



Event Notifications

Cisco Enterprise NFVIS generates event notifications for key events. A NETCONF client can subscribe to these notifications for monitoring the progress of configuration activation and the status change of the system and VMs.

There are two types of event notifications: `nfvisEvent` and `vmlcEvent` (VM life cycle event)

To receive event notifications automatically, you can run the NETCONF client, and subscribe to these notifications using the following NETCONF operations:

- `--create-subscription=nfvisEvent`
- `--create-subscription=vmlcEvent`

You can view NFVIS and VM life cycle event notifications using the **`show notification stream nfvisEvent`** and **`show notification stream vmlcEvent`** commands respectively.

- [nfvisEvent, on page 2](#)
- [vmlcEvent, on page 13](#)

nfvisEvent

Event Type	Notification Trigger	Notification Output Example
WAN_DHCP_RENEW	DHCP renew operation is performed.	<pre><?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></pre>
BRIDGE_DHCP_RENEW	Bridge DHCP renew operation is performed.	<pre><?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></pre>
INTF_STATUS_CHANGE	Interface status is changed.	<pre><?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></pre>

Event Type	Notification Trigger	Notification Output Example
NETWORK_CREATE	A network is created.	<pre><?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 successfully</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></pre>
NETWORK_UPDATE	A network is updated.	<pre><?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 successfully</status_message> <event_type>NETWORK_UPDATE</event_type> <network_name>testn1</network_name> <network_bridge/> <network_sriov/> <network_vlan/> <network_trunk/> </nfvisEvent> </notification></pre>

Event Type	Notification Trigger	Notification Output Example
NETWORK_DELETE	A network is deleted.	<pre><?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></pre>
UPGRADE_REGISTER	System upgrade is registered.	<pre><?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></pre>
UPGRADE_APPLY	System upgrade is applied.	<pre><?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></pre>

Event Type	Notification Trigger	Notification Output Example
ROTATED_LOGS_DELETE	Rotated logs older than 30 days are deleted by the system.	<pre><?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></pre>
ROTATED_LOGS_DELETE	Older logs deleted by the system when the total file size of rotated logs exceeds 2GB.	<pre><?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></pre>

Event Type	Notification Trigger	Notification Output Example
SECUREBRIDGE	create secure overlay	<pre> <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> </pre>
SECUREBRIDGE	Secure Overlay is UP	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
<u>WAN_DHCP_SWITCHOVER</u>	WAN bridge toggle	<pre> <?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> </pre>
<u>WAN_DHCP_TOGGLE_END</u>	WAN bridge toggle	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
ROUTE_DISTRIBUTION_START	To start route distribution	<pre data-bbox="641 348 1446 827"><?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></pre>
ROUTE_DISTRIBUTION_DOWN	Route distribution is down	<pre data-bbox="641 884 1487 1362"><?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></pre>

Event Type	Notification Trigger	Notification Output Example
ROUTE_DISTRIBUTION_ERROR	Route distribution in error	<pre> <?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> </pre>
ROUTE_DISTRIBUTION_DELETE	Route distribution deleted	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
ROUTE_DISTRIBUTION_UP	Route distribution up	<pre><?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></pre>
OVS_DPK_SUCCESS	Enable DPK	<pre><?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_DPK_SUCCESS</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification></pre>
OVS_DPK_FAILURE	DPDK failure	<pre><?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_DPK_FAILURE</event_type> <severity>INFO</severity> <hostname>NFVIS</hostname> </nfvisEvent> </notification></pre>

Event Type	Notification Trigger	Notification Output Example
PNIC_SRIOV_ENABLE	Enable SR-IOV to 2 vfs	<pre> <?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> </pre>
PNIC_SRIOV_DISABLE	Disable SR-IOV	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
PNCSRIOV_ENABLE	Enable of disable SR-IOV in error	<pre data-bbox="641 348 1382 829"><?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></pre>
PNCSRIOV_UPDATE	Set switchmode to veb/vepa	<pre data-bbox="641 884 1369 1360"><?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></pre>

Event Type	Notification Trigger	Notification Output Example
PNIC_SRIOV_UPDATE	Set switchmode to veb/vepa in error	<pre><?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></pre>

vmlcEvent

Event Type	Notification Trigger	Notification Output Example
CREATE_IMAGE	The VM image is registered.	<pre><?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></pre>

Event Type	Notification Trigger	Notification Output Example
DELETE_IMAGE	The VM image is unregistered.	<pre><?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></pre>
CREATE_FLAVOR	A flavor is created.	<pre><?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></pre>
DELETE_FLAVOR	A flavor is deleted.	<pre><?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></pre>

Event Type	Notification Trigger	Notification Output Example
VM_DEPLOYED	The VM is deployed.	<pre> <?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> </vmlcEvent> </notification> </pre>

Event Type	Notification Trigger	Notification Output Example
VM_ALIVE	The state of a monitored VM becomes ACTIVE.	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
VM_UNDEPLOYED	The VM is undeployed	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
SERVICE_UPDATED	The VM is updated.	<pre> <?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> </pre>
VM_STOPPED	The VM is stopped per VM action request.	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
VM_STARTED	The VM is started per VM action request.	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
VM_REBOOTED	The VM is rebooted per VM action request.	<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
VM_RECOVERY_INIT	A monitored VM is not reachable.	<pre> <?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] triggered. 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> </pre>

Event Type	Notification Trigger	Notification Output Example
VM_RECOVERY_REBOOT	Recovery reboot starts for the monitored VM, which is not reachable.	<pre> <?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. </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_REBOOT</type> </event> </vmlcEvent> </notification> </pre>

Event Type	Notification Trigger	Notification Output Example
VM_RECOVERY_COMPLETE	Recovery reboot completes for the monitored VM, which is not reachable.	<pre> <?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/nfv/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> </pre>

Event Type	Notification Trigger	Notification Output Example
VMMONCR_UNSET	Monitoring is disabled per VM action request.	<pre> <?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> </pre>
VMMONCR_SET	Monitoring is enabled per VM action request.	<pre> <?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> </pre>

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

Event Type	Notification Trigger	Notification Output Example
		<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
		<pre> </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> </pre>

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

Event Type	Notification Trigger	Notification Output Example
		<pre> <?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> </pre>

Event Type	Notification Trigger	Notification Output Example
		<pre><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></pre>