


# OpenManage Integration for VMware vCenter

Version 3.1 Compatibility Matrix

## Notes, cautions, and warnings

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

 **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 for your *OpenManage Integration for VMware vCenter* (OMIVV) and any other technical documentation included with *OpenManage Integration for VMware vCenter* software.

The *OpenManage Integration for VMware vCenter 3.1* now supports:

- vCenter; 5.5 U3, 6.0 U1, and 6.0 U2
- VMware ESXi versions; 5.5 U3, 6.0 U1, 6.0 U2
- T130, T330, R230, R330, C4130 platforms
- OMSA 8.2
- OMIVV appliance registration by non-administrator users with the required privileges
- Traditional Chinese language
- 64-bit DUP bundles for firmware update

## Topics:

- [Space required for provisioned storage](#)
- [Default virtual appliance configuration](#)
- [Other documents you may need](#)

## Space required for provisioned storage

The OpenManage Integration virtual appliance requires 43.5 GB of disk space for provisioned storage.

## Default virtual appliance configuration

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

## Other documents you may need

Go to [dell.com/support/manuals](https://dell.com/support/manuals) for the following list of documents for vSphere desktop and Web client:

- *Dell OpenManage Integration for VMware vCenter 3.1 User's Guide for Desktop client*
- *Dell OpenManage Integration for VMware vCenter 3.1 Installation Guide for Desktop client*
- *Dell OpenManage Integration for VMware vCenter 3.1 User's Guide for Web client*
- *Dell OpenManage Integration for VMware vCenter 3.1 Installation Guide for Web client*
- *Dell OpenManage Integration for VMware vCenter 3.1 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 the 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 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 following BIOS, iDRAC, and Lifecycle Controller versions are required to enable the features of *OpenManage Integration for VMware vCenter*.

It is recommended 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 *OpenManage Integration for VMware vCenter*.

**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 (continued)**

| <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**

| 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  |
| 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 | 2.00.00.00 or later                      | 2.00.00.00 or later  |

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

| Model | BIOS  | iDRAC with LifeCycle Controller |
|-------|-------|---------------------------------|
| C6320 | 1.0.2 | 2.20.20.20                      |
| C4130 | 1.0.2 | 2.22.22.20                      |

## Port information

### Virtual appliance and Managed Nodes

In OpenManage Integration for VMware vCenter, when you deploy the OMSA agent using the *Fix non-compliance hosts* link available in the Compliance window, the OpenManage Integration for VMware vCenter starts the http Client service, enables port 8080, and releases the port 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 non-compliant 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 (continued)**

| 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.

| 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<br>(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                                    |

### Supported vCenter Server versions for release 3.1

The OpenManage Integration for VMware vCenter will work with any of the following vCenter Server versions:

| vCenter version | Desktop Client Support | Web Client Support |
|-----------------|------------------------|--------------------|
| v5.1 U2         | Y                      | N                  |
| v5.1 U3         | Y                      | N                  |
| v5.5 U1         | Y                      | Y                  |
| v5.5 U2         | Y                      | Y                  |
| v5.5 U3         | Y                      | Y                  |
| v6.0            | Y                      | Y                  |
| v6.0 U1         | Y                      | Y                  |
| v6.0 U2         | Y                      | Y                  |

**NOTE:**

For more information on registering a vCenter server, see *OpenManage Integration for VMware vCenter, Quick Install Guide v3.1* available at [dell.com/support/manuals](http://dell.com/support/manuals).

## Supported features on the Dell PowerEdge chassis

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

| 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.

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

| Resource                         | Platform |      |      |
|----------------------------------|----------|------|------|
|                                  | 11th     | 12th | 13th |
| 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.

## Important notes

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

- *OpenManage Integration for VMware vCenter* supports BIOS mode to deploy Hypervisor on the target server. Make sure that you have BIOS mode selected in the reference hardware profile before applying the Hypervisor profile. If there is no hardware profile selected, make sure to manually configure the boot mode as BIOS and reboot the server before applying the Hypervisor profile.

**i** **NOTE:** Hypervisor deployment is supported only in the desktop client.

- The *OpenManage Integration for VMware vCenter* 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 the OpenManage Integration for VMware vCenter and the events do not appear 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.

**i** **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.

- Registering OpenManage Integration for VMware vCenter with the VMware vCenter using Fully Qualified Domain Name (FQDN) is highly recommended. For FQDN based registrations, the hostname of the vCenter should be properly resolvable by the DNS server.

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

- [DNS requirements for vSphere 5.5](#)
- [DNS requirements for vSphere 6.0](#)