

Dell EMC OpenManage Management Pack for vRealize Operations Manager Version 2.0

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 enables 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:

- [Pre-requisites](#)
- [Support Matrix](#)

Pre-requisites

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

- A compatible version of the OpenManage Integration for VMware vCenter and vRealize Operations are required (see table 1).
- 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 Extralarge(6.5 and above), if more than 500 servers are managed.

NOTE: If the OMIVV is managing many servers (>100), Dell EMC recommends setting the Collection Interval (minutes) to 45 at vROPS.

- Ensure that the hosts are part of the connection host credential profile of Dell EMC OMIVV to manage them using Dell EMC management pack.

Support Matrix

Table 1. Support Matrix

OpenManage Management Pack for vRealize Operations Manager Version	Required OpenManage Integration for VMware vCenter versions	Supported vRealize Operations Manager versions
1.0	4.0	6.3, 6.4
1.1	4.0, 4.1, 4.2	6.3, 6.4, 6.5, 6.6
1.2	4.2, 4.3	6.5, 6.6, 6.7, 7.0
2.0	5.0	6.7, 7.0, 7.5

NOTE: Refer the OMIVV document for supported PowerEdge , Chassis, and supported Firmware version. For information about supported PowerEdge servers, see OMIVV compatibility matrix at dell.com/support

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 Version 2.0

To install or upgrade to OpenManage Management Pack for vRealize Operations Manager v2.0, perform the following steps:

1. Go to **Dell.com/support**.
2. Following are two ways to download vRealize Operations Manager v2.0:
 - a. Enter the Service Tag of your Dell EMC Software Virtualization Solutions, and then select search.
 - Select the appropriate model.
 - On the support page of your server, select **Drivers & Downloads**.
 - From the **Operating System** list, select the appropriate version of VMware ESXi.
 - From the **Category** list, select **System Management** The supported version of vRealize Operations Manager v2.0 is displayed.
 - Click **Download** or select the check box to add the software to your download list.
 - b. Select **Browse all products--> Software--> Virtualization Solutions**.

NOTE: User can directly select the vRealize Operations Manager v2.0 from the list once they go to the previous mentioned path.
3. **To upgrade or install vRealize Operations Manager v2.0**
 - a) Open **vRealize Operations Manager** console as, **https://<IP or Hostname or FQDN>**.
 - b) In the left pane of **vRealize Operations Manager**, click **Administration > Solutions**.
 - c) In the **Solutions** tab, click **+**.
The **Add Solution** page is displayed.

NOTE: For vROPS 7.5, navigation steps are as follows:
Solution > Repository > Add Management Pack
 - d) To go to the location of the .pak file, click **Browse**.
 - e) Select **OpenManageAdapter** .pak file.
 - f) Click **Upload**.
 - g) Click **Next** to continue.
The **Dell End User License Agreement (EULA)** is displayed.
 - h) Select **License Agreement** and, click **Next**.
 - i) Click **Finish**.
The **OpenManage Management Pack for vRealize Operations Manager** is now listed in the **Solutions** tab of **vRealize Operations Manager**.

NOTE: Solution UI is unavailable for a minute until management pack installation is completed.

NOTE: After installing or upgrading, log out and log in to the OpenManage Management Pack for vRealize Operations Manager to view the Dell EMC Dashboard and Dell EMC customized ICONs.
 - j) If you are upgrading to OpenManage Management Pack for vRealize Operations Manager version 2.0, in the **Solution Details**, click **Stop Collecting > Start Collecting** for each instance of the adapter.

Topics:

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

Adding OMIVV instance

Ensure that you add an adapter instance by providing either the hostname, or Fully Qualifies Domain Name, 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.

NOTE: For vROPS 7.5, the **OpenManage Management vRealize Operations Management Pack** under **Configured Adapter Instances** and then click **Configure**.

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 hostname, 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 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. 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:

The data and alerts for the server and chassis are populated after three data collection cycles after the OMIVV instance is added. 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.

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.

NOTE: For vROPS 7.5, go to the **OpenManage Management vRealize Operations Management Pack** under **Configured Adapter Instances** and then click **Configure**.

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

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

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

NOTE:

Disable the extended monitoring in OMIVV after deleting the instance if you do not want to monitor deleted instance in OMIVV.

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

If you want to replace the existing OMIVV instance with another OMIVV, delete existing OMIVV instance and then configure with new OMIVV instance.

Troubleshooting

- I do not see any metrics for the HDD resource after OpenManage Management Pack for vRealize Operations Manager Version 1.2 upgrade or later.
 - After OpenManage Management Pack for vRealize Operations Manager Version 1.2 upgrade or later, 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 or later.
 - Historical data for HDDs are not available after the OpenManage Management Pack for vRealize Operations Manager Version 1.2 upgrade or later. 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 or later user 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".
- The basic health update and extended metric jobs may fail to run within a minute when multiple traps for the same server are received. The associated metrics for the server are refreshed after the next successful run.