



# Cisco Nexus 1000V and VMware Compatibility Information, Release 4.2(1)SV2(2.1)

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

- [Information About Upgrading and Software Compatibility, page 1](#)
- [Information About Server Compatibility, page 2](#)
- [Cisco Nexus 1000V Software Release Compatibility, page 2](#)
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## 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/c/dam/en/us/td/docs/Website/datacenter/nexus1000/upgrade/n1kvmatrix.html>



**Note**

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See also [Understanding Cisco Nexus 1000V and VMware Software Version Compatibility](#).

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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 following command:

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

Example:

```
esxcli software vib install -d "../VEM500-201306160100-BG-release.zip "
```



**Note**

The **esxupdate** command is only available on ESX, not ESXi. The **vhostupdate** 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 VEM500-201306160100-BG-release.zip
```



**Note**

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



**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(2.1) does not support VMware ESX/ESXi 4.0 and 4.1 release series or any earlier ESX/ESXi releases.

[Table 1](#) shows the compatibility for the Cisco Nexus 1000V Release 4.2(1)SV2(2.1) and VMware.

**Table 1** VMware and Cisco Nexus 1000V Software Compatibility for Release 4.2(1)SV2(2.1)

VMware Software Release Supported	Cisco Nexus 1000V Release
ESXi 5.5 and later <sup>12</sup>	Compatible <sup>3</sup>
ESXi 5.1 and later	Compatible <sup>2</sup>

**Table 1 VMware and Cisco Nexus 1000V Software Compatibility for Release 4.2(1)SV2(2.1) (continued)**

VMware Software Release Supported	Cisco Nexus 1000V Release
	4.2(1)SV2(2.1)
ESXi 5.0 and later	Compatible <sup>2</sup>
ESX/ESXi 4.1 and later	Not supported
ESX/ESXi 4.0 and later	Not supported
ESX/ESXi 3.5 and later	Not supported

- VMware ESXi 5.5 is not supported on Cisco vPath Ecosystem Release 2.5. 2. For compatibility information with Cisco vPath Ecosystem, see [Compatibility Matrix for Products in Cisco vPath Ecosystem](#).
- 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.
- The Cisco Nexus 1000V VIB is available in the VSM home page: [http://<vsm\\_ip>](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(2.1).



### 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 <a href="http://www.vmware.com/patch/download">http://www.vmware.com/patch/download</a> .)	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
<b>VMware software version: ESXi 5.5(includes patches and updates)<sup>1</sup></b>					
cross_cisco-vem-v160-4.2.1.2.2.1.0-3.2.1.vib	VEM550-201308160108-BG-release.zip (offline) VEM550-201308160108-BG (Online)	5.5	5.5	5.5	5.5
<b>VMware software version: ESXi 5.1(includes patches and updates)</b>					
cross_cisco-vem-v160-4.2.1.2.2.1.0-3.1.1.vib	VEM510-201306160101-BG-release.zip (Offline) VEM510-201306160101-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 <a href="http://www.vmware.com/patch/download.">http://www.vmware.com/patch/download.</a> )	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
<b>VMware software version: ESXi 5.0 (includes patches and updates)</b>					
cross_cisco-vem-v160-4.2.1.2.2.1.0-3.0.1. vib	VEM500-201306160100-BG-release.zip (offline) VEM500-201306160100-BG(Online)	5.0	5.0	5.0	5.0

- 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 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

VMware Software Version	Cisco Nexus 1000V Version
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 <a href="#">–KB 2073502</a> .
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

VMware Software Version	Cisco Nexus 1000V Version
vCD 5.5	Compatible
vCD 5.1	Compatible
vCD 1.5.1	Compatible



**Note** Cisco Nexus 1000V Release 4.2(1)SV2(2.1) 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 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(2.1)	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
	VLAN Backed	Can specify a range of VLANs in a vCD	Supported	Supported	Supported
	Network Isolation Backed	Cisco Nexus 1000V uses VXLAN for isolation-backed networks	Supported	Supported	Supported
vCD 5.1 and vShield Manager 5.1	Port Group Backed	Export group is a network	Supported	Supported	Supported
	VLAN Backed	Can specify a range of VLANs in a vCD	Supported	Supported	Supported
	Network Isolation Backed	VMware uses VCNI for isolation backed networks	Not supported	Not supported	Not supported
	VXLAN	Cisco Nexus 1000V uses VXLAN for isolation backed networks	Supported	Supported	Supported
vCD 5.5 and vShield Manager 5.5	Port Group Backed	Export group is a network	Supported	Not supported	Not supported
	VLAN Backed	Can specify a range of VLANs in a vCD	Supported	Not supported	Not supported
	Network Isolation Backed	VMware uses VCNI for isolation backed networks	Not supported	Not supported	Not supported
	VXLAN	Cisco Nexus 1000V uses VXLAN for isolation backed networks	Supported	Not supported	Not supported

## Related Documentation

This section lists the documents used with the Cisco Nexus 1000 and available at the following URL:  
[http://www.cisco.com/en/US/products/ps9902/tsd\\_products\\_support\\_series\\_home.html](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*

## **Programming Guide**

*Cisco Nexus 1000V XML API User Guide*

## **Reference Guides**

*Cisco Nexus 1000V Command Reference*  
*Cisco Nexus 1000V MIB Quick 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](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](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](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](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](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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