Network Segmentation Manager

This chapter describes how to identify and resolve problems with Network Segmentation Manager (NSM).

Information About Network Segmentation Manager

For information on the Network Segmentation Manager, see the *Cisco Nexus 1000V for Hyper-V Network Segmentation Manager Configuration Guide*.

Problems with Network Segmentation Manager

For more information about problems occuring with NSM see the "Problems with Port Profiles" section on page 9-2.

Updating VM Fails

This problem usually occurs when you are trying to attach a vEth port to the Cisco Nexus 1000V and Microsoft SCVMM server.

Step 1 Launch the Microsoft SCVMM UI.

Step 2 Verify the sytem flags on the network segment and port profile on the Virtual Supervisor Module (VSM) by entering the following commands:

- **show run port-profile** *port-profile-name*
- **show nsm network segment name** *name*

Step 3 Repair the VM from the Microsoft SCVMM by running the *repair* option followed by *ignore*.

Step 4 Once the operation is complete, refresh the VM.

Step 5 Move the vEth port to the Not Connected state from the Microsoft SCVMM.

Step 6 Attach the vEth port to the Microsoft SCVMM using one of the following combinations:

- Choose **System Network Segment > System Port Profile**
- Chose **System Network Segment > Non System Port Profile**

Choose **Non System Network Segment > Non System Port Profile**

Network Segment Not Visible on the Microsoft SCVMM

When creating a VM network on a Microsoft SCVMM using a network segment from a Cisco Nexus 1000V device, the network segment cannot be found. This problem can occur due to one of the following reasons:

- The network segment is in the unpublished state.
- A Switch Extension Manager refresh was not performed after creating the network segment.

Step 1 Launch the Microsoft SCVMM UI.

Step 2 From theVSM, verify the network segment configuration by entering the **show nsm network segment name** command:

Step 3 Verify that the network segment has a publish-name.

Step 4 After completing Step 3, choose **Fabric > Switch Extension Manager/Network Service> Extension**, and choose **Refresh** to update the Microsoft SCVMM with the latest VSM configuration.

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Network Segment Is Not Available on the Microsoft SCVMM

When you apply a VM network on a Microsoft SCVMM to a Cisco Nexus 1000V vNIC, a network error is displayed.

Step 1 On the Microsoft SCVMM, identify the network segment used to create the VM network.

Step 2 On the VSM, identify the network segment pool to which the network segment is associated.

Step 3 Identify the uplink networks that allow the network segment pool identified in Step 2.

Step 4 On the Microsoft SCVMM, verify that the logical switch on that host is using the uplink networks identified in Step 3.

Step 5 If the links do not agree, change the appropriate uplink networks as needed.

Network Segmentation Manager Troubleshooting Commands

You can use the commands in this section to troubleshoot problems related to the Network Segmentation Manager.

Command	Purpose
show nsm ip pool template name *name*	Displays the IP pool template information.
show nsm ip pool template usage network segment	Displays the network segment using an IP pool template.
show nsm logical network *name*	Displays the NSM logical network name.
show nsm network segment brief	Displays brief information about the network segment information.
show nsm network segment filter network segment pool *name*	Displays the filtered information for a network segment pool.
show nsm network segment filter vlan *vlan_ID*	Displays the network segment VLAN information.
show nsm network segment filter pvlan host *vlan_ID*	Displays the network segment PVLAN host information.
show nsm network segment filter pvlan primary *vlan_ID*	Displays the network segment PVLAN primary mode information.
show nsm network segment filter pvlan promiscuous *vlan_ID*	Displays the network segment PVLAN promiscuous mode information.
show nsm network segment filter pvlan secondary *vlan_ID*	Displays the network segment PVLAN information for a specified secondary VLAN.
show nsm network segment name *name*	Displays network segment information.
show nsm network segment pool *name*	Displays network segment pool information.
show nsm network uplink brief	Displays brief information about the network segment uplink.
show nsm network uplink filter import *Ethernet Port-Profile name*	Displays network segment uplink information filtered by the Ethernet policy port profile.
show dynamic-port-profile	Displays dynamic port profile information.
show dynamic-port-profile *name*	Displays dynamic port profile information for the specified port profile.
show dynamic-port-profile inherit *name*	Displays dynamic port profiles with inherited vEthernet policy profiles.
show dynamic-port-profile network segment *name*	Displays dynamic port profile network segment information.

For detailed information about **show** command output, see the *Cisco Nexus 1000V for Microsoft Hyper-V Command Reference Guide*.