Monitoring Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager

This chapter contains the following sections:

Information about Monitoring

Cisco Virtual Switch Update Manager provides the server administrators with a view of the virtual network and visibility into the networking aspects of the Cisco Nexus 1000V.

It allows the administrators to view the configuration aspects of the VSM, export networking details from vCenter server, investigate the root cause of and prevent networking issues, and deploy the virtual machines with policies. The administrators can monitor and manage the resources effectively with the network details that are provided in the Cisco Virtual Switch Update Manager.

Cisco Virtual Switch Update Manager displays the following switch information:

- **Dashboard tab**—Displays the summary of the system, network statistics, and license information.
- **Switch tab**—Displays hosts, VMs, port groups, and VNIC and PNIC information at the switch level.
- **Hosts/VEM tab**—Displays hosts, VMs, port groups, and VNIC and PNIC information at the host level.

Note TACACS users cannot monitor the Cisco Nexus 1000V switch on the Cisco Virtual Switch Update Manager.

Monitoring the Cisco Nexus 1000V Using Cisco Virtual Switch Update Manager

You can view the Virtual Supervisor module (VSM) and Virtual Ethernet module (VEM) details of the Cisco Nexus 1000V switch.

Step 1 Log in to VMware vSphere Web Client.

Step 2 In the vSphere Client, choose **Home** > **Cisco Virtual Switch Update Manager** > **Configure and Manage Nexus 1000V and Application Virtual Switch** > **Datacenter** > **Distributed Virtual Switch** > **Monitor**.

   Note You are prompted to enter your credentials if the switch is not managed by Cisco Virtual Switch Update Manager. If the switch is managed by Cisco Virtual Switch Update Manager, you can monitor the switch automatically.

   Note If you register Cisco Virtual Switch Update Manager with vCenter when the vCenter plug-in is already installed, you might not see the **Cisco Nexus 1000V** tab under Monitor. If you do not see this tab, reboot VMware vSphere Web Client.

Step 3 (Optional) You can also access the **Cisco Nexus 1000V Monitor** pane in the vSphere Client by choosing **vCenter** > **Distributed Switches**.

Step 4 (Optional) In the switch pane, choose **Monitor** > **Cisco Nexus 1000V** .

Step 5 Click **Dashboard**.
The **Dashboard** pane displays following non configurable summary of the Cisco Nexus 1000V:

Name	Description
System	
Switch Name field	The name of the switch.
NX-OS Version field	The Cisco NX-OS version and the build that the switch is using.
VSM IP field	The IP address of the Virtual Supervisor Module (VSM).
DC Name field	The name of the data center.
Connectivity Mode field	The mode of connectivity between the VSMs and the VEMs .
VC Connectivity field	The status of vCenter connectivity
VSM HA field	The Virtual Supervisor Module (VSM) high availability mode
Network Statistics	
VNICs vs Max field	The maximum number of virtual network interface cards (VNICs) that are supported and their current usage

Name	Description
Hosts vs Max field	The maximum number of server hosts that are supported and their current usage.
Port-Groups vs Max field	The maximum number of port groups that are supported and their current usage.
Veths/Host Max field	The maximum number of vEthernet ports per host that are supported and their current usage.
VLAN vs Max field	The maximum number of VLANs that are supported and their current usage.
VXLAN vs Max field	The maximum number of VXLANs that are supported and their current usage.
Licenses	The information of the license installed.
License Type field	The type of the license
Licenses Available field	The licenses that are available to use.
Licenses Used field	The licenses that are actually used.
Earliest Expiration field	The earliest expiration time of the license.
Status field	The status of the license.

Step 6   Click **Switch**.

Step 7   Click **Host/VEM**.

The **Host/VEM** pane displays the following non configurable details of the host.

Name	Description
Host Name field	The name of the host.
NX-OS Version field	The Cisco NX-OS version and the build that the host is using.
Host IP field	The IP address of the host.
License field	The license details of the host.
Host/Module field	The number of modules per host.
VMs/Host field	The number of VMs per host.

Name	Description
VNICs / Host field.	The number of VNICs per host.

Step 8   Click **VM Info**.
The **VM Info** pane displays the following non configurable details.

Name	Description
VMs field	The name of the VM.
vNICs field	The name of the vNIC associated to the VM.
Adapter field	The name of the adapter.
Status field	The status of the VM.
Port Group field	The port group associated with the VM.
VLANs field	The VLAN associated with the VM.
Host ID field	The module number of the host at VSM.

Step 9   Click **Port Groups**.
The **Port Groups** pane displays the following non configurable details.

Name	Description
Port Group field	The name of the port profile.
Type field	The type of port profile.
VLANs field	The VLANs associated with the port profile.
System VLANs field	The system VLANs associated with the port profile.
Port Max field	The maximum number of ports available.
Port Min field	The minimum number of ports available.
Port Used field	The total number of the ports used.

Step 10   Click **vNICS**.
The **vNICs** pane displays the following non configurable details.

Name	Description
vNICs field	The name of the vNIC.
VM field	The name of the VM.
Adapter field	The name of the adapter.
Status field	The status of the vNIC.
Port Group field	The port group associated with the vNICs.
VLANs field	The VLANs associated with the vNICs.
Host ID field	The module number of the host at the VSM.

Step 11   Click **Uplinks**.
The Uplinks pane displays the details of the Uplinks as described in the table below:

Name	Description
Switch Interface field	The name of the port.
Status field	The status of the uplink.
Port Channel field	The port channel associated with the uplink.
Host IDfield	The module number of the host at the VSM.
Port Group field	The port group associated with the uplink.
VLANs field	The VLANs associated with the uplink .
CDP Uplinks field	The CDP uplink information.

Step 12   Click **Hosts/VEM**.
The Systems area in the Host/VEM pane displays the details of the host as described in the table below:

Name	Description
Host Name field	The name of the host.
NX-OS Version field	The Cisco NX-OS version and the build that the host is using.
Host IP field	The IP address of the host.

Name	Description
License field	The license details of the host.
Host/Module field	The number of modules per host.
VMs/Host field	The number of VMs per host .
VNIC/Host field	The number of VNICs per host.

Step 13   Click **VM Info**.

The **VM Info** area provides the following host details:

Name	Description
VMs field	The name of VMs per host.
VNICs field	The name of the vNICs per host.
Adapter field	The name of the adapter.
Status field	The status of the host.
Port Group field	The port group associated with the VM of the host.
VLANs field	The VLANs associated with the VMs of the host.
Host ID field	The module number of the host at the VSM.

Step 14   Click **Port Groups**.

The **Port Groups** area provides the following host details:

Name	Description
Port Group field	The name of the port group.
Type field	The type of the port group.
VLAN field	The VLANs associated with the host.
System VLAN field	The system VLAN associated with the host.
Ports Max field	The maximum number of port per host.
Ports Min field	The minimum number of ports per host.
Ports Used field	The total number of ports used.

Step 15   Click **vNICS**.

The **vNICs** area provides the following host details:

Name	Description
VNICs field	The name of the VNICs associated to the host.
VMs field	The name of the VM associated to the host .
Adapter field	The name of the adapter.
Status field	The status of the vNIC associated to the host.
Ports Group field	The name of the port group associated to the host.
VLANs field	The VLANs associated with the host.
Host ID field	The module number of the host at the VSM.

Step 16   Click **Uplinks**.

The **Uplinks** area provides the following host details:

Name	Description
Switch Interface field	The name of the port.
Status field	The status of the uplink interface.
Port Channel field	The port channel associated with the uplink.
Host ID field	The module number of the host at the VSM.
Ports Group field	The name of the port group per host.
VLANs field	The VLANs associated with per host.
CDP Uplink field	The CDP Uplink information.

Feature History for Cisco Virtual Switch Update Manager Monitoring Feature

This table includes only the updates for those releases that have resulted in additions or changes to the feature.

Feature Name	Releases	Feature Information
Cisco Virtual Switch Update Manager Monitoring Feature	Release 1.0	This feature was introduced.