Cisco Nexus 1000V and VMware Compatibility Information, Release 5.2(1)SV3(2.1)

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This document provides compatibility information for the Cisco Nexus 1000V and VMware software.

Information About Upgrading and Software Compatibility

Important Customer Update

To improve customer support for 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** See also Understanding Cisco Nexus 1000V and VMware Software Version Compatibility.

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 "/../VEM500-201607300101-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.

Binary compatibility was introduced with ESX/ESXi 4.1 GA and ESXi 5.0. 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 ESXi500-201501001, you run the following command:

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

> **Note** For more information about installing or upgrading VEM software, see the appropriate *Cisco Nexus 1000V Installation and Upgrade Guide*.

Information About Server Compatibility

The servers running the Cisco Nexus 1000V VSM and VEM must be in the VMware Hardware Compatibility List. 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 5.2(1)SV3(1.2) and later does not support VMware ESX/ESXi 4.1, 4.0, or any earlier ESX/ESXi releases.

The following table shows the software compatibility for Cisco Nexus 1000V Release 5.2(1)SV3(2.1) and VMware releases.

Table 1: VMware and Cisco Nexus 1000V Software Compatibility for Release 5.2(1)SV3(2.1)

VMware Software Release Supported	Cisco Nexus 1000V Release 5.2(1)SV3(2.1)[1]
ESXi 6.0 and later	Compatible
ESXi 5.5 and later **Note** Upgrade the ESX host to ESXi 5.5 update 1 or later before upgrading to Cisco Nexus 1000V Release 5.2(1)SV3(1.4) or Release 5.2(1)SV3(2.1).	Compatible
ESXi 5.1 and later **Note** Upgrade the ESX host to ESXi 5.1 update 2 or later before upgrading to Cisco Nexus 1000V Release 5.2(1)SV3(1.4) or Release 5.2(1)SV3(2.1).	Compatible
ESXi 5.0 and later **Note** Upgrade the ESX host to ESXi 5.0 update 3 or later before upgrading to Cisco Nexus 1000V Release 5.2(1)SV3(1.4) or Release 5.2(1)SV3(2.1).	Compatible

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

Host Software Version Compatibility

The following table lists the compatible host software versions for VMware ESXi 6.0, ESXi 5.5, ESXi 5.1, ESXi 5.0 and the Cisco Nexus 1000V VEM for Release 5.2(1)SV3(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, on page 2.

Table 2: Host Software Version Compatibility for ESXi 6.0, 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 6.0 (includes patches and updates)					
cross_cisco-vem-v300-5.2.1.3.2.1.0-6.0.1.vib	VEM600-201607300119-BG-release.zip (Offline) VEM600-201607300119-BG (Online)	6.0	6.0	6.0	6.0
VMware software version: ESXi 5.5 (includes patches and updates)					
cross_cisco-vem-v300-5.2.1.3.2.1.0-3.2.1.vib	VEM550-201607300113-BG-release.zip (Offline) VEM550-201607300113-BG (Online)	5.5	5.5	5.5	5.5
VMware software version: ESXi 5.1 (includes patches and updates)					
cross_cisco-vem-v300-5.2.1.3.2.1.0-3.1.1.vib	VEM510-201607300107-BG-release.zip (Offline) VEM510-201607300107-BG (Online)	5.1	5.1	5.1	5.1
VMware software version: ESXi 5.0 (includes patches and updates)					
cross_cisco-vem-v300-5.2.1.3.2.1.0-3.0.1.vib	VEM500-201607300101-BG-release.zip (Offline) VEM500-201607300101-BG (Online)	5.0	5.0	5.0	5.0

VMware Version Compatibility

The following table lists the vShield Manager/VCNS version compatibility for Cisco Nexus 1000V.

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

VMware Software Version	Cisco Nexus 1000V Release 5.2(1)SV3(2.1)
VCNS 5.5	Compatible
VCNS 5.1	Compatible **Note** VCNS 5.1.3 upgrade is not supported. However, VCNS 5.1.3 fresh install using an ova package is supported. See the KB article KB 2073502.
vShield Manager 5.0.2	Compatible

The following table 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 Release 5.2(1)SV3(2.1)
vCD 8.0	Compatible
vCD 5.5	Compatible
vCD 5.1	Compatible
vCD 1.5.2	Compatible

Note   Cisco Nexus 1000V Release 5.2(1)SV3(2.1) does not support any earlier version of the VMware components listed in the preceding table.

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

The following table lists the supported network pool in vCD for Cisco Nexus 1000V.

Table 5: Network Pool in vCD Compatibility for Cisco Nexus 1000V

Network Pool in vCD	Description	Cisco Nexus 1000V Release 5.2(1)SV3(2.1)
VMware software version: vCD 1.5.1 and vShield Manager 5.0.1		
Port group backed	Export group is a network	Compatible

Network Pool in vCD	Description	Cisco Nexus 1000V Release 5.2(1)SV3(2.1)
VLAN backed	Can specify a range of VLANs in a vCD	Compatible
Network isolation backed	Cisco Nexus 1000V uses VXLAN for isolation-backed networks	Compatible
VMware software version: vCD 5.1 and vShield Manager 5.1		
Port group backed	Export group is a network	Compatible
VLAN backed	Can specify a range of VLANs in a vCD	Compatible
Network isolation backed	Cisco Nexus 1000V uses VCNI for isolation-backed networks	Not supported
VXLAN	Cisco Nexus 1000V uses VXLAN for isolation-backed networks	Compatible
VMware software version: vCD 5.5 and vShield Manager 5.5		
Port group backed	Export group is a network	Compatible
VLAN backed	Can specify a range of VLANs in a vCD	Compatible
Network isolation backed	Cisco Nexus 1000V uses VCNI for isolation-backed networks	Not supported
VXLAN	Cisco Nexus 1000V uses VXLAN for isolation-backed networks	Compatible
VMware software version: vCD 8.0 and vShield Manager 5.5		
Port group backed	Export group is a network	Compatible
VLAN backed	Can specify a range of VLANs in a vCD	Compatible
Network isolation backed	Cisco Nexus 1000V uses VCNI for isolation-backed networks	Not supported
VXLAN	Cisco Nexus 1000V uses VXLAN for isolation-backed networks	Compatible

Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to: nexus1k-docfeedback@cisco.com.

We appreciate your feedback.

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/c/en/us/support/switches/nexus-1000v-switch-vmware-vsphere/tsd-products-support-series-home.html

General Information

Cisco Nexus 1000V Documentation Roadmap

Cisco Nexus 1000V Release Notes

Cisco Nexus 1000V and VMware Compatibility Information

Install and Upgrade

Cisco Nexus 1000V Installation and Upgrade Guide

Configuration Guides

Cisco Nexus 1000V DFA Configuration Guide

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 Multi-Hypervisor 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 VDP Configuration Guide

Cisco Nexus 1000V VXLAN Configuration Guide

Reference Guides

Cisco Nexus 1000V Resource Availability Reference

Troubleshooting and Alerts

Cisco Nexus 1000V Troubleshooting Guide

Cisco NX-OS System Messages Reference

Cloud Services Platform Documentation

The *Cisco Cloud Services Platform* documentation is available at http://www.cisco.com/c/en/us/support/switches/nexus-1100-series-cloud-services-platforms/tsd-products-support-series-home.html.

Virtual Security Gateway Documentation

The *Cisco Virtual Security Gateway for Nexus 1000V Series Switch* documentation is available at http://www.cisco.com/c/en/us/support/switches/virtual-security-gateway/tsd-products-support-series-home.html.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see What's New in Cisco Product Documentation.

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the What's New in Cisco Product Documentation RSS feed. RSS feeds are a free service.