



## Installation

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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.

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

### VMs populated on the Microsoft SCVMM are missing

At times, the VMs that are populated in the Microsoft SCVMM are found to be missing, but are visible under the View Dependent Resources option that is displayed when you right-click the logical switch and are accessible from the Cisco Nexus 1000V HyperV manager in the host.

In this case, perform the steps in the following document to get the VMs back in Microsoft SCVMM and refresh both, the host and the SCVMM agent.

<https://social.technet.microsoft.com/forums/en-us/f9ce9fa8-e509-40ed-b6ee-9c352f44c5c5/vdi-created-vms-vm-fails-to-show-up-in-the-system-center-2012-virtual-machine-manager>

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### Adding Hosts to a Logical Switch in Microsoft SCVMM Fails

When you try to add hosts to a logical switch in Microsoft SCVMM, it fails with ERROR 2912.

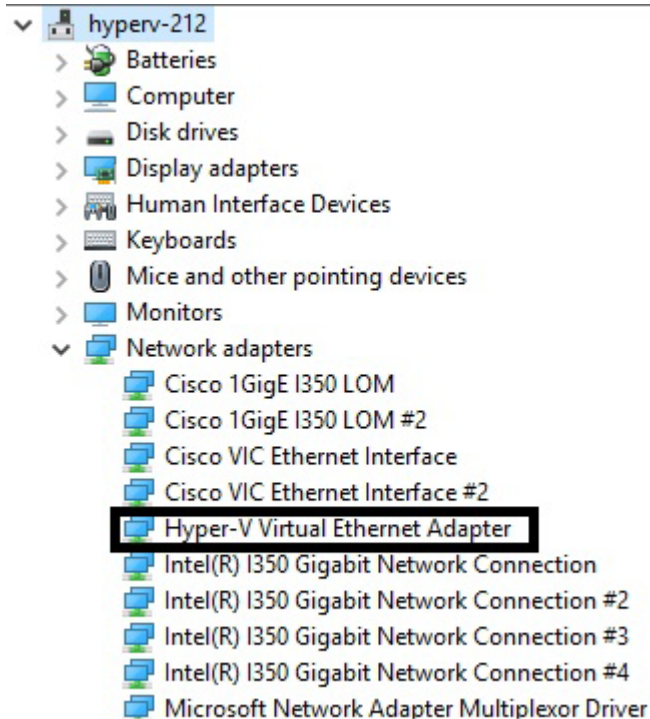
To add hosts to a logical switch in the Microsoft SCVMM, perform the following steps:

- 
- Step 1** On the affected HyperV host, navigate to **Control Panel > Hardware > Device Manager**.

**Step 2** Under **Network Adapters**, check for the following adapters:

- Hyper-V Virtual Ethernet Adapter
- Hyper-V Switch Extension Adapter

*Figure 3-1 Adapters Under Network Adapters*



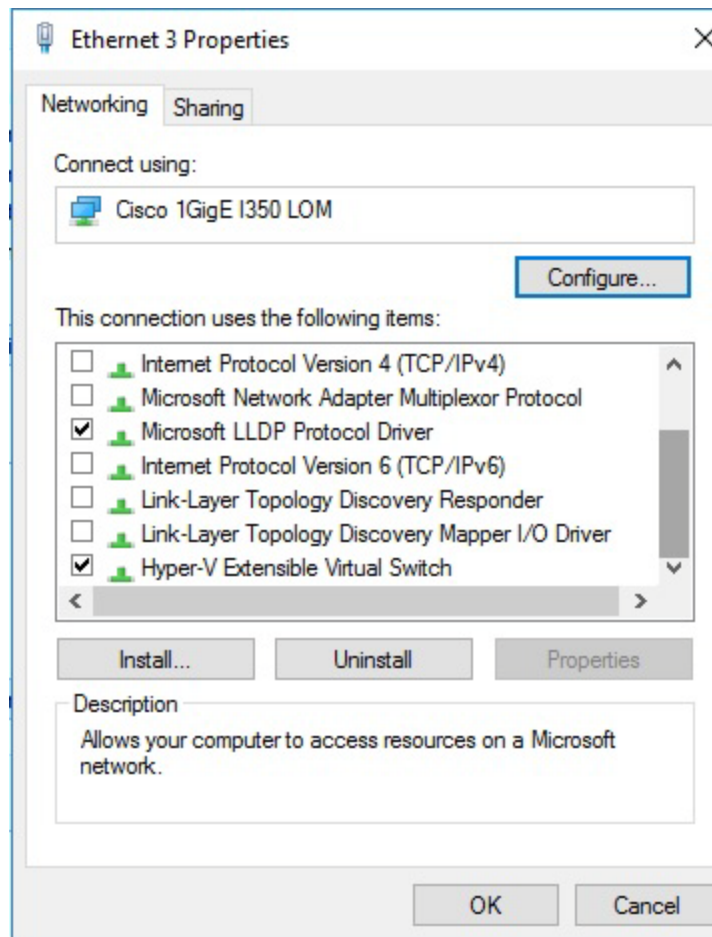
**Step 3** Right-click and select **uninstall** to uninstall the above adapters if available.

**Step 4** From the **Hyper-V manager**, navigate to **Server Manager > Control Panel > Adapter Settings** to verify if the adapters have been removed successfully.

**Step 5** From the **Hyper-V manager**, navigate to **Server Manager > Control Panel > Adapter Settings** to create a new virtual switch with a physical external adapter.

**Step 6** Right-click **Adapter Settings** to open the properties of the physical adapter over which the Virtual Switch needs to be created.

Figure 3-2 Properties Dialog Box



- Step 7** Uncheck **Hyper-V Extensible Switch** and recreate the virtual switch.
- Step 8** On the **Hyper-V host**, open **PowerShell**, and run the *Get-NetSwitchTeam* command.
- Step 9** Remove any NIC team if available by running the *Remove-NetSwitchTeam -Name <name of the team present already>* command.

Figure 3-3 PowerShell - Get and Remove NetSwitchTeam Commands

ows PowerShell

```

PowerShell
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\administrator.HYPERV>
\administrator.HYPERV>
\administrator.HYPERV>
\administrator.HYPERV>
\administrator.HYPERV> Get-NetSwitchTeam

Logical Switch
Ethernet 5

\administrator.HYPERV>
\administrator.HYPERV>
\administrator.HYPERV> Remove-NetSwitchTeam -Name "Logical
\administrator.HYPERV>
\administrator.HYPERV>
\administrator.HYPERV>
\administrator.HYPERV>

```

- Step 10 Verify if the NIC team is removed successfully by running the *Get-NetSwitchTeam* command and then create the logical switch from the Microsoft SCVMM.

## Host Changes to a Non-Responding State in Microsoft SCVMM

This occurs when the update patches are installed on the SCVMM server. When there is a mismatch of these update patches on the SCVMM server and host, with reference to the patch dated May 8, 2018—KB4103723 (OS Build 14393.2248) which includes the CredSSP updates for CVE-2018-0886. Hence, if the SCVMM server is updated to patch, OS Build 14393.2248 or above when the host is below this patch, then the host changes to the non-responding state.

For the Microsoft SVCMM server and host communication to function properly, both the Microsoft SCVMM and the host should be either below or above patch OS Build 14393.2248.

To resolve this issue, update the host to patch OS Build 14393.2248 or above. If you cannot update the host, perform the following steps:

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- Step 1** Open **Run** and enter **gpedit.msc**.
- Step 2** From the Local Group Policy window that appears, navigate to **Computer Configuration > Administrative Templates > System > Credentials Delegation**.
- Step 3** Right-click **Encryption Oracle Remediation**, set it to **Enable**, set the value to **Vulnerable**, and click **OK**.
- Step 4** Open **Run** and enter **regedit**.
- Step 5** Under the **HKLM\Software\Microsoft\Windows\CurrentVersion\Policies\System\CredSSP\Parameters** registry path, set the **Allow Encryption Oracle** value to 2.

The following error is displayed when the host is refreshed:

*Table 3-1 Error Message - Refreshing Host*

Error	Solution
Error (2912)  An internal error has occurred trying to contact the 'hyperv-117.n1kqa.com' server: . .  WinRM: URL: [http://hyperv-117.n1kqa.com:5985], Verb: [INVOKE], Method: [GetVersion], Resource: [http://schemas.microsoft.com/wbem/wsman/1/wmi/root/scvmm/AgentManagement]	Verify if the WS-Management service is installed and is running on the hyperv-117.n1kqa.com server.  For more information, run the <b>winrm helpmsg hresult</b> command. If hyperv-117.n1kqa.com' is a host/library/update server or a PXE server role then ensure that the VMM agent is installed and running.  For more information, see <a href="http://support.microsoft.com/kb/2742275">http://support.microsoft.com/kb/2742275</a>
The request is not supported (0x80070032)	

## 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

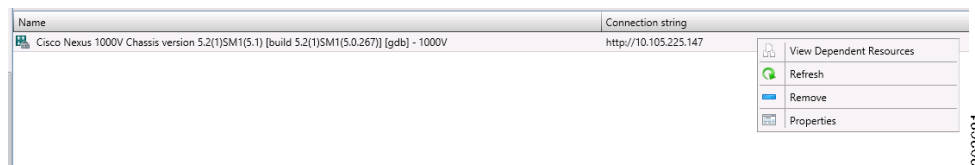
- 
- Step 1** Launch the Microsoft SCVMM UI.
  - Step 2** At the command prompt, enter the **ping *hostname***, where the *hostname* is the name of the DNS host.
  - Step 3** Enter the **winrm id -r<*hostname*>** command.
  - Step 4** Repeat [Step 2](#) and [Step 3](#) from the host and replace the *hostname* 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.

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- Step 1** Launch the Microsoft SCVMM UI.
  - Step 2** For the SCVMM 2016 SP1 server, choose **Fabric Management > Networking > Switch Extension Manager**.
  - Step 3** For the SCVMM 2016 R2 server, choose **Fabric Management > Networking > Network Service**.
  - Step 4** Choose **Cisco Nexus 1000V** and right click to refresh. See [Figure 3-4](#).

**Figure 3-4** Refresh Cisco Nexus 1000V Connection with the Microsoft SCVMM Server



- 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.

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- Step 1** Launch the Microsoft SCVMM UI.

**Step 2** Choose **Fabric > Logical Switches** to display the screen. See [Figure 3-5](#).

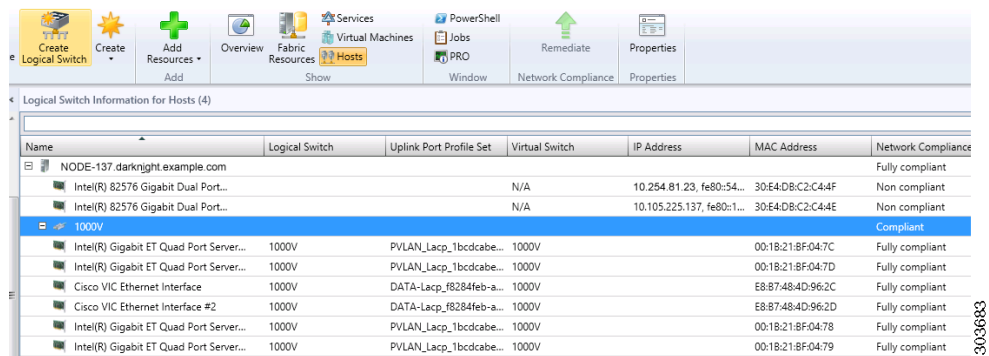
**Figure 3-5** *Displaying Logical Switches*



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

**Step 4** Choose the host and choose **1000V**. See [Figure 3-6](#).

**Figure 3-6** *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 Extension 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 addresses:

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

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

## Removing of vem.msi Throws an Error

Removing of vem.msi in WSUS throws an error if the WSUS is a part of SCVMM.

To resolve this issue, perform the following steps:

**Step 1** Remove the WSUS server from SCVMM.

**Step 2** Remove vem.msi from the WSUS using the powershell script.

**Step 3** Readd the WSUS server to SCVMM.

**Step 4** In the WSUS server, provide the cisco-get update command to successfully remove the image.

## Installing the Install-Nexus1000V-VSMCertificate.ps1 Fails

If the proxy settings are enabled on the SCVMM virtual machine, you must disable these proxy settings from the virtual machine.

To disable the proxy settings, do the following:

**Step 1** Open **Control panel**.

**Step 2** Navigate to **Network and Internet > Internet Options**.

**Step 3** In the **Internet Properties** dialog box, navigate to **Connections > LAN Settings**.



**Step 4** In **Local Area Network(LAN) Settings**, Uncheck the **Proxy Server** check box.

**Step 5** Click **OK**.

Now try to run the Install-Nexus1000V-VSMCertificate.ps1. It will work.

## 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.

*Table 3-2 Problems - Refresh Switch Extension*

Symptoms		
You are unable to refresh the Switch Extension Manager from the Microsoft SCVMM.	There is a problem with the connection between the Microsoft SCVMM and the VSM.	<ol style="list-style-type: none"> <li>1. Verify that you can navigate to the VSM <i>http://vsm_ip_address</i> from the server where the Microsoft SCVMM service is running.</li> <li>2. Verify that your proxy settings and firewall settings are not impacting on the Microsoft SCVMM to VSM connectivity.</li> </ol>
	There is an error in the VSM configuration.	On the VSM, verify the configuration by entering the <b>show svcs 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.



**Note** This issue is only a warning; it is not an error.

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

**Step 2** Navigate to **Fabric > Logical Switches > Hosts**.

**Step 3** Using a Microsoft SCVMM PowerShell window, enter the following:

```
Get-SCVirtualNetwork | where-object {$_.LogicalSwitch -like "1000V"} | select VMHost, HighlyAvailable, LogicalNetworks, VMHostNetworkAdapters | LogicalSwitchComplianceStatus
```

To remove the Logical Switch Compliance Warning, perform the following steps:

- 
- Step 1** Refresh the Virtual Switch Extension Manager
  - Step 2** Choose **Fabric > Logical Switches > Hosts**.
  - Step 3** Select the appropriate logical switch and choose **Remediate the Host**.
- 

## Verifying the Logical Switch Extension

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

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- 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 1** Log in to the host using the remote console.
  - Step 2** Open an elevated PowerShell window and enter the **Remove-VMSwitch -name *switchname*** command.
  - Step 3** Remove the NetSwitch Team from the host and restore connectivity by entering the **Get-NetSwitchTeam | Remove-NetSwitchTeam** command.
  - Step 4** Refresh the host from the Microsoft SCVMM.

**Note**

If [Step 2](#) fails when the WMI on the host is stuck in an inconsistent state, manually delete the switch 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.	Delete the temporary templates by entering the following commands in a PowerShell window: <ul style="list-style-type: none"> <li>Get-VMMServer</li> <li>Get-SCVMMTemplate   where {\$_.Name -like "Temporary*"}   Remove-SCVMMTemplate</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.



**Note** This problem is a Microsoft issue with Server Core versions of Windows Server 2016.

- 
- 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 **Remove-VMSwitch -name *switchname*** command.
- Step 4** Remove the NetSwitch Team from the host and restore connectivity by entering the **Get-NetSwitchTeam | Remove-NetSwitchTeam** 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 VEMs.	The VSM IP address has changed.	<ol style="list-style-type: none"> <li>1. Change the IP address of the management interface (mgmt0) on the VSM.</li> <li>2. Change the connection string of the Switch Manager Extension on the Microsoft SCVMM to the new VSM IP address.</li> <li>3. Refresh the Switch Extension Manager/Network Service in the Microsoft SCVMM.</li> <li>4. Verify the information on all screens before you choose <b>OK</b>.</li> <li>5. Choose <b>Fabric &gt; Logical Switches &gt; Hosts</b>.</li> <li>6. Choose the host from the list.</li> <li>7. From the toolbar, choose <b>Remediate</b>.</li> <li>8. Verify that the job was completed by checking the <b>Jobs</b> section.</li> </ol>