Cisco Nexus 1000V and VMware Compatibility Information, Release 4.2(1)SV2(2.3)

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This document provides the following compatibility information for the Cisco Nexus 1000V:

Information About Upgrading and Software Compatibility

Important Customer Update

In order to improve customer support for the Cisco Nexus 1000V, Cisco only updates the support matrix for major and minor releases from VMware. All VMware patch and update releases are automatically supported at the time of their release. VMware guarantees compatibility with all patches and updates, and customers are not required to check the matrix for VMware patch or update support.

Interactive Upgrade Utility Tool

An easy-to-use *Cisco Nexus 1000V and VMware ESX/ESXi Upgrade Utility* provides you with steps to follow for your specific upgrade. It is available at this URL:

http://www.cisco.com/c/dam/en/us/td/docs/Website/datacenter/nexus1000/upgrade/n1kvmatrix.html.

Note See also Understanding Cisco Nexus 1000V and VMware Software Version Compatibility.

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If you are not using VMware Update Manager (VUM), to ensure compatibility with the existing Virtual Supervisor Module (VSM) software version, you can install the compatible Virtual Ethernet Module (VEM) software version by using the following command:

esxcli software vib install -d *[path to VEM offline bundle]*

Example:

```
esxcli software vib install -d "/../VEM500-201407165100-BG-release.zip (offline)"
```

> **Note** The **esxupdate** command is only available on ESX, not ESXi. The **vihostupdate** command is available on both ESX and ESXi.

Starting with ESX/ESXi 4.1 GA and ESXi 5.0, binary compatibility was introduced. With the introduction of binary compatibility, it is no longer necessary to add the Cisco VIB when upgrading from one patch level to another.

With binary compatibility, if you are patching from ESXi500-201207001 to ESXi500-201209001, use the following command:

esxcli software vib update -d ESXi500-201209001.zip (offline)

Information About Server Compatibility

The servers running the Cisco Nexus 1000V VSM and VEM must be in the VMware Hardware Compatibility List (HCL).

The Cisco Nexus 1000V is compatible with any upstream physical access layer switch that is Ethernet-standard compliant, including Catalyst 6500 series switches, Cisco Nexus switches, and switches from other network vendors.

Cisco Nexus 1000V Software Release Compatibility

> **Note**
> - Do not install VMware vSphere 5.5 Patch 2702864 with Cisco Nexus 1000V. The VMware vSphere 5.5 Patch 2702864 is not supported on Cisco Nexus 1000V.
> - Cisco Nexus 1000V Release 4.2(1)SV2(2.3) does not support VMware ESX/ESXi 4.0 and 4.1 release series or earlier.

Table 1 shows the software compatibility for Cisco Nexus 1000V Release 4.2(1)SV2(2.3) and VMware releases.

Table 1   VMware and Cisco Nexus 1000V Software Compatibility for Release 4.2(1)SV2(2.3)

VMware Software Release Supported	Cisco Nexus 1000V Release
	Release 4.2(1)SV2(2.3)
ESXi 5.5 and later[1]	Compatible[2]
ESXi 5.1 and later	Compatible[1]
ESXi 5.0 and later	Compatible[1]

Table 1   VMware and Cisco Nexus 1000V Software Compatibility for Release 4.2(1)SV2(2.3) (continued)

VMware Software Release Supported	Cisco Nexus 1000V Release Release 4.2(1)SV2(2.3)
ESX/ESXi 4.1 and later	Unsupported
ESX/ESXi 4.0 and later	Unsupported
ESX/ESXi 3.5 and later	Unsupported

1. Do not install VMware vSphere 5.5 Patch 2702864 with Cisco Nexus 1000V. The VMware vSphere 5.5 Patch 2702864 is not supported on Cisco Nexus 1000V.

2. The Cisco Nexus 1000V VIB is available on the VSM home page at http://<vsm_ip>

Important Customer Update

In order to improve customer support for the Cisco Nexus 1000V, Cisco only updates the support matrix for major and minor releases from VMware. All VMware patch and update releases are automatically supported at the time of their release. VMware guarantees compatibility with all patches and updates, and customers are not required to check the matrix for VMware patch or update support.

Host Software Version Compatibility

Table 2 lists the compatible host software versions for VMware ESXi 5.5, ESXi 5.1, ESXi 5.0 and the Cisco Nexus 1000V VEM for Release 4.2(1)SV2(2.3).

Note
- Do not install VMware vSphere 5.5 Patch 2702864 with Cisco Nexus 1000V. The VMware vSphere 5.5 Patch 2702864 is not supported on Cisco Nexus 1000V.

- If you are upgrading VEMs using a Cisco Nexus 1000V software bundle, see Information About Upgrading and Software Compatibility, page 1.

Table 2   Host Software Version Compatibility for ESXi 5.5, 5.1, and 5.0

VIB Version (VIB files are available at http://www.vmware.com/patch/download.)	VEM Bundle (VMware bundled software updates require placing the host in maintenance mode.)	Minimum Supported Version			
		Windows VC Installer	Linux vCenter Server Appliance	vSphere CLI	Power Shell CLI
VMware software version: ESXi 5.5 (includes patches and updates)[1]					
cross_cisco-vem-v165-4.2.1.2.2.3.0-3.2.1.vib	VEM550-201408165104-BG-release.zip (Offline) VEM550-201408165104-BG (Online)	5.5	5.5	5.5	5.5
VMware software version: ESXi 5.1 (includes patches and updates)					
cross_cisco-vem-v165-4.2.1.2.2.3.0-3.1.1.vib	VEM510-201408165101-BG-release.zip (Offline) VEM510-201408165101-BG (Online)	5.1	5.1	5.1	5.1

Table 2   Host Software Version Compatibility for ESXi 5.5, 5.1, and 5.0 (continued)

VIB Version (VIB files are available at http://www.vmware.com/patch/download.)	VEM Bundle (VMware bundled software updates require placing the host in maintenance mode.)	Minimum Supported Version			
		Windows VC Installer	Linux vCenter Server Appliance	vSphere CLI	Power Shell CLI
VMware software version: ESXi 5.0 (includes patches and updates)					
cross_cisco-vem-v165-4.2.1.2.2.3.0-3.0.1.vib	VEM500-201408165100-BG-release.zip (Offline) VEM500-201408165100-BG (Online)	5.0	5.0	5.0	5.0

1. Do not install VMware vSphere 5.5 Patch 2702864 with Cisco Nexus 1000V. The VMware vSphere 5.5 Patch 2702864 is not supported on Cisco Nexus 1000V.

VMware Version Compatibility

Important Customer Update

In order to improve customer support for the Cisco Nexus 1000V, Cisco only updates the support matrix for major and minor releases from VMware. All VMware patch and update releases are automatically supported at the time of their release. VMware guarantees compatibility with all patches and updates, and customers are not required to check the matrix for VMware patch or update support.

Table 3 lists the vShield Manager/VCNS compatibility version for the Cisco Nexus 1000V.

Table 3   vShield Manager/VCNS Version Compatibility for Cisco Nexus 1000V

VMware Software Version	Cisco Nexus 1000V Version
	4.2(1)SV2(2.3)
VCNS 5.5	Compatible
VCNS 5.1	Compatible VCNS 5.1.3 upgrade is not supported. However, VCNS 5.1.3 fresh install using ova package is supported. See the KB article –KB 2073502.
vShield Manager 5.0.2	Compatible

Table 4 lists the vCloud Director Version Compatibility for the Cisco Nexus 1000V.

Table 4   vCloud Director Version Compatibility for Cisco Nexus 1000V

VMware Software Version	Cisco Nexus 1000V Version
	4.2(1)SV2(2.3)
vCD 5.5	Compatible
vCD 5.1	Compatible
vCD 1.5.2	Compatible

Note Cisco Nexus 1000V Release 4.2(1)SV2(2.3) does not support any earlier versions of the VMware components listed in the preceding table.

Note For vCloud Director and VCNS compatibility, see VMware Product Interoperability Matrixes.

Table 5 lists the supported network pool in vCD with the Cisco Nexus 1000V.

Table 5   Supported Network Pool in vCloud Director with Cisco Nexus 1000V

Network Pool in vCD	Description	Cisco Nexus 1000V Version					
		4.2(1)SV2 (2.3)	4.2(1)SV2(2.2)	4.2(1)SV2 (2.1a)	4.2(1)SV2 (2.1)	4.2(1)SV2 (1.1a)	4.2(1)SV2 (1.1)
VMware software version: vCD 1.5.2 and vShield Manager 5.0.1							
Port Group Backed	Export group is a network	Supported	Supported	Supported	Supported	Supported	Supported
VLAN Backed	Can specify a range of VLANs in a vCD	Supported	Supported	Supported	Supported	Supported	Supported
Network Isolation Backed	Cisco Nexus 1000V uses VXLAN for isolation-backed networks	Supported	Supported	Supported	Supported	Supported	Supported
VMware software version: vCD 5.1 and vShield Manager 5.1							
Port Group Backed	Export group is a network	Supported	Supported	Supported	Supported	Supported	Supported
VLAN Backed	Can specify a range of VLANs in a vCD	Supported	Supported	Supported	Supported	Supported	Supported
Network Isolation Backed	VMware uses VCNI for isolation backed networks	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported
VXLAN	Cisco Nexus 1000V uses VXLAN for isolation backed networks	Supported	Supported	Supported	Supported	Supported	Supported
VMware software version: vCD 5.5 and vShield Manager 5.5							
Port Group Backed	Export group is a network	Supported	Supported	Supported	Supported	Not supported	Not supported
VLAN Backed	Can specify a range of VLANs in a vCD	Supported	Supported	Supported	Supported	Not supported	Not supported

Table 5   *Supported Network Pool in vCloud Director with Cisco Nexus 1000V (continued)*

Network Pool in vCD	Description	Cisco Nexus 1000V Version					
		4.2(1)SV2 (2.3)	4.2(1)SV2(2.2)	4.2(1)SV2 (2.1a)	4.2(1)SV2 (2.1)	4.2(1)SV2 (1.1a)	4.2(1)SV2 (1.1)
Network Isolation Backed	VMware uses VCNI for isolation backed networks	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported
VXLAN	Cisco Nexus 1000V uses VXLAN for isolation backed networks	Supported	Supported	Supported	Supported	Not supported	Not supported

Related Documentation

This section lists the documents used with the Cisco Nexus 1000V and available on Cisco.com at the following URL:

http://www.cisco.com/en/US/products/ps9902/tsd_products_support_series_home.html

General Information

Cisco Nexus 1000V Documentation Roadmap

Cisco Nexus 1000V Release Notes

Cisco Nexus 1000V Compatibility Information

Install and Upgrade

Cisco Nexus 1000V Installation and Upgrade Guide

Configuration Guides

Cisco Nexus 1000V High Availability and Redundancy Configuration Guide

Cisco Nexus 1000V Interface Configuration Guide

Cisco Nexus 1000V Layer 2 Switching Configuration Guide

Cisco Nexus 1000V License Configuration Guide

Cisco Nexus 1000V Network Segmentation Manager Configuration Guide

Cisco Nexus 1000V Port Profile Configuration Guide

Cisco Nexus 1000V Quality of Service Configuration Guide

Cisco Nexus 1000V REST API Plug-in Configuration Guide

Cisco Nexus 1000V Security Configuration Guide

Cisco Nexus 1000V System Management Configuration Guide

Cisco Nexus 1000V vCenter Plugin Configuration Guide

Cisco Nexus 1000V VXLAN Configuration Guide

Cisco Nexus 1000V VDP Configuration Guide

Cisco Nexus 1000V DFA Configuration Guide

Cisco Nexus 1000V vCenter Plugin Configuration Guide

Programming Guide

Cisco Nexus 1000V XML API User Guide

Reference Guides

Cisco Nexus 1000V Command Reference

Cisco Nexus 1000V Resource Availability Reference

Troubleshooting, Password Recovery, System Messages Guides

Cisco Nexus 1000V Troubleshooting Guide

Cisco Nexus 1000V Password Recovery Guide

Cisco NX-OS System Messages Reference

Virtual Services Appliance Documentation

The Cisco Nexus Virtual Services Appliance (VSA) documentation is available at

http://www.cisco.com/en/US/products/ps9902/tsd_products_support_series_home.html

Virtual Security Gateway Documentation

The Cisco Virtual Security Gateway documentation is available at

http://www.cisco.com/en/US/products/ps13095/tsd_products_support_series_home.html

Virtual Network Management Center

The Cisco Virtual Network Management Center documentation is available at

http://www.cisco.com/en/US/products/ps11213/tsd_products_support_series_home.html

Virtual Wide Area Application Services (vWAAS)

The Virtual Wide Area Application Services documentation is available at

http://www.cisco.com/en/US/products/ps6870/tsd_products_support_series_home.html

ASA 1000V Cloud Firewall

The ASA 1000V Cloud Firewall documentation is available at

http://www.cisco.com/en/US/products/ps12233/tsd_products_support_series_home.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html.

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