



Cisco Virtual Switch Update Manager Troubleshooting Guide, Release 2.x

First Published: February 22, 2016

Last Modified: March 03, 2016

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

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Overview

This chapter contains the following sections:

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- [Overview of the Troubleshooting Process, page 2](#)
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- [Collecting VSUM Bundle Logs for the Cisco Technical Assistance Center, page 2](#)
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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.

-
- 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** For a first-time VSUM 2.0 installation, the folder name will be `vsumLogs` instead of `ajaxLogs`.
-

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.

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.



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 Cisco Virtual Switch Update Manager tab does not appear in the vCenter vSphere Web Client home page.	The OVA file is corrupt.	<ol style="list-style-type: none"> 1 Copy the OVA file to your local machine. 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. 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.

Symptom	Possible Causes	Verification and Solution
<p>After deploying the OVA file, the Cisco Virtual Switch Update Manager 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"> 1 Log in to Cisco Virtual Switch Update Manager using the default credentials. 2 View the installation log available at <code>/etc/cisco/app_install/logs/n1kv-manager_install.log</code> to view the NoRouteToHostEx error. 3 Ensure that the correct port group is selected for the virtual machine (VM) and ping the default gateway. <p>To add or edit the IP address of the VM, do the following:</p> <ol style="list-style-type: none"> 1 Navigate to <code>/etc/cisco/app_install</code>. 2 Copy the <code>cfg</code> template to <code>app.cfg</code> using the <code>cp app.cfg.template app.cfg</code> command. 3 Open the <code>cfg</code> template by using the <code>vi app.cfg</code> command. 4 Update the IP address and change the <code>vCenterUsernameFormat</code> and <code>vCenterPasswordFormat</code> values from Hex to Plain. 5 Enter the administrator credentials in the <code>vCenterUsername</code> and <code>vCenterPassword</code> fields and save this configuration. 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.

Symptom	Possible Causes	Verification and Solution
<p>After deploying the OVA file, the Cisco Virtual Switch Update Manager 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"> 1 Log in to Cisco Virtual Switch Update Manager using the default credentials. 2 View the installation log available at <code>/etc/cisco/app_install/logs/n1kv-manager_install.log</code> to view the InvalidLogin error. 3 Ensure that all the networking issues are resolved and redeploy Cisco Virtual Switch Update Manager with the correct credentials. <p>To add or edit the IP address or the credentials of the VM, do the following:</p> <ol style="list-style-type: none"> 1 Navigate to <code>/etc/cisco/app_install</code>. 2 Copy the cfg template to <code>app.cfg</code> using the <code>cp app.cfg.template app.cfg</code> command. 3 Open the cfg template by using the <code>vi app.cfg</code> command. 4 Update the IP address and change the <code>vCenterUsernameFormat</code> and <code>vCenterPasswordFormat</code> values from Hex to Plain. 5 Enter the administrator credentials in the <code>vCenterUsername</code> and <code>vCenterPassword</code> fields and save this configuration. 6 Navigate to <code>/etc/cisco/app_install</code> and run the <code>./config_app.sh -r</code> command to re-register the Cisco Virtual Switch Update Manager.

Symptom	Possible Causes	Verification and Solution
<p>After deploying the OVA file, the Cisco Virtual Switch Update Manager 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"> 1 Enter <code>https://<the assigned vCenter IP address>mob</code> in a web browser. 2 Choose Content > Extension Manager. 3 Unregister the file with extension cisco.cisco.nlkv. 4 Delete the com.cisco.nlkv-1.0 folder: <ul style="list-style-type: none"> Note 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. • In a Windows server, this folder is available at C:\ProgramData\VMware\vSphere Web Client\vc-packages\vsphere-client-serenity. • 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/. • In a Linux server, this folder for vCenter 6.0 is etc/vmware/vsphere-client/vc-packages/vsphere-client-serenity/com.cisco.* 5 Restart vCenter vSphere Web Client: <ul style="list-style-type: none"> • For a Windows server, choose Start > Run > type services.msc > start and stop to restart vCenter vSphere Web Client. • For the Linux server, run the /etc/init.d/vsphere-client restart command. 6 Redeploy the VM to register it.

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"> • From the vCenter CLI with the command netstat -bano. • In VSUM by performing the following steps: <ol style="list-style-type: none"> 1 Navigate to <code>/etc/cisco/app_install</code>. 2 Copy the cfg template to <code>app.cfg</code> using the cp app.cfg.template app.cfg command. 3 Open the cfg template by using the vi app.cfg command. 4 Update vCenter's new port number. 5 Change the <code>vCenterUsernameFormat</code> and <code>vCenterPasswordFormat</code> values from Hex to Plain. 6 Enter the administrator credentials in the <code>vCenterUsername</code> and <code>vCenterPassword</code> fields and save the configuration. 7 Navigate to <code>/etc/cisco/app_install</code> and run the ./config_app.sh -r command to reregister. <p>Note 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 Troubleshooting Virtual Switch Update Manager Installation with Logs.</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"> 1 Power off the current active VSUM VM and delete it. 2 Go to <code>https://VCIP/mob</code> and log in with the default credentials. 3 In a web browser, choose Content > Extension Manager. 4 Click UnregisterExtension, enter <code>com.cisco.n1kv</code> and then click Invoke method. If the <code>com.cisco.n1kv</code> extension not available, move to the next step. 5 Choose Start and then run services.msc. 6 Right-click the VMware vSphere Web Client and click Stop. 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. 8 Choose Start and then run services.msc. 9 Right-click the VMware vSphere Web Client and then click Start. 10 Check if the web client UI is working after starting the service and logging out. 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. 12 After Cisco VSUM is successfully deployed, login to the VMware vSphere Web Client to view the Cisco VSUM plugin.

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"> 1 Power off the current active VSUM VM and delete it. 2 Go to <code>https://VCIP/mob</code> and log in with the default credentials. 3 In a web browser, choose Content > Extension Manager. 4 Click UnregisterExtension, enter <code>com.cisco.n1kv</code> and then click Invoke method. <p>If the <code>com.cisco.n1kv</code> extension not available, move to the next step.</p> <ol style="list-style-type: none"> 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. 6 Restart VMware vSphere Web Client service using the <code>/etc/init.d/vsphere-client restart</code> command. 7 Check if the web client UI is working after starting the service and logging out. 8 Install new the Cisco VSUM using the OVA. <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"> 9 After Cisco VSUM is successfully deployed, login to the VMware vSphere Web Client to view the Cisco VSUM plugin.

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.



Upgrading Cisco Virtual Switch Upgrade Manager

This chapter contains the following sections:

- [Problems when Upgrading the Cisco Virtual Switch Update Manager](#), page 15

Problems when Upgrading the Cisco Virtual Switch Update Manager

This section includes symptoms, possible causes, and solutions for the following problems while you upgrade VSUM.

Symptom	Possible Causes	Verification and Solution
When you upgrade VSUM using the command <code>./upgradeVsumToXXX.sh vCenterUsername vCenterPassword</code> , an error message appears, saying permission is denied.	The <code>upgradeVsumToXXX.sh</code> file might not have permission to execute.	Make sure that the permissions for the <code>upgradeVsumToXXX.sh</code> file are set for read, write and execute.



Virtual Switch Image File Upload Utility

This chapter contains the following sections:

- [Problems with the Virtual Switch Image File Upload Utility, page 17](#)

Problems with the Virtual Switch Image File Upload Utility

This section includes symptoms, possible causes, and solutions for the following problems while you use the virtual switch image file upload utility.

Symptom	Possible Causes	Verification and Solution
In the image task flow, when you click the Upload button, the file upload isn't launched.	Your browser has a popup blocker enabled or tab settings with some restrictions.	Before launching the file upload utility, make sure that your browser will open popup windows. Also make sure that the popup is opened in a new tab or new window.
The file upload utility web page isn't rendered properly or doesn't show the progress bar.	You are using an unsupported browser or unsupported browser version.	Before launching the file upload utility, make sure that you are using a supported browser and the minimum browser version listed in the VSUM 2.0 Release Notes. Note We recommend that you launch the file upload utility in a new tab.



Installing Cisco Nexus 1000V

This chapter contains the following sections:

- [Problems with Installing the Cisco Nexus 1000V, page 19](#)

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 Virtual Supervisor Module (VSM) Configuration area, enter an unused IP address, and click Finish to complete the installation.
A suitable host cannot be found.	The selected Control and Management port groups are available on different hosts.	In the Nexus 1000V Switch Deployment Type 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 Host Selection area, choose a host that has sufficient memory resources.
Displays a duplicate VM name.	The specified switch name exists on the host.	In the Virtual Supervisor Module (VSM) configuration 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](#).



CHAPTER 6

Migrating Cisco Nexus 1000V

This chapter contains the following sections:

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

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.	The host could be one of the following: <ul style="list-style-type: none">• Disconnected or not responding state• Already added to the Cisco Nexus 1000V switch.• Running an unsupported ESXi version by the switch.	Resolve the host issues and refresh the page.
Cisco Virtual Switch Update Manager displays the following error message: <code>"The port profile does not have its native VLAN configured correctly."</code>	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 Native VLAN field and click Finish 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"> 1 Log into a terminal session. 2 Navigate to <code>etc/ciscoapp_install</code> and run the <code>\$.bundleLogs.sh</code> command. 3 In the root directory, retrieve the <code>ajaxLogs</code> folder, compress the folder, and send it to the Cisco Technical Assistance Center. <p>Note For a first-time VSUM 2.0 installation, the folder name will be <code>vsumLogs</code> instead of <code>ajaxLogs</code>.</p>

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 23](#)

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: <?xml version="1.0" encoding="UTF-8" standalone="yes"?><errorData><errorCode>SWITCH_HAS_NO_STANDBY</errorCode> <msgObjects><obj xsi:type="xs:string" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">VSM-CCO-SV1-52b</obj><rank>0</rank></msgObjects> <msgTemplate>Switch {0} has no standby.</msgTemplate></errorData></p>

Symptom	Possible Causes	Verification and Solution
In the Switch Upgrade Path 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 Eligible Hosts drop-down list. However, the host might appear in the No Upgrade Needed Hosts drop-down list.	Browser history and cached memory need to be cleared.	<ol style="list-style-type: none"> 1 Clear the browser history and cached memory. 2 Log out of the vCenter Web Client and then log in again. 3 Verify that the host appears in the Eligible Hosts drop-down list. 4 Choose the host and proceed with the upgrade.

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 25

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

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

Symptom	Verification and Solution
<p>The Cisco Nexus 1000V displays wrong VM info values.</p>	<ol style="list-style-type: none"> <li data-bbox="951 306 1521 432">1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/vnic?bulk=1:50 command. <ul style="list-style-type: none"> <li data-bbox="992 447 1521 573">Note For Release 4.2(1)SV2(1.1a), enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/vnic command. <li data-bbox="1084 588 1521 678">In the ciscoExt.log, check for the content after the following line: GET /api/vc/vnic HTTP/1.1 <li data-bbox="951 688 1521 779">2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/vnic?bulk=1:50 HTTP/1.1 <li data-bbox="951 800 1211 831">3 Compare the values. <li data-bbox="951 852 1521 905">4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.
<p>The Cisco Nexus 1000V displays wrong port profile values.</p>	<ol style="list-style-type: none"> <li data-bbox="951 984 1521 1110">1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/port-profile?bulk=1:50 command. <ul style="list-style-type: none"> <li data-bbox="992 1125 1521 1251">Note For Release 4.2(1)SV2(1.1a), enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/port-profile command. <li data-bbox="1084 1266 1521 1356">In the ciscoExt.log, check for the content after the following line: GET /api/vc/port-profile HTTP/1.1 <li data-bbox="951 1367 1521 1457">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 data-bbox="951 1478 1211 1509">3 Compare the values. <li data-bbox="951 1530 1521 1583">4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.

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

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

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 432">1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/port-profile?bulk=1:50 command. Note For Release 4.2(1)SV2(1.1a), enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/port-profile command. In the ciscoExt.log, check for the content after the following line: GET /api/vc/port-profile HTTP/1.1 <li data-bbox="915 688 1479 779">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 data-bbox="915 804 1170 831">3 Compare the values. <li data-bbox="915 856 1479 911">4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.
<p>The Cisco Nexus 1000V displays the wrong vNICs.</p>	<ol style="list-style-type: none"> <li data-bbox="915 984 1479 1110">1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/vnic?bulk=1:50 command. Note For Release 4.2(1)SV2(1.1a), enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/vnic command. In the ciscoExt.log, check for the content after the following line: GET /api/vc/vnic HTTP/1.1 <li data-bbox="915 1367 1479 1457">2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/vnic?bulk=1:50 HTTP/1.1 <li data-bbox="915 1482 1170 1509">3 Compare the values. <li data-bbox="915 1535 1479 1589">4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.

Symptom	Verification and Solution
The Cisco Nexus 1000V displays the wrong uplinks.	<ol style="list-style-type: none"><li data-bbox="951 306 1516 432">1 In a Linux VM or a Cisco Virtual Switch Update Manager VM, enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/uplink?bulk=1:50 command. Note For Release 4.2(1)SV2(1.1a), enter the curl -u <vsm username>:<vsm password> <vsm ip>/api/vc/uplink command. In the ciscoExt.log, check for the content after the following line: GET /api/vc/uplink HTTP/1.1<li data-bbox="951 688 1516 779">2 In the ciscoExt.log, check for the content after the following line: GET/api/vc/uplink?bulk=1:50 HTTP/1.1<li data-bbox="951 804 1211 831">3 Compare the values.<li data-bbox="951 856 1516 909">4 If there is a difference in values, send the log files to the Cisco Technical Assistance Center.



Adding Hosts to the Cisco Application Virtual Switch

This chapter contains the following sections:

- [Problems with Adding Hosts to the Cisco Application Virtual Switch](#), page 33

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.
- Note** For a first-time VSUM 2.0 installation, the folder name will be `vsumLogs` instead of `ajaxLogs`.
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Upgrading the Cisco Application Virtual Switch

This chapter contains the following sections:

- [Problems with Upgrading the Cisco Application Virtual Switch, page 35](#)

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** For a first-time VSUM 2.0 installation, the folder name will be `vsumLogs` instead of `ajaxLogs`.
- 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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