OpenManage Integration for VMware vCenter Quick Installation Guide for vSphere Web Client Version 3.0



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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Quick Start Installation

Installation Introduction

This guide provides step-by-step instructions for the installation and configuration of OpenManage Integration for VMware vCenter (OMIVV) on Dell servers. After the installation is complete, for information about all aspects of administration including: inventory management, monitoring and alerting, firmware updates, and warranty management, see the *OpenManage Integration for VMware vCenter User's Guide* available at **dell.com/support/manuals**.

Prerequisites

The following prerequisites must be fulfilled before you start the product installation:

- TCP/IP address information to assign to the OMIVV virtual appliance.
- A user name and password for the OMIVV to access the vCenter server. This should be an administrator role that has all needed permissions. For more information about the available OMIVV roles within vCenter, see *Open Manage Integration for VMWare vCenter User's Guide* available at **dell.com/support/manuals**.
- Root password for ESXi host systems, or the active directory credentials that has administrative rights on the host.
- User name and password associated with iDRAC Express or Enterprise.
- Make sure the vCenter server is currently running.
- Know the location of the OMIVV OVF file.
- Install the OMIVV (virtual appliance) on any ESXi host.
- Your VMware vSphere environment must meet virtual appliance, port access, and listening port requirements. In addition, install Adobe Flash Player 11.2 or later on the client system. For more information on the VMware documentation, see the VMware vCenter User's guide and Release Notes.



NOTE: The virtual appliance functions as a regular virtual machine; any interruptions or shut downs impact overall functionality of the virtual appliance.



NOTE: The OMIVV shows the VMware Tools as Running (Out-of-date) when deployed on ESXi 5.5 and later. You can upgrade the VMware tools after a successful deployment of the appliance or anytime later, if necessary.



NOTE: It is recommended that the OMIVV and vCenter server are located on the same network.

Hardware Requirements

OMIVV provides full support for several generation of Dell servers, with full feature support for servers with iDRAC Express or Enterprise. Extensive information on the platform requirements can be found in the *OpenManage Integration for VMWare vCenter Release Notes* available at **Dell.com/support/ manuals**. To verify that your host servers are eligible, refer to the tables in the *OpenManage Integration for VMWare vCenter Release* available at **Dell.com/support/** *for VMWare vCenter Compatibility Matrix* available at **Dell.com/support/manuals**.

- Supported server and minimum BIOS
- iDRAC supported versions (both deployment and management)
- OMSA support for older servers and ESXi version support (both deployment and management)

Software Requirements

The vSphere environment must fulfill virtual appliance, port access, and listening port requirements.



NOTE: VMware vSphere has both a desktop client and Web client.

Requirements for Web Client

Supported for vCenter 5.5 or later.

For specific software requirements, see *OpenManage Integration for VMware vCenter Compatibility Matrix* available at **dell.com/support/manuals**.

OpenManage Integration for VMware vCenter Port Requirements

Port number	Description
443 (https) and 80 (http)	For Administration Console
4433 (https)	For auto discovery and handshake
162 and 11620	For SNMP trap listener
2049, 4001, 4002, 4003, 4004	For NFS share

Installation and Configuration Overview

The following high-level steps outline the overall installation procedure for the OMIVV. These procedures assume that the required hardware is in place and running the required VMware vCenter software.

The following information is an outline of the installation process. To begin the actual installation, see the section <u>Deploy OVF Using Web Client</u>.

Installation Overview

- 1. Install OMIVV.
 - a. Be sure systems are connected and the vCenter server is up and running.
 - b. Deploy the Open Virtualization Format (OVF) file that contains the OMIVV using the vSphere client or vSphere Web client.
 - c. Upload the license file.
 - d. Register the OMIVV with vCenter server using the Administration Console.



NOTE: Register using FQDN is highly recommended. For both IP / FQDN based registrations, the hostname of the vCenter should be properly resolvable by the DNS server

2. Complete the Initial Configuration Wizard.

Deploying the OMIVV OVF Using the vSphere Web Client

This procedure assumes that you have downloaded and extracted the product zip file (Dell_OpenManage_Integration_<version number>.
build number>.zip) from the Dell website.

To deploy the OMIVV OVF using the vSphere Web Client:

- 1. Locate the OMIVV virtual disk that you downloaded and extracted and run **Dell_OpenManage_Integration.exe**.
- 2. Accept the EULA and save the OVF file.
- **3.** Copy or move the OVF file to a location accessible to the VMware vSphere host to which you will upload the appliance.
- 4. Start the VMware vSphere Web Client.
- From the VMware vSphere Web Client, select a host and in the main menu click Actions → Deploy OVF Template.

You can also right-click Host and select Deploy OVF Template.

The Deploy OVF Template wizard is displayed.

- 6. In the Select Source window, do the following:
 - a. URL: If you want to download the OVF package from internet, select URL.
 - b. Local file: If you want to select the OVF package from your local system, select the Local file and click Browse.

NOTE: The installation can take between 10 to 30 minutes, if the OVF package resides on a network share. For a quick installation, it is recommended that you host the OVF on a local drive.

- 7. Click Next. The Review Details window is displayed.
- 8. The following information is displayed in the **Review Details** window:
 - a. **Product**: The OVF template name is displayed.
 - b. Version: The version of the OVF template is displayed.
 - c. Vendor: The vendor name is displayed.
 - d. Publisher: The publisher details are displayed.
 - e. Download Size: The actual size of the OVF template in Gigabytes.
 - f. Size on Disk: Details of thick and thin provisioned details are displayed.
 - g. Description: You can view the comments.
- 9. Click Next. The Select Name and Folder window is displayed.

- 10. In the Select Name and Folder window, do the following:
 - a. In **Name**, enter the name of the template. This name can contain up to 80 characters.
 - b. In the Select a folder or datacenter list, select a location to deploy the template.
- 11. Click Next.

The Select Storage window is displayed.

- 12. In the Select Storage window, do the following:
 - a. From the **Select Virtual Disk Format** drop-down list, select either Thick Provision (lazy Zeroed), Thick Provision (Eager zeroed), or Thin Provision to store the virtual disk. It is recommended that you select Thick Provision (Eager Zeroed).
 - b. From the VM Storage Policy drop-down list, select one of the policies.
- 13. Click Next. The Setup Networks window is displayed.
- 14. The Setup Networks window is displayed which contains details about the source and destination networks. Click Next.

NOTE: It is recommended that the OMIVV and the vCenter server are located in the same network.

15. In the **Ready to Complete** window, review the selected options for the OVF deployment task and click **Finish**.

The deployment job runs and provides a completion status window where you can track job progress.

Registering OpenManage Integration for VMware vCenter and Importing The License File

This procedure assumes that you have received the licenses in the form of an e-mail attachment from **download_software@dell.com**. If you have more than one license, you can add the licenses one after another. The license file is available as an XML format file.

Ø

NOTE: If you want to upload a custom certificate for your appliance, you must upload the new certificate prior to vCenter registration. If you upload the new custom certificate after vCenter registration, communication errors are displayed in the Web client. To fix this issue, you must unregister and reregister the appliance with the vCenter.

- From the vSphere Web Client, click Home → Hosts and Clusters, then in the left panel, locate the OMIVV that you just deployed, and click Power on the virtual machine.
 During deployment, if you select Power on after Deployment, the VM is powered on automatically after deployment is complete.
- 2. Click the Console tab in the main VMware vCenter window to run the Administration Console.
- **3.** Allow the OMIVV to finish booting up, and then enter the user name for the administrator (the default is Admin), and then set a password.
- 4. Configure the OMIVV network and time zone information.

OpenManage Integration for VMw	are vCenter Virtual Appliance Setup ×
OpenManage Integration for VMwa	are vCenter Virtual Appliance Setup
Advanced Configuration: https://10.94.145.216/DellAdmin	Portal/index.html
Date/Time Properties	Network Configuration
Change Hostname	Change Admin Password
Reboot Appliance	
Reset Settings	gout

Figure 1. Console tab

5. To open the **Administration Console** for the product, open a Web browser and type the appliance's IP address or hostname.

The IP address is the IP address of the appliance VM and not the ESXi host IP address. The Administration Console can be accessed by using the URL mentioned at the top of the console. For example: https://10.210.126.120 or https://myesxihost

	DNSOLE	
Login Enter Password below :		
		Login

Figure 2. Administration Console

6. In the Administration Console login window, enter the password, and then click Login.

TRATION CONSOLE				Logout	
vCenter Registration					
MANAGE VCENTER SERVER CONNECT	IONS				
Registered vCenters	Registered vCenters				
ACKUP AND RESTORE					
vCenter Server IP or Hostname	Description	Credentials	Certificate	Unregister	
	No vCenter servers an	e currently registered			
In Use	0				
In Use	0				
	VCenter Registration MANAGE VCENTER SERVER CONNECT Registered vCenters Tasks: © Register New vCenter Server vCenter Server IP or Hostname UCENSING Host Connection Licenses Naximum Host Connection Licenses In Use Available vCenter Connection Licenses: Maximum vCenter Connection Licenses: In Use	VCenter Registration MANAGE VCENTER SERVER CONNECTIONS Registered VCenters Tasks: @ Register New vCenter Server @ Upload License vCenter Server IP or Hostname Description Vo vCenter servers an No vCenter servers an LICENSING Host Connection Licenses Maximum Host Connection Licenses Maximum Host Connection Licenses S0 No vCenter Server 50 No vCenter Server 50 No vCenter 50 No vC	VCenter Registration MANAGE VCENTER SERVER CONNECTIONS Registered vCenters Tasks: @ Register New vCenter Server @ Upload License vCenter Server IP or Hostname Description Credentials No vCenter servers are currently registered LICENSING LICENSING Naximum Host Connection Licenses Naximum Host Connection Licenses Naximum Host Connection Licenses vCenter Connection Licenses: Naximum vCenter Connection Licenses: Naximum vCenter Connection Licenses Naximum VCenter Center VVE	VCenter Registration MANAGE VCENTER SERVER CONNECTIONS Registered vCenters Tasks: @ Register New vCenter Server @ Upload License vCenter Server IP or Hostname Description Credentials Certificate No vCenter Servers are currently registered LICENSING Host Connection Licenses S0 In Use 0 Available 50 vCenter Connection Licenses: Maximum Vcenter Connection Licenses: 10 10 In Use 0 0	

Figure 3. vCenter Registration Window from within the Administration Console

7. In the vCenter Registration window, click Register New vCenter Server.

- 8. In the Register New vCenter Server window, do the following:
 - a. Under **vCenter Name**, in the **vCenter Server IP or Hostname** text box, enter the server IP or hostname and then in the **Description** text box, enter the description that is optional.



NOTE: Registering using Fully Qualified Domain Name (FQDN) is not mandatory but highly recommended. For both Internet Protocol (IP) and FQDN based registrations, the host name of the vCenter must be properly resolvable by the DNS server.

- b. Under Admin User Account, in Admin User Name, enter the Admin user name. Enter the username as domain/user or domain/user or user@domain. The Admin user account is used by the OMIVV administration.
- c. In **Password**, enter the password.
- d. In Verify Password, enter the password again.
- 9. Click Register.

NOTE: One instance of OMIVV can support upto 10 vCenters which are a part of the same vCenter SSO. Multiple independent instances of vCenters are currently not supported.

10. Do one of the following:

- If you are using the OMIVV trial version, go to step 12.
- If you are using the full product version, the license file will be e-mailed to you, and you must import this license to your virtual appliance. To import the license file, click **Upload License**.
- **11.** In the **Upload License** window, click **Browse** to navigate to the license file and then click **Upload** to import the license file.



- If the license file is modified or edited in any way, the license file will not work and you must send an e-mail with the original order number to download_software@dell.com. The license XML file is used in this procedure and it does not come with a hard coded file name.
- You cannot use an individual license XML file to upload, instead use the license XML file included in a compressed file.

After OMIVV is registered, OMIVV is shown under the Administration category of the Web Client home page.

4 Heatow 11 C	I C	(Home						- 14
d Home		Getting Started	Home					• 🝸 Recent Tasks 🛛 🖸
ØvCenter >	>	Inventories						At Running Falled
Rules and Profiles VCenter Orchestrator	>	0	0	6		Q	O.	
Administration	>	vCenter	vCenter Hosts and Clusters	VMs and Storage Templates	Storage	Networking	VCenter Orchestrator	
🚺 Tasks 🔂 Log Browser 🔽 Events		Monitoring						
Ø Tags	-	1	100			1	100	
Q New Search >> ☐ Saved Searches >>	>	Task Console	Console Event Console	Host Profiles VM Storage Policies	Customization Specification Manager	vCenter Operations Manager	My Tasks • More Task • 💉 Work in Progress	
		Administration						
		200 Roles	R Licensing	vCenter Solutions	CopenManage Integration			
				Manager				- 🖸 Alarma
								All (3) New (3) Ackno
								10.255.4.246 Host connection and power.
								▲ 10.255.4.246 Status of other host hardwar
		Watch How-	to Videos					10 255 4 246 Host PM System Event Log.

Figure 4. The OpenManage Integration for VMware vCenter Successfully Added to vCenter

Installation Verification

The following steps verify that the OMIVV installation was successful:

- 1. Close any vSphere Client windows and start a new vSphere Web Client.
- 2. Confirm that the OMIVV icon appears inside vSphere Web Client.
- **3.** Make sure that vCenter can communicate with the OMIVV by attempting a PING command from the vCenter server to the virtual appliance IP address or hostname.
- 4. In vSphere Web Client, click Plug-ins \rightarrow Managed Plug-ins.
- 5. In the Plug-in Manager window verify the OMIVV is installed and enabled.

Migration Path to migrate from 2.x to 3.0

You can migrate from older version (2.x) to the version 3.0 release using the Backup and Restore path. or start with a fresh deployment of the v3.0 OVF after uninstalling the old version.

Do the following to migrate from older version to the OMIVV 3.0 version:

- Take a Back up of the database for the older (v2.x) release.
 For more information, see OpenManage Integration for VMWare vCenter version 3.0 User's Guide available at dell.com/support/manuals.
- 2. Power off the older appliance from vCenter.
 - **NOTE:** Do not unregister the plug-in from vCenter. Unregistering the plug-in from vCenter removes all the Alarms registered on vCenter by the plug-in and removes all the customization performed on the alarms like actions and so on. For more information, see <u>Recover</u> <u>OpenManage Integration for VMware vCenter if the older plug-in is unregistered</u>if you have already unregistered the plug-in after the backup.
- Deploy the new OpenManage Integration version 3.0 OVF.
 For more information on deploying the OVF, see <u>Deploying the OMIVV OVF Using the vSphere Web</u> <u>Client</u>.
- **4.** Power on the OpenManage Integration version 3.0 appliance.
- 5. Set up the network and time zone on the appliance.

It is mandatory that the new OpenManage Integration version 3.0 appliance has the same IP address as the old appliance. To set up the network details, see <u>Registering OpenManage Integration for</u> <u>VMware vCenter and Importing The License File</u>.

NOTE: The plug in might not work properly if the IP address for the OMIVV 3.0 appliance is different from the IP address of the older appliance. In such a scenario, you need to un-register and re-register all the vCenter instances.

- Restore the database to the new appliance.
 For more information, see Restoring The Database From A Backup in the OpenManage Integration for VMWare vCenter Version 3.0 User Guide available at dell.com/support/manuals.
- Upload the new license file.
 For more information, see <u>Registering OpenManage Integration for VMware vCenter and Importing</u> <u>The License File</u>.
- 8. Verify the appliance.

For more information, see the section **Installation Verification** in this guide to ensure the database migration is successful.

9. Run the Inventory on all the registered vCenters.

MOTE:

It is recommended that you run the inventory on all the hosts managed by the plug-in again after the upgrade. For more information, see the section **Running Inventory Jobs** for steps to run the inventory on demand.

If the IP address of the new OMIVV version 3.0 appliance has changed from that of the old appliance, the trap destination for the SNMP traps must be configured to point to the new appliance. For 12G and 13G servers, this will be fixed by running the Inventory on these hosts. For all 11G or earlier generation hosts that were earlier complaint, this IP change shows up as non-complaint and will require configuring OMSA. For more information on fixing the host compliance, see **Running the Fix Non-Compliant VSphere hosts Wizard** in the *OpenManage Integration for VMWare vCenter Version 3.0 User Guide* available at **dell.com/support/manuals**.

Recover OpenManage Integration for VMware vCenter if the older plug-in is unregistered

If you have unregistered the plug-ins after taking backup of the database of the older version, perform the following steps before proceeding with the migration.



NOTE: Unregistering the plug-in removes all the customizations that was implemented on the registered alarms by the plug-in. The following steps will not be able to restore the customization. However, it will re-register the alarms in their default state.

- 1. Perform step 3 through step 5 in <u>Migration Path to migrate from 2.x to 3.0</u>.
- 2. Register the plug-in to the same vCenter that you had registered in the older plug-in.
- **3.** Complete step 6 through step 8 in <u>Migration Path to migrate from 2.x to 3.0</u>to complete the migration.

2

Understanding How to Configure or Edit the OpenManage Integration for VMware vCenter

After you complete the basic installation of the OMIVV, the **Initial Configuration Wizard** is displayed when you click on the OMIVV icon. Use the **Initial Configuration Wizard** to configure the **Settings** on first launch. For subsequent instances use the **Settings** page. From the **Initial Configuration Wizard** you can create a connection profile, edit the settings of warranty, inventory, events and alarms. Although using the **Initial Configuration Wizard** is the most common method used, you can also accomplish this task through the appliance's **OpenManage Integration** \rightarrow **Manage** \rightarrow **Settings** page in the OMIVV. For more information on the Initial Configuration Wizard, see, *OpenManage Integration for VMWare vCenter User Guide* available at **dell.com/support/manuals**.

Configuration Tasks Using the Configuration Wizard

The **Initial Configuration Wizard** can be used to configure the following for one vCenter or for all registered vCenters:

- 1. vCenter Selection
- 2. Creating A New Connection Profile
- 3. <u>Scheduling Inventory Jobs</u>
- 4. Running A Warranty Retrieval Job
- 5. Configuring Events And Alarms



NOTE: You can also launch the Initial Configuration Wizard using the link Start Initial Configuration Wizard under Basic Tasks in the Getting Started page.

Configuration Wizard Welcome Page

After you install the OMIVV, it must be configured.

- 1. In the vSphere Web Client, click Home, and then click OpenManage Integration Icon
- The first time you click on the OpenManage Integration icon, it opens the Configuration Wizard. You can also access this wizard on the OpenManage Integration → Getting Started → Start Initial Configuration Wizard page.

vCenter Selection

Using the vCenter Selection page you can configure:

- a specific vCenter
- All available vCenters
- 1. In the Initial Configuration Wizard, click Next in the Welcome screen.
- 2. Select one vCenter or all vCenters from the vCenters drop-down list.

Select an individual vCenter for those not configured yet or if you have added a new vCenter to your environment. The vCenter selection page allows you to select one or more vCenters to configure settings.

3. Click Next to proceed to the Connection Profile description page.

NOTE: If you have multiple vCenter servers as a part of the same SSO and if you chose to configure a single vCenter server, the following steps must be repeated until you configure each vCenter.

Creating A New Connection Profile using the Initial **Configuration Wizard**

A connection profile stores the iDRAC and host credentials that the virtual appliance uses to communicate with Dell servers. Each Dell server must be associated with a connection profile to be managed by the OMIVV. You may assign multiple servers to a single connection profile. You can create the Connection Profile using the Configuration Wizard or from OpenManage Integration for VMware vCenter \rightarrow Settings.

You can log in to iDRAC and the host using Active directory credentials.



NOTE: Before using the Active Directory credentials with a connection profile, the Active Directory user's account must exist in Active Directory and the iDRAC and host must be configured for Active Directory based authentication.



NOTE: The Active Directory credential can be same for both iDRAC and the host or it can be set as separate active directory credentials. The user credential must have administrative privileges.



NOTE: You cannot create a connection profile if the number of hosts added exceeds the license limit for creating a Connection Profile.

To create a new connection profile using the Configuration Wizard:

- 1. In the Connection Profile Description page, click Next.
- 2. In the Name and Credentials page, enter the Connection Profile Name and an optional Connection Profile Description.
- 3. In the Name and Credentials page, under iDRAC Credentials, do one of the following:



NOTE: The iDRAC account requires administrative privileges for updating firmware, applying hardware profiles, and deploying hypervisor.

- For iDRACs already configured and enabled for Active Directory on which you want to use Active Directory, select the **Use Active Directory**; otherwise skip down to configure the iDRAC credentials.
 - In Active Directory User Name, type the user name. Type the username in one of these formats: domain/username or username@domain. The user name is limited to 256 characters. Refer to Microsoft Active Directory documentation for user name restrictions.
 - In Active Directory Password, type the password. The password is limited to 127 characters.
 - In **Verify Password**, type the password again.
 - Perform one of the following actions:
 - * To download and store the iDRAC certificate and validate it during all future connections, select the **Enable Certificate Check**.
 - * To not store and perform the iDRAC certificate checking during all future connections, clear the **Enable Certificate Check**.
- To configure iDRAC credentials without Active Directory, do the following:
 - In **User Name**, type the user name. The user name is limited to 16 characters. Refer to the iDRAC documentation for information about user name restrictions for your version of iDRAC.
 - In **Password**, type the password. The password is limited to 20 characters.
 - In Verify Password, type the password again.
 - Perform one of the following actions:
 - * To download and store the iDRAC certificate and validate it during all future connections, select **Enable Certificate Check**.
 - * To not store and perform the iDRAC certificate check during all future connections, clear **Enable Certificate Check**.
- 4. In the Host Root area, do one of the following:
 - For hosts already configured and enabled for Active Directory on which you want to use Active Directory, select the **Use Active Directory**; otherwise configure your **Host Credentials**.
 - In Active Directory User Name, type the user name. Type the username in one of these formats: domain/username or username@domain. The user name is limited to 256 characters.

For host user name and domain restrictions, refer to the following:

Host Username Requirements:

- a. Between 1 and 64 characters long
- b. No non-printable characters
- c. Invalid characters: " / \ [] : ; | = , + * ? < > @

Host Domain Requirements:

a. Between 1 and 64 characters long

- b. First character must be alphabetical
- Cannot contain a space C.
- d. Invalid characters: " / \ : |, * ? < > ~ ! @ # \$ % ^ & ' () { } _
- In Active Directory Password, type the password. The password is limited to 127 characters.
- In Verify Password, type the password again.
- Perform one of the following actions:
 - To download and store the Host certificate and validate it during all future connections, select Enable Certificate Check.
 - To not store and perform the Host certificate check during all future connections, clear Enable Certificate Check.
- To configure Host Credentials without Active Directory, do the following:
 - In User Name, the user name is root. This is the default username and you cannot change the username. However, if the Active directory is set, you can choose any Active directory user not just root.
 - In Password, type the password. The password is limited to 127 characters.

NOTE: The OMSA credentials are the same credentials used for ESXi hosts.

- In Verify Password, type the password again.
- Perform one of the following actions:
 - To download and store the Host certificate and validate it during all future connections, select Enable Certificate Check.
 - To not store and perform the Host certificate check during all future connections, clear Enable Certificate Check
- 5. Click Next.
- 6. In the Associated Hosts page, select the hosts for the connection profile and click OK.
- 7. To test the connection profile, select one or more hosts and click Test Connection.

NOTE: This step is optional. This is used to check whether the Host and iDRAC credentials are correct or not.

8. To complete the profile, click Next.



NOTE: For servers that do not have either an iDRAC Express or Enterprise card, the iDRAC test connection result states Not Applicable for this system.

Scheduling Inventory Jobs [Wizard]

you can configure inventory schedule using the Configuration Wizard or OpenManage Integration under **OpenManage Integration** \rightarrow **Manage** \rightarrow **Settings**.



NOTE: To make sure that the OMIVV continues to display updated information, it is recommended that you schedule a periodic inventory job. The inventory job consumes minimal resources and will not degrade host performance.



NOTE: Chassis gets discovered automatically after the inventory for all hosts is run. If the chassis is added to a chassis profile, then the chassis inventory automatically runs. In a SSO environment having multiple vCenters, the chassis inventory runs automatically with every vCenter when the inventory for any vCenter is run at a scheduled time.

To schedule an inventory job:

1. In the Configuration Wizard, in the Inventory Schedule window, select Enable Inventory Data Retrieval if it is not enabled.

By default, Enable Inventory Data Retrieval is enabled.

- 2. Under Inventory Data Retrieval Schedule, do the following:
 - a. Select the check box next to each day of the week that you want to run the inventory. By default, **all the days** are selected.
 - b. In the text box, enter the time in HH:MM format.

The time you enter is your local time. Therefore, if you want to run the inventory at the virtual appliance time zone, calculate the time difference between your local and virtual appliance time zone, and then enter the time appropriately.

3. To apply the changes and continue, click **Next** to proceed with the warranty schedule settings.

Running A Warranty Retrieval Job [Wizard]

The warranty retrieval job configuration is from setting option in the OMIVV. In addition, you can also run or schedule warranty retrieval job from **Job Queue**->**Warranty**. Scheduled jobs are listed in the Job queue. In a SSO environment having multiple vCenters, the chassis warranty runs automatically with every vCenter when the warranty for any vCenter is run. Warranty is not automatically run if it added to chassis profile.

To run a warranty retrieval job:

- 1. In the **Configuration Wizard**, in the **Warranty Schedule** window, select **Enable Warranty Data Retrieval** to enable you to schedule the warranty.
- 2. Under Warranty Data Retrieval Schedule, do the following:
 - a. Select the check box next to each day of the week that you want to run the warranty.
 - b. In the text box, enter the time in HH:MM format.

The time you enter is your local time. Therefore, if you want to run the inventory at the virtual appliance time zone, calculate the time difference between your local and virtual appliance time zone, and then enter the time appropriately.

3. To apply the changes and continue, click Next to proceed with the Event and Alarm settings.

Configuring Events And Alarms [Wizard]

You can configure events and alarms using the **Configuration Wizard** or from the **Settings** option for **Events and Alarms**. To receive the events from the servers, OMIVV is configured as the trap destination. For 12th generation hosts and later, the SNMP trap destination must be set in iDRAC. For hosts prior to 12th generation, trap generation must be set in OMSA.



NOTE: OMIVV supports SNMP v1 and v2 alerts for 12th generation hosts and later. For hosts earlier than 12th generation, OMIVV supports only SNMP v1 alerts.

To configure events and alarms:

- 1. In the Initial Configuration Wizard, under Event Posting Levels, select one of the following:
 - Do not post any events Block hardware events.
 - Post All Events Post all hardware events.
 - Post only Critical and Warning Events Post only critical or warning level hardware events.
 - Post only Virtualization-Related Critical and Warning Events Post only virtualization-related critical and warning events; this is the default event posting level.
- 2. To enable all hardware alarms and events, select the Enable Alarms for Dell Hosts check box.

NOTE: Dell hosts that have alarms enabled respond to some specific critical events by entering maintenance mode.

3. A dialog box **Enabling Dell Alarm Warning** is displayed, click **Continue** to accept the change, or click **Cancel**.



NOTE: You must complete this step only if Enable Alarms For Dell Hosts is selected.

NOTE: After restoring the appliance the **Events and Alarms** settings are not enabled even if the Graphic User Interface shows it as enabled. You must enable the **Events and Alarms** settings again from the **Settings** page.

4. Click Apply.

Creating A Chassis Profile

OMIVV can monitor all Dell Chassis associated with the Dell servers that are managed by OMIVV. Chassis profile is required to monitor the chassis. A chassis credential profile can be created to associate with a single or multiple chassis. The chassis profile is created using the following steps:

- 1. In the OpenManage Integration for VMware vCenter, select Manage \rightarrow Profiles \rightarrow Credential Profiles \rightarrow Chassis Profile.
- 2. In the Chassis Profiles page, click on the Plus (+) icon to create a New Chassis Profile.
- 3. In the Chassis Profile Wizard page, do the following:
 - a. In the Profile Name text box, enter the profile name.
 - b. In the **Description** text box, enter an optional description.
- 4. Under Credentials do the following:
 - a. In the **User Name** text box, type the user name with administrative rights, which is typically used to log on to the Chassis Management Controller.
 - b. In the **Password** text box, type the password for the corresponding user name.
 - c. In the **Verify Password** text box, enter the same password you have entered in the **Password** text box. The passwords must match.

NOTE: The credentials can be a local or active directory credentials. Before using the Active Directory credentials with a Chassis Profile, the Active Directory user's account must exist in Active Directory and the Chassis Management Controller must be configured for Active Directory based authentication.

5. Click Next.

The **Select Chassis** page is displayed which shows all the available chassis.



NOTE: Chassis will be discovered and available to be associated with the Chassis Profile only after the successful inventory run of any modular host present under that chassis.

6. To select either an individual chassis or multiple chassis, select the corresponding check boxes next to the IP/Host Name column.

If the selected chassis is already a part of another profile then a warning message is displayed, stating that the selected chassis is associated with a profile.

For example, you have a profile Test associated with Chassis A. If you create another profile Test 1 and try to associate Chassis A to **Test 1**, a warning message is displayed.

7. Click OK.

The Associated Chassis page is displayed.

- 8. Select the chassis and click on Test Connection Icon to test the chassis connectivity which verifies the credentials and the result is displayed in the Test Result column as Pass or Fail.
- 9. Click Finish to complete the profile.



NOTE: You can also add or remove a chassis by clicking on the Plus Icon displayed on the top left corner of the Associated Chassis page.

Additional Configuration Settings

The following configuration settings are optional. However, it can be used for monitoring the hosts in your VMware vCenter using the plug-in.

- Warranty Expiration Notification
- <u>Firmware Update Repository</u>
- OMSA Web Server URL

Warranty Expiration Notification

Viewing Warranty Expiration Notification Settings

- **1.** In the OMIVV, click **Manage** \rightarrow **Settings** tab.
- 2. Under Appliance Settings, click Warranty Expiration Notification. The Warranty Expiration Notification page displays the following:
 - Indicates whether the setting is enabled or disabled
 - The number of days set for the first warning setting.
 - The number of days set for the critical warning setting
- 3. To configure the Warranty Expiration Notification, see Configuring Warranty Expiration Notifications.

Configuring Warranty Expiration Notification

You can configure warranty expiration thresholds to alert about warranty expiration.

- **1.** In the OMIVV, click **Manage** \rightarrow **Settings**.
- 2. Under Appliance Settings, to the right side of Warranty Expiration Notification, click the Edit icon.
- **3.** In the **Warranty Expiration Notification** dialog box, to enable warranty expiration notification, select **Enable warranty expiration notification for hosts**.
- 4. In **Minimum Days Threshold Alert**, from the **Warning** list, select the number of days before warranty expiration, that you want to be notified.
- 5. From the **Critical** list, select the number of days before warranty expiration, that you want to be notified.
- 6. Click Apply.

Firmware Update Repository

In OMIVV, in the Settings tab, you can set the location from which the servers can receive firmware updates. This is a global setting.

Firmware repository settings contain the firmware catalog location used to update deployed servers. Following are the locations:

Dell (ftp.dell.com) – Uses the firmware update repository of Dell (ftp.dell.com). The OMIVV downloads selected firmware updates from Dell repository.



NOTE: OMIVV connects to the Internet to get the catalog and firmware packages applicable for your hosts. Depending on your network settings, configure proxy for the firmware update task to run successfully from Dell online.

Shared Network Folder – Created with Dell Repository Manager. These local repositories should be located on CIFS or NFS file share.

Setting Up the Firmware Update Repository

You can configure the firmware update repository on the OMIVV in the Settings tab.

- **1.** In OMIVV, click Manage \rightarrow Settings.
- 2. Under Appliance Settings, to the right side of Firmware Update Repository, click the Edit icon.
- 3. In the Firmware Update Repository dialog box, select one of the following:
 - **Dell Online** Default firmware repository (**ftp.dell.com**) with a staging folder. The OMIVV downloads selected firmware updates and stores them in the staging folder, and then you need to run the firmware wizard to update the firmware.
 - Shared Network Folder These are created with the Dell Repository Manager application. Locate these local repositories on Windows or Linux based file shares. Use the live link to go to Dell Repository Manager.
- 4. If you selected the Shared Network Folder option, Enter the catalog file location using the following format[.]
 - NFS share for xml file: host:/share/filename.xml
 - NFS share for gz file: host:/share/filename.gz
 - CIFS share for xml file:\\host\share\filename.xml
 - CIFS share for gz file: \\host\share\filename.gz

NOTE: You can view the progress of the download in the Select Update Source page.

5. When the download is complete, click Apply.

OMSA Web Server URL

OMSA link is the URL to launch the OMSA GUI for host servers that have OMSA installed.



NOTE: OMSA is only required on Dell PowerEdge 11th generation servers.

- **1.** In OMIVV, click Manage \rightarrow Settings.
- 2. Under vCenter Settings , to the right side of the OMSA Web Server URL, click Edit.
- 3. In the OMSA Web Server URL dialog box, type the URL. You must include the full URL including HTTPS and the port number. For example, https://10.0.0.1:1311 or https://omsaurl:1311
- 4. Select Apply these settings to all vCenters to apply the OMSA URL to all vCenters. If you do not select this check box, the OMSA URL is applied only to one vCenter.
- 5. From the corresponding host **Summary** tab, check if the link works.
- 6. Check if the OMSA Console link is functional within the Dell Host Information.

4

Licensing in OpenManage Integration for VMware vCenter

This chapter provides details about licensing in OMIVV. There are no new licensing changes for 3.0.

NOTE: The Licensing for OMIVV will not alter the number of vCenter connection licenses. The maximum number of vCenter licenses is 10. If you want to register multiple vCenters, all vCenters should be part of same SSO. Separate instances of vCenters are not supported in this OMIVV release.

License Types

With version 3.0 there are two types of licenses. An evaluation license, and a standard license. These licenses restrict functionality based on time, and the number of Dell 11th Generation or newer hosts.

Evaluation License

When the OMIVV version 3.x appliance is powered on for the first time, an evaluation license is automatically installed. This evaluation license will allow the OMIVV to operate and manage five ESXi 11th Generation and newer hosts without blocking any functionality for the 90 day evaluation period from the first power on. Once a standard license is uploaded, the evaluation license is no longer used.

Standard License

A standard license is purchased from Dell. Different purchase SKU's are used when ordering the license based on the number of Dell 11th Generation or newer servers running VMware ESXi to be managed, and the duration of product support. The license includes product support and appliance updates for a periods of ether 3 or 5 years.

Uploading License

When a license is purchased, an e-mail will be sent to you containing the license file. The license is to be uploaded from the web administration console, accessible by using the ip address of the appliance.

- 1. Licenses are uploaded using the Upload License link on the VCenter Registration Page.
- 2. After clicking the Upload License link, the Upload License dialog box will appear.
- 3. Browse to the license XML file and click Upload.



NOTE: The license file may come to you packaged inside a zip file. Be sure to unzip the zip file and upload only the license .xml file. The license file will likely be named based on your order number (i.e 123456789.xml)

4. The Upload License file should display a success message if the license upload was successful.

Options After Uploading Licenses

License file for new purchases

When purchasing a new license, an e-mail will be sent from Dell containing the new license file. The license should arrive in an .xml format. If the license is in a zip format, extract the license xml file from the zip file before uploading.

Stacking licenses

Starting from OMIVV version 2.1, OMIVV has the ability to stack multiple standard licenses to increase the number of supported hosts to the sum of the hosts in the uploaded licenses. An evaluation license cannot be stacked. The number of supported vCenters cannot be increased by stacking, and would require the use of a multiple appliances.

There are some restrictions around the functionality of stacking licenses. If a new standard license is upload before the existing standard license is expired, the licenses will stack. Otherwise, if the license is expired and a new license is uploaded, only the number of hosts from the new license will be supported. If there are already multiple licenses uploaded, the number of supported hosts will be the sum of the hosts in the non-expired licenses at the time the last license was uploaded.

Expired Licenses

Licenses that are past their support duration, typically three or five years from date of purchase, are blocked from being uploaded. If a licenses has expired after being uploaded, functionality for existing hosts will continue, however upgrades to new versions of the OMIVV are blocked.

Replacement of Licenses

Should there be a problem with your order and you receive a replacement license from Dell, the replacement license will contain the same entitlement ID of the previous license. When uploading a replacement license, if a license was already uploaded with the same entitlement ID it will be replaced.

Enforcement

Appliance Updates

The appliance will not allow updates to newer versions when all licenses are expired. Please obtain and upload a new license prior to attempting to upgrade the appliance.

Evaluation Licenses

When an evaluation license expires, several key areas will cease to work, and display an error message.

Adding Hosts to Connection Profiles

When attempting to add a host to a connection profile, if the number of licensed 11th Generation or newer hosts is exceeded and beyond the license number, adding additional hosts is prevented.