



Upgrade

This chapter describes how to identify and resolve problems related to upgrading the VSM and VEM software.

Information About Upgrades

The upgrade for the Cisco Nexus 1000V involves upgrading the software on both, the VSM and the VEM.

An in service software upgrade (ISSU) is available for a stateful upgrade of the Cisco Nexus 1000V image(s) running on the VSM. A stateful upgrade is one without noticeable interruption of data plane services provided by the switch.

For more information, see the *Cisco Nexus 1000V for Microsoft Hyper-V Installation and Upgrade Guide*.

Problems with ISSU

The following are symptoms, possible causes, and solutions for problems while upgrading the software using the manual ISSU method. For information on the installation process, see the *Cisco Nexus 1000V for Microsoft Hyper-V Installation and Upgrade Guide*.

Symptom	Possible Causes	Solution
Error Message: Pre-Upgrade check failed. Return code 0x40930062 (free space in the filesystem is below threshold).	This error indicates that there is not enough space in the /var/sysmgr partition.	Reboot the system.
Error message: Pre-Upgrade check failed. Return code 0x4093000A (SRG collection failed).	A module is removed during the upgrade.	<ol style="list-style-type: none"> 1. Ensure that the module removal is complete. 2. Restart the software upgrade.

Symptom	Possible Causes	Solution
<p>Error message:</p> <p>Pre-Upgrade check failed. Return code 0x40930076 (Standby sup is offline. ISSU will not proceed)</p>	The standby VSM is not present or is not synchronized with the active VSM, and the VSMs do not form a stable HA pair.	<ol style="list-style-type: none"> 1. Verify the HA synchronization state. 2. The output of the show system redundancy status command must indicate the following: <ul style="list-style-type: none"> – Active VSM—Active with HA standby – Standby VSM—HA standby 3. When the VSMs are synchronized, restart the software upgrade.
<p>Error message:</p> <p>Pre-Upgrade check failed. Return code 0x807B0002 (No such file or directory).</p>	The software image files required for the upgrade are not available or were not copied to the bootflash: repository.	<ol style="list-style-type: none"> 1. Verify there is enough space in bootflash: repository for the image files. 2. If additional space is needed, delete other files from the bootflash: repository to make space for the software image files.
<p>Error message:</p> <p>Pre-Upgrade check failed. Return code 0x4093000F (Failed to copy image).</p>	There may not be enough space in bootflash: repository for the files to be copied.	<p> Caution Do not delete the kickstart or system image files from the bootflash: repository. You cannot reboot the system if image files are unavailable in the bootflash: repository.</p> <ol style="list-style-type: none"> 3. Download the required images from www.cisco.com to the bootflash: repository. 4. Verify that the correct images are in the bootflash: repository. 5. When the correct software images are in the bootflash: repository, restart the software upgrade
<p>The install command fails with the following error:</p> <ul style="list-style-type: none"> • Return code 0x4045001F (image MD5 checksum error). • Pre-Upgrade check failed. Return code 0x40930011 (Image verification failed). 	<ul style="list-style-type: none"> • The software image file(s) required for the upgrade do not pass the MD5 checksum verification, indicating that the correct file(s) are not present in bootflash: for the upgrade to proceed. • A file can be truncated when copied. 	<ol style="list-style-type: none"> 1. Verify the MD5 checksum for each of the image files using the README file from the upgrade zip folder at www.cisco.com. 2. Replace the file(s) that do not match. 3. Verify that the correct images are in the bootflash: repository and that the checksums match. 4. When the correct software images are in the bootflash: repository, restart the software upgrade.
<p>Error message:</p> <p>Install has failed. Return code 0x40970001 (Incompatible image)</p>	While entering the install all command, you could have used an incorrect filename.	<p>Restart the software upgrade using the correct filenames for the new software images.</p> <p>Example:</p> <pre>install all kickstart filename1 system filename2</pre>

Symptom	Possible Causes	Solution
After upgrading, the VSMs do not run the new software version.	The boot variables were not set properly.	<ol style="list-style-type: none"> 1. Verify that the running images and boot variables match the upgrade version. 2. Download the required images from www.cisco.com to your local bootflash: repository, if required. 3. Verify that the correct images are in the bootflash: repository. 4. Restart the software upgrade. 5. If the problem persists, collect details of the upgrade and open a support case.
Performing the configuration copy process fails and stops the upgrade. Performing configuration copy. [####-----] 30%	Service or system errors.	<ol style="list-style-type: none"> 1. Manually copy the configuration. 2. Do one of the following: <ul style="list-style-type: none"> - If the progress bar gets stuck before 100% for over one minute, collect details of the upgrade and open a support case. - If the copy succeeds without delays, restart the software upgrade.
Error message: Another install procedure may be in progress. (0x401E0007)	Another upgrade session is in progress from a VSM console or SSH/Telnet.	<p>Do one of the following:</p> <ul style="list-style-type: none"> • Continue the first upgrade session in progress. • Stop the upgrade and restart one session
Install command fails with following error message: -- FAIL. Return code 0x4093001E (Standby failed to come online) Install has failed. Return code 0x4093001E (Standby failed to come online).	The standby VSM fails to boot with the new image.	<p>Do one of the following:</p> <ul style="list-style-type: none"> • Restart the software upgrade. • Postpone the upgrade and reset the boot variables to the original filenames.
Install command fails with following error message: Install has failed. Return code 0x4093001F (Standby installer failed to take over the installation). Please identify the cause of the failure, and try the install all command.	The standby VSM takes more than 10 minutes to come up and form a stable HA pair with the active VSM.	<ol style="list-style-type: none"> 1. Reset the boot variables to the original filenames. 2. If the standby is still running the new software version, reload it. The standby synchronizes with the active, so that both are running the original software version.

Symptom	Possible Causes	Solution
Install command fails with following error message: Module 2: Waiting for module online. -- SUCCESS -- Install has failed. Return code 0x40930000 (Current operation failed to complete within specified time).	A failure at the standby VSM caused it to reload again after the <i>Continuing with installation, please wait</i> message and before the switchover.	Verify whether the standby VSM has come up using the show module command. After it comes up, retry the software upgrade using the install all kickstart filename1 system filename2 command.
Install command fails with following error message: Pre-upgrade check failed. Return code 0x42380014 (license validation failed).	An upgrade of the VSM, which is in advanced edition was performed without installing the evaluation or the permanent license.	<ol style="list-style-type: none"> 1. Before the upgrade process, either install a valid license (evaluation/permanent) or switch over to the Essential Edition. 2. Restart the software upgrade using the install all kickstart filename1 system filename2 command.

Problems with the VEM Upgrade

The following are symptoms, possible causes, and the solutions for problems associated with the VEM software upgrade

Symptom	Possible Causes	Solution
After upgrading the VEM, the host is not online in the VSM.	The VSM upgrade was not performed before the VEM upgrade.	Perform the VSM upgrade and check if the host comes online in the VSM.
During the VEM upgrade, the initial compliance scan fails.	The Update server is not responding.	Remove the Update server from the VMM management and re-add it to the VMM management.
The Supported VEM version range does not update after the VSM upgrade in the VMM.	The Switch Extension Manager has not been refreshed after the VSM upgrade.	Refresh the Switch Extension Manager after the VSM upgrade.
The vemcmd command on the host fails with an error initializing <code>sf_dpa_api_init()</code> .	Powershell/Command Promt was run without the Admin privileges.	Run the Powershell/Command prompt with the Admin privileges.
The provided VEM upgrade script does not respond on the PowerShell/PowerShell ISE.	PowerShell	Press Enter when the script is not responding on the PowerShell/PowerShell ISE.