

# Installation

This chapter describes how to identify and resolve installation problems.

#### Host Is in the Not Responding State in the Microsoft SCVMM

You can refresh the host that is in the Not Responding state.

Step 1	Launch the Microsoft SCVMM UI.
Step 2	Choose the server that is in the Not Responding state.
Step 3	Refresh the host.

## Installation Failure When the Microsoft SCVMM Fails to Resolve Hostnames

The Microsoft SCVMM might fail to resolve the hostnames of the managed Cisco Nexus 1000V for Microsoft Hyper-V servers. Which might result in the failure of pushing Cisco Nexus 1000V for Microsoft Hyper-V VEM MSI to the Microsoft SCVMM server hosts from the Microsoft SCVMM server.

Any host side operation might fail when DNS is not resolved and could resolve in the following:

- Refresh failure of the host from the Microsoft SCVMM
- Failure to create a Cisco Nexus 1000V logical switch on the host
- **Step 1** Launch the Microsoft SCVMM UI.
- Step 2 At the command prompt, enter the ping hostname, where the hostname is the name of the DNS host.
- **Step 3** Enter the **winrm id** -**r**<*hostname*> command.
- **Step 4** Repeat Step 2 and Step 3 from the host and replace the *hostname* with the name of the Microsoft SCVMM DNS server.
- **Step 5** If there is more than one DNS server associated with the host, make sure that the management NIC contains only the DNS server that points to the Active Directory (AD).

Step 6 Using your browser, navigate to Tools > Internet Options > Connections to relocate your alternate DNS server (if any).

#### Refreshing the Connection Between the Cisco Nexus 1000V and Microsoft SCVMM Server

You can refresh the connection between the Cisco Nexus 1000V and Microsoft SCVMM server.

- Step 1 Launch the Microsoft SCVMM UI.
- Step 2 For the SCVMM 2012 SP1 server, choose Fabric Management > Networking > Switch Extension Manager.
- **Step 3** For the SCVMM 2012 R2 server, choose **Fabric Management > Networking > Network Service**.
- Step 4 Choose Cisco Nexus 1000V and right click to refresh. See Figure 3-1.

Figure 3-1 Refresh Cisco Nexus 1000V Connection with the Microsoft SCVMM Server

Name	Connection string			
Eisco Nexus 1000V Chassis version 5.2(1)SM1(5.1) [build 5.2(1)SM1(5.0.267)] [gdb] - 1000V	http://10.105.225.147	.a	View Dependent Resources	
		00	Pafrash	
			Reiresn	
			Remove	
		1	Properties	8
				36
				30

**Step 5** Verify that the job is complete by checking the **Jobs** section.

#### Updating the Cisco Nexus 1000V Configuration Data on Hyper-V Hosts

You can update the Cisco Nexus 1000V configuration data on the Hyper-V hosts.

- **Step 1** Launch the Microsoft SCVMM UI.
- **Step 2** Choose Fabric > Logical Switches to display the screen. See Figure 3-2.

ate	Create Logical Switch	Create	Add Resources •	Overview	Fabric Resources	🕸 Services 🍈 Virtual Machines 👥 Hosts
			Add		Sh	ow
<	< Logical Switches (2)					
Name						

Figure 3-2 Displaying Logical Switches

**Step 3** From the toolbar, choose **Hosts**.

**Step 4** Choose the host and choose **1000V.** See Figure 3-3.

27 PowerShel A Services 🍈 Virtual Machines 🗄 Jobs Add Overview Fabrio Resources Hosts RO PRO vitch Information for Hosts (4) IP Address Logical Switch Uplink Port Profile Set Virtual Switch MAC Address Network Complia NODE-137.darknight.example.com Fully compliant Intel(R) 82576 Gigabit Dual Port.. 10.254.81.23, fe80::54... 30:E4:DB:C2:C4:41 N/A Non compliant Intel(R) 82576 Gigabit Dual Port.. 10.105.225.137, fe80::1.. 30:E4:DB:C2:C4:4 N/A Non compliant 💐 Intel(R) Gigabit ET Quad Port Server... PVLAN\_Lacp\_1bcdcabe... 1000V 00:1B:21:BF:04:7C Fully compliant 1000V Intel(R) Gigabit ET Quad Port Server.. 1000V PVLAN\_Lacp\_1bcdcabe... 1000V 00:1B:21:BF:04:7D Fully compliant Cisco VIC Ethernet Interface 1000V DATA-Lacp f8284feb-a... 1000v F8:87:48:4D:96:2C Fully compliant Cisco VIC Ethernet Interface #2 1000V DATA-Lacp\_f8284feb-a... 1000V E8:87:48:4D:96:2D Fully compliant 303683 Intel(R) Gigabit ET Quad Port Server.. PVLAN\_Lacp\_1bcdcabe... 1000V 00:1B:21:BF:04:78 1000V Fully compliant Intel(R) Gigabit ET Quad Port Server... 00:1B:21:BF:04:79 1000V PVLAN\_Lacp\_1bcdcabe... 1000V Fully compliant

Figure 3-3 Choosing the Cisco Nexus 1000V Switch

**Step 5** From the toolbar, choose **Remediate**.

**Step 6** Verify that the job was completed by checking the **Jobs** section.

#### Verifying That the Cisco Provider Installed Correctly

You can verify that the Cisco pCleaning up the switch extension might fail when you are deploying a VM that uses a static IP address from the static IP address pools that are published by the Cisco Nexus 1000V VSM.rovider has been installed correctly.

- **Step 1** Launch the Microsoft SCVMM UI.
- Step 2 Navigate to Settings.
- Step 3 Choose Configuration Providers.

## **Cleaning Up Switch Extention Fails**

Cleaning up the switch extension might fail when you are deploying a VM that uses a static IP address from the static IP address pools that are published by the Cisco Nexus 1000V VSM.

Note

This problem is a known Microsoft issue.

Because the error is due to unrevoked IP addresses, the error shown by the Microsoft SCVMM is not specific.

**Step 1** Launch the Microsoft SCVMM UI.

**Step 2** Using a PowerShell window, enter the following commands, in sequence, to revoke the static IP adresses:

```
$vsem = Get-SCVirtualSwitchExtensionManager -VirtualSwitchExtensionManagerConnectionString
http://<VSM-IP-address>
$pools = Get-SCStaticIPAddressPool | where { $_.VirtualSwitchExtensionManager.ID -eq
$vsem.ID }
$pools | ForEach-Object { get-scipaddress -UnAssigned -StaticIPAddressPool $_ } | Revoke-
SCIPAddress
```

**Step 3** The configuration provider details appear on the Microsoft SCVMM.

#### **Refreshing Switch Extension Manager Fails**

The following are symptoms, possible causes, and solutions for problems when refreshing the Switch Extension Manager or the Network Service.

Symptom	Possible Causes	Solution
You are unable to refresh the Switch Extension Manager from Microsoft SCVMM.	There is a problem with the connection between the Microsoft SCVMM and the VSM.	<ol> <li>Verify that you can navigate to the VSM http://vsm_ip_address from the server where the Microsoft SCVMM service is running.</li> </ol>
		2. Verify that your proxy settings and firewall settings are not impacting on the Microsoft SCVMM to VSM connectivity.
	There is an error in the VSM configuration.	On the VSM, verify the configuration by entering the <b>show svs domain</b> command.

## **Verifying Logical Switch Compliance**

The Microsoft SCVMM might report a non compliant warning when you are deploying or changing port profiles on the Cisco Nexus 1000V logical switch. This problem is a result of a mismatch of the opaque data stored on Microsoft SCVMM and that of the individual hosts.

	This issue is only a warning; it is not an error.
	Launch the Microsoft SCVMM UI.
	Navigate to Fabric > Logical Switches > Hosts.
	Using a Microsoft SCVMM PowerShell window, enter the following:
	Get-SCVirtualNetwork   where-object {\$LogicalSwitch -like "1000V"}   select VMHost, HighlyAvailable, LogicalNetworks, VMHostNetworkAdaters   LogicalSwitchComplianceStatu
	To remove the Logical Switch Compliance Warning, perform the following steps:
Refresh the Virtual Switch Extension Manager	
Choose Fabric > Logical Switches > Hosts.	
Select the appropriate logical switch and choose <b>Remediate the Host</b> .	

#### **Verifying the Logical Switch Extension**

The Cisco Nexus 1000V logical switch extension is always a forwarding extension. You can verify the logical switch extension.

Step 1	Launch the Microsoft SCVMM UI.
Step 2	Choose Fabric > Logical Switches > switch_name > Properties > Extensions.
Step 3	Verify that the extension type is Forwarding.

## **Verifying the Logical Switch Uplink Mode**

The Cisco Nexus 1000V logical switch uplink mode should be **team**. You can verify the logical switch uplink mode.

- **Step 1** Launch the Microsoft SCVMM UI.
- Step 2 Choose Fabric > Logical Switches > switch\_name > Properties > Uplink.
- **Step 3** Verify that the Uplink mode is **Team**.

## **Creating or Deleting a Switch on a Host Management Adapter**

While you are deploying a Cisco Nexus 1000V switch or cleaning up a Cisco Nexus 1000V on a host management adapter, the operation might fail if there are network flaps or a DNS resolution. This problem might cause host connectivity loss because the failure occurs on the host management adapter.

Step 1Log in to the host using the remote console.Step 2Open an elevated PowerShell window and enter the Remove-VMSwitch -name switchname command.Step 3Remove the NetSwitch Team from the host and restore connectivity by entering the Get-NetswitchTeam<br/>I Remove-NetSwitchTeam command.Step 4Refresh the host from the Microsoft SCVMM.NoteIf Step 2 fails when the WMI on the host is stuck in an inconsistent state, manually delete the switch<br/>from the registry, and perform a system reboot and proceed to Step 3.

## **Exporting VM Templates When a Hard Disk Fails**

When you are exporting a VM template and the hard disk selected fails, the problem is probably caused by the internet proxy settings.

- **Step 1** Launch the Microsoft SCVMM UI.
- **Step 2** Verify that the internet Connection Settings field is blank.

## **Deleting Temporary Templates**

You can delete temporary templates that are created by the Microsoft SCVMM.

Symptom	Possible Causes	Solution
Unable to delete Cisco Nexus 1000V objects in Microsoft SCVMM.	The Microsoft SCVMM creates temporary templates that are linked to the Cisco Nexus 1000V objects.	<ul> <li>Delete the temporary templates by entering the following commands in a PowerShell window:</li> <li>Get-VMMServer</li> <li>Get-SCVMTemplate   where {\$Name -linke "Tempoarary*"}   Remove-SCVMTemplate</li> </ul>

## **Verifying Host Compliance in the Microsoft SCVMM**

You can verify host compliance in the Microsoft SCVMM; all hosts should show as fully compliant.

- Step 1 Choose Fabric > Logical Switches > Hosts.
- **Step 2** Choose the host from list.
- **Step 3** From the toolbar, choose **Remediate**.
- **Step 4** Verify that the job was completed by checking the **Jobs** section

### Creating a Switch on a Management NIC When a Static IP Address Fails on a Server Core

Creating a switch fails when using a Cisco Nexus 1000V on a management NIC with a static IP address on a server core.



This problem is a Microsoft issue with Server Core versions of Windows Server 2012.

Step 1	Launch the Microsoft SCVMM UI.
Step 2	Log in to the host using the remote console.
Step 3	Using a Microsoft SCVMM PowerShell window, delete the switch from the host by entering the <b>Remove-VMSwitch</b> – <b>name</b> <i>switchname</i> command.
Step 4	Remove the NetSwitch Team from the host and restore connectivity by entering the <b>Get-NetswitchTeam</b>   <b>Remove-NetSwitchTeam</b> command.
Step 5	Refresh the host from the Microsoft SCVMM.

# **Problems with Management NICs**

The following are symptoms, possible causes, and solutions for problems with management NICs.

Symptom	Possible Causes	Solution
You are unable to push opaque data (OD) on	The VSM IP address has changed.	1. Change the IP address of the management interface (mgmt0) on the VSM.
VEMs.		2. Change the connection string of the Switch Manager Extension on the Microsoft SCVMM to the new VSM IP address.
		<b>3.</b> Refresh the Switch Extension Manager/Network Service in the Microsoft SCVMM.
	<ul> <li>4. Verify the information on all screens before</li> <li>5. Choose Fabric &gt; Logical Switches &gt; How</li> <li>6. Choose the host from the list.</li> </ul>	4. Verify the information on all screens before you choose OK.
		5. Choose Fabric > Logical Switches > Hosts.
		<b>6</b> . Choose the host from the list.
		7. From the toolbar, choose <b>Remediate</b> .
		8. Verify that the job was completed by checking the <b>Jobs</b> section.