

Appendix

- Event Notifications, on page 1
- Syslog Messages, on page 35
- Support for 40G Dual Port and Quad-Split NICs on Cisco Cloud Services Platforms, on page 40
- Granular Role Based Access Control, on page 43

Event Notifications

nfvisEvent

Event Type	Notification Trigger	Notification Output Example
WAN_DHCP_RENEW	DHCP renew operation is performed.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-04-26T18:06:46.142089+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>NA</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Wan DHCP IP address is being renewed</status_message> <details>NA</details> <event_type>**WAN_DHCP_RENEW**</event_type> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
BRIDGE_DHCP_RENEW	Bridge DHCP renew operation is performed.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2018-04-26T09:47:06.066264+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>NA</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Bridge DHCP IP address is being renewed</status_message> <details>NA</details> <event_type>**BRIDGE_DHCP_RENEW**</event_type> </nfvisEvent> </notification>
INTF_STATUS_CHANGE	Interface status is changed.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-04-26T18:12:09.963556+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <event_type>**INTF_STATUS_CHANGE**</event_type> <intf_name>eth7</intf_name> <intf_prv_op>up</intf_prv_op> <intf_op>down</intf_op> <intf_prv_link>down</intf_prv_link> <intf_link>down</intf_link> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
NETWORK_CREATE	A network is created.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-09-22T12:41:04.564298+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_message>Network created succesfully</status_message> <event_type>**NETWORK_CREATE**</event_type> <network_name>testn1</network_name> <network_bridge>test-net-br</network_bridge> <network_sriov>false</network_sriov> <network_vlan/> <network_trunk/> </nfvisEvent> </notification>
NETWORK_UPDATE	A network is updated.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-09-22T12:42:03.391986+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_message>Network updated succesfully</status_message> <event_type>**NETWORK_UPDATE**</event_type> <network_name>testn1</network_name> <network_bridge/> <network_sriov/> <network_vlan/> <network_trunk/> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
NETWORK_DELETE	A network is deleted.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-09-22T12:42:03.391986+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_message>Network deleted succesfully</status_message> <event_type>**NETWORK_DELETE**</event_type> <network_name>testn1</network_name> <network_bridge/> <network_sriov/> <network_vlan/> <network_trunk/> </nfvisEvent> </notification>
UPGRADE_REGISTER	System upgrade is registered.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-04-26T15:57:50.434636+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>NA</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Upgrade package registration successful: Cisco_NFVIS_Upgrade-3.6.1-698-20170402_042811.nfvispkg</status_message> <event_type>**UPGRADE_REGISTER**</event_type> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
UPGRADE_APPLY	System upgrade is applied.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-04-26T16:02:43.885516+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>NA</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Upgrade Process: In Progress</status_message> <event_type>**UPGRADE_APPLY**</event_type> </nfvisEvent> </notification>
ROTATED_LOGS_DELETE	Rotated logs older than 30 days are deleted by the system.	<?xml version="1.0" encoding="UTF-8"?> <rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="1"> <ok/> </rpc-reply> <?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-04-26T17:38:10.321152+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>NA</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Deleted rotated logs from archive older than 30 days</status_message> <details>NA</details> <event_type>**ROTATED_LOGS_DELETE**</event_type> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
ROTATED_LOGS_DELETE	Older logs deleted by the system when the total file size of rotated logs exceeds 2GB.	<?xml version="1.0" encoding="UTF-8"?> <rpc-reply xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="1"> <ok/> </rpc-reply> <?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-04-26T17:42:10.321152+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>NA</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Rotated logs had exceeded 2G, older logs have been deleted to make space</status_message> <details>NA</details> <event_type>**ROTATED_LOGS_DELETE**</event_type> </nfvisEvent> </notification>
REBOOT	system reboot	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2018-04-26T09:37:47.387525+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>System will be rebooted</status_message> <details>NA</details> <event_type>**REBOOT**</event_type> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
SHUTDOWN	system shutdown	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2018-04-26T09:47:06.066264+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>System will be shutdown</status_message> <details>NA</details> <event_type>**SHUTDOWN**</event_type> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
SECURE_OVERLAY_CREATING	create secure overlay	<notification <eventTime> 2018-11-02T04:23:02.641317+00:00 <nfvisEvent <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Secure Overlay mgmthub initial creation. Active local bridge: wan-br</status_message> <details>NA</details> <event_type>SECURE_OVERLAY_CREATING<event_type> <severity> INFO</severity> <hostname>nfvis</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
SECURE_OVERLAY_UP	Secure Overlay is UP	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2018-04-26T09:47:06.066264+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Secure Overlay mgmthub up. Active bridge: wan-br</status_message> <details>Secure overlay initial creation</details> <event_type>SECURE_OVERLAY_UP</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
WAN_DHCP_SWITCHOVER	WAN bridge toggle	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2018-04-26T09:47:06.066264+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Switch over to bridge wan2-br for auto DHCP enablement successful</status_message> <details>NA</details> <event_type>WAN_DHCP_SWITCHOVER</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
WAN_DHCP_TOGGLE_END	WAN bridge toggle	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2018-04-26T09:47:06.066264+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Disabling bridge toggle for auto DHCP enablement.</status_message> <details>NA</details> <event_type>WAN_DHCP_TOGGLE_END</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
ROUTE_DISTRIBUTION_START	To start route distribution	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Route Distribution initial creation. Neighbor Address: 172.25.221.106</status_message> <details>NA</details> <event_type>ROUTE_DISTRIBUTION_START</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
ROUTE_DISTRIBUTION_DOWN	Route distribution is down	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Neighbor Address: 172.25.221.106</status_message> <details>NA</details> <event_type>ROUTE_DISTRIBUTION_DOWN</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
ROUTE_DISTRIBUTION_ERROR	Route distribution in error	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Neighbor Address: 172.25.221.106</status_message> <details>NA</details> <event_type>ROUTE_DISTRIBUTION_ERROR</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
ROUTE_DISTRIBUTION_DELETE	Route distribution deleted	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>All Neighbor Addresses deleted</status_message> <details>NA</details> <event_type>ROUTE_DISTRIBUTION_DELETE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
ROUTE_DISTRIBUTION_UP	Route distribution up	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Neighbor Address: 172.25.221.106</status_message> <details>NA</details> <event_type>ROUTE_DISTRIBUTION_UP</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
OVS_DPDK_SUCCESS	Enable DPDK	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>OVS-DPDK enabled</status_message> <details>NA</details> <event_type>OVS_DPDK_SUCCESS</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
OVS_DPDK_FAILURE	DPDK failure	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Unable to allocate CPU</status_message> <details>NA</details> <event_type>OVS_DPDK_FAILURE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
PNIC_SRIOV_ENABLE	Enable SR-IOV to 2 vfs	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Physical Interface: eth0-1 Number of VFs 2</status_message> <details>NA</details> <event_type>PNIC_SRIOV_ENABLE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
PNIC_SRIOV_DISABLE	Disable SR-IOV	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Physical Interface: eth0-1 Number of VFs 0</status_message> <details>NA</details> <event_type>PNIC_SRIOV_DISABLE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
PNIC_SRIOV_ENABLE	Enable of disable SR-IOV in error	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Physical Interface: eth0-1 Number of VFs 2</status_message> <details>NA</details> <event_type>PNIC_SRIOV_ENABLE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
PNIC_SRIOV_UPDATE	Set switchmode to veb/vepa	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Physical Interface: eth0-1 Switchmode vepa</status_message> <details>NA</details> <event_type>PNIC_SRIOV_UPDATE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
PNIC_SRIOV_UPDATE	Set switchmode to veb/vepa in error	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2019-03-15T21:46:28.034133+00:00</eventTime> <nfvisEvent xmlns="http://www.cisco.com/nfvis/notifier"> <user_id>admin</user_id> <config_change>true</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Physical Interface: eth0-1 Switchmode vepa</status_message> <details>NA</details> <event_type>PNIC_SRIOV_UPDATE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
PROMISC_ENABLED	Enable promiscuous mode	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2020-03-27T19:58:52.333682+00:00</eventTime> <nfvisEvent <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>GE0-0: promiscuous mode enabled</status_message> <details>GE0-0: promiscuous mode enabled</details> <event_type>PROMISC_ENABLED</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
FIPS_CONFIGURED_REBOOT_TO_ENABLE	When FIPS mode is configured but a reboot is required to enable it.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2020-06-07T21:26:06.231166+00:00</eventTime> <nfvisEvent <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Fips-mode configured and a manual reboot is required to enable it</status_message> <details>NA</details> <event_type>FIPS_CONFIGURED_REBOOT_TO_ENABLE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
FIPS_ENABLED	FIPS mode is enabled.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2020-06-07T21:26:06.231166+00:00</eventTime> <nfvisEvent <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Fips-mode successfully enabled</status_message> <details>NA</details> <event_type>FIPS_ENABLED</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
FIPS_FAILED		<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2020-06-07T21:26:06.231166+00:00</eventTime> <nfvisEvent <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Fips-mode configuration is unsuccessful</status_message> <details>NA</details> <event_type>FIPS_FAILED</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>
FIPS_DISABLED	FIPS mode is disabled.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2020-06-07T21:26:06.231166+00:00</eventTime> <nfvisEvent <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Fips-mode successfully disabled</status_message> <details>NA</details> <event_type>FIPS_DISABLED</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
FIPS_UNCONFIGURED_REBOOT_TO_DISABLE		<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2020-06-07T21:26:06.231166+00:00</eventTime> <nfvisEvent <user_id>admin</user_id> <config_change>false</config_change> <transaction_id>0</transaction_id> <status>SUCCESS</status> <status_code>0</status_code> <status_message>Fips-mode unconfigured and a manual reboot is required to disable it</status_message> <details>NA</details> <event_type>FIPS_UNCONFIGURED_REBOOT_TO_DISABLE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification>

vmlcEvent

Event Type	Notification Trigger	Notification Output Example
CREATE_IMAGE	The VM image is registered.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:12:30.76+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Image creation completed successfully.</status_message> <image>isrv-universalk9.16.03.01.tar.gz</image> <vm_source></vm_source> <vm_target></vm_target> <event> <type>**CREATE_IMAGE**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
DELETE_IMAGE	The VM image is unregistered.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:14:51.169+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Image deletion completed successfully.</status_message> <image>isrv-universalk9.16.03.01.tar.gz</image> <vm_source></vm_source> <vm_target></vm_target> <event> <type>**DELETE_IMAGE**</type> </event> </vmlcEvent> </notification>
CREATE_FLAVOR	A flavor is created.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:12:29.685+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Flavor creation completed successfully.</status_message> <flavor>ISRv-small</flavor> <vm_source></vm_source> <vm_target></vm_target> <event> <type>**CREATE_FLAVOR**</type> </event> </vmlcEvent> </notification>
DELETE_FLAVOR	A flavor is deleted.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:14:51.425+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Flavor deletion completed successfully.</status_message> <flavor>ISRv-small</flavor> <vm_source></vm_source> <vm_target></vm_target> <event> <type>**DELETE_FLAVOR**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_DEPLOYED	The VM is deployed.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:19:16.927+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>VIM Driver: VM successfully created, VM Name: [SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c]</status_message> <depname>1479341445</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <depid>c64d79db-3a29-41a8-8114-c80d42731a5b</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>d18dd252-80c8-44f2-ab66-d4481790bb79</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> <interfaces> <interface> <nicid>0</nicid> <port_id>vnet0</port_id> <network>int-mgmt-net</network> <subnet>N/A</subnet> <ip_address>10.20.0.2</ip_address> <mac_address>52:54:00:31:c5:7f</mac_address> <netmask>255.255.255.0</netmask> <gateway>10.20.0.1</gateway> </interface> <interface> <nicid>1</nicid> <port_id>vnet1</port_id> <network>wan-net</network> <subnet>N/A</subnet> <mac_address>52:54:00:59:52:41</mac_address> <netmask>255.255.255.0</netmask> <gateway>172.19.181.152</gateway> </interface> </interfaces> </vm_source> <vm_target></vm_target> <event> <type>**VM_DEPLOYED**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_ALIVE	The state of a monitored VM becomes ACTIVE.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:22:47.306+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>VM_Alive event received, VM ID: [SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c]</status_message> <depname>1479341445</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <depid>c64d79db-3a29-41a8-8114-c80d42731a5b</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>d18dd252-80c8-44f2-ab66-d4481790bb79</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> <interfaces> <interface> <nicid>0</nicid> <port_id>vnet0</port_id> <network>int-mgmt-net</network> <subnet>N/A</subnet> <ip_address>10.20.0.2</ip_address> <mac_address>52:54:00:31:c5:7f</mac_address> <netmask>255.255.255.0</netmask> <gateway>10.20.0.1</gateway> </interface> <interface> <nicid>1</nicid> <port_id>vnet1</port_id> <network>wan-net</network> <subnet>N/A</subnet> <mac_address>52:54:00:59:52:41</mac_address> <netmask>255.255.255.0</netmask> <gateway>172.19.181.152</gateway> </interface> </interfaces> </vm_source> <vm_target></vm_target> <event> <type>**VM_ALIVE**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_UNDEPLOYED	The VM is undeployed.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:31:40.6+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>204</status_code> <status_message>VIM Driver: VM successfully deleted</status_message> <depname>1479341445</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <depid>c64d79db-3a29-41a8-8114-c80d42731a5b</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>d18dd252-80c8-44f2-ab66-d4481790bb79</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> <interfaces> <interface> <nicid>0</nicid> <port_id>vnet0</port_id> <network>int-mgmt-net</network> <subnet>N/A</subnet> <ip_address>10.20.0.2</ip_address> <mac_address>52:54:00:31:c5:7f</mac_address> <netmask>255.255.255.0</netmask> <gateway>10.20.0.1</gateway> </interface> <interface> <nicid>1</nicid> <port_id>vnet1</port_id> <network>wan-net</network> <subnet>N/A</subnet> <mac_address>52:54:00:59:52:41</mac_address> <netmask>255.255.255.0</netmask> <gateway>172.19.181.152</gateway> </interface> </interfaces> </vm_source> <vm_target></vm_target> <event> <type>**VM_UNDEPLOYED**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
SERVICE_UPDATED	The VM is updated.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:51:45.5+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Service group update completed successfully</status_message> <depname>1479342258</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <depid>827e871a-30d5-4f5f-a05a-263b7ee3a734</depid> <vm_source></vm_source> <vm_target></vm_target> <event> <type>**SERVICE_UPDATED**</type> </event> </vmlcEvent> </notification>
VM_STOPPED	The VM is stopped per VM action requrest.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:26:05.762+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Successfully stopped VM [SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c].</status_message> <depname>1479341445</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <svcid>NULL</svcid> <depid>c64d79db-3a29-41a8-8114-c80d42731a5b</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>d18dd252-80c8-44f2-ab66-d4481790bb79</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> </vm_source> <vm_target></vm_target> <event> <type>**VM_STOPPED**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_STARTED	The VM is started per VM action request.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:26:40.398+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Started VM [SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c].</status_message> <depname>1479341445</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <svcid>NULL</svcid> <depid>c64d79db-3a29-41a8-8114-c80d42731a5b</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>d18dd252-80c8-44f2-ab66-d4481790bb79</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> </vm_source> <vm_target></vm_target> <event> <type>**VM_STARTED**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_REBOOTED	The VM is rebooted per VM action request.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T17:36:56.5+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Rebooted VM [SystemAdminTena_ROUTER_0_f17fc494-8535-4b05-b88d-f0fd2effdc7d]</status_message> <depname>1479342258</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <svcid>NULL</svcid> <depid>827e871a-30d5-4f5f-a05a-263b7ee3a734</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>d918a3b1-f2a9-4065-9d8e-2135b0a37d87</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> </vm_source> <vm_target></vm_target> <event> <type>**VM_REBOOTED**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_RECOVERY_INIT	A monitored VM is not reachable.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T16:27:51.627+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Recovery event for VM [SystemAdminTena_ROUTER_0_40ae18be-5930-4d94-95ff-dbb0b56ef12b] trigge red. Processing Auto healing. Proceeding with Recovery.</status_message> <depname>1479328919</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <svcid>NULL</svcid> <depid>9e7fe4f8-a5f4-4a6d-aad7-121405be4ba4</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>000883fc-77f3-4b9e-aaf6-0f31d88a8f67</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> </vm_source> <vm_target></vm_target> <event> <type>**VM_RECOVERY_INIT**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_RECOVERY_REBOOT	Recovery reboot starts for the monitored VM, which is not reachable.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T16:27:53.979+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>VM [SystemAdminTena_ROUTER_0_40ae18be-5930-4d94-95ff-dbb0b56ef12b] is being rebooted. </statu s_message> <depname>1479328919</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <svcid>NULL</svcid> <depid>9e7fe4f8-a5f4-4a6d-aad7-121405be4ba4</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>000883fc-77f3-4b9e-aaf6-0f31d88a8f67</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> </vm_source> <vm_target></vm_target> <event> <type>**VM_RECOVERY_REBOOT**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_RECOVERY_COMPLETE	Recovery reboot completes for the monitored VM, which is not reachable.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-17T16:31:26.934+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Successfully recovered VM [SystemAdminTena_ROUTER_0_40ae18be-5930-4d94-95ff-dbb0b56ef12b]. status_message> <depname>1479328919</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <svcid>NULL</svcid> <depid>9e7fe4f8-a5f4-4a6d-aad7-121405be4ba4</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>000883fc-77f3-4b9e-aaf6-0f31d88a8f67</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> </vm_source> <vm_target> <vmid>000883fc-77f3-4b9e-aaf6-0f31d88a8f67</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> <interfaces> <interface> <nicid>0</nicid> <port_id>vnet0</port_id> <network>int-mgmt-net</network> <subnet>N/A</subnet> <ip_address>10.20.0.2</ip_address> <mac_address>52:54:00:7b:3f:de</mac_address> <netmask>255.255.255.0</netmask> <gateway>10.20.0.1</gateway> </interface> <interface> <nicid>1</nicid> <port_id>vnet1</port_id> <network>wan-net</network> <subnet>N/A</subnet> <mac_address>52:54:00:96:8a:4d</mac_address> <netmask>255.255.255.0</netmask> <gateway>172.19.181.152</gateway> </interface> </interfaces> </vm_target> <event> <type>**VM_RECOVERY_COMPLETE**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_MONITOR_UNSET	Monitoring is disabled per VM action request.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-18T13:36:43.613+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Unset monitor completed successfully</status_message> <depname>1479413090</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <svcid>NULL</svcid> <depid>742dd335-330c-4bf0-a75d-a44003c645c5</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>23ec3793-37ab-4ec2-a978-a10e08585fdd</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> </vm_source> <vm_target></vm_target> <event> <type>**VM_MONITOR_UNSET**</type> </event> </vmlcEvent> </notification>
VM_MONITOR_SET	Monitoring is enabled per VM action request.	<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2016-11-18T13:40:15.276+00:00</eventTime> <vmlcEvent xmlns="http://www.cisco.com/nfvis/vm_lifecycle"> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Set monitor completed successfully</status_message> <depname>1479413090</depname> <tenant>admin</tenant> <tenant_id>AdminTenantId</tenant_id> <svcid>NULL</svcid> <depid>742dd335-330c-4bf0-a75d-a44003c645c5</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>23ec3793-37ab-4ec2-a978-a10e08585fdd</vmid> <hostid>NFVIS</hostid> <hostname>NFVIS</hostname> </vm_source> <vm_target></vm_target> <event> <type>**VM_MONITOR_SET**</type> </event> </vmlcEvent> </notification>

Event Type	Notification Trigger	Notification Output Example
VM_UPDATED	VM's flavor is changed.	

Event Type	Notification Trigger	Notification Output Example
		<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-12-08T00:50:39.034+00:00</eventTime> <vmlcEvent xmlns='http://www.cisco.com/nfvis/vm_lifecycle'> <status>SUCCESS</status> <status_code>200</status_code> <status_message>VM is resized with flavor [ISRv-medium].</status_message> <user_name>admin</user_name> <depname>1512766000</depname> <tenant>admin</tenant> <tenant_id>adminUUID</tenant_id> <depid>92c11aa1-f6dd-47d1-948f-c8c65b9ef70f</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>1a6f587e-2779-4087-b84d-c0a2c8a481b1</vmid> <vmname>1512766000_ROUTER_0_60d15064-0c6d-49b9-aa4a-80587f626004</vmname> <hostid>NFVIS</hostid> <hostname>nfvis</hostname> <interfaces> <interface> <nicid>0</nicid> <type>virtual</type> <port_id>vnic0</port_id> <network>int-mgmt-net</network> <subnet>N/A</subnet> <ip_address>10.20.0.3</ip_address> <mac_address>52:54:00:3c:ee:5b</mac_address> <netmask>255.255.255.0</netmask> <gateway>10.20.0.1</gateway> </interface> <interface> <nicid>1</nicid> <type>virtual</type> <port_id>vnic1</port_id> <network>wan-net</network> <subnet>N/A</subnet> <mac_address>52:54:00:70:06:4a</mac_address> <netmask>255.255.255.0</netmask> <gateway>172.19.181.152</gateway> </interface> <interface> <nicid>2</nicid> <type>virtual</type> <port_id>vnic2</port_id> <network>lan-net</network> <subnet>N/A</subnet> <mac_address>52:54:00:c7:30:1c</mac_address> <netmask>255.255.255.0</netmask> <gateway>192.168.1.1</gateway> </interface> </interfaces> </vm_source> <event> <type>VM_UPDATED</type> </event>

Event Type	Notification Trigger	Notification Output Example
		</vmlcEvent></notification>]]>]]> <?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-12-08T00:50:39.06+00:00</eventTime> <vmlcEvent xmlns='http://www.cisco.com/nfvis/vm_lifecycle'> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Service group update completed successfully</status_message> <user_name>admin</user_name> <depname>1512766000</depname> <tenant>admin</tenant> <tenant_id>adminUUID</tenant_id> <depid>92c11aa1-f6dd-47d1-948f-c8c65b9ef70f</depid> <event> <type>SERVICE_UPDATED</type> </event> </vmlcEvent>

Event Type	Notification Trigger	Notification Output Example
VM_UPDATED	VNIC is added, deleted or updated.	

Event Type	Notification Trigger	Notification Output Example
		<?xml version="1.0" encoding="UTF-8"?> <notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0"> <eventTime>2017-12-08T02:10:56.184+00:00</eventTime> <vmlcEvent xmlns='http://www.cisco.com/nfvis/vm_lifecycle'> <status>SUCCESS</status> <status_code>200</status_code> <status_message>Added 1 interface: [managed, net=my-net-1, nicid=3] Updated 2 interface: [managed, net=lan-net, nicid=1],[managed, net=wan-net, nicid=2]</status_message> <user_name>admin</user_name> <depname>1512766000</depname> <tenant>admin</tenant> <tenant_id>adminUUID</tenant_id> <depid>92c11aa1-f6dd-47d1-948f-c8c65b9ef70f</depid> <vm_group>ROUTER</vm_group> <vm_source> <vmid>1a6f587e-2779-4087-b84d-c0a2c8a481b1</vmid> <vmname>1512766000_ROUTER_0_60d15064-0c6d-49b9-aa4a-80587f626004</vmname> <hostid>NFVIS</hostid> <hostname>nfvis</hostname> <interfaces> <interface> <nicid>0</nicid> <type>virtual</type> <port_id>vnic0</port_id> <network>int-mgmt-net</network> <subnet>N/A</subnet> <ip_address>10.20.0.3</ip_address> <mac_address>52:54:00:3c:ee:5b</mac_address> <netmask>255.255.255.0</netmask> <gateway>10.20.0.1</gateway> </interface> <interface> <nicid>1</nicid> <type>virtual</type> <port_id>vnic1</port_id> <network>lan-net</network> <subnet>N/A</subnet> <mac_address>52:54:00:70:06:4a</mac_address> <netmask>255.255.255.0</netmask> <gateway>192.168.1.1</gateway> </interface> <interface> <nicid>2</nicid> <type>virtual</type> <port_id>vnic2</port_id> <network>wan-net</network> <subnet>N/A</subnet> <mac_address>52:54:00:c7:30:1c</mac_address> <netmask>255.255.255.0</netmask> <gateway>172.19.181.152</gateway> </interface> <interface> <nicid>3</nicid> <type>virtual</type> <port_id>vnic3</port_id>

Event Type	Notification Trigger	Notification Output Example
		<network>my-net-1</network> <subnet>N/A</subnet> <mac_address>52:54:00:66:b5:c1</mac_address> </interface> </interfaces> </vm_source> <event> <type>VM_UPDATED</type> </event> </vmlcEvent>

Syslog Messages

Event	Trigger Condition	Syslog Messages
NETWORK_CREATE	create a new network	nfvis %SYS-6-NETWORK_CREATE: Network my-net created successfully
NETWORK_UPDATE	modify an existing network	nfvis %SYS-6-NETWORK_UPDATE: Network my-net updated successfully
NETWORK_DELETE	delete a network	nfvis %SYS-6-NETWORK_DELETE: Network my-net deleted successfully
BRIDGE_CREATE	create a new bridge	nfvis %SYS-6-BRIDGE_CREATE: Bridge created successfully: my-bridge
BRIDGE_UPDATE	modify an existing bridge	nfvis %SYS-6-BRIDGE_UPDATE: Updated bridge successfully: my-bridge
BRIDGE_DELETE	delete a bridge	nfvis %SYS-6-BRIDGE_DELETE: Bridge deleted successfully: my-bridge
WAN_DHCP_RENEW	dhcp renew from wan interface	nfvis %SYS-6-WAN_DHCP_RENEW: wan-br DHCP IP address is being renewed
BRIDGE_DHCP_RENEW	bridge dhcp renew	nfvis %SYS-6-BRIDGE_DHCP_RENEW: Bridge DHCP IP address is being renewed
MGMT_DHCP_RENEW	dhcp renew from MGMT interface	nfvis %SYS-6-MGMT_DHCP_RENEW: wan-br DHCP IP address is being renewed
INTF_STATUS_CHANGE	interface status change	nfvis %SYS-6-INTF_STATUS_CHANGE: Interface eth0, changed state to up
UPGRADE_REGISTER	upgrade package registration	nfvis %SYS-6-UPGRADE_REGISTER: Upgrade package registration successful: Cisco_NFVIS_Upgrade-3.6.1-698-20170402_042811.nfvispkg
UPGRADE_APPLY	upgrade process	nfvis %SYS-6-UPGRADE_APPLY: Upgrade Process: In Progress

Event	Trigger Condition	Syslog Messages
RBAC_USER_CREATE	create a new user	nfvis %SYS-6-RBAC_USER_CREATE: Created user admin as administrators successfully
RBAC_USER_PASSWORD_UPDATE	change user's password	nfvis %SYS-6-RBAC_USER_PASSWORD_UPDATE: Set admin password successfully
RBAC_USER_ROLE_UPDATE	change user's role	nfvis %SYS-6-RBAC_USER_ROLE_UPDATE: Modified user: somebody successfully
RBAC_USER_DELETE	delete a user	nfvis %SYS-6-RBAC_USER_DELETE: Deleted rbac user successfully: somebody
RBAC_USERS_INACTIVATED	disable the user	nfvis %SYS-6-RBAC_USERS_INACTIVATED: Following users have been marked as INACTIVE, [user1, user2]. Please take necessary action.
RBAC_USER_ACTIVATED	activate the user	nfvis %SYS-6-RBAC_USER_ACTIVATED: Modified user user1 successfully.
RBAC_PWD_EXPIRED	password expired	nfvis %SYS-6-RBAC_PWD_EXPIRED: User user1's password is older than 60 days. Please reset password.
RBAC_LOGIN_FAILURE	invalid user login	nfvis %SYS-3-RBAC_LOGIN_FAILURE: Login with invalid username from maapi failed
SECURITY_SERVER_CREATE	create server config	nfvis %SYS-6-SECURITY_SERVER_CREATE: TACACS+ server config created successfully.
SECURITY_SERVER_UPDATE	update server config	nfvis %SYS-6-SECURITY_SERVER_UPDATE: TACACS+ server configuration updated successfully.
SECURITY_SERVER_DELETE	delete server config	nfvis %SYS-6-SECURITY_SERVER_DELETE: TACACS+ server deleted successfully.
AAA_TYPE_CREATE	create AAA authentication type	nfvis %SYS-6-AAA_TYPE_CREATE: AAA authentication type TACACS created successfully.
AAA_TYPE_UPDATE	update AAA authentication type	nfvis %SYS-6-AAA_TYPE_UPDATE: AAA authentication type TACACS+ updated successfully. AAA authentication updated to use TACACS+ server
RECREATE_CERTIFICATE	recreate self-sign certificate	nfvis %SYS-6-RECREATE_CERTIFICATE: Self Signed Certificate re-created. Application connection may become temporarily unavailable.
CERT_CSR_CREATE	create a CSR file	nfvis %SYS-6-CERT_CSR_CREATE: signing-request created /data/intdatastore/download/nfvis.csr
CERT_SWITCH_CERT	switch to use different certificate	nfvis %SYS-6-CERT_SWITCH_CERT: switch certificate from ca-signed to self-signed.
CERT_CA_CERT_INSTALL	install CA signed certificate	nfvis %SYS-6-CERT_CA_CERT_INSTALL: ca-signed certificate file:// installed

Event	Trigger Condition	Syslog Messages
REBOOT	system reboot	nfvis %SYS-6-REBOOT: System will be rebooted
SHUTDOWN	system shutdown	nfvis %SYS-6-SHUTDOWN: System will be shutdown
LOGGING_FAILURE	logging failure	nfvis %SYS-6-LOGGING_FAILURE: Unable to write to log file nfvis_config.log. Log message: log_config.CONFIG_LOGGER: File not found.
DISK_SPACE_ALMOST_FULL	disk space almost full	nfvis %SYS-6-DISK_SPACE_ALMOST_FULL: 'lv_data' currently occupies 95% of available disk space, which is more than or equal to the threshold of 90%.
ROTATED_LOGS_DELETE	delete rotated logfiles when accumulated rotated log files reach 2GB	nfvis %SYS-6-ROTATED_LOGS_DELETE: Deleted rotated logs from archive older than 30 days
TIME_UPDATE	Change system time manually	nfvis %SYS-6-TIME_UPDATE: Manual time updated successfully Manual time is now set to 2018-04-26 11:43:00
TIMEZONE_UPDATE	Change system timezone	nfvis %SYS-6-TIMEZONE_UPDATE: Timezone updated successfully. Timezone is now set to US/Eastern
FILE_COPY_STATUS	copy status of file	nfvis %SYS-6-FILE_COPY_STATUS: hostaction.py Copied Successfully.
CREATE_IMAGE	create image	nfvis %SYS-6-CREATE_IMAGE: Image creation successful: TinyLinux.tar.gz
DELETE_IMAGE	delete image	nfvis %SYS-6-DELETE_IMAGE: Image deletion successful: TinyLinux.tar.gz
CREATE_FLAVOR	create flavor	nfvis %SYS-6-CREATE_FLAVOR: Profile creation successful: small
DELETE_FLAVOR	delete flavor	nfvis %SYS-6-DELETE_FLAVOR: Profile deletion successful: small
VM_DEPLOYED	vm deployment	nfvis %SYS-6-VM_DEPLOYED: VM deployment successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
VM_ALIVE	vm alive	nfvis %SYS-6-VM_ALIVE: VM active successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
SERVICE_ALIVE	service alive	nfvis %SYS-6-SERVICE_ALIVE: Service group deployment completed successfully!

Event	Trigger Condition	Syslog Messages
VM_UNDEPLOYED	vm undeployed	nfvis %SYS-6-VM_UNDEPLOYED: VM undeployment successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c SERVICE_UNDEPLOYED service undeployed nfvis %SYS-6-SERVICE_UNDEPLOYED: Service group undeployment completed successfully
VM_UPDATED (update flavor)	vm updated	nfvis %SYS-6-VM_UPDATED: VM update successful: VM is resized with flavor [ISRv-medium].
VM_UPDATED (vnic add / delete / update)	vm updated	nfvis %SYS-6-VM_UPDATED: VM update successful: Added 1 interface: [managed, net=my-net-1, nicid=3] Updated 2 interface: [managed, net=lan-net, nicid=1],[managed, net=wan-net, nicid=2]
SERVICE_UPDATED	service updated	nfvis %SYS-6-SERVICE_UPDATED: Service group update completed successfully
VM_STOPPED	vm stopped	nfvis %SYS-6-VM_STOPPED: VM stop successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
VM_STARTED	vm started	nfvis %SYS-6-VM_STARTED: VM start successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
VM_REBOOTED	vm rebooted	nfvis %SYS-6-VM_REBOOTED: VM reboot successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
VM_RECOVERY_INIT	vm recovery initiation	nfvis %SYS-6-VM_RECOVERY_INIT: VM recovery initiation successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
VM_RECOVERY_REBOOT	vm recovery reboot	nfvis %SYS-6-VM_RECOVERY_REBOOT: VM recovery reboot successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
VM_RECOVERY_COMPLETE	vm recovery complete	nfvis %SYS-6-VM_RECOVERY_COMPLETE: VM recovery successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
VM_MONITOR_UNSET	vm monitoring unset	nfvis %SYS-6-VM_MONITOR_UNSET: Unsetting VM monitoring successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
VM_MONITOR_SET	vm monitoring set	nfvis %SYS-6-VM_MONITOR_SET: Setting VM monitoring successful: SystemAdminTena_ROUTER_0_df6733c1-0768-4ae6-8dce-b223ecdb036c
ROTATED_LOGS_DELETE (When logs older than 30 days are present)	delete rotated logs	nfvis %SYS-6-ROTATED_LOGS_DELETE: Deleted rotated logs from archive older than 30 days

Event	Trigger Condition	Syslog Messages
ROTATED_LOGS_DELETE (When Log file size exceed 2GB, older logs are deleted)	delete rotated logs	nfvis %SYS-6-ROTATED_LOGS_DELETE: Rotated logs had exceeded 2G, older logs have been deleted to make space
CIMC_PASSWORD_UPDATE	cimc password update operation	nfvis %SYS-6-CIMC_PASSWORD_UPDATE: CIMC password change is successful
BIOS_PASSWORD_UPDATE	bios password update operation	nfvis %SYS-6-BIOS_PASSWORD_UPDATE: BIOS password change is successful
SECURE_OVERLAY_CREATING	create secure overlay	nfvis %SYS-6-SECURE_OVERLAY_CREATING: Secure Overlay mgmthub initial creation. Active local bridge: wan-br
SECURE_OVERLAY_UP	secure overlay is up	nfvis %SYS-6-SECURE_OVERLAY_UP: Secure Overlay mgmthub up. Active bridge: wan-br Secure Overlay up after network interuption
SECURE_OVERLAY_DELETE	secure overlay is deleted	nfvis %SYS-6-SECURE_OVERLAY_DELETE: Secure Overlay deleted
SECURE_OVERLAY_ERROR	error in secure overlay	nfvis %SYS-3-SECURE_OVERLAY_ERROR: Secure Overlay mgmthub creation in error. Active bridge: wan-br Secure overlay initial creation nfvis %SYS-3-SECURE_OVERLAY_ERROR: Secure Overlay mgmthub creation in error. Active bridge: wan-br Cannot ping remote system ip address 10.0.0.1
WAN_DHCP_SWITCHOVER	WAN bridge toggle	nfvis %SYS-6-WAN_DHCP_SWITCHOVER: Switch over to bridge wan-br for auto DHCP enablement successful
WAN_DHCP_TOGGLE_END	WAN bridge toggle	nfvis %SYS-6-WAN_DHCP_TOGGLE_END: Disabling bridge toggle for auto DHCP enablement.
ROUTE_DISTRIBUTION_DOWN	Route distribution down	nfvis %SYS-6-ROUTE_DISTRIBUTION_DOWN: Neighbor Address: 172.25.221.106
ROUTE_DISTRIBUTION_START	Route distribution start	nfvis %SYS-6-ROUTE_DISTRIBUTION_START: Route Distribution initial creation. Neighbor Address: 172.25.221.106
ROUTE_DISTRIBUTION_ERROR	Route distribution in error state	nfvis %SYS-3-ROUTE_DISTRIBUTION_ERROR: Neighbor Address: 172.25.221.106
ROUTE_DISTRIBUTION_DELETE	Route distribution deleted	nfvis %SYS-6-ROUTE_DISTRIBUTION_DELETE: All Neighbor Addresses deleted
ROUTE_DISTRIBUTION_UP	Route distribution up	nfvis %SYS-3-ROUTE_DISTRIBUTION_UP: Neighbor Address: 172.25.221.106

Event	Trigger Condition	Syslog Messages
OVS_DPDK_SUCCESS	Enable DPDK	nfvis %SYS-3-OVS_DPDK_SUCCESS: OVS-DPDK enabled
OVS_DPDK_FAILURE	DPDK failure	nfvis %SYS-3-OVS_DPDK_FAILURE: Unable to allocate CP
BACKUP_INIT	Backup configuration initiation	nfvis %SYS-6-BACKUP_INIT: Starting backup: configuration-xxx
BACKUP_SUCCESS	Backup configuration successful	nfvis %SYS-6-BACKUP_SUCCESS: Backup configuration-xxx completed successfully
BACKUP_FAILURE	Backup configuration failure	nfvis %SYS-3-BACKUP_FAILURE: Backup configuration-xxx failed
RESTORE_INIT	Restore initiation	nfvis %SYS-6-RESTORE_INIT: Restore started
RESTORE_ SUCCESS	Successful restore	nfvis %SYS-6-RESTORE_ SUCCESS: Restore successful
RESTORE_FAILURE	Failure to restore	nfvis %SYS-3-RESTORE_FAILURE: Restore failed - internal error

Support for 40G Dual Port and Quad-Split NICs on Cisco Cloud Services Platforms

NFVIS Backup and Restore

In a NFVIS Backup and Restore, the PNIC mode of the source system and the destination system must be the same. If not, the restore command is rejected.

Backup (Source System)	Restore (Destination System)	Result
2x40 mode configuration	2x40 mode configuration	**`nfvis# hostaction restore file-path intdatastore:sample-dir/sample2.bkup`** 2021-06-07 21:51:22,079 INFO [hostaction:/hostaction:hostaction] [restore] Restore completed successfully.

Backup (Source System)	Restore (Destination System)	Result
2x40 mode configuration	4x10 mode configuration	Restore command is rejected. **nfvis# hostaction restore file-path intdatastore:sample-dir/sample4.bkup** Error: Unable to restore - 40G PNIC mode configuration mismatch.
4x10 mode configuration	2x40 mode configuration	Restore command is rejected. **nfvis# hostaction restore file-path intdatastore:sample-dir/sample4.bkup** Error: Unable to restore - 40G PNIC mode configuration mismatch.
4x10 mode configuration	4x10 mode configuration	**nfvis# hostaction restore file-path intdatastore:sample-dir/sample2.bkup** 2021-06-07 21:51:22,079 INFO [hostaction:/hostaction:hostaction] [restore] Restore completed successfully.

Return Material Authorization (RMA)



Note Before powering down the CSP device, ensure to remove the vMedia configuration used for NFVIS installation.

Table 1:

Original Card Mode	New Card Mode	Process
2x40	2x40	• Shut down the CSP. • Insert the new 2x40 card in the same slot as the old RMAed card. • Turn on the CSP. • Confirm that the PNICs are in ok state by checking **show system status**. • Interfaces come up as ethx-1 and ethx-2 where x is the slot. Run the **show running-config pnic** and **show pnic** commands to check PNIC information.

Original Card Mode	New Card Mode	Process
4x10	4x10	• Shut down the CSP. • Insert the new 4x10 card in the same slot as the old RMAed card. • Turn on the CSP. • Confirm that the PNICs are in ok state by checking **`show system status`**. • Interfaces come up as ethx-1-1, ethx-1-2, ethx-1-3, and ethx-1-4, where x is the slot. Run the **`show running-config pnic`** and **`show pnic`** commands to check PNIC information.
2x40: ethx-1 ethx-2	4x10	• Shut down the CSP. • Insert the new 4x10 card in the same slot as the old RMAed card. • Turn on the CSP. • NFVIS reboots again since the PNIC status is not ok. You see the interfaces ethx-1, ethx-2, ethx-1-1, ethx-1-2, ethx-1-3, and ethx-1-4 in the running configuration. Running the **`show system status`** command shows that the PNIC status is not ok.c • Run the **`show pnic-breakout`** or **`show nic`** commands to get the device ID of the 40G NIC card whose PNIC mode needs to be changed. • Use the device ID got from the previous step to run the un-breakout command: **`hostaction pnic-breakout force device x mode 2x40`** (where x is device ID). • System reboots after the command is executed. • Confirm that PNICs are in ok state by running the **`show system status`** command. • Interfaces come up as ethx-1, ethx-2 where x is the slot. Run the **`show running-config pnic`** and **`show pnic`** commands to check PNIC information.

Original Card Mode	New Card Mode	Process
4x10: ethx-1-1 ethx-1-2 ethx-1-3 ethx-1-4	2x40	• Shut down the CSP. • Insert the new 2x40 card in the same slot as the old RMAed card. • Turn on the CSP. • NFVIS reboots again since the PNIC status is not ok. You see the interfaces ethx-1, ethx-2, ethx-1-1, ethx-1-2, ethx-1-3, and ethx-1-4 in running configuration. Running the **`show system status`** command shows that the PNIC status is not ok. Run the **`show running-config pnic`** and **`show pnic`** commands to check PNIC information. • Run the **`show pnic-breakout`** or **`show nic`** commands to get the device ID of the 40G NIC card whose PNIC mode needs to be changed. • Use the device ID got from the previous step to run the breakout command: **`hostaction pnic-breakout force device x mode 2x40`** (where x is device ID). • System reboots after the command is executed. • Confirm that PNICs are in ok state by running the **`show system status`** command. • Interfaces come up as ethx-1-1, ethx-1-2, ethx-1-3, and ethx-1-4 where x is the slot. Run the **`show running-config pnic`** and **`show pnic`** commands to check PNIC information.

Granular Role Based Access Control

Capability Matrix

Table 2:

Operations/Roles	"admin" Super User	Administrator	Operator	Auditor	VNF Group Administrator	VNF Group Operator	VNF Group Auditor
User Management							
Create, update, delete new logins and assign roles	Y	Y	N	N	N	N	N
List all logins	Y	Y	Y	Y	Y	Y	Y

Operations/Roles	"admin" Super User	Administrator	Operator	Auditor	VNF Group Administrator	VNF Group Operator	VNF Group Auditor
Ability to reset password on any login	Y	Y	N	N	Y	N	N
Create and delete custom VNF groups and assign users to VNF groups	Y	Y	N	N	N	N	N
VNF Management							
Create	Y	Y	N	N	Y	N	N
Delete or update VNFs	Y	Y	N	N	Specific VNFs	N	N
Update VNF group name	Y	Y	N	N	N	N	N
Start and stop VNFs	Y	Y	Y	N	Specific VNFs	Specific VNFs	N
VNF snapshots	Y	Y	Y	N	Specific VNFs	Specific VNFs	N
Restore from snapshot	Y	Y	N	N	Specific VNFs	N	N
List all VNF instances	Y	Y	Y	Y	Specific VNFs	Specific VNFs	Specific VNFs
Access the VNF console	Y	Y	Y	N	Specific VNFs	Specific VNFs	N
Assign VNF to a custom group	Y	Y	N	N	N	N	N
Device Level Operations							

Operations/Roles	"admin" Super User	Administrator	Operator	Auditor	VNF Group Administrator	VNF Group Operator	VNF Group Auditor
View and monitor device level statistics, including logs	Y	Y	Y	Y	Y	Y	Y
Factory reset	Y	Y	N	N	N	N	N
System-wide device configurations such as DNS	Y	Y	N	N	N	N	N
Device backup and restore	Y	N	N	N	N	N	N
Platform upgrades	Y	Y	N	N	N	N	N
Change BIOS password, change CIMC password, PNIC-breakout, power cycle, host reboot, and hostaction shutdown	Y	Y	N	N	N	N	N
Clear BIOS spassword, SSH keys, and stats files	Y	Y	N	N	N	N	N
Clear cache, mgmt-dhcp-renew, wan-dhcp-renew, and PnP actions	Y	Y	Y	N	N	N	N

Operations/Roles	"admin" Super User	Administrator	Operator	Auditor	VNF Group Administrator	VNF Group Operator	VNF Group Auditor
System certificate modifications, ISCSI settings, and file delete operation	Y	Y	N	N	N	N	N
Tech support and logs	Y	Y	Y	Only through portal	Y	Y	Only through portal
Create VFs for SR-IOV, and enable DPDK	Y	Y	N	N	N	N	N
Image Repository Changes							
Upload new VNF images	Y	Y	N	N	Y	N	N
Upload new NFVIS upgrade files	Y	Y	N	N	Y	N	N
File transfer to the device (certificates)	Y	Y	N	N	Y	N	N
File transfer from the device	Y	Y	N	N	Y	N	N
File-copy and file-download	Y	Y	N	N	Y	N	N
File-delete	Y	Y	N	N	N	N	N
View contents	Y	Y	Y	Y	Y	Y	Y
Clustering Operations							

Operations/Roles	"admin" Super User	Administrator	Operator	Auditor	VNF Group Administrator	VNF Group Operator	VNF Group Auditor
Set up a cluster (both management and storage)	Y	Y	N	N	N	N	N