

Smart Licensing Command Reference

This chapter describes the commands to configure smart licensing.

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license smart deregister

To cancel the registration of your device, use the **license smart deregister** command.

license smart deregister

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

None

Command History

Release	Modification
Release 6.1.32	This command was introduced.

Usage Guidelines

When your device is taken off the inventory, shipped elsewhere for redeployment or returned to Cisco for replacement using the return merchandise authorization (RMA) process, you can use this command to cancel the registration on your device. All smart licensing entitlements and certificates on the platform are removed.

The following example deregisters the NCS 4000 router :

```
RP/0/RP0:hostname# license smart deregister
```

license smart register

To register the device instance with the Cisco licensing cloud, use the **license smart register idtoken** *token-id* **force** command.

license smart register idtoken *token-id* **force**

Syntax Description

token_id	Specifies the token generated in smart manager.
force	If the registration fails due to communication failure between the device and the portal or satellite, CTC waits for 24 hours before attempting to register the device again. Use this option to force the registration.

Command Default

None

Command Modes

None

Command History

Release	Modification
Release 6.1.32	This command was introduced.

Usage Guidelines

Use this command to register the device instance with the Cisco licensing cloud.

The following example registers and sets the token ID required for registration of the NCS 4000 router :

```
RP/0/RP0:hostname# license smart register token-id
```

license smart renew

To manually renew the ID certification or authorization, use the **license smart renew** command.

license smart renew id {**ID|auth]** }

Syntax Description

ID	ID certificates are renewed automatically after six months. In case, the renewal fails, the product instance goes into unidentified state. You can manually renew the ID certificate using this option.
auth	Authorization periods are renewed by the Smart Licensing system every 30 days. As long as the license is in an 'Authorized' or 'Out-of-compliance' (OOC), the authorization period is renewed. Use this command to make an on-demand manual update of your registration. Thus, instead of waiting 30 days for the next registration renewal cycle, you can use this option to instantly find out the status of your license. After 90 days, the authorization period expires and the status of the associated licenses display "AUTH EXPIRED". Use this option to retry the authorization period renewal. If the retry is successful, a new authorization period begins.

Command Default

None

Command Modes

None

Command History

Release	Modification
Release 6.1.32	This command was introduced.

Usage Guidelines

None

The following example manually renews the ID certificate for the NCS 4000 router :

```
RP/0/RP0:hostname# license smart renew id
```

The following example manually renews the authorization for the NCS 4000 router :

```
RP/0/RP0:hostname# license smart renew auth
```

show alarms

To display alarms related to the system, use the **show alarms** command.

show alarms brief system active force

Syntax Description

brief	Displays alarms in brief.
system	Displays system scope alarms related data.
active	Displays active alarms.

Command Default

None

Command Modes

None

Command History

Release	Modification
Release 6.1.32	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

The following example displays the output of the show alarms brief system active command:

```
 RP/0/RP0:hostname# show alarms brief system active
 Fri Jun  9 14:21:20.143 UTC

------------------------------------------------------------------------------------
Active Alarms
------------------------------------------------------------------------------------
Location        Severity     Group            Set Time                    Description



------------------------------------------------------------------------------------
0               Major        Environ          06/01/2017 17:58:15 UTC    Power Shelf
redundancy lost.


0/RP0           Minor        Fabric           06/01/2017 18:00:13 UTC    Fabric Plane-3 is
 Down


0               Major        Shelf            06/01/2017 18:00:32 UTC    Fabric Card
Redundancy Lost


0/RP0           Major        FPD_Infra        06/06/2017 09:18:38 UTC    One Or More FPDs
Need Upgrade Or Not In Current State

0/RP1           Major        FPD_Infra        06/06/2017 09:18:38 UTC    One Or More FPDs
Need Upgrade Or Not In Current State
```

```
0/9             Major        FPD_Infra        06/06/2017 09:25:23 UTC    One Or More FPDs
Need Upgrade Or Not In Current State

0/9             Minor        Controller       06/06/2017 09:25:33 UTC    Optics0/9/0/0 -
Port Pluggable Module Mismatched With Pre-Provisoned PPM

0/9             Minor        Controller       06/06/2017 09:25:33 UTC    Optics0/9/0/1 -
Improper Removal

0/9             Minor        Controller       06/06/2017 09:25:34 UTC    Optics0/9/0/11 -
Improper Removal

0/RP0           NotReported  Software         06/09/2017 10:55:51 UTC    One Or More
Entitlements Are Out Of Compliance
0/RP0           NotReported  Software         06/09/2017 14:16:29 UTC    Communications
Failure With Cisco Licensing Cloud
```

show license all

To view the entitlements in use, use the **show license all** command.

show license all

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

None

Command History

Release	Modification
Release 6.1.32	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

The following example displays all entitlements in use. It can also be used to check if Smart Licensing is enabled. Additionally, it shows associated licensing certificates, compliance status, UDI, and other details for the NCS 4000 router:

```
 RP/0/RP0:hostname# show license all
 Wed Jun  7 11:18:35.953 UTC

Smart Licensing Status
======================

Smart Licensing is ENABLED

Registration:
  Status: REGISTERED
  Smart Account: NCS4K
  Virtual Account: Default
  Initial Registration: SUCCEEDED on Fri Jun 02 2017 14:27:19 UTC
  Last Renewal Attempt: SUCCEEDED on Fri Jun 02 2017 14:56:40 UTC
    Failure reason:
  Next Renewal Attempt: Wed Nov 29 2017 14:56:41 UTC
  Registration Expires: Sat Jun 02 2018 09:29:55 UTC

License Authorization:
  Status: AUTHORIZED on Tue Jun 06 2017 09:53:03 UTC
  Last Communication Attempt: FAILED on Tue Jun 06 2017 09:53:03 UTC
    Failure reason: Fail to send out Call Home HTTP message
  Next Communication Attempt: Thu Jul 06 2017 04:16:31 UTC
  Communication Deadline: Mon Sep 04 2017 04:16:31 UTC

License Usage
==============

 NCS 4000 400G Packet/OTN/WDM - QSFP28/CFP2 - Lic. 100G OTN (NCS4K-4H-OPW-LO):
  Description: NCS 4000 400G Packet/OTN/WDM - QSFP28/CFP2 - Lic. 100G OTN
```

```
  Count: 1
  Version: 1.0
  Status: PENDING

 NCS4K 100G Bandwidth Licenses (S-NCS4K-100G-LIC):
  Description: NCS4K 100G Bandwidth Licenses
  Count: 2
  Version: 1.0
  Status: PENDING

 SW License for WDM CFP2 Pluggable port (S-CFP2-WDM-LIC):
  Description: SW License for WDM CFP2 Pluggable port
  Count: 1
  Version: 1.0
  Status: PENDING

Product Information
===================
UDI: SN:SAL1834Z18D,UUID:default-sdr
HA UDI List:
    Active:SN:SAL1834Z18D,UUID:default-sdr
    Standby:SN:SAL1834Z18D,UUID:default-sdr

Agent Version
=============
Smart Agent for Licensing: 2.2.0_rel/30
```

show license status

To display the registration details, status of license, and authorization details of license, use the **show license status** command.

show license status

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

None

Command History

Release	Modification
Release 6.1.32	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

The following example displays the output of the show license status command:

```
 RP/0/RP0:hostname# show license status
Wed Jun  7 05:42:22.392 UTC
Smart Licensing is ENABLED
  Initial Registration: SUCCEEDED on Wed Jun 07 2017 12:06:50 UTC
  Last Renewal Attempt: None
  Next Renewal Attempt: Mon Dec 04 2017 12:07:10 UTC
  Registration Expires: Thu Jun 07 2018 06:40:34 UTC

License Authorization:
  Status: AUTHORIZED on Wed Jun 07 2017 12:07:50 UTC
  Last Communication Attempt: SUCCEEDED on Wed Jun 07 2017 12:07:50 UTC
  Next Communication Attempt: Fri Jul 07 2017 12:07:49 UTC
  Communication Deadline: Tue Sep 05 2017 06:41:16 UTC
```

show license summary

To display the license summary, use the **show license summary** command.

show license summary

Syntax Description

This command has no keywords or arguments.

Command Default

None

Command Modes

None

Command History

Release	Modification
Release 6.1.32	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

The following example displays the output of the show license summary command:

```
 RP/0/RP0:hostname# show license summary
 Fri Jun  9 15:53:53.301 UTC

Smart Licensing is ENABLED

Registration:
  Status: REGISTERED
  Smart Account: NCS4K
  Virtual Account: NCS4K-VIRTUAL-AC
  Last Renewal Attempt: None
  Next Renewal Attempt: Wed Dec 06 2017 15:51:48 UTC

License Authorization:
  Status: OUT OF COMPLIANCE on Fri Jun 09 2017 15:53:08 UTC
  Last Communication Attempt: SUCCEEDED
  Next Communication Attempt: Sat Jun 10 2017 03:53:08 UTC

License Usage:
  License             Entitlement tag          Count  Status
  -----------------------------------------------------------------
  NCS 4000 400G Packet/OTN/WDM - QSFP28/CFP2 - Lic. 100G OTN(NCS4K-4H-OPW-LO)           1
  OUT OF COMPLIANCE
  NCS4K 100G Bandwidth Licenses(S-NCS4K-100G-LIC)          2   OUT OF COMPLIANCE
  SW License for WDM CFP2 Pluggable port(S-CFP2-WDM-LIC)            1   OUT OF COMPLIANCE
```