



## **Cisco Virtual Switch Update Manager Troubleshooting Guide, Release 1.x**

**First Published:** February 18, 2015

**Last Modified:** December 03, 2015

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## CONTENTS

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### CHAPTER 1

#### Overview 1

- Information About Cisco Virtual Switch Update Manager 1
- Overview of the Troubleshooting Process 2
- Overview of Best Practices 2
- Collecting VSUM Bundle Logs for the Cisco Technical Assistance Center 2
- Checking Status of VSUM Tasks in VMware vCenter 3
  - Checking Status of Cisco Nexus 1000V Installation with VSUM in VMware vCenter 3
  - Checking Status of Adding Hosts or Upgrading with VSUM in the VMware vCenter for Cisco AVS or Cisco Nexus 1000V 3
- Cisco Support Communities 4
- Contacting the Cisco Technical Assistance Center 4

---

### CHAPTER 2

#### Installing Cisco Virtual Switch Update Manager 5

- Problems with Installing the Cisco Virtual Switch Update Manager 5
- Troubleshooting Virtual Switch Update Manager Installation with Logs 12

---

### CHAPTER 3

#### Installing Cisco Nexus 1000V 15

- Problems with Installing the Cisco Nexus 1000V 15

---

### CHAPTER 4

#### Migrating Cisco Nexus 1000V 17

- Problems with Migrating Hosts to the Cisco Nexus 1000V 17

---

### CHAPTER 5

#### Upgrading Cisco Nexus 1000V 19

- Problems with Upgrading the Cisco Nexus 1000v 19

---

### CHAPTER 6

#### Monitoring Cisco Nexus 1000V 21

- Problems with Monitoring the Cisco Nexus 1000V 21

---

**CHAPTER 7**

**Adding Hosts to the Cisco Application Virtual Switch 29**

Problems with Adding Hosts to the Cisco Application Virtual Switch 29

---

**CHAPTER 8**

**Upgrading the Cisco Application Virtual Switch 31**

Problems with Upgrading the Cisco Application Virtual Switch 31



## Overview

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This chapter contains the following sections:

- [Information About Cisco Virtual Switch Update Manager, page 1](#)
- [Overview of the Troubleshooting Process, page 2](#)
- [Overview of Best Practices, page 2](#)
- [Collecting VSUM Bundle Logs for the Cisco Technical Assistance Center, page 2](#)
- [Checking Status of VSUM Tasks in VMware vCenter, page 3](#)
- [Cisco Support Communities, page 4](#)
- [Contacting the Cisco Technical Assistance Center, page 4](#)

## Information About Cisco Virtual Switch Update Manager

Cisco Virtual Switch Update Manager is a virtual appliance that is registered as a plug-in to VMware vCenter Server. The Cisco Virtual Switch Update Manager graphical user interface (GUI) is an integral part of VMware vSphere Web Client; you can access Cisco Virtual Switch Update Manager only if you log into VMware vSphere Web Client.

Cisco Virtual Switch Update Manager simplifies the installation and the configuration of the Cisco Nexus 1000V and the Cisco Application Virtual Switch (AVS).

Cisco Virtual Switch Update Manager enables you to do the following for the Cisco Nexus 1000V for VMware vSphere:

- Install the Cisco Nexus 1000V switch.
- Migrate the VMware vSwitch and VMware vSphere Distributed Switch (VDS) to the Cisco Nexus 1000V.
- Monitor the Cisco Nexus 1000V.
- Upgrade the Cisco Nexus 1000V and add hosts from an earlier version to the latest version.
- Install the health of the virtual machines (VMs) in your data center by using the **Dashboard - Cisco Nexus 1000V** window on the **Cisco Nexus 1000V** tab in the user interface.

Cisco Virtual Switch Update Manager enables you to do the following for the Cisco AVS:

- Add hosts to the Cisco AVS.
- Upgrade the Cisco AVS.

## Overview of the Troubleshooting Process

Follow the steps below to troubleshoot your network:

- 1 Gather information that defines the specific symptoms.
- 2 Identify all potential problems that could be causing the symptoms.
- 3 Systematically eliminate each potential problem (from most likely to least likely) until the symptoms disappear.

## Overview of Best Practices

Best practices are the recommended steps you should take to ensure the proper operation of your network. We recommend the following best practices for most networks:

- Maintain a consistent Cisco Virtual Switch Update Manager release across all network devices.
- Refer to the release notes for your Cisco Virtual Switch Update Manager release for the latest features, limitations, and caveats.
- Enable system message logging.
- Verify and troubleshoot any new configuration changes after implementing the change.

## Collecting VSUM Bundle Logs for the Cisco Technical Assistance Center

For problems with Cisco Nexus 1000V or Cisco AVS when using VSUM, collect VSUM bundle logs and send them to the Cisco Technical Assistance Center.

- 
- |               |  |
|---------------|--|
| <b>Step 1</b> | Use Secure Shell (SSH) to connect into Cisco Virtual Switch Update Manager. The default username is root and the password is cisco.          |
| <b>Step 2</b> | Navigate to <code>/etc/cisco/app_install</code> and run the <code>./bundleLogs.sh</code> command.  |
| <b>Step 3</b> | In the root directory, retrieve the <code>ajaxLogs</code> folder, compress the folder, and send it to the Cisco Technical Assistance Center. |
-

## Checking Status of VSUM Tasks in VMware vCenter

As of the VSUM Release 1.3, you can check the status of tasks that you just completed in the VMware vSphere Task Console.

## Checking Status of Cisco Nexus 1000V Installation with VSUM in VMware vCenter

After you click **Finish** to install the Cisco Nexus 1000V switch, you can check the status of the installation.

- 
- Step 1** Open a new tab in your browser and enter the same vCenter IP address to open the web client again.
- Step 2** Log in to the web client and in the navigation pane, click **Tasks**.  
The **Task Console** opens in the work pane, displaying a list of tasks with the most recent task at the top.
- Step 3** Find the task in the **Task Name** column and then view the status in the **Status** column.  
The **Status** column shows whether the task is complete or is in progress. You can click the refresh icon to display new tasks and learn how much of the task is complete in terms of percentage.
- Note** Several tasks might appear above the primary task you just performed. They might be associated with your primary task.  
The Nexus 1000V installation is confirmed when the primary task `Create Nexus 1000v Switch` has the status `Completed`. A typical installation of the switch takes about 4 minutes.
- 

## Checking Status of Adding Hosts or Upgrading with VSUM in the VMware vCenter for Cisco AVS or Cisco Nexus 1000V

After you click **Finish** when adding hosts or upgrading with VSUM, you can check the status of the task. The procedure is the same for Cisco Nexus 1000V and the Cisco Application Virtual Switch.

- 
- Step 1** In the **Recent Tasks** pane to the right of the work pane, click **More Tasks**.  
The **Task Console** appears in the work pane, displaying a list of tasks with the most recent task at the top.
- Step 2** Find the task in the **Task Name** column and then view the status in the **Status** column.  
The **Status** column shows whether the task is complete or is in progress. You can click the refresh icon to display new tasks and learn how much of the task is complete in terms of percentage.
- Note** Several tasks might appear above the primary task you just performed. They might be associated with your primary task.  
The host addition is confirmed when the primary task has the status `Completed`.  
If you close the browser and later want to view the task's history, log in to the web client, click **Tasks** in the navigation pane to display the lists of tasks in the work pane.

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## Cisco Support Communities

For additional information, visit one of the following support communities:

- Cisco Support Community for Server Networking
- Cisco Communities: Nexus 1000V
- Cisco Communities: Application Virtual Switch

## Contacting the Cisco Technical Assistance Center

If you are unable to solve a problem after using the troubleshooting suggestions in this guide, contact a customer service representative for assistance and further instructions. Before you call, have the following information ready to help your service provider assist you as quickly as possible.

- Version of the Cisco Virtual Switch Update Manager software that you are running
- Contact phone number
- Brief description of the problem
- Brief explanation of the steps you have already taken to isolate and resolve the problem

After you have collected this information, see the Obtaining Documentation and Submitting a Service Request section.





# CHAPTER 2

## Installing Cisco Virtual Switch Update Manager

If following the troubleshooting scenarios in this chapter does not resolve your problem, you can access and examine the logs for a possible solution.

This chapter contains the following sections:

- [Problems with Installing the Cisco Virtual Switch Update Manager, page 5](#)
- [Troubleshooting Virtual Switch Update Manager Installation with Logs, page 12](#)

### Problems with Installing the Cisco Virtual Switch Update Manager

This section includes symptoms, possible causes, and solutions for the following problems while you install the Cisco Virtual Switch Update Manager (VSUM).

Symptom	Possible Causes	Verification and Solution
After deploying the Open Virtualization Appliance (OVA) file, the <b>Cisco Virtual Switch Update Manager</b> tab does not appear in the vCenter vSphere Web Client home page.	The OVA file is corrupt.	<ol style="list-style-type: none"> <li>1 Copy the OVA file to your local machine.</li> <li>2 Verify the file integrity by using the <code>bash\$ls n1kv-manager.ova n1kv-manager.ova.md5 bash\$md5sum n1kv-manager.ova</code> command. The output displays the OVA file contents.</li> <li>3 The contents of the OVA file must match the MD5 file contents. to those of the md5 file.  If the contents do not match, copy the OVA file once again.</li> </ol>

Symptom	Possible Causes	Verification and Solution
<p>After deploying the OVA file, the <b>Cisco Virtual Switch Update Manager</b> tab does not appear in the vCenter vSphere Web Client home page.</p>	<p>Either a wrong IP address or port group has been assigned to the appliance.</p>	<ol style="list-style-type: none"> <li>1 Log in to Cisco Virtual Switch Update Manager using the default credentials.</li> <li>2 View the installation log available at <code>/etc/cisco/app_install/logs/n1kv-manager_install.log</code> to view the NoRouteToHostEx error.</li> <li>3 Ensure that the correct port group is selected for the virtual machine (VM) and ping the default gateway.</li> </ol> <p>To add or edit the IP address of the VM, do the following:</p> <ol style="list-style-type: none"> <li>1 Navigate to <code>/etc/cisco/app_install</code>.</li> <li>2 Copy the <code>cfg</code> template to <code>app.cfg</code> using the <code>cp app.cfg.template app.cfg</code> command.</li> <li>3 Open the <code>cfg</code> template by using the <code>vi app.cfg</code> command.</li> <li>4 Update the IP address and change the <code>vCenterUsernameFormat</code> and <code>vCenterPasswordFormat</code> values from <b>Hex</b> to <b>Plain</b>.</li> <li>5 Enter the administrator credentials in the <code>vCenterUsername</code> and <code>vCenterPassword</code> fields and save this configuration.</li> <li>6 Navigate to <code>/etc/cisco/app_install</code> and run the <code>./config_app.sh -n</code> command to re-register and update the network parameters.</li> </ol>

Symptom	Possible Causes	Verification and Solution
<p>After deploying the OVA file, the <b>Cisco Virtual Switch Update Manager</b> tab does not appear in the vCenter vSphere Web Client home page.</p>	<p>The vCenter vSphere Web Client credentials are incorrect.</p>	<ol style="list-style-type: none"> <li>1 Log in to Cisco Virtual Switch Update Manager using the default credentials.</li> <li>2 View the installation log available at <code>/etc/cisco/app_install/logs/n1kv-manager_install.log</code> to view the InvalidLogin error.</li> <li>3 Ensure that all the networking issues are resolved and redeploy Cisco Virtual Switch Update Manager with the correct credentials.</li> </ol> <p>To add or edit the IP address or the credentials of the VM, do the following:</p> <ol style="list-style-type: none"> <li>1 Navigate to <code>/etc/cisco/app_install</code>.</li> <li>2 Copy the cfg template to <code>app.cfg</code> using the <b><code>cp app.cfg.template app.cfg</code></b> command.</li> <li>3 Open the cfg template by using the <b><code>vi app.cfg</code></b> command.</li> <li>4 Update the IP address and change the <code>vCenterUsernameFormat</code> and <code>vCenterPasswordFormat</code> values from <b>Hex</b> to <b>Plain</b>.</li> <li>5 Enter the administrator credentials in the <code>vCenterUsername</code> and <code>vCenterPassword</code> fields and save this configuration.</li> <li>6 Navigate to <code>/etc/cisco/app_install</code> and run the <b><code>./config_app.sh -r</code></b> command to re-register the Cisco Virtual Switch Update Manager.</li> </ol>

Symptom	Possible Causes	Verification and Solution
<p>After deploying the OVA file, the <b>Cisco Virtual Switch Update Manager</b> tab does not appear in the vCenter vSphere Web Client home page.</p>	<p>An older version of the com.cisco.nlkv is already available on the vCenter vSphere Web Client.</p>	<ol style="list-style-type: none"> <li>1 Enter <code>https://&lt;the assigned vCenter IP address&gt;mob</code> in a web browser.</li> <li>2 Choose <b>Content &gt; Extension Manager</b>.</li> <li>3 Unregister the file with extension cisco.cisco.nlkv.</li> <li>4 Delete the com.cisco.nlkv-1.0 folder: <ul style="list-style-type: none"> <li><b>Note</b> com.cisco.nlkv-1.0 is the version used for VSUM 1.0. If you are using VSUM 1.1/1.2/1.3/1.x, select the corresponding version folder.</li> <li>• In a Windows server, this folder is available at C:\ProgramData\VMware\vSphere Web Client\vc-packages\vsphere-client-serenity.</li> <li>• In a Linux server, this folder for vCenter 5.1 and 5.5 is available at "rm -rf /var/lib/vmware/vsphere-client/vc-packages/vsphere-client-serenity/com.cisco.nlkv-1.0/.</li> <li>• In a Linux server, this folder for vCenter 6.0 is etc/vmware/vsphere-client/vc-packages/vsphere-client-serenity/com.cisco.*</li> </ul> </li> <li>5 Restart vCenter vSphere Web Client: <ul style="list-style-type: none"> <li>• For a Windows server, choose <b>Start &gt; Run &gt; type services.msc &gt; start and stop</b> to restart vCenter vSphere Web Client.</li> <li>• For the Linux server, run the <b>/etc/init.d/vsphere-client restart</b> command.</li> </ul> </li> <li>6 Redeploy the VM to register it.</li> </ol>

Symptom	Possible Causes	Verification and Solution
VSUM is not working after changing vCenter port number.	The new port number may not be open on vCenter, or the new port number is not updated in VSUM.	<p>Ensure that the newly changed port number is configured correctly on vCenter and is listening with new port.</p> <p>You can verify the configuration two different ways:</p> <ul style="list-style-type: none"> <li>• From the vCenter CLI with the command <b>netstat -bano</b>.</li> <li>• In VSUM by performing the following steps: <ol style="list-style-type: none"> <li>1 Navigate to <code>/etc/cisco/app_install</code>.</li> <li>2 Copy the cfg template to <code>app.cfg</code> using the <b>cp app.cfg.template app.cfg</b> command.</li> <li>3 Open the cfg template by using the <b>vi app.cfg</b> command.</li> <li>4 Update vCenter's new port number.</li> <li>5 Change the <code>vCenterUsernameFormat</code> and <code>vCenterPasswordFormat</code> values from Hex to Plain.</li> <li>6 Enter the administrator credentials in the <code>vCenterUsername</code> and <code>vCenterPassword</code> fields and save the configuration.</li> <li>7 Navigate to <code>/etc/cisco/app_install</code> and run the <b>./config_app.sh -r</b> command to reregister.</li> </ol> </li> </ul> <p><b>Note</b> Changing the port number on vCenter requires a reboot of vCenter. Ensure that port 8443 is open. Cisco VSUM uses port 8443 for communication with vCenter.</p>

Symptom	Possible Causes	Verification and Solution
<p>Logs show a problem with VSUM installation. See the section <a href="#">Troubleshooting Virtual Switch Update Manager Installation with Logs</a>.</p>	<p>VSUM did not install correctly.</p>	<p>For vCenter on Windows, do a clean uninstall and reinstall of VSUM by performing the following steps:</p> <ol style="list-style-type: none"> <li>1 Power off the current active VSUM VM and delete it.</li> <li>2 Go to <code>https://VCIP/mob</code> and log in with the default credentials.</li> <li>3 In a web browser, choose <b>Content &gt; Extension Manager</b>.</li> <li>4 Click <b>UnregisterExtension</b>, enter <code>com.cisco.n1kv</code> and then click <b>Invoke method</b>.  If the <code>com.cisco.n1kv</code> extension not available, move to the next step.</li> <li>5 Choose <b>Start</b> and then run <b>services.msc</b>.</li> <li>6 Right-click the VMware vSphere Web Client and click <b>Stop</b>.</li> <li>7 Go to <code>C:\ProgramData\VMware\vSphere</code> and in the <code>Web Client\vc-packages\vsphere-client-serenity</code> directory, delete the entire <code>com.cisco.n1kv</code> folder.</li> <li>8 Choose <b>Start</b> and then run <b>services.msc</b>.</li> <li>9 Right-click the VMware vSphere Web Client and then click <b>Start</b>.</li> <li>10 Check if the web client UI is working after starting the service and logging out.</li> <li>11 Install the new Cisco VSUM using the OVA.  Ensure that all parameters such as port group, IP address, vCenter credentials, and port number are correct during installation.</li> <li>12 After Cisco VSUM is successfully deployed, login to the VMware vSphere Web Client to view the Cisco VSUM plugin.</li> </ol>

Symptom	Possible Causes	Verification and Solution
		<p>For vCenter on Linux, do a clean uninstall and reinstall of VSUM by performing the following steps:</p> <ol style="list-style-type: none"> <li>1 Power off the current active VSUM VM and delete it.</li> <li>2 Go to <code>https://VCIP/mob</code> and log in with the default credentials.</li> <li>3 In a web browser, choose <b>Content &gt; Extension Manager</b>.</li> <li>4 Click <b>UnregisterExtension</b>, enter <code>com.cisco.n1kv</code> and then click <b>Invoke method</b>.</li> </ol> <p>If the <code>com.cisco.n1kv</code> extension not available, move to the next step.</p> <ol style="list-style-type: none"> <li>5 Go to the <code>/var/lib/vmware/vsphere-client/vc-packages/vsphere-client-serenity/</code> directory and delete the entire <code>com.cisco.n1kv</code> folder using the <code>rm -rf com.cisco.n1kv*</code> command.</li> <li>6 Restart VMware vSphere Web Client service using the <code>/etc/init.d/vsphere-client restart</code> command.</li> <li>7 Check if the web client UI is working after starting the service and logging out.</li> <li>8 Install new the Cisco VSUM using the OVA.</li> </ol> <p>Ensure that all parameters such as port group, IP address, vCenter credentials, and port number are correct during installation.</p> <ol style="list-style-type: none"> <li>9 After Cisco VSUM is successfully deployed, login to the VMware vSphere Web Client to view the Cisco VSUM plugin.</li> </ol>

# Troubleshooting Virtual Switch Update Manager Installation with Logs

If you have a problem installing Cisco Virtual Switch Update Manager and cannot solve it by methods listed earlier in this chapter, you can access and view logs in the Cisco Virtual Switch Update Manager for a possible solution.

- 1 Use Secure Shell (SSH) to connect to Cisco Virtual Switch Update Manager. The default username is root and the password is cisco.
- 2 Navigate to `/etc/cisco/app_install/logs/nlkv-manager_install.log` and check for the following log snippets:

```
193 [main] DEBUG com.cisco.vcenter.extension.register.ServiceUtil - host=10.193.216.91,
  clearPort=80, securePort=443, secure=true,
  tunnel=true, vCenterURL=https://10.193.216.91:80 /sdk 345 [main] DEBUG
com.virtuata.security.TunnelFactory - Tryig to read 0 bytes
long response 345 [main] DEBUG com.virtuata.security.TunnelFactory - CONNECT Response
Body: 367 [main]
DEBUG com.virtuata.security.TunnelFactory - VC SSL Tunnel Opened from localhost 51672 to
  10.193.216.91:80 613 [main]
DEBUG com.virtuata.security.TunnelFactory - Tunneled socket opening is complete 613 [main]

DEBUG com.virtuata.security.VirtuataTunneledSSLSocketFactory - Tunneled socket is created
732 [main]
DEBUG com.virtuata.security.VirtuataHostnameVerifier - Returning original verifier of
type
javax.net.ssl.HttpURLConnection.DefaultHostnameVerifier 1212 [main] DEBUG
com.cisco.vcenter.extension.register.ExtensionRegister - Received
version=5.1.0 from vCenter. Parsed it as 5.1.0 (v-j5-n1-u0-l-b-v)

1983 [main] INFO com.cisco.vcenter.extension.register.ExtensionRegister - Examining
extension with key=com.cisco.nlkv
1983 [main] INFO com.cisco.vcenter.extension.register.ExtensionRegister - Ignoring
extension with key=com.cisco.nlkv
1983 [main] INFO com.cisco.vcenter.extension.register.ExtensionRegister - Legacy vcplugin
was not installed. Nothing to remove
1989 [main] DEBUG com.cisco.vcenter.extension.register.KeyValueStore - Using /etc/cisco
as the prefDir, and /etc/cisco/nlkvCfgData.properties as the file, full path is
/etc/cisco/
nlkvCfgData.properties
Using CATALINA_BASE: /usr/local/tomcat
Using CATALINA_HOME: /usr/local/tomcat
Using CATALINA_TMPDIR: /usr/local/tomcat/temp
Using JRE_HOME: /usr/java/default
Using CLASSPATH:
/usr/local/tomcat/bin/bootstrap.jar:/usr/local/tomcat/bin/tomcat-juli.jar
Using CATALINA_PID: /usr/local/tomcat/catalina.pid
Registered app with vCenter.
Thu Jul 31 15:21:46 PDT 2014
Finished initial configuration.
Thu Jul 31 15:21:46 PDT 2014
```

- 3 If there are no issues in the above log snippet, check the vCenter Managed Object Browser (MOB) to verify that the Cisco Virtual Switch Update Manager plug-in is registered successfully.
- 4 Verify that the extension is registered successfully:
  - Enter `https://vcenterip/mob` in a web browser and log in with the vCenter credentials.
  - Choose **Content > Extension Manager** and verify that the **com.cisco.nlkv** extension is listed.
  - Choose **cisco.com.nlkv > Server** and verify that the URL value displays the IP address of the Cisco VSUM VM.



If the IP address is displayed, the extension is registered successfully.

- 5 If Cisco Virtual Switch Update Manager is not visible on vCenter vSphere Web Client, collect the vCenter and Cisco VSUM logs and send it to the Cisco Technical Assistance Center.





## Installing Cisco Nexus 1000V

This chapter contains the following sections:

- [Problems with Installing the Cisco Nexus 1000V, page 15](#)

### Problems with Installing the Cisco Nexus 1000V

This section includes symptoms, possible causes, and solutions for the following problems while you install the Cisco Nexus 1000V.

Symptom	Possible Causes	Verification and Solution
The IP address is in use.	The specified IP address has been used earlier.	In the <b>Virtual Supervisor Module (VSM) Configuration</b> area, enter an unused IP address, and click <b>Finish</b> to complete the installation.
A suitable host cannot be found.	The selected Control and Management port groups are available on different hosts.	In the <b>Nexus 1000V Switch Deployment Type</b> area, choose the Control and Management port groups that are available on a same host.
Powering on the VSM fails.	The selected host does not have sufficient CPU or memory resources.	In the <b>Host Selection</b> area, choose a host that has sufficient memory resources.
Displays a duplicate VM name.	The specified switch name exists on the host.	In the <b>Virtual Supervisor Module (VSM) configuration</b> area, enter a new switch name.
Displays an error message as follows: NO_DISK_SPACE	Insufficient disk space to deploy the VSM on the host.	Free up disk space and complete the installation.

If a problem persists after you try solutions in the preceding table, follow instructions in the section [Collecting VSUM Bundle Logs for the Cisco Technical Assistance Center](#).



## Migrating Cisco Nexus 1000V

This chapter contains the following sections:

- [Problems with Migrating Hosts to the Cisco Nexus 1000V](#), page 17

### Problems with Migrating Hosts to the Cisco Nexus 1000V

This section includes symptoms, possible causes, and solutions for the following problems while you migrate hosts to the Cisco Nexus 1000V.

Symptom	Possible Causes	Verification and Solution
Hosts do not appear under the supported host list.	<p>The host could be one of the following:</p> <ul style="list-style-type: none"> <li>• Disconnected or not responding state</li> <li>• Already added to the Cisco Nexus 1000V switch.</li> <li>• Running an unsupported ESXi version by the switch.</li> </ul>	Resolve the host issues and refresh the page.
<p>Cisco Virtual Switch Update Manager displays the following error message:</p> <pre>"The port profile does not have its native VLAN configured correctly."</pre>	If Cisco Discovery Protocol (CDP) is enabled on the upstream for the VMNIC, the Cisco Virtual Switch Update Manager automatically suggests a port profile with the native VLAN. If CDP is disabled, the native VLAN does not appear for the port profile associated with the VMNIC.	Enter the native VLAN manually in the <b>Native VLAN</b> field and click <b>Finish</b> to migrate the host to the Cisco Nexus1000V switch.

Symptom	Possible Causes	Verification and Solution
The connectivity to some of the VMs is lost.	All the physical adapters are moved to the Cisco Nexus 1000V, while some VMs are not migrated.	Do not move all the physical adapters. You must retain at least one active physical adapter that can be used for any of the VMs that are not migrated.
The VLANs are not backed up by the uplink port profiles.	The VLANs that belong to the VMkernels and the VMs are not configured in the Ethernet port profile.	Ensure that all the VMkernel and the VM VLANs are configured in the uplink Ethernet port profile. Add the VLANs manually to the uplink Ethernet port profiles that are not backed by the Ethernet port profile.
The VEM module goes missing.	The VSM to VEM communication is incomplete.	Ensure that the IP address and the VLAN that is selected for the VMkernel for the Layer 3 control traffic is correct.
An internal error occurs.		<ol style="list-style-type: none"> <li>1 Log into a terminal session.</li> <li>2 Navigate to <code>etc/ciscoapp_install</code> and run the <code>\$.bundleLogs.sh</code> command.</li> <li>3 In the root directory, retrieve the <code>ajaxLogs</code> folder, compress the folder, and send it to the Cisco Technical Assistance Center.</li> </ol>

If a problem persists after you try one of the first five solutions in the preceding table, follow instructions in the section [Collecting VSUM Bundle Logs for the Cisco Technical Assistance Center](#).



## Upgrading Cisco Nexus 1000V

This chapter contains the following sections:

- [Problems with Upgrading the Cisco Nexus 1000v](#), page 19

### Problems with Upgrading the Cisco Nexus 1000v

This section includes symptoms, possible causes, and solutions for the following problems while you upgrade the Cisco Nexus 1000V.

Symptom	Possible Causes	Verification and Solution
<p>Cisco Virtual Switch Update Manager displays the following pop up message and does not allow you to proceed with the installation:</p> <p>"SWITCH_HAS_NO_STANDBY"</p>	<p>The Cisco Nexus 1000V does not have a standby.</p>	<p>Use the Cisco Nexus 1000V switch with a standby, active, or redundancy role.</p> <p>Check the following log:</p> <pre>428443293 ERROR 2014-08-18 12:34:23,785[http-bio-8443-exec-9] com.cisco.service.intercept.NLKVExceptionMapper - Translating exception= com.cisco.nlkv.exception.SwitchHasNoStandby at com.cisco.nlkv.upgrade. UpgradeHelper.doRecGenerationPreChecks (UpgradeHelper.java:423)</pre> <p>Payload: &lt;?xml version="1.0" encoding="UTF-8" standalone="yes"?&gt;&lt;errorData&gt;&lt;errorCode&gt;SWITCH_HAS_NO_STANDBY&lt;/errorCode&gt; &lt;msgObjects&gt;&lt;obj xsi:type="xs:string" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"&gt;VSM-CCO-SV1-52b&lt;/obj&gt;&lt;rank&gt;0&lt;/rank&gt;&lt;/msgObjects&gt; &lt;msgTemplate&gt;Switch {0} has no standby.&lt;/msgTemplate&gt;&lt;/errorData&gt;</p>

Symptom	Possible Causes	Verification and Solution
In the <b>Switch Upgrade Path</b> area, none of the hosts are available	The Cisco Nexus 1000V switch includes one or more hosts that are unsupported.	Prior to upgrading the Cisco Nexus 1000V switch, upgrade the ESXi hosts to the version that is compatible with the version of the Cisco Nexus 1000V that you want to upgrade to.
During an upgrade of the Cisco Nexus 1000V, the host being upgraded should appear in the <b>Eligible Hosts</b> drop-down list. However, the host might appear in the <b>No Upgrade Needed Hosts</b> drop-down list.	Browser history and cached memory need to be cleared.	<ol style="list-style-type: none"> <li>1 Clear the browser history and cached memory.</li> <li>2 Log out of the vCenter Web Client and then log in again.</li> <li>3 Verify that the host appears in the <b>Eligible Hosts</b> drop-down list.</li> <li>4 Choose the host and proceed with the upgrade.</li> </ol>

If a problem persists after you try solutions in the preceding table, follow instructions in the section [Collecting VSUM Bundle Logs for the Cisco Technical Assistance Center](#).





## Monitoring Cisco Nexus 1000V

This chapter contains the following sections:

- [Problems with Monitoring the Cisco Nexus 1000V](#) , page 21

### Problems with Monitoring the Cisco Nexus 1000V

This section includes symptoms and solutions for the following problems while you monitor the Cisco Nexus 1000V.

Symptom	Verification and Solution
<b>Dashboard Tab</b>	
The Cisco Nexus 1000V displays the wrong system detail values.	<ol style="list-style-type: none"> <li>1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/summary</b> command.</li> <li>2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/summary HTTP/1.1</li> <li>3 Compare the values.</li> <li>4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>
The Cisco Nexus 1000V displays wrong network statistic values.	<ol style="list-style-type: none"> <li>1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/limits</b> command.</li> <li>2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/limits HTTP/1.1</li> <li>3 Compare the values.</li> <li>4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>

Symptom	Verification and Solution
The Cisco Nexus 1000V displays the wrong licenses.	<ol style="list-style-type: none"> <li><b>1</b> In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/license</b> command.</li> <li><b>2</b> In the ciscoExt.log, check for the content after the following line: GET/api/vc/license HTTP/1.1</li> <li><b>3</b> Compare the values.</li> <li><b>4</b> If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>
<b>Switch Tab</b>	
The Cisco Nexus 1000V displays the wrong host/Virtual Ethernet Module (VEM) values.	<ol style="list-style-type: none"> <li><b>1</b> In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vem?bulk=1:50</b> command. <ul style="list-style-type: none"> <li><b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vem</b> command.</li> <li>In the ciscoExt.log, check for the content after the following line: GET /api/vc/vem HTTP/1.1</li> </ul> </li> <li><b>2</b> In the ciscoExt.log, check for the content after the following line: GET/api/vc/vem?bulk=1:50 HTTP/1.1</li> <li><b>3</b> Compare the values.</li> <li><b>4</b> If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>

Symptom	Verification and Solution
<p>The Cisco Nexus 1000V displays wrong VM info values.</p>	<ol style="list-style-type: none"> <li>1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vnic?bulk=1:50</b> command.           <p><b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vnic</b> command.</p> <p>In the ciscoExt.log, check for the content after the following line: GET /api/vc/vnic HTTP/1.1</p> </li> <li>2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/vnic?bulk=1:50 HTTP/1.1</li> <li>3 Compare the values.</li> <li>4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>
<p>The Cisco Nexus 1000V displays wrong port profile values.</p>	<ol style="list-style-type: none"> <li>1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/port-profile?bulk=1:50</b> command.           <p><b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/port-profile</b> command.</p> <p>In the ciscoExt.log, check for the content after the following line: GET /api/vc/port profile HTTP/1.1</p> </li> <li>2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/port-profile?bulk=1:50 HTTP/1.1</li> <li>3 Compare the values.</li> <li>4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>

Symptom	Verification and Solution
The Cisco Nexus 1000V displays wrong vNICs.	<p><b>1</b> In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vnic?bulk=1:50</b> command.</p> <p><b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vnic</b> command.</p> <p>In the ciscoExt.log, check for the content after the following line: GET /api/vc/vnic HTTP/1.1</p> <p><b>2</b> In the ciscoExt.log, check for the content after the following line: GET/api/vc/vnic?bulk=1:50 HTTP/1.1</p> <p><b>3</b> Compare the values.</p> <p><b>4</b> If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</p>
The Cisco Nexus 1000V displays wrong uplinks.	<p><b>1</b> In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/uplink?bulk=1:50</b> command.</p> <p><b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/uplink</b> command.</p> <p>In the ciscoExt.log, check for the content after the following line: GET /api/vc/uplink HTTP/1.1</p> <p><b>2</b> In the ciscoExt.log, check for the content after the following line: GET/api/vc/uplink?bulk=1:50 HTTP/1.1</p> <p><b>3</b> Compare the values.</p> <p><b>4</b> If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</p>
<b>Hosts/VEM Tab</b>	

Symptom	Verification and Solution
The Cisco Nexus 1000V displays wrong host values.	<ol style="list-style-type: none"> <li>1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vem</b> command.</li> <li>2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/vem HTTP/1.1</li> <li>3 Compare the values.</li> <li>4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>
The Cisco Nexus 1000V displays wrong VM info values	<ol style="list-style-type: none"> <li>1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vnic?bulk=1:50</b> command. <ul style="list-style-type: none"> <li><b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vnic</b> command.</li> </ul> <p>In the ciscoExt.log, check for the content after the following line: GET /api/vc/vnic HTTP/1.1</p> </li> <li>2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/vnic?bulk=1:50 HTTP/1.1</li> <li>3 Compare the values.</li> <li>4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>

Symptom	Verification and Solution
<p>The Cisco Nexus 1000V displays wrong port group values.</p>	<ol style="list-style-type: none"> <li data-bbox="915 306 1479 428">1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/port-profile?bulk=1:50</b> command.</li> <li data-bbox="951 449 1479 646"> <p><b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/port-profile</b> command.</p> <p>In the ciscoExt.log, check for the content after the following line: GET /api/vc/port-profile HTTP/1.1</p> </li> <li data-bbox="915 657 1479 743">2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/port-profile?bulk=1:50 HTTP/1.1</li> <li data-bbox="915 764 1170 795">3 Compare the values.</li> <li data-bbox="915 816 1479 873">4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>
<p>The Cisco Nexus 1000V displays the wrong vNICs.</p>	<ol style="list-style-type: none"> <li data-bbox="915 951 1479 1037">1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vnic?bulk=1:50</b> command.</li> <li data-bbox="951 1058 1479 1255"> <p><b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/vnic</b> command.</p> <p>In the ciscoExt.log, check for the content after the following line: GET /api/vc/vnic HTTP/1.1</p> </li> <li data-bbox="915 1266 1479 1352">2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/vnic?bulk=1:50 HTTP/1.1</li> <li data-bbox="915 1373 1170 1404">3 Compare the values.</li> <li data-bbox="915 1425 1479 1482">4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li> </ol>

Symptom	Verification and Solution
The Cisco Nexus 1000V displays the wrong uplinks.	<ol style="list-style-type: none"><li data-bbox="951 306 1518 401">1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/uplink?bulk=1:50</b> command. <b>Note</b> For Release 4.2(1)SV2(1.1a), enter the <b>curl -u admin:Sfish123 &lt;vsm ip&gt;/api/vc/uplink</b> command. In the ciscoExt.log, check for the content after the following line: GET /api/vc/uplink HTTP/1.1</li><li data-bbox="951 625 1518 720">2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/uplink?bulk=1:50 HTTP/1.1</li><li data-bbox="951 735 1209 766">3 Compare the values.</li><li data-bbox="951 781 1518 844">4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.</li></ol>







## Adding Hosts to the Cisco Application Virtual Switch

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This chapter contains the following sections:

- [Problems with Adding Hosts to the Cisco Application Virtual Switch, page 29](#)

### Problems with Adding Hosts to the Cisco Application Virtual Switch

For problems adding hosts to the Cisco Application Virtual Switch, do the following:

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- Step 1** Use Secure Shell (SSH) to connect into Cisco Virtual Switch Update Manager. The default username is root and the password is cisco.
  - Step 2** Navigate to `/etc/cisco/app_install/` and run the `./bundleLogs.sh` command.
  - Step 3** In the root directory, retrieve the `ajaxLogs` folder, compress the folder, and send it to the Cisco Technical Assistance Center.
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# Upgrading the Cisco Application Virtual Switch

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This chapter contains the following sections:

- [Problems with Upgrading the Cisco Application Virtual Switch, page 31](#)

## Problems with Upgrading the Cisco Application Virtual Switch

For problems adding hosts to the Cisco Application Virtual Switch, do the following:

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- Step 1** Use Secure Shell (SSH) to connect into Cisco Virtual Switch Update Manager. The default username is root and the password is cisco.
- Step 2** Navigate to `/etc/cisco/app_install/` and run the `./bundleLogs.sh` command.
- Step 3** In the root directory, retrieve the `ajaxLogs` folder, compress the folder, and send it to the Cisco Technical Assistance Center.
- Note** If the Management VMkernel NIC is available on the Cisco AVS, while upgrading the Cisco AVS, you might encounter an error during the Install and Delete file tasks under the under VMware vCenter. If you get this error, do the following:
- 1 Allow the upgrading process to complete and allow the host to exit the maintenance mode.
  - 2 Confirm if the host is reachable using the Management network.
  - 3 Log in to the corresponding ESX host and enter the `vem status -v` command to verify that the Virtual Ethernet Module (VEM) is upgraded.
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