

OpenManage Management Pack for vRealize Operations Manager Version 1.2

Installation Guide

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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Introduction

The OpenManage Management Pack for vRealize Operations Manager allows you to monitor the health status and analyze important metrics of the Dell EMC PowerEdge servers and chassis that are managed by OpenManage Integration for VMware vCenter (OMIVV) 4.0 or later.

Topics:

- [Prerequisites](#)
- [Support Matrix](#)

Prerequisites

Following are the requirements to install OpenManage Management Pack for vRealize Operations Manager:

- Ensure that you install VMware vRealize Operations Manager (vROPS) version 6.5 or later.
- OpenManage Management Pack for vRealize Operations Manager requires OMIVV 4.0 or higher to be installed.
- Ensure that you have an OMIVV license to manage the Dell EMC hosts. For more information about the OMIVV license, see *OpenManage Integration for VMware vCenter Quick Installation Guide for vSphere Web Client*.
- Ensure that the vROPS configuration is set to Extra-large(6.5 and above), if more than 500 servers are managed.

NOTE: If the OMIVV is managing a large number of servers (>100) it is recommended to set the Collection Interval (minutes) to 30 at vROPS.

- Ensure that the hosts are part of the connection profile of Dell EMC OMIVV to manage them using Dell EMC management pack.
- Dell EMC recommends using firmware version of iDRAC 2.40.40.40 or later for accurate management and monitoring of the 12th and 13th generation of the PowerEdge servers.
- Dell EMC recommends using firmware version of iDRAC 3.00.00.00 or later for accurate management and monitoring of the 14th generation of the PowerEdge servers.

Support Matrix

Table 1. Support Matrix

OpenManage Management Pack for vRealize Operations Manager Version	Required OpenManage Integration for VMware vCenter version(s)	Supported vRealize Operations Manager version(s)	Supported PowerEdge Server Generation(s)	Supported Chassis
1.0	4.0	6.3, 6.4	12th,13th	M1000e, FX2s, VRTX
1.1	4.0, 4.1, 4.2	6.3, 6.4, 6.5, 6.6	12th,13th,14th (requires OMIVV 4.1 or 4.2)	M1000e, FX2s, VRTX
1.2	4.2, 4.3	6.5, 6.6, 6.7, 7.0	12th,13th,14th	M1000e, FX2s, VRTX, MX7000 (requires OMIVV 4.3)

NOTE: It is recommended to use Dell EMC OpenManage Enterprise-Modular Edition Version 1.00.01 with OMIVV 4.3.

Configuring OMIVV

Extended monitoring support needs to be enabled at OMIVV to configure with vROPS.

To enable the extended monitoring support, perform the following steps:

1. To launch the OMIVV administration console, start a web browser and provide the **https:\\<Appliance IP> or <Appliance Hostname>**.
2. Type the password in the **Login** field.
3. In the left pane, click **APPLIANCE MANAGEMENT** and scroll down to the **EXTENDED MONITORING** section.
4. In the **EXTENDED MONITORING** section, click **Edit**, and then click **Enable** or **Disable** to enable or disable the extended monitoring support. Extended monitoring support is disabled by default.
5. Ensure to enable **SNMP Trap Monitoring** to support SNMP alerts for OpenManage Management Pack for vRealize Operations Manager. This allows the user to monitor the health status of the server or chassis in real time.

Installing or upgrading to OpenManage Management Pack for vRealize Operations Manager v1.2

To install or upgrade to OpenManage Management Pack for vRealize Operations Manager v1.2, perform the following steps:

1. Go to Dell.com/Support/Home.
2. In the **Choose from all products** section, click **Software & Security**.
3. In the **Software & Security** group box, click **Virtualization Solutions**.
4. To download the product, click the required product version.
The **Product Support** page is displayed.
5. Download self-extractable .exe file that consists of the Release Notes and OpenManage Management Pack .pak file from the support site.
6. Extract the .exe file.
7. Open **vRealize Operations Manager** console as, **https://<IP or Hostname or FQDN>**.
8. In the left pane of **vRealize Operations Manager**, click **Administration > Solutions**.
9. In the **Solutions** tab, click .
The **Add Solution** page is displayed.
10. To navigate to the location of the .pak file, click **Browse**.
11. Select **OpenManageAdapter** .pak file.
12. Click **Upload**.
13. To continue, click **Next**.
The **Dell End User License Agreement** (EULA) is displayed.
14. Select **To accept the terms of agreement**, and click **Next**.
15. Click **Finish**.

The **OpenManage Management Pack for vRealize Operations Manager** is now listed in the **Solutions** tab of **vRealize Operations Manager**.

 **NOTE:** Solution UI may freeze for some time (about a minute or so) until management pack installation is completed.

 **NOTE:** If you are upgrading to OpenManage Management Pack for vRealize Operations Manager version 1.2 from 1.0, in the **Solution Details** tab you need to click **Stop Collecting > Start Collecting** for each instance of the adapter.

 **NOTE:** After installing or upgrading, you must relogin to the OpenManage Management Pack for vRealize Operations Manager to view the Dell Dashboard and Dell customized ICONs.

Topics:

- [Adding OMIVV instance](#)
- [Removing OMIVV instances](#)

Adding OMIVV instance

Ensure that you add an adapter instance by providing either the host name, or FQDN, or IP address and the appropriate login credentials of OMIVV and vROPS.

To add an adapter instance, perform the following steps:

1. In a browser, launch the **vRealize Operations Manager** user interface.

2. Log in as an administrator.
 3. Click **Administration → Solutions**.
The **Manage Solutions** screen is displayed.
 4. Select **OpenManage Management Pack for vRealize Operations Manager**, and click **Configure**.
 5. In **Manage Solution — OpenManage vRealize Operations Management Pack** screen, perform the following steps:
 - a) Instance Settings:
 1. In the **Display Name** field, enter a name for the adapter.
 2. In the **Description** field, enter a description.
 - b) Basic Settings:
 1. Type the host name, or FQDN, or IP address of the OMIVV instances.
 2. To add login credentials, click .
 3. Provide appropriate admin (default username) credentials for authenticating with OMIVV along with vROPS user's details.
NOTE: You must have an administrative privilege for vROPS.
 4. Click **OK**.
 5. To validate the settings that you entered, click **Test Connection**.
NOTE:
Ensure that the extended monitoring is enabled or Unable to establish a valid connection to the target system. Extended Monitoring is disabled. Enable Extended Monitoring in OMIVV admin portal error message is displayed. For more details, see [Configuring with OMIVV](#).
 - c) Advanced Settings:
 1. Expand **Advanced Settings** and select a collector from the list.
 2. It is recommended that you to set the value as **True** to use Auto Discovery.
 3. Click **Save Settings**.
 4. Click **Close**.

OpenManage Management Pack for vRealize Operations Manager starts collecting data from the OMIVV server instance.

NOTE:
After adding OMIVV instance, the data and alerts for the server and chassis are populated after three data collection cycles. By default data collection cycle runs every 5 minutes.

NOTE:
vROPS credential is required for creating the relationship between physical servers and ESXi hosts and to post SNMP alerts.

NOTE:
If you provide invalid credentials for vROPS, the Unable to establish a valid connection to the target system. Check that vROPS credentials are correct or not error message is displayed.

 - 6. Go to **Homepage**, from the **Dashboard list** drop-down menu, select **OpenManage dashboards** for the older version of vROPS (6.5 and earlier). For vROPS 6.6 and later go to **Dashboard** to view the **OpenManage dashboards**.
OpenManage dashboards are now displayed.
- NOTE:**
If the OMIVV IP is changed, update the IP in Manage Solution wizard.
- NOTE:**
If you want to replace the existing OMIVV instance with another OMIVV, delete existing OMIVV instance and then configure with new OMIVV instance.

Removing OMIVV instances

1. In a browser, open the **vRealize Operations Manager** user interface.
2. Log in as an administrator.
3. Click **Administration → Solutions**.

The **Manage Solutions** Screen is displayed.

4. Click **Management Pack Solution**.
5. Select **OpenManage vRealize Operations Management Pack**, and then click **Configure**.
List of adapter instances are displayed.

 **NOTE:** Clear all the alerts before removing the OMIVV adapter instance.

6. Select a required instance, and then click **Delete**.

 **NOTE:**
You can disable the extended monitoring in OMIVV after deleting the instance(s).

 **NOTE:** Delete may take few minutes depending upon the number of servers and chassis managed by OMIVV.

Troubleshooting

- I don't see any metrics for the HDD resource after OpenManage Management Pack for vRealize Operations Manager Version 1.2 upgrade (from 1.0).
 - After OpenManage Management Pack for vRealize Operations Manager Version 1.2 upgrade (from 1.0), you must **Stop Collecting** and **Start Collecting** for an adapter instance, to reflect the correct HDD metrics. In case of multiple instances, you need to perform the same task for all adapter instances.
- I don't see any historical data for HDDs after the OpenManage Management Pack for vRealize Operations Manager Version 1.2 upgrade (from 1.0).
 - Historical data for HDDs are not available after the OpenManage Management Pack for vRealize Operations Manager Version 1.2 upgrade (from 1.0). This is an expected behavior, with the latest upgrade, adapter is offering HDD and SSD data separately. However, historical data are available only for the SSDs. HDD metrics are freshly populated since the time adapter has been updated.
- After I create and configure a new adapter instance, I'm unable to see the firmware metrics.
 - Firmware metrics collection does not happen when the firmware catalog is getting refreshed. You need to run the inventory in OMIVV again and check for the metrics after the next collect cycle.
- I still see the resources in unknown state once I delete the adapter instances.
 - When you delete the configured instance of the adapter, then in the inventory view, the older instances of servers and chassis may be listed in unknown state; delete these components from inventory explorer page.
- I deleted an adapter instance and created a new one and configured it with the same OMIVV, now the widgets are not populated.
 - To populate the data, edit the widgets in the dashboard and save without making any changes. Refer OpenManage Management Pack for vRealize Operations Manager Version 1.2 user's guide for further information on configuration.
- I see the health status as "Unknown" for few Dell EMC Server Storage Controllers.
 - For On-board controller, 6GBps SAS HBA and Software RAID there is no real time monitoring support. Hence, the health status is shown Unknown".