



## Port Profiles

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This chapter describes how to identify and resolve problems with port profiles.

### Information About Port Profiles

Port profiles are used to configure interfaces. A port profile can be assigned to multiple interfaces which gives them all the same configuration. Changes to the port profile are propagated automatically to the configuration of any interface that is assigned to it.

In the Microsoft Hyper-V Server, a port profile is represented as a port group. The vEthernet or Ethernet interfaces are assigned in the Microsoft SCVMM server to a port profile to do the following:

- Define the port configuration by policy.
- Apply a single policy across a large number of ports.
- Support both vEthernet and Ethernet ports.

Port profiles can be assigned by the server administrator to physical ports (a VMNIC or a PNIC). Port profiles that are configured as vEthernet can be assigned only to a vNIC port while port profiles that are configured as Ethernet can be assigned only to physical adapters.



**Note**

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While a manual interface configuration overrides that of the port profile, it is not recommended. A manual interface configuration is used only, for example, to quickly test a change or allow a port to be disabled without having to change the inherited port profile.

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For more information about assigning port profiles to physical or virtual ports, see *Cisco Nexus 1000V for Microsoft Hyper-V Port Profile Configuration Guide, Release 5.2(1)SM1(5.1)*.

To verify that the profiles are assigned as expected to physical or virtual ports, use these **show** commands:

- **show port-profile virtual usage**
- **show running-config interface interface-id**

To verify port profile inheritance, enter this command:

- **show running-config interface interface-id**



**Note**

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Inherited port profiles cannot be changed or removed from an interface from the Cisco Nexus 1000V CLI. This process can be done from the Microsoft SCVMM server.

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**Note**

Inherited port profiles are automatically configured by the Cisco Nexus 1000V when the ports are attached on the hosts. This process occurs when the Microsoft Hyper-V port GUID that is assigned by the system administrator is matched with the port profile that created it.

For detailed information about port profiles, see the *Cisco Nexus 1000V for Microsoft Hyper-V Port Profile Configuration Guide, Release 5.2(1)SM1(5.1)*.

## Problems with Port Profiles

The following are symptoms, possible causes, and solutions for problems with port profiles.

Symptom	Possible Causes	Solution
You do not see the port profile/uplink network/network segment on the Microsoft SCVMM server.	The connection to the Microsoft SCVMM server is down.	<ol style="list-style-type: none"> <li>1. Connect to <code>http://VSM-IP</code> to verify that the VSM is reachable from the Microsoft SCVMM server.</li> <li>2. Launch the Microsoft SCVMM user interface (UI).</li> <li>3. Choose <b>Fabric Management &gt; Networking &gt; Switch Extension Manager</b>.</li> <li>4. Refresh the Cisco Nexus 1000V.</li> </ol>
	The Microsoft SCVMM server has not pulled the new configuration from the VSM.	<ol style="list-style-type: none"> <li>1. Launch the Microsoft SCVMM user interface (UI).</li> <li>2. Choose <b>Fabric Management &gt; Networking &gt; Switch Extension Manager</b>.</li> <li>3. Refresh the Cisco Nexus 1000V to force Microsoft SCVMM to pull new configuration from the VSM.</li> <li>4. Fix any problems with the domain configuration.</li> </ol> <p>For information about configuring the domain, see the <i>Cisco Nexus 1000V for Microsoft Hyper-V System Management Configuration Guide, Release 5.2(1)SM1(5.1)</i>.</p>
	The port profile is configured incorrectly.	<ol style="list-style-type: none"> <li>1. To verify that publish port profile is configured for the port profile/Network segment/uplink network, enter this command: <b>show network segment name name</b></li> <li>2. Fix the port profile using the procedures in the <i>Cisco Nexus 1000V for Microsoft Hyper-V Port Profile Configuration Guide, Release 5.2(1)SM1(5.1)</i>.</li> </ol>

Symptom	Possible Causes	Solution
<p>An Ethernet interface or vEthernet interface is administratively down.</p> <p>A system message similar to the following is logged:</p> <pre>%VMS-3-DVPG_NICS_MOVED: '1' nics have been moved from port-group 'Access483' to 'Unused_Or_Quarantine_Veth'.</pre>	<p>A configuration was not saved prior to rebooting the VSM, the configuration was lost, and the interfaces were moved to one of the following port profiles:</p> <ul style="list-style-type: none"> <li>Unused_Or_Quarantine_Uplink for Ethernet types</li> <li>Unused_Or_Quarantine_Veth for vEthernet types</li> </ul>	<ol style="list-style-type: none"> <li>1. Verify the port profile to interface mapping by entering the <b>show port-profile virtual usage</b> command.</li> <li>2. Reassign the VMNIC or PNIC to a nonquarantined port group to enable the interface to be up and forwarding traffic. You must change the port group on the Microsoft SCVMM server.</li> </ol>
<p>After applying a port profile, an online interface is quarantined.</p> <p>A system message similar to the following is logged:</p> <pre>%PORT-PROFILE-2-INTERFACE_QUARAN TINED: Interface Ethernet3/3 has been quarantined due to Cache Overrun</pre>	<p>The assigned port profile is incorrectly configured. The incorrect command fails when the port profile is applied to an interface.</p> <p>Although a specific command fails, the port profile-to-interface mapping is created.</p>	<ol style="list-style-type: none"> <li>1. Identify the command that failed by entering the <b>show accounting log   grep FAILURE</b> command.</li> <li>2. Verify the port profile-to-interface mapping by entering the <b>show port-profile virtual usage</b> command.</li> <li>3. Fix the error in the port profile using the procedures in the <i>Cisco Nexus 1000V for Microsoft Hyper-V Port Profile Configuration Guide, Release 5.2(1)SM1(5.1)</i>.</li> <li>4. Bring the interface out of quarantine by entering the <b>no shutdown</b> command. The interface comes back online.</li> <li>5. Return shutdown control to the port profile by entering the <b>default shutdown</b> command.</li> </ol>
<p>After modifying a port profile, an assigned offline interface is quarantined.</p> <p>A system message similar to the following is logged:</p> <pre>%PORT-PROFILE-2-INTERFACE_QUARAN TINED: Interface Ethernet4/3 has been quarantined due to Cache Overrun</pre>	<p>The interface has been removed from the DVS.</p>	<p>To bring the interface back online, see the <a href="#">“Recovering a Quarantined Offline Interface”</a> section on page 8-7.</p>

Symptom	Possible Causes	Solution
<p>A module and all associated interfaces are offline.</p> <p>A system message similar to the following is logged:</p> <pre>2011 Mar 2 22:28:50 n1000v %VEM_MGR-2-VEM_MGR_REMOVE_NO_HB: Removing VEM 3 (heartbeats lost) 2011 Mar 2 22:29:00 n1000v %VEM_MGR-2-MOD_OFFLINE: Module 3 is offline</pre>	<p>The interface that causes system VLANs for the module has gone down for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• System interfaces were removed from the DVS on the Microsoft SCVMM Server.</li> <li>• The module was powered down.</li> <li>• There is general loss of connectivity to the module.</li> </ul>	<p>See the VEM troubleshooting guide to bring the module back online.</p> <p>To bring the interface back online, see the <a href="#">“Recovering a Quarantined Offline Interface”</a> section on page 8-7.</p>

Symptom	Possible Causes	Solution
<p>The interface is in the NoPortProfile state.</p>	<p>The port profile or uplink networks have been deleted from the VSM but are still on the VMM. If the port profiles are used to attach Ethernet and vEthernet interfaces, the interface will go into the NoPortProfile state.</p>	<ol style="list-style-type: none"> <li>1. Check if the GUID of the Ethernet port profile and GUID of the Microsoft SCVMM server uplink port profile set match as follows: <ol style="list-style-type: none"> <li>a. Display the GUID of the Ethernet port profile by entering the <b>show running-config port-profile <i>uplinkname</i></b> command on the VSM.</li> <li>b. Display the GUID of the Microsoft SCVMM server uplink port profile set by entering the PS C:\Program files(x86)\Cisco\Nexus1000V\Support &gt; <b>Get-SCExtensionUplinkPortProfile -name <i>uplinkname</i></b> command in a PowerShell window.</li> </ol> </li> <li>2. Check if the GUID of the vEthernet port profile matches the GUID of the Microsoft SCVMM server port profile under port classification as follows: <ol style="list-style-type: none"> <li>a. Display the GUID of the vEthernet port profile by entering the <b>show running-config port-profile <i>vEthernetName</i></b> command on the VSM.</li> <li>b. Display the GUID of the Microsoft SCVMM server port profile by entering the PS C:\Program files(x86)\Cisco\Nexus1000V\Support &gt; <b>Get-SCVirtualNetworkAdapterExtensionPortProfile -name <i>vEthernetName</i></b> command in a PowerShell window.</li> </ol> </li> <li>3. Detach the vEthernet interface from the Microsoft SCVMM server</li> <li>4. Delete the vEthernet interface manually from the VSM.</li> <li>5. Refresh the Switch Extension Manager in the Microsoft SCVMM server.</li> <li>6. Create a new uplink port profile set or a virtual port classification.</li> <li>7. Attach the original combination of Ethernet and vEthernet interfaces.</li> </ol>

Symptom	Possible Causes	Solution
	In Microsoft SCVMM 2012 you can attach a vEthernet port to a Cisco Nexus 1000V, by using two mandatory parameters VMNetwork and PortClassification. If the PortClassification is not applied, the vEthernet port will go into NoPortProfile state.	<ol style="list-style-type: none"> <li>1. In the Microsoft SCVMM UI, use the VM properties to detach the vEthernet/vNIC from the Cisco Nexus 1000V logical switch.</li> <li>2. Attach the vEthernet/vNIC to the Cisco Nexus 1000V logical switch with both of the parameters.</li> </ol>
The interface is in NoPortProfile and an update failure has occurred at the Microsoft SCVMM UI.	The vEthernet port profile is a system and the network segment is a nonsystem. This scenario is not supported.	<ol style="list-style-type: none"> <li>1. In the Microsoft SCVMM UI, repair the VM and click <b>ignore</b>.</li> <li>2. Detach the vEthernet interface from the Cisco Nexus 1000V host in the Microsoft SCVMM UI by moving it to a disconnected state.</li> <li>3. Attach the vEthernet interface back to the Cisco Nexus 1000V by using one of the following supported combinations: <ul style="list-style-type: none"> <li>– A vEthernet interface that is attached with a system vEthernet port profile and a system network segment.</li> <li>– A vEthernet interface that is attached with a nonsystem vEthernet port profile and a nonsystem network segment</li> <li>– A vEthernet interface that is attached with a nonsystem vEthernet port profile and a system network segment.</li> </ul> </li> </ol>
You are unable to add a PVLAN network segment to an uplink port that contains system VLANs.	If uplink networks are marked as system, the VSM does not allow PVLAN network segment pools.	<ol style="list-style-type: none"> <li>1. Remove the system VLAN configuration from the uplink network.</li> <li>2. Attach the PVLAN network segment pool to the uplink network.</li> <li>3. Convert the uplink network back to the system.</li> </ol>

Symptom	Possible Causes	Solution
You are unable to remove the system keyword from the network segment.	Sometimes, removing a system keyword is not allowed.	<ol style="list-style-type: none"> <li>1. Check if the segment is used by any dynamic profile by entering the <b>show dynamic-port-profile network segment name</b> command.</li> <li>2. If it is used, delete the dynamic profile.</li> <li>3. If Step 2 fails, do the following: <ol style="list-style-type: none"> <li>a. Check if any vEthernet interfaces are using the profile by entering <b>show port-profile name name</b> command.</li> <li>b. If vEthernet interfaces are present, detach the vEthernet interfaces from the Cisco Nexus 1000V by putting the interfaces in the NotConnected state.</li> <li>c. Detach the vEthernet interfaces to move the vEthernet interfaces to a Nonparticipating state so that they can be deleted without any impact.</li> <li>d. After all the vEthernet interfaces are associated with the dynamic port profile are deleted, repeat Step 2.</li> </ol> </li> <li>4. Remove the <b>system</b> keyword from the profile.</li> </ol>
The network segment is not available for attaching to a vEthernet interface.	A new network segment is associated with an existing network segment pool. However, when you try to attach a vEthernet interface to this new segment might not appear the same on the Microsoft SCVMM UI.	<ol style="list-style-type: none"> <li>1. Check if the uplink profiles allow the network segment pool that contains the new network segment on the VSM and the Microsoft SCVMM UI.</li> <li>2. If the segment is missing on the VSM, allow the network segment pool under the uplink network. Refresh the Switch Extension Manager to retrieve the new information.</li> <li>3. If the segment is missing on the Microsoft SCVMM UI, perform a refresh of the Switch Extension Manager to retrieve the new information.</li> </ol>
VM network not available on Cisco Nexus 1000V.	The VM network is created on the Microsoft SCVMM but when using this VM network to assign to a VM it fails.	<ol style="list-style-type: none"> <li>1. Identify the uplink network of the host where the VM is residing.</li> <li>2. Verify that the uplink network carries the VM etwork.</li> <li>3. Use the appropriate uplink network.</li> </ol>

## Recovering a Quarantined Offline Interface

You can recover and bring online an interface that is offline and has been quarantined.

**BEFORE YOU BEGIN**

- Log in to the CLI in EXEC mode.

**DETAILED STEPS**

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- Step 1** Verify that the interface is quarantined. The interface appears in the **show** command output.
- Step 2** On the Microsoft SCVMM server, add or associate the PNIC to a port profile (either the original port profile or a different port profile).  
The interface comes back online.
- Step 3** Verify that the interface has come back online by entering the **show interface brief** command.
- Step 4** Verify the port profile-to-interface mapping by entering the **show port-profile virtual usage** command.
- Step 5** Verify the interface has come out of quarantine automatically. The interface should no longer appear in the **show** command output.
- Step 6** Return shutdown control to the port profile by entering the **default shutdown** command.
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## Verifying the Maximum Number of Ports

The validation for the maximum number of ports is carried out by the Microsoft SCVMM only during the following two scenarios:

- When a new VM is deployed from the Microsoft SCVMM.
- When an existing VM is moved or migrated live.

Maximum ports are classified in two categories

- Per port profile with a default value of 32 and a maximum of 1024.
- Per host or VEM with a value of 216 on the Hyper-V.

## Verifying Maximum Number of Ports on a Logical Switch

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- Step 1** Launch the Microsoft SCVMM UI to view the maximum ports on a logical switch.
- Step 2** Choose **Fabric > Switch Extension Manager > Properties > Extensions**.
- 

## Verifying the Maximum Number of Ports on a Virtual Port Profile

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- Step 1** On the VSM, verify the maximum number of ports on the virtual port profile by entering the **show port-profile name** *virtual\_port\_profile\_name* command.

```
n1000v(config)# show port-profile name veth-policy
port-profile veth-policy
```



```
type: Vethernet
description:
status: enabled
max-ports: 32
min-ports: 1
inherit:
config attributes:
no shutdown
evaluated config attributes:
no shutdown
assigned interfaces:
port-group: new
system vlans: none
capability l3control: no
capability iscsi-multipath: no
capability vxlan: no
capability l3-vn-service: no
port-profile role: none
port-binding: static
```

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## Verifying the Maximum Number of Ports of a vEthernet Interface on the Microsoft SCVMM

- Step 1** Launch a PowerShell window to view the maximum ports of the vEthernet port profile on the Microsoft SCVMM.
- Step 2** In the PowerShell window, enter this command.:
- ```
PS C:\> Get-SCVirtualNetworkAdapterExtensionPortProfile -Name vEthernet_port_profile
```
- 

## Port Profile Logs

To enable and collect detailed logs for port profiles, enter these commands:

- **debug port-profile trace**
- **debug port-profile error**
- **debug port-profile all**
- **debug msp all**
- **debug nsmgr trace**

After enabling the debug log, the results of any subsequent port profile configuration are captured in the log file.

# Port Profile Troubleshooting Commands

You can use the commands in this section to troubleshoot problems related to port profiles.

| Command                                                                        | Purpose                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Get-SCPortClassification</b>                                                | Displays the port profile and port classification information.                                                                                                                                                                                                        |
| <b>Get-SCVirtualNetworkAdapterExtensionPort Profile</b>                        | See <a href="#">Example 8-1 on page 8-11</a> .                                                                                                                                                                                                                        |
| <b>show port-profile</b>                                                       | Displays the port profile configuration.<br>See <a href="#">Example 8-2 on page 8-11</a> .                                                                                                                                                                            |
| <b>show port-profile name</b> <i>name</i>                                      | Displays the configuration for a named port profile.<br>See <a href="#">Example 8-3 on page 8-12</a> .                                                                                                                                                                |
| <b>show port-profile brief</b>                                                 | Displays a tabular view of all configured port profiles.<br>See <a href="#">Example 8-4 on page 8-12</a> .                                                                                                                                                            |
| <b>show port-profile expand-interface name</b> <i>name</i>                     | Displays a named port profile expanded to include the interfaces assigned to it.<br>See <a href="#">Example 8-5 on page 8-12</a> .                                                                                                                                    |
| <b>show running-config port-profile</b><br><i>[profile-name]</i>               | Displays the port profile configuration.<br>See <a href="#">Example 8-6 on page 8-13</a> .                                                                                                                                                                            |
| <b>show port-profile virtual usage</b> [ <i>name</i> ]<br><i>profile-name]</i> | Displays the port profile usage by interface.<br>See <a href="#">Example 8-7 on page 8-14</a> .                                                                                                                                                                       |
| <b>show msp internal info</b>                                                  | Displays port profile mappings on the Microsoft SCVMM server and configured roles.<br>See <a href="#">Example 8-8 on page 8-14</a> .                                                                                                                                  |
| <b>show system internal port-profile profile-fsm</b>                           | Displays port profile activity on the Cisco Nexus 1000V, including transitions such as inherits and configurations. If the following appears, all inherits are processed:<br><br>Curr state: [PPM_PROFILE_ST_SIDLE]<br>See <a href="#">Example 8-9 on page 8-15</a> . |
| <b>show system internal port-profile event-history msgs</b>                    | Displays the messages logged about port profile events within the Cisco Nexus 1000V.<br>See <a href="#">Example 8-10 on page 8-15</a> .                                                                                                                               |

For detailed information about **show** command output, see the *Cisco Nexus 1000V for Microsoft Hyper-V Command Reference, Release 5.2(1)SM1(5.1)*.

## EXAMPLES

**Example 8-1 Get-SCPortClassification command**

```
PS C:\Users\Administrator.HyperV> Get-SCPortClassification

Name           : NexusNoRestrict-2
Description    :
ServerConnection : Microsoft.SystemCenter.VirtualMachineManager.Remoting.ServerConnection
ID             : 9f8819c1-8b53-42bd-a6fd-0173804e3194
IsViewOnly     : False
ObjectType     : PortClassification
MarkedForDeletion : False
IsFullyCached  : True
```

```
PS C:\Users\Administrator.HYPERV> Get-SCVirtualNetworkAdapterExtensionPortProfile
```

```
Name           : NoRest-unicast-norest
ExternalId     : 308ad66b-7c42-4067-90af-13f7a6e59afe
NetworkEntityAccessType : ExternallyManaged
VirtualSwitchExtension : n1kv-test
Tags           : {}
AllowedVNicType : Both
MaxNumberOfPorts : 32
MaxNumberOfPortsPerHost : 216
ProfileData    : 0
ServerConnection :
Microsoft.SystemCenter.VirtualMachineManager.Remoting.ServerConnection
ID             : 8934a01c-0cb7-4ee2-ae9d-21ff5b26568f
IsViewOnly     : False
ObjectType     : VirtualSwitchExtensionVirtualPortProfile
MarkedForDeletion : False
IsFullyCached  : True
```

**Example 8-2 show port-profile name new command**

```
n1000v# show port-profile name new
```

```
port-profile new
type: Vethernet
description:
status: enabled
max-ports: 32
min-ports: 1
inherit:
config attributes:
no shutdown
evaluated config attributes:
no shutdown
assigned interfaces:
port-group: new
system vlans: none
capability l3control: no
capability iscsi-multipath: no
capability vxlan: no
capability l3-vn-service: no
port-profile role: none
port-binding: static
```

**Example 8-3 show port-profile name command**

```
n1000v# show port-profile name vEthProfile3
port-profile vEthProfile3
  description:
  type: vethernet
  status: disabled
  capability l3control: no
  pinning control-vlan: -
  pinning packet-vlan: -
  system vlans: none
  port-group:
  max ports: 32
  inherit:
  config attributes:
    channel-group auto mode on sub-group manual
  evaluated config attributes:
    channel-group auto mode on sub-group manual
  assigned interfaces:
n1000v#
```

**Example 8-4 show port-profile brief command**

```
n1000v# show port-profile brief
-----
Port Profile Profile Conf Eval Assigned Child
Profile Type State Items Items Intfs Profs
-----
LACP Ethernet 1 2 2 0 2
LACP_PIN Ethernet 1 4 5 4 0
MAC Ethernet 1 2 2 0 1
MAC_PIN Ethernet 1 4 5 7 0
MAC_PIN_343 Ethernet 1 2 4 1 0
NSM_template_segmentation Vethernet 1 1 1 0 0
NSM_template_vlan Vethernet 1 1 1 0 0
basic Vethernet 1 1 1 0 0
default Vethernet 1 1 1 0 0
dynpp_a7ab47ce-07c3-4fc8-ae74-321a10818199_76604d2a-f62e-40a4-85d1-0ccad8d1c9c0
Vethernet 1 2 3 0 0
dynpp_a7ab47ce-07c3-4fc8-ae74-321a10818199_aa914386-bf85-48e6-98ca-541a764e7580
Vethernet 1 2 3 2 0
dynpp_a7ab47ce-07c3-4fc8-ae74-321a10818199_b4490e62-57c2-4c3d-81f9-99ca0b6a6a82
Vethernet 1 2 3 8 0
new Vethernet 1 1 1 0 3
system Vethernet 1 1 1 0 0
uplink_network_default_policy Ethernet 1 1 1 0 0
-----
Profile Assigned Total Sys Parent Child UsedBy
Type Intfs Prfls Prfls Prfls Prfls Prfls
-----
Vethernet 10 9 1 8 3 2
Ethernet 12 6 0 4 3 3
n1000v#
```

**Example 8-5 show port-profile expand-interface name UplinkProfile1 command**

```
n1000v# show port-profile expand-interface name UplinkProfile1
port-profile EthProfile1
Ethernet2/2
  switchport mode trunk
  switchport trunk allowed vlan 110-119
```

```
no shutdown
n1000v#
```

**Example 8-6 show running-config port-profile command**

```
n1000v# show running-config port-profile
!Command: show running-config port-profile
!Time: Sun Mar 17 13:17:03 2013

version 5.2(1)SM1(5.1)
port-profile default max-ports 32
port-profile type vethernet NSM_template_vlan
no shutdown
guid 100b8834-85a7-4a9f-a942-83b8218b4fc1
description NSM default port-profile for VLAN networks. Do not delete.
state enabled
port-profile type vethernet NSM_template_segmentation
no shutdown
guid aee2046c-eb9d-4018-bae7-e1000f5b2d54
description NSM default port-profile for VXLAN networks. Do not delete.
state enabled
port-profile type ethernet MAC
channel-group auto mode on mac-pinning
no shutdown
guid 51217cb4-280d-4cbe-a73d-18299cc347c2
max-ports 512
state enabled
port-profile type ethernet LACP
channel-group auto mode active
no shutdown
guid 28a414ca-7c10-4c0d-a73e-a1af409bdb5f
max-ports 512
state enabled
port-profile type vethernet basic
no shutdown
guid bbf3ec9f-9ca3-445a-9376-630180c35250
publish port-profile basic-non-system
state enabled
port-profile type vethernet system
no shutdown
guid 2e21ff4a-e966-4432-95ae-6600e0cbe50f
publish port-profile basic-system
system port-profile
state enabled
port-profile type ethernet uplink_network_default_policy
no shutdown
guid 4cc1067c-7104-4aa1-8556-ce18ada165e8
max-ports 512
description NSM created profile. Do not delete.
state enabled
port-profile type vethernet default
no shutdown
guid 622e109d-6465-4abd-882f-d026938b830d
state enabled
port-profile type vethernet new
no shutdown
guid a7ab47ce-07c3-4fc8-ae74-321a10818199
publish port-profile
state enabled
n1000v#
```

**Example 8-7 show port-profile virtual usage command**

```
n1000v# show port-profile virtual usage
-----
Port Profile Port Adapter Owner
-----
MAC_PIN Po2
Po6
Eth3/4 vmnic3 WIN-35
Eth3/5 vmnic4 WIN-35
Eth3/6 vmnic5 WIN-35
Eth4/1 vmnic0 WIN-37
Eth4/3 vmnic2 WIN-37
LACP_PIN Po1
Po3
Eth5/1 vmnic0 WIN-39
Eth5/2 vmnic1 WIN-39
dynpp_a7ab47ce-07c3-4fc8-a
e74-321a10818199_b4490e62-
57c2-4c3d-81f9-99ca0b6a6a8
2 Veth1 Net Adapter Win2008-2-1
Veth2 Net Adapter Win2008-1-1
Veth3 Net Adapter Win2008-3-1
Veth4 Net Adapter Win2008-4-1
Veth5 Net Adapter Win2008-2-2
Veth6 Net Adapter Win2008-1-2
Veth7 Net Adapter Win2008-3-2
Veth8 Net Adapter Win2008-4-2
MAC_PIN_343 Po4
dynpp_a7ab47ce-07c3-4fc8-a
e74-321a10818199_aa914386-
bf85-48e6-98ca-541a764e758
0 Veth9 Net Adapter WIN-Legacy
Veth10 Net Adapter WIN-SPAN-3
n1000v#
```

**Example 8-8 show msp internal info command**

```
n1000v# show msp internal info
port-profile NSM_template_segmentation
  id: 2
  capability: 0x0
  state: 0x1
  type: 0x0
  system vlan mode: -
  system vlans:
  port-binding: static
  bind_opts: 0
  max ports: 32
  min ports: 1
  active used ports count: 0
  intf inherit count: 0
  Hyper-V config information
    pg name: NSM_template_segmentation
    dvs: (ignore)
    reserved ports: 32
  port-profile role:
  alias information:
    pg id: 8eebad90-fe9a-4460-b44e-9f71b8ebc88d
    dvs uuid:
    type: 11
port-profile NSM_template_vlan
  id: 1
```

```

capability: 0x0
state: 0x1
type: 0x0
system vlan mode: -
system vlans:
port-binding: static
bind_opts: 0
max ports: 32
min ports: 1
active used ports count: 0
intf inherit count: 0
Hyper-V config information
  pg name: NSM_template_vlan
  dvs: (ignore)
  reserved ports: 32
port-profile role:
alias information:
  pg id: 83e41305-c443-4d30-a142-f1260183d974
  dvs uuid:
  type: 11
pending binds:
PPM restore_complete:TRUE
  opq_data_info.ppm_sdb_restored:1
NSMGR restore_complete:TRUE
  opq_data_info.nsm_sdb_restored:1

```

### Example 8-9 show system internal port-profile profile-fsm command

```

n1000v# show system internal port-profile profile-fsm
>>>FSM: <PROFILE_FSM:1> has 4 logged transitions<<<<<

1) FSM:<PROFILE_FSM:1> Transition at 856903 usecs after Tue Mar  8 19:11:47 2011
   Previous state: [PPM_PROFILE_ST_SIDLE]
   Triggered event: [PPM_PROFILE_EV_EIF_STATUS_CHANGE]
   Next state: [PPM_PROFILE_ST_SIDLE]

2) FSM:<PROFILE_FSM:1> Transition at 858442 usecs after Tue Mar  8 19:11:47 2011
   Previous state: [PPM_PROFILE_ST_SIDLE]
   Triggered event: [PPM_PROFILE_EV_ELEARN]
   Next state: [PPM_PROFILE_ST_SIF_CREATE]

3) FSM:<PROFILE_FSM:1> Transition at 842710 usecs after Tue Mar  8 19:12:04 2011
   Previous state: [PPM_PROFILE_ST_SIF_CREATE]
   Triggered event: [PPM_PROFILE_EV_EACKNOWLEDGE]
   Next state: [FSM_ST_NO_CHANGE]

4) FSM:<PROFILE_FSM:1> Transition at 873872 usecs after Tue Mar  8 19:12:04 2011
   Previous state: [PPM_PROFILE_ST_SIF_CREATE]
   Triggered event: [PPM_PROFILE_EV_ESUCCESS]
   Next state: [PPM_PROFILE_ST_SIDLE]

   Curr state: [PPM_PROFILE_ST_SIDLE]
n1000v#

```

### Example 8-10 show system internal port-profile event-history msgs command

```

n1000v# show system internal port-profile event-history msgs
1) Event:E_MTS_RX, length:60, at 538337 usecs after Tue Mar  8 19:13:02 2011
   [NOT] Opc:MTS_OPC_IM_IF_CREATED(62467), Id:0X0000B814, Ret:SUCCESS
   Src:0x00000101/175, Dst:0x00000101/0, Flags:None
   HA_SEQNO:0X00000000, RRtoken:0x00000000, Sync:UNKNOWN, Payloadsize:120
   Payload:

```

```

0x0000: 00 00 00 02 00 00 00 02 00 00 00 0c 00 00 00 29

2) Event:E_MTS_RX, length:60, at 515030 usecs after Tue Mar  8 19:13:02 2011
   [NOT] Opc:MTS_OPC_LC_ONLINE(1084), Id:0X0000B7E8, Ret:SUCCESS
   Src:0x00000101/744, Dst:0x00000101/0, Flags:None
   HA_SEQNO:0X00000000, RRtoken:0x00000000, Sync:UNKNOWN, Payloadsize:234
   Payload:
0x0000: 02 00 00 03 00 00 00 00 00 00 03 02 03 02 00 00

3) Event:E_MTS_RX, length:60, at 624319 usecs after Tue Mar  8 19:12:05 2011
   [NOT] Opc:MTS_OPC_PPM_INTERFACE_UPDATE(152601), Id:0X00003908, Ret:SUCCESS
   Src:0x00000101/489, Dst:0x00000101/0, Flags:None
   HA_SEQNO:0X00000000, RRtoken:0x00000000, Sync:UNKNOWN, Payloadsize:107
   Payload:
0x0000: 00 00 00 02 00 00 00 02 00 00 00 0c 00 00 00 26

4) Event:E_MTS_RX, length:60, at 624180 usecs after Tue Mar  8 19:12:05 2011
   [NOT] Opc:MTS_OPC_PPM_INTERFACE_UPDATE(152601), Id:0X00003905, Ret:SUCCESS
   Src:0x00000101/489, Dst:0x00000101/0, Flags:None
   HA_SEQNO:0X00000000, RRtoken:0x00000000, Sync:UNKNOWN, Payloadsize:107
   Payload:
0x0000: 00 00 00 02 00 00 00 02 00 00 00 0c 00 00 00 26

5) Event:E_MTS_RX, length:60, at 624041 usecs after Tue Mar  8 19:12:05 2011
   [NOT] Opc:MTS_OPC_PPM_INTERFACE_UPDATE(152601), Id:0X00003903, Ret:SUCCESS
   Src:0x00000101/489, Dst:0x00000101/0, Flags:None
   HA_SEQNO:0X00000000, RRtoken:0x00000000, Sync:UNKNOWN, Payloadsize:107
   Payload:
0x0000: 00 00 00 02 00 00 00 02 00 00 00 0c 00 00 00 26
...

```