

# OpenManage Integration for VMware vCenter Version 4.0.1

## Compatibility Matrix

## Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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# Overview

This document contains updated information about OpenManage Integration for VMware vCenter(OMIVV) and any other Technical Documentation included with the OMIVV software.

The OpenManage Integration for VMware vCenter 4.0.1 already provides support for the following:

- Support for vSphere 6.5 and 6.0 U2
- Support for vSphere 6.5 Proactive HA and customize severity of the Dell host and chassis components
- Support for parallel firmware update jobs on multiple clusters
- Support for integration with vRealize Operations
- Support for OMSA 8.3 and OMSA 8.4
- Notification on the availability of latest version of OMIVV
- Support for up to 1000 hosts with a single vCenter instance or multiple vCenters
- Support for all 13th generation platforms

**NOTE:** From OMIVV 4.0 onwards, only VMware vSphere Web client is supported and the vSphere Desktop client is not supported.

**NOTE:** For vCenter 6.5 and later, the OMIVV appliance is available only for the flash version. The OMIVV appliance is not available for the HTML5 version.

The release highlights of OpenManage Integration for VMware vCenter version 4.0.1 are:

- Support for ESXi 6.0 U3
- Chassis polling enhanced to support Proactive HA events for its hosts
- Internal Dual SD Module (IDSDM) events for Proactive HA supports 12th and later generation of servers
- Support for vSphere 6.5 Proactive HA and override severity of Poractive HA events

## Space required for provisioned storage

The OMIVV virtual appliance requires at least 44 GB of disk space for provisioned storage.

## Default virtual appliance configuration

The OMIVV virtual appliance is provisioned with 8 GB of RAM and 2 virtual CPU.

### Topics:

- [Other documents you may need](#)

## Other documents you may need

Go to [Dell.com/support/manuals](https://Dell.com/support/manuals) for the following list of documents for vSphere web client:

- *OpenManage Integration for VMware vCenter Version 4.0.1 Web Client User's Guide*
- *OpenManage Integration for VMware vCenter Version 4.0 .1 Web Client Installation Guide*
- *OpenManage Integration for VMware vCenter Version 4.0.1 Release Notes*

## Supported resources

This chapter contains sections that provides information about the resources that support OpenManage Integration for VMware vCenter.

### Topics:

- [Browser and flash player requirements](#)
- [BIOS, iDRAC, Lifecycle Controller versions](#)
- [Port information](#)
- [OpenManage Integration for VMware vCenter requirements](#)
- [Supported features on Dell PowerEdge chassis](#)
- [Supported features on PowerEdge servers](#)

## Browser and flash player requirements

To display OpenManage Integration for VMware vCenter, a system must have a minimum 1024 x 768 screen resolution and a web browser that meets minimum requirements based on the operating system.

**NOTE:** The browser and flash player requirements are as per the VMware guidelines for OpenManage Integration for VMware vCenter. The supported browsers are the Microsoft Internet Explorer, Google Chrome, and Mozilla Firefox. For specific browser versions, see the VMware Documentation for the vCenter version that you are using.

**NOTE:** To access OpenManage Integration for VMware vCenter from Windows server 2012 or later, enable the Desktop Experience Feature to activate the flash player. Install the OpenManage Integration for VMware vCenter (virtual appliance) on any ESXi host.

**Table 1. Flash player requirements for vCenter server versions**

vCenter version	Flash player version
v5.0-v5.5	11.5.0 or later
v6.0 or later	16.0 or later

## BIOS, iDRAC, Lifecycle Controller versions

The BIOS, iDRAC, and the Lifecycle Controller versions required to enable the features of OpenManage Integration for VMware vCenter are listed in this section.

Dell recommends you to use Server Update Utility (SUU), Repository Manager, or Lifecycle Controller's Platform to update your servers to one of the following base versions before using OMIVV:

**Table 2. BIOS for Dell PowerEdge 11<sup>th</sup> generation servers**

Server	Minimum version
PowerEdge R210	1.8.2 or later
PowerEdge R210II	1.3.1 or later
PowerEdge R310	1.8.2 or later
PowerEdge R410	1.9.0 or later
PowerEdge R415	1.8.6 or later
PowerEdge R510	1.9.0 or later

**Table 2. BIOS for Dell PowerEdge 11<sup>th</sup> generation servers**

<b>Server</b>	<b>Minimum version</b>
PowerEdge R515	1.8.6 or later
PowerEdge R610	6.1.0 or later
PowerEdge R710	6.1.0 or later
PowerEdge R710	6.1.0 or later
PowerEdge R715	3.0.0 or later
PowerEdge R810	2.5.0 or later
PowerEdge R815	3.0.0 or later
PowerEdge R910	2.5.0 or later
PowerEdge M610	6.1.0 or later
PowerEdge M610x	6.1.0 or later
PowerEdge M710HD	5.0.1 or later
PowerEdge M910	2.5.0 or later
PowerEdge M915	2.6.0 or later
PowerEdge T110 II	1.8.2 or later
PowerEdge T310	1.8.2 or later
PowerEdge T410	1.9.0 or later
PowerEdge T610	6.1.0 or later
PowerEdge T710	6.1.0 or later

**Table 3. BIOS for Dell PowerEdge 12<sup>th</sup> generation servers**

<b>Server</b>	<b>Minimum version</b>
T320	1.0.1 or later
T420	1.0.1 or later
T620	1.2.6 or later
M420	1.2.4 or later
M520	1.2.6 or later
M620	1.2.6 or later
M820	1.2.6 or later
R220	1.0.3 or later
R320	1.2.4 or later
R420	1.2.4 or later
R520	1.2.4 or later
R620	1.2.6 or later
R720	1.2.6 or later
R720xd	1.2.6 or later
R820	1.7.2 or later
R920	1.1.0 or later

**Table 4. BIOS for Dell PowerEdge 13<sup>th</sup> generation servers**

**Table 4. BIOS for Dell PowerEdge 13<sup>th</sup> generation servers**

Server	Minimum version
R630	1.0.4 or later
T630	1.0.4 or later
R730	1.0.4 or later
R730xd	1.0.4 or later
R430	1.0.2 or later
R530	1.0.2 or later
R830	1.0.2 or later
R930	1.0.2 or later
T130	1.0.2 or later
T330	1.0.2 or later
T430	1.0.2 or later
R230	1.0.2 or later
R330	1.0.2 or later
M630	1.0.0 or later
M830	1.0.0 or later
FC430	1.0.0 or later
FC630	1.0.0 or later
FC830	1.0.0 or later

**Table 5. iDRAC and Lifecycle Controller for deployment**

Generation	Version	
	iDRAC	Lifecycle Controller
Dell PowerEdge 11th generation servers	3.35 for Modular, 1.85 for Rack or Tower	1.5.2 or later
Dell PowerEdge 12th generation servers	1.00.0 or later	1.0.0.3017 or later
Dell PowerEdge 13th generation servers	2.30.30.30 or later	2.30.30.30 or later

**Table 6. BIOS and iDRAC requirements for cloud server**

Model	BIOS	iDRAC with Lifecycle Controller
C6320	1.0.2	2.30.30.30 or later
C4130	1.0.2	2.30.30.30 or later

## Port information

### Virtual appliance and managed nodes

In OMIVV, when you deploy the OMSA agent by using the *Fix non-compliance hosts* link available in the **Fix Non-compliant vSphere Hosts** wizard, OMIVV performs the following action:

- Starts the HTTP Client service
- Enables port 8080
- Makes the port available for ESXi 5.0 or later to download and install OMSA VIB

After the OMSA VIB installation is complete, the service automatically stops and the port is closed.

**Table 7. Virtual appliance**

Port Number	Protocols	Port Type	Maximum Encryption Level	Direction	Usage	Configurable
21	FTP	TCP	None	Out	FTP command client	No
53	DNS	TCP	None	Out	DNS client	No
80	HTTP	TCP	None	Out	Dell Online Data Access	No
80	HTTP	TCP	None	In	Administration Console	No
162	SNMP Agent	UDP	None	In	SNMP Agent (server)	No
443	HTTPS	TCP	128-bit	In	HTTPS server	No
443	WSMAN	TCP	128-bit	In/Out	iDRAC/OMSA communication	No
4433	HTTPS	TCP	128-bit	In	Auto Discovery	No
2049	NFS	UDP/TCP	None	In/Out	Public Share	No
4001-4004	NFS	UDP/TCP	None	In/Out	Public Share	No
5432	Postgres	TCP	128-bit	In/Out	PostgreSQL	No
11620	SNMP Agent	UDP	None	In	SNMP Agent (server)	No

**Table 8. Managed nodes**

Port Number	Protocols	Port Type	Maximum Encryption Level	Direction	Usage	Configurable
162, 11620	SNMP	UDP	None	Out	Hardware Events	No
443	WSMAN	TCP	128-bit	In	iDRAC/OMSA communication	No
4433	HTTPS	TCP	128-bit	Out	Auto Discovery	No
2049	NFS	UDP	None	In/Out	Public Share	No
4001-4004	NFS	UDP	None	In/Out	Public Share	No
443	HTTPS	TCP	128-bit	In	HTTPS server	No
8080	HTTP	TCP		In	HTTP server; downloads the OMSA VIB and fixes noncompliant vSphere hosts	No
50	RMCP	UDP/TCP	128-bit	Out	Remote Mail Check Protocol	No
51	IMP	UDP/TCP	None	N/A	IMP Logical Address Maintenance	No
5353	mDNS	UDP/TCP		In/Out	Multicast DNS	No
631	IPP	UDP/TCP	None	Out	Internet Printing Protocol (IPP)	No

**Table 8. Managed nodes**

Port Number	Protocols	Port Type	Maximum Encryption Level	Direction	Usage	Configurable
69	TFTP	UDP	128-bit	In/Out	Trivial File Transfer	No
111	NFS	UDP/TCP	128-bit	In	SUN Remote Procedure Call (Portmap)	No
68	BOOTP	UDP	None	Out	Bootstrap Protocol Client	No

## OpenManage Integration for VMware vCenter requirements

### Supported ESXi versions on managed hosts

The following table provides information about the supported ESXi versions on managed hosts:

**Table 9. Supported ESXi versions**

ESXi version support	Server generation		
	11G	12G	13G
v5.0	Y	Y	N
v5.0 U1	Y	Y	N
v5.0 U2	Y	Y	N
v5.0 U3	Y	Y	N
v5.1	Y	Y	N
v5.1 U1	Y	Y	N
v5.1 U2	Y	Y	Y
v5.1 U3	Y	Y	Y (except M830, FC830, and FC430)
v5.5	Y	Y	N
v5.5 U1	Y	Y	N
v5.5 U2	Y	Y	Y
v5.5 U3	Y	Y	Y
v6.0	Y	Y	Y
v6.0 U1	Y	Y	Y
v6.0 U2	Y	Y	Y
v6.0 U3	Y	Y	Y
v6.5	N	Y	Y

The OpenManage Integration for VMware vCenter supports any of the following vCenter server versions:

**Table 10. Supported vCenter server versions**

**Table 10. Supported vCenter server versions**

vCenter version	Web client support
v5.1 U2	N
v5.1 U3	N
v5.5 U1	Y
v5.5 U2	Y
v5.5 U3	Y
v6.0	Y
v6.0 U1	Y
v6.0 U2	Y
v6.0 U3	Y
v6.5	Y

**NOTE:** For more information about registering a vCenter server, see *OpenManage Integration for VMware vCenter Version 4.0.1 Web Client Install Guide* available at [Dell.com/support/manuals](http://Dell.com/support/manuals).

The OpenManage Integration for VMware vCenter version 4.0.1 supports the following VMware vRealize Operations Manager (vROPS) versions:

**Table 11. Supported vROPS versions**

OpenManage Management Pack for vRealize Operations Manager	vROPS version
v1.0	v6.3 or later

## Supported features on Dell PowerEdge chassis

This chapter provides information about the supported features on the Dell PowerEdge chassis.

**Table 12. Supported features on modular infrastructure**

Features	M1000e	VRTX	FX2s
SNMP Alerts	Y	Y	Y
Hardware Inventory	Y	Y	Y
Link and Launch CMC	Y	Y	Y
License Information	N/A	Y	Y
Warranty Information	Y	Y	Y
Health Reporting	Y	Y	Y

## Supported features on PowerEdge servers

The following features are supported on the hosts managed by OpenManage Integration for VMware vCenter:

**Table 13. Supported features on PowerEdge servers**

Resource	Platform		
	11th	12th	13th
Hardware Inventory	Y	Y	Y

**Table 13. Supported features on PowerEdge servers**

Resource	Platform		
	11th	12th	13th
Events and Alarms	Y (SNMP v1 only)	Y (SNMP v1 and v2)	Y (SNMP v1 and v2)
Component wise Health Monitoring*	Y	Y	Y
BIOS/Firmware Updates**	Y	Y	Y
Proactive HA***	N	Y	Y
Warranty Information	Y	Y	Y
Host Compliance	Y	Y	Y
Auto/Manual discovery of bare-metal Server	Y	Y	Y
Bare-Metal compliance	Y	Y	Y
Hardware Configuration	Y	Y	Y
Bare-Metal Hypervisor Deployment	Y	Y	Y
Blink Server LED	Y	Y	Y
View/Clear SEL logs	Y	Y	Y
Link and Launch iDRAC	Y	Y	Y
iDRAC reset	Y	Y	Y

\*In Cloud with model number C6320, health monitoring is not supported for the mezzanine cards.

\*\*In Cloud with model number C6320, firmware updates are not supported for the mezzanine cards.

\*\*\*Proactive HA feature is only applicable on vCenter 6.5 or later that has ESXi 6.0 or later.

## Important notes

This section provides important information that you must consider when you are working on OpenManage Integration for VMware vCenter.

- OMIVV supports BIOS mode to deploy hypervisor on the target server. Ensure that you have BIOS mode selected in the reference hardware profile before applying the hypervisor profile. If there is no hardware profile selected, ensure that you manually configure the Boot mode as BIOS and reboot the server before applying the hypervisor profile.
- OMIVV currently supports only the community named "Public" or "public". The SNMP community name is not configurable. If another community name is used, the events are not received by OMIVV and the events are not displayed in the VMware vCenter.
- A hardware profile created using a reference server with a certain BIOS version can cause deployment to fail. Some BIOS versions do not provide accurate information for certain BIOS settings, such as the Embedded NIC1 and NIC2 settings. When a server with the minimum BIOS version is used as a reference server in a hardware profile, the fields are ignored by both the UI and deployment. An issue may occur, however, if the settings in question are required to have a certain value for deployment to complete successfully. The solution to this issue is to use a server with up-to-date BIOS as a reference server for a hardware profile.

**NOTE:** Servers being used for deployment should also have updated BIOS. If deployment tries to apply settings to a server with issues in BIOS, deployment fails. Currently the BIOS version is not checked for compliance, but it is displayed on the server compliance page. Warnings are displayed on the hardware profile reference server and BIOS settings pages and when you select a deployment template with an affected hardware profile during deployment.

- OMIVV registered with the VMware vCenter by using Fully Qualified Domain Name (FQDN) is highly recommended. For FQDN-based registrations, the host name of the vCenter should be properly resolvable by the DNS server.

**NOTE:** For more information about the DNS requirements for vSphere, see the following links:

- [DNS requirements for vSphere 5.5](#)
- [DNS requirements for vSphere 6.0](#)
- [DNS requirements for vSphere 6.5 and Platform Services Controller appliance](#)