

# Cisco Nexus 1000V and VMware Compatibility Information, Release 4.2(1)SV2(2.2)

Published: March 18, 2014 OL-31104-01

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

- Information About Software Compatibility, page 1
- Cisco Nexus 1000V Software Release Compatibility, page 2
- Host Software Version Compatibility, page 3
- VMware Version Compatibility, page 4
- Related Documentation, page 6
- Obtaining Documentation and Submitting a Service Request, page 8

## **Information About Software Compatibility**

This section includes the following topics:

- Information About Upgrading and Software Compatibility, page 1
- Information About Server Compatibility, page 2

### **Information About Upgrading and Software Compatibility**

#### **Important Customer Update**

In order to improve customer support for the Cisco Nexus 1000V, Cisco now 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/web/techdoc/n1kv/upgrade/utility/n1kvmatrix.html.



For additional information about *Cisco Nexus 1000V Compatibility Information*, *Release* 4.2(1)SV2(2.2), view Understanding Cisco Nexus 1000V and VMware Software Version Compatibility.

If you are not using VUM, To ensure the compatibility with the existing VSM software version, you can install the compatible VEM software version using the below command:

esxcli software vib install -d [path to VEM offline bundle]
Example:
esxcli software vib install -d "/../VEM500-201401164100-BG-release.zip (offline)"



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, you run the following command:

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



For more information about installing or upgrading VEM software, see the *Cisco Nexus 1000V Installation and Upgrade Guide, Release 4.2(1)SV2(2.1).* 

### **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**



Cisco Nexus 1000V Release 4.2(1)SV2(2.2) does not support VMware ESX/ESXi 4.0 and 4.1 release series and any earlier ESX/ESXi releases.

Table 1 shows the software compatibility for Cisco Nexus 1000V, Release 4.2(1)SV2(2.2) that are supported by VMware release.

Table 1 VMware and Cisco Nexus 1000V Software Compatibility for Release 4.2(1)SV2(2.2)

	Cisco Nexus 1000V Release				
VMware Software Release Supported	4.2(1)SV2(2.2)				
ESXi 5.5 and later	Compatible <sup>1</sup>				
ESXi 5.1 and later	Compatible <sup>1</sup>				
ESXi 5.0 and later	Compatible <sup>1</sup>				
ESX/ESXi 4.1 and later	Unsupported				
ESX/ESXi 4.0 and later	Unsupported				
ESX/ESXi 3.5 and later	Unsupported				

<sup>1.</sup> Cisco Nexus 1000V VIB is available in the VSM home page http://<vsm\_ip>

#### **Important Customer Update**

In order to improve customer support for the Cisco Nexus 1000V, Cisco now 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(2.2).



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

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

			Minimum Supported Version			
VMware Software Version	VIB Version (VIB files are available at http://www.vmware.com/patc h/download.)	VEM Bundle (VMware bundled software updates require placing the host in maintenance mode.)	Windo wsVC Installe	Linux vCenter Server Applian ce	vSphere CLI	PowerSh ell CLI
ESXi 5.5 (includes patches and updates)	cross_cisco-vem-v164-4.2.1.2 .2.2.0-3.2.1.vib	VEM550-201401164104-BG-r elease.zip (Offline) VEM550-201401164104-BG (Online)	5.5	5.5	5.5	5.5
ESXi 5.1(includes patches and updates)	cross_cisco-vem-v164-4.2.1.2 .2.2.0-3.1.1.vib	VEM510-201401164101-BG-r elease.zip (Offline) VEM510-201401164101-BG (Online)	5.1	5.1	5.1	5.1
ESXi 5.0 (includes patches and updates)	cross_cisco-vem-v164-4.2.1.2 .2.2.0-3.0.1.vib	VEM500-201401164100-BG-r elease.zip (Offline) VEM500-201401164100-BG (Online)	5.0	5.0	5.0	5.0

### **VMware Version Compatibility**

Important Customer Update

In order to improve customer support for the Cisco Nexus 1000V, Cisco now 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 Cisco Nexus 1000V.

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

	Cisco Nexus 1000V Version			
VMware Software Version	4.2(1)SV2(2.2)			
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. Please refer the KB article –KB 2073502.			
vShield Manager 5.0.2	Compatible			

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

Table 4 vCloud Director Version Compatibility for Cisco Nexus 1000V

	Cisco Nexus 1000V Version		
VMware Software Version	4.2(1)SV2(2.2)		
vCD 5.5	Compatible		
vCD 5.1	Compatible		
vCD 1.5.1	Compatible		



Cisco Nexus 1000V Release 4.2(1)SV2(2.2) does not support any earlier versions of the VMware components listed in the above table.



For vCloud Director and VCNS compatibility please refer VMware Product Interoperability Matrixes.

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

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

VMware Software Version	Network Pool in vCD	Description	Cisco Nexus 1000V Version					
			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)	
vCD 1.5.1 and vShield Manager 5.0.1	Port Group Backed	Export group is a network	Supported	Supported	Supported	Supported	Supported	
	VLAN Backed	Can specify a range of VLANs in a vCD	Supported	Supported	Supported	Supported	Supported	
	Network Isolation Backed	Cisco Nexus 1000V uses VXLAN for isolation-backe d networks	Supported	Supported	Supported	Supported	Supported	

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

VMware	Network Pool in vCD	Description	Cisco Nexus 1000V Version					
Software Version			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)	
vCD 5.1 and vShield Manager 5.1	Port Group Backed	Export group is a network	Supported	Supported	Supported	Supported	Supported	
	VLAN Backed	Can specify a range of VLANs in a vCD	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	
	VXLAN	Cisco Nexus 1000V uses VXLAN for isolation backed networks	Supported	Supported	Supported	Supported	Supported	
vCD 5.5 and vShield	Port Group Backed	Export group is a network	Supported	Supported	Supported	Not Supported	Not Supported	
Manager 5.5	VLAN Backed	Can specify a range of VLANs in a vCD	Supported	Supported	Supported	Not Supported	Not Supported	
	Network Isolation Backed	VMware uses VCNI for isolation backed networks	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	
	VXLAN	Cisco Nexus 1000V uses VXLAN for isolation backed networks	Supported	Supported	Supported	Not Supported	Not Supported	

### **Related Documentation**

This section lists the documents used with the Cisco Nexus 1000 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.

Subscribe to *What's New in Cisco Product Documentation*, which lists all new and revised Cisco technical documentation, as an RSS feed and deliver content directly to your desktop using a reader application. The RSS feeds are a free service.

This document is to be used in conjunction with the documents listed in the "Related Documentation" section.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <a href="https://www.cisco.com/go/trademarks">www.cisco.com/go/trademarks</a>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Internet Protocol (IP) addresses that are used in the examples, command display output, and figures within this document are for illustration only. If an actual IP address appears in this document, it is coincidental.

© 2014 Cisco Systems, Inc. All rights reserved.