



Monitoring Cisco Nexus 1000V Using Cisco VSUM

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Information about Monitoring

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

It allows 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. Administrators can monitor and manage resources with the network details that are provided in the Cisco VSUM.

Cisco VSUM 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 VSUM.

Monitoring the Cisco Nexus 1000V Using Cisco VSUM

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

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- Step 1** Log in to the VMware vSphere Web Client.
- Step 2** In the vSphere Client, choose **Home > Cisco Virtual Switch Update Manager > Nexus1000V > Configure**.
- Step 3** Choose a data center and a distributed virtual switch, and then click **Monitor**.
- Note** You are prompted to enter your credentials if the switch is not managed by Cisco VSUM. For more information, see [Managing an Existing Cisco Nexus 1000V Switch](#).
- Note** If you register Cisco VSUM 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 the VMware vSphere Web Client.
- Step 4** (Optional) You can also access the **Cisco Nexus 1000V Monitor** pane in the vSphere Client by choosing **vCenter > Distributed Switches**.
- Step 5** (Optional) In the switch pane, choose **Monitor > Cisco Nexus 1000V**.
- Step 6** Click **Dashboard**.
The **Dashboard** pane displays the following summary of the Cisco Nexus 1000V:

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

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

Step 7 Click **Switch**.

Step 8 Click **Host/VEM**.

The **Host/VEM** pane displays the following 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. |
| VNICs / Host field | The number of VNICs per host. |

- Step 9** Click **VM Info**.
The **VM Info** pane displays the following details.

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

- Step 10** Click **Port Groups**.
The **Port Groups** pane displays the following details.

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

- Step 11** Click **vNICS**.
The **vNICS** pane displays the following details.

| Name | Description |
|---------|--------------------------|
| vNICs | The name of the vNIC. |
| VM | The name of the VM. |
| Adapter | The name of the adapter. |

| Name | Description |
|------------|---|
| Status | The status of the vNIC. |
| Port Group | The port group associated with the vNICs. |
| VLANs | The VLANs associated with the vNICs. |
| Host ID | The module number of the host at the VSM. |

- Step 12** Click **Uplinks**.
The **Uplinks** pane displays the following details.

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

- Step 13** Click **Hosts/VEM**.
The **Systems** area in the **Host/VEM** pane displays the host details.

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

| Name | Description |
|-----------|-------------------------------|
| VNIC/Host | The number of VNICs per host. |

Step 14

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 15

Click **Port Groups**.

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

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

Step 16

Click **vNICs**.

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

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

- Step 17** Click **Uplinks**.
The **Uplinks** area provides the following host details.

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

