Dell Server Management Pack Suite Version 6.0 for Microsoft System Center Operations Manager
Installation Guide

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 guide provides information to install, configure and use the Dell Server Management Pack Suite version 6.0 with Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager, Microsoft System Center 2012 Operations Manager, and Microsoft System Center Operations Manager 2007 R2.

The integration of the Dell Server Management Pack Suite version 6.0 with System Center 2012 R2 Operations Manager, or System Center 2012 SP1 Operations Manager, or System Center 2012 Operations Manager, or System Center Operations Manager 2007 R2 environment allows you to manage, monitor, and ensure the availability of your Dell devices.

> ⚠ CAUTION: Perform the procedures in this document only if you have proper knowledge and experience in using Microsoft Windows operating system and the System Center 2012 R2 Operations Manager, System Center 2012 SP1 Operations Manager, System Center 2012 Operations Manager, and System Center Operations Manager 2007 R2, to avoid data corruption and/or data loss.

The Management Pack Suite Installer, Installation Guide, and Release Notes files are packaged in a self-extracting executable **Dell_Server_Management_Pack_Suite_v6.0_A00.exe** file. You can download the executable from **dell.com/support**.

Read the Management Pack's release notes, which contain the latest information about software and management server requirements, in addition to information about known issues. The release notes is also posted to the Systems Management documentation page at **dell.com/support/manuals**.

Terms Used in This Document

The following terms are used throughout this document. Make sure to substitute the actual term wherever appropriate.

> ✎ NOTE: The term OpsMgr in this document is used to refer to Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager, Microsoft System Center 2012 Operations Manager, and Microsoft System Center Operations Manager 2007 R2, unless otherwise specified.

> ✎ NOTE: The term OpsMgr 2012 in this document is used to refer to Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager, and Microsoft System Center 2012 Operations Manager, unless otherwise specified.

> ✎ NOTE: The term Dell Remote Access Controller (DRAC) devices in this document is used to refer to iDRAC6, iDRAC7, and iDRAC8, unless otherwise specified.

> ✎ NOTE: The term Chassis devices in this document is used to refer to Chassis Management Controller (CMC), unless otherwise specified.

NOTE: The term Servers in this document is used to refer to Servers and Rack Workstations, unless otherwise specified.

NOTE: The term Agent-based monitoring in this document is used to refer to Servers and Rack Workstation Agent-based Monitoring, unless otherwise specified.

NOTE: The term Agent-free monitoring in this document is used to refer to Servers and Rack Workstations Agent-free Monitoring, unless otherwise specified.

Prerequisites

To install the Dell Server Management Pack Suite version 6.0 on a management server, make sure that you have the following installed:

- OpsMgr

  - 2012 R2
  - 2012 SP1 — On systems running OpsMgr 2012 SP1, download and apply the Update Rollup 2 for OpsMgr 2012 SP1 provided in the Microsoft knowledge base article KB2826664. For more information, see **support.microsoft.com/kb/2802159.**
  - 2012
  - 2007 R2
- Microsoft .NET version 3.5 or later.

Monitoring Features Supported by Dell Server Management Pack Suite

The following table lists the monitoring features supported by this version of Dell Server Management Pack suite.

Table 1. Features Supported by Dell Server Management Pack Suite

Feature	Description
Servers and Rack Workstations Agent-based Monitoring	Agent-based monitoring and inventory of Dell PowerEdge, Dell PowerVault storage servers and supported Dell Precision Racks.
Servers and Rack Workstations Agent-free Monitoring	Agent-free monitoring and inventory of Dell PowerEdge, Dell PowerVault storage servers and supported Dell Precision Racks.
DRAC Monitoring	Monitoring and inventory of DRAC devices.
Chassis Monitoring	Monitoring and inventory of Dell CMC devices.
Chassis Modular Server Correlation	Correlation of Dell servers within a chassis, discovered either using Agent-based or Agent-free monitoring features.

Supported OpsMgr Versions for Monitoring Features

Table 2. Supported OpsMgr Versions for Monitoring Features

Monitoring Features	OpsMgr	
	2012 R2/ 2012 SP1/ 2012	2007 R2
Servers and Rack Workstations Agent-based Monitoring	✅	✅
Servers and Rack Workstations Agent-free Monitoring	✅	❌
DRAC	✅	✅
Chassis		
Scalable	✅	✅
Detailed	✅	❌
Chassis Modular Server Correlation		
Chassis Modular Server Correlation	✅	✅
Chassis Shared Storage Component Correlation with Dell Modular Servers	✅	❌

Table 3. Supported Dell Hardware Devices For OpsMgr Versions

Dell Hardware Device	OpsMgr 2012 R2/ 2012 SP1/ 2012	OpsMgr 2007 R2
Dell PowerEdge M1000e	✅	✅
Dell PowerEdge VRTX	✅	Supported only for: • Chassis Monitoring Feature – Scalable • Chassis Modular Server Correlation Monitoring Feature
Dell PowerEdge FX2	✅	❌

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Installing, Uninstalling, And Upgrading Dell Server Management Pack Suite

Installing the Dell Server Management Pack Suite Using the Installer

1. Download the **Dell_Server_Management_Pack_Suite_v6.0_Axx.exe** (where *xx* is the Dell Server Management Pack release number) from **dell.com/support**.
2. Run the **.exe** file and specify a path to extract the contents of the self-extractable zip file.
3. Launch the **Dell_Server_Management_Pack_Suite_v6.0_x86_x64.exe** file from the extracted location.

   The Dell Server Management Pack Suite welcome screen is displayed.
4. Click **Next**.

   The license agreement is displayed.
5. To continue the installation, accept the license terms after reading them, and click **Next**.
6. Click **Change** (if necessary) to change the default installation folder and click **Next**.

   The **Enter License Credentials** screen is displayed.
7. (Optional) Select the **Configure License Credentials** check box for enabling the licensed features.

   > 🖉 NOTE: Licensed monitoring features require domain user credentials for retrieving licenses from Dell Connection License Manager. Provide the domain user credentials in this window. Since monitoring features may cache license data in the **Program Files** folder, make sure that the domain user has local administration rights on the management server where Dell Server Management Pack Suite is installed. The user credentials are used for configuring the Dell Helper Utility and not cached or stored anywhere by the Dell Server Management Pack Suite.
8. Type the user credentials and click **Next.**
9. Click **Install**.
10. Click **Finish** on the **Install Shield Wizard Completed** screen.

    The management packs are extracted to the location; **C:\Program Files\Dell Management Packs \Server Mgmt Suite\6.0**.

    Following are automatically imported after the installation of Dell Server Management Pack Suite:
    - Agent-based monitoring feature.
    - Agent-free monitoring feature, if the licenses are configured and if the prerequisites are met.
    - Dell Feature Management Pack. The **Feature Management Dashboard** is displayed under **Monitoring** → **Dell** on the OpsMgr console. Refer to the individual monitoring sections for importing the monitoring features.

> 🖉 NOTE: The Agent-free monitoring feature requires the installer to run on all the management servers that are used to monitor the Dell Agent-free servers. The installer registers the Dell Device Helper Utility (COM+ application) on the management server. The default location is **C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Library.**

NOTE: The installer also extracts the management packs. To extract the management packs, run the installer on a client system with Windows operating system.

A log file containing the installation information is generated after the installation of Dell Server Management Pack Suite. The log file is available at the location where **Dell_Server_Management_Pack_Suite_v6.0_x86_x64.exe** is extracted.

NOTE: During the installation, the installer creates the Dell Connections License Manager domain groups in the Windows Server Active Directory. If the domain groups are not automatically created during installation, then manually create them. For more information, see Creating Connections License Manager Domain Groups.

Upgrading Dell Server Management Pack Suite From Previous Versions

You can upgrade to Dell Server Management Pack Suite version 6.0 using the installer.

Upgrading From Dell Server Management Pack Suite Version 5.2.0 Using the Installer

The installer automatically:

- Upgrades the Dell Server Management Pack Suite to version 6.0
- Upgrades the Agent-based monitoring feature to version 6.0

NOTE: The installer may display a message prompting a restart after the upgrade is completed, ignore this message as a restart is not required.

Upgrading From Version 5.1 And Prior Versions

Upgrade from Dell Server Management Pack Suite version 5.1 and earlier versions to version 6.0 are not supported.

Upgrading From Previous Operations Manager

You can upgrade to OpsMgr from previous versions as per Microsoft guidelines. Refer to Microsoft System Center documentation for the supported upgrade scenarios.

Upgrading From OpsMgr 2012 SP1 To OpsMgr 2012 R2

Upgrading to OpsMgr 2012 R2 will not impact the existing Dell Server Management Pack Suite features and functionalities. For information about upgrading from OpsMgr 2012 SP1 to OpsMgr 2012 R2, see **technet.microsoft.com/en-us/library/dn249707.aspx**.

Upgrading From OpsMgr 2012 To OpsMgr 2012 SP1

Upgrading to OpsMgr 2012 SP1 will not impact the existing Dell Server Management Pack Suite features and functionalities. For information about upgrading from OpsMgr 2012 to OpsMgr 2012 SP1, see **technet.microsoft.com/en-us/library/jj899854.aspx**.

Upgrading From OpsMgr 2007 R2 To OpsMgr 2012

For details on how to upgrade from OpsMgr 2007 R2 to OpsMgr 2012, see **technet.microsoft.com/en-us/library/hh476934.aspx**.

NOTE: To make sure that the feature management workflows are functioning at an optimal level, restart the root management server after upgrading to OpsMgr 2012.

Using The Modify Option In The Installer

The **Modify** option in the Dell Server Management Pack Suite installer, allows you to modify the license credentials.

NOTE: The **Modify** option is not supported on systems running 32-bit operating system.

1. Run the **Dell_Server_Management_Pack_Suite_v6.0_x86_x64.exe** file from the folder where you have extracted it.

   The welcome screen for Dell Server Management Suite Pack is displayed.
2. Click **Next**.

   The **Program Maintenance** screen is displayed.
3. Select **Modify** and click **Next**.

   The **Enter License Credentials** screen is displayed.
4. (Optional) Select the **Configure License Credentials** check box for enabling licensed features.
5. Type the user credentials and click **Next.**

   The **Ready to Modify the Program** screen is displayed.
6. Click **Install**.

   The **Installation Completed Successfully** screen is displayed.
7. Click **Finish**.

Using The Repair Option In The Installer

The **Repair** option, allows you to repair any installation errors that may have occurred while installing the Dell Server Management Pack Suite.

1. Launch the **Dell_Server_Management_Pack_Suite_v6.0_x86_x64.exe** file from the extracted location.

   The welcome screen for Dell Server Management Suite Pack is displayed.
2. Click **Next**.

   The **Program Maintenance** screen is displayed.
3. Select **Repair** and click **Next**.

   The **Ready to Repair the Program** screen is displayed.
4. (Optional) Select **Configure License Credentials** for enabling licensed features.
5. Type the user credentials and click **Next.**

   The **Ready to Repair the Program** screen is displayed.
6. Click **Install**.

A progress screen displays the progress of the installation. Once the installation is completed, the **Installation Completed Successfully** screen is displayed.

7. Click **Finish**.

📝 NOTE: The **Repair** option is not available through **Add/Remove Programs** from the **Control Panel**.

Uninstalling The Dell Server Management Pack Suite

You can uninstall the Dell Server Management Pack Suite from the Windows Control Panel or using the **Remove** option in the Dell Server Management Pack Suite installer.

Removing Dell Server Management Pack Suite Using the Installer

To remove Dell Server Management Pack Suite using the installer:

1. Start the **Dell_Server_Management_Pack_Suite_v6.0_x86_x64.exe** file from the extracted location.
   The welcome screen for Dell Server Management Suite Pack is displayed.
2. Click **Next**.
3. Select **Remove** and click **Next**.
   The **Remove the Program** screen is displayed
4. Click **Remove**.
   The Dell Server Management Pack Suite is removed.

📝 NOTE:

- While uninstalling, the following message is displayed: `The following applications should be closed before continuing the installation: COM Surrogate` as the COM surrogate process is running the **DellDeviceHelper.DLL** in the background which should be closed. Select the **Automatically close applications and attempt to restart them after the setup is complete** option. Click **OK** to proceed with the uninstallation.
- Uninstallation of Dell Server Management Pack suite does not remove the Dell Management Packs imported in the OpsMgr. To remove the Dell Management Packs from the OpsMgr, see **technet.microsoft.com/en-us/library/cc974489.aspx**.

Uninstalling The Dell Server Management Pack Suite Using Windows Control Panel

To uninstall the Dell Server Management Pack Suite using Windows Control Panel:

1. Click **Start → Control Panel → Uninstall a program.**
2. Right-click **Dell Server Management Pack Suite** and click **Uninstall**.
3. Follow the instructions on the screen to complete the uninstallation process.

Creating Connections License Manager Domain Groups

The following groups are created in the Windows Server Active Directory during installation of Dell Server Management Pack Suite or Dell Connections License Manager:

- **Dell Connections License Administrators**
- **Dell Connections License Operators**
- **Dell Connections License Users**

If the preceding domain groups are not automatically created during installation, then manually create the groups. To create domains and add users to domains, see the Windows documentation from Microsoft at **technet.microsoft.com**.

> **NOTE:** After creating the required domain groups, add your Management Server Action Account to the **Dell Connections License Users** group, and add the current user account to the **Dell Connections License Administrators** group. In case, there are nested domain groups, add the accounts directly to the **Dell Connections License Users** group (instead of adding a nested domain group that contains the user accounts as members).

Domain User Credentials

Dell Connections License Manager (DCLM) uses domain membership to determine the privileges for granting a license. Therefore, the Dell Device Helper COM+ application requires domain user credentials to obtain the licenses from DCLM.

The credentials are directly configured in the COM+ application, in the **Dell Device Helper Properties → This user:** window. The password is not stored in the Dell Server Management Pack Suite or COM+ application for later use.

> **NOTE:** Add the domain user to the **Dell Connections License Users** group. If, there are nested domain groups, add the domain user account directly to the **Dell Connections License Users** group (instead of adding a nested domain group that contains the domain user as a member).

Installing, Upgrading, And Removing Monitoring Features

The topics in this section describe how to install, upgrade, and remove the monitoring features using the **Dell Feature Monitoring Dashboard**.

You can import monitoring features into OpsMgr either by importing the Monitoring Feature management packs using OpsMgr **Import Management Packs** wizard or using the **Dell Feature Management Dashboard**. You can use **Feature Management Dashboard** for advanced fine tuning of monitoring features. For more information, see Feature Management Tasks under the respective monitoring features.

Importing The Dell Server Management Packs Into OpsMgr

To import the Dell Server management packs, use the OpsMgr Import Management Pack wizard.

1. Launch the OpsMgr console.
2. From the navigation pane, click **Administration.**
3. Expand **Administration**, right-click **Management Packs**, and select **Import Management Packs.**
4. On the **Select Management Packs** screen, click **Add → Add from disk**.
5. Type the location details or navigate to the location where you have installed the **Dell Server Management Pack Suite**.

   If you had chosen to install in the default directory, then the Dell Server Management Packs are available under **C:\Program Files\Dell Management Packs\6.0.**
6. Select the Management Pack you want to import and click **Open**.

   The **Import Management Packs screen** appears with the Management Packs displayed in the **Import List**.
7. Click **Install.**

Dell Feature Management Dashboard

The **Dell Feature Management Dashboard** enhances the management of the Dell systems — Dell servers, Dell Precision Racks, Dell Remote Access Controllers (DRAC), Dell PowerEdge FX2, Dell PowerEdge VRTX, Dell PowerEdge M1000e, and integrated DRAC (iDRAC) in the OpsMgr by providing the following monitoring features.

- Agent-based Monitoring Feature
- Agent-free Monitoring Feature

- [DRAC Monitoring Feature](#)
- [Chassis Monitoring Feature](#)
- [Chassis Modular Server Correlation Feature](#)

You can import, upgrade, and remove the monitoring features using the **Dell Feature Management Dashboard**.

Importing Monitoring Features Using Dell Feature Management Dashboard

Dell Feature Management Dashboard allows you to view the available Dell Server Management Pack Suite's monitoring features and enable them automatically for importing, upgrading, and removing the management packs that are required by a particular feature.

In a distributed setup (including distributed resource pool in OpsMgr 2012), the management server where the Dell Server Management Pack suite is installed first is selected to host all feature management activities such as discoveries, alerts and tasks.

To import the monitoring features

1. Launch the OpsMgr console.
2. From the **Navigation** pane, click **Monitoring.**
3. Expand **Monitoring → Dell → Feature Management Dashboard.**
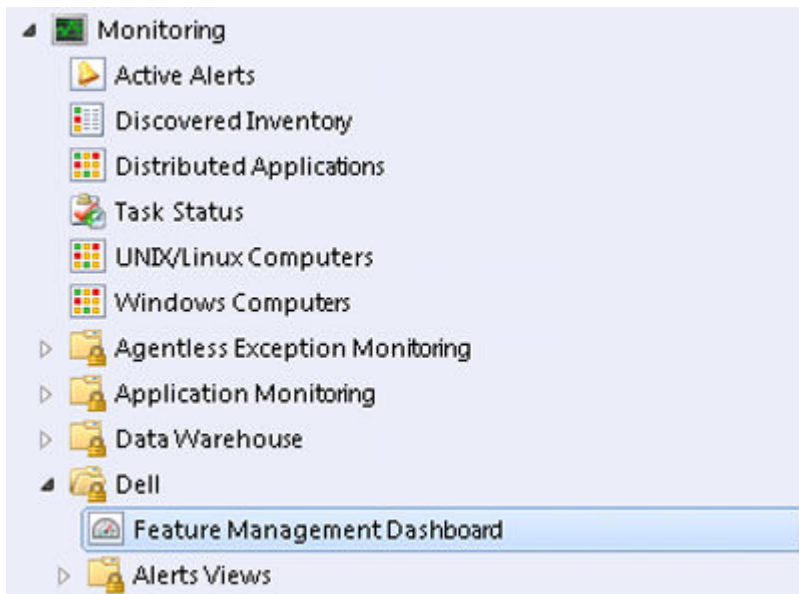
On the **Feature Management Dashboard** pane you can view the list of features installed, the version currently in use, the version you can upgrade to, the level of monitoring, total licenses, and licenses in use.

4. Select the monitoring feature you want to install.
5. Under the **Tasks** pane, expand **Dell Monitoring Feature Tasks**.

6. Click a task to import/ upgrade a feature.
7. On the **Run Task** screen, make sure that the **Use the predefined Run As Account** option is selected.
8. Click **Run**.
9. After the task has successfully completed, click **Close**.
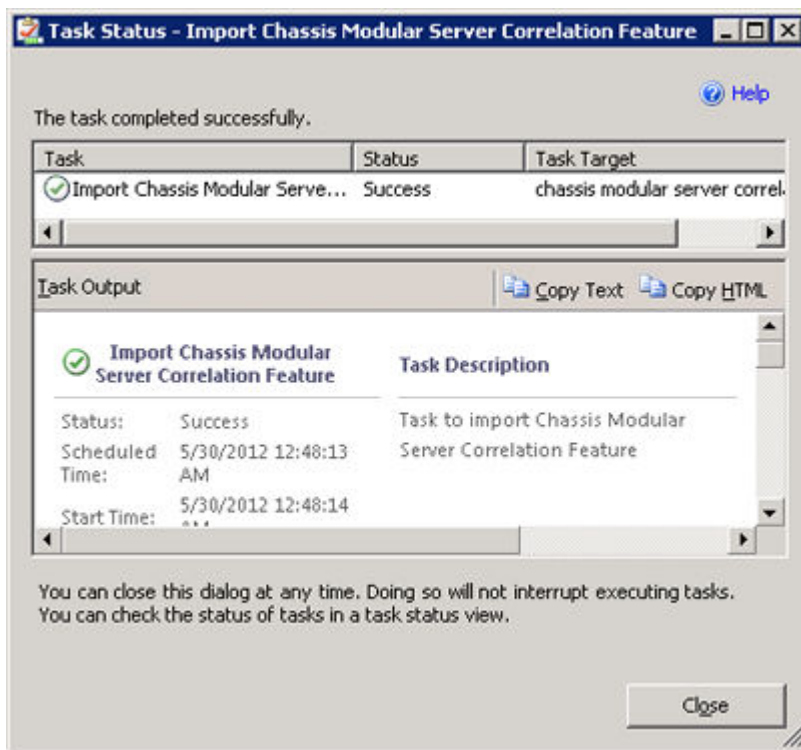
10. Repeat step 4 to step 9 for each monitoring feature you want to enable.

   ✎ NOTE: Wait for a task to complete before launching another task using the **Feature Management Dashboard**.

Upgrading Monitoring Features Using the Dell Feature Management Dashboard

1. Launch the OpsMgr console.
2. From the navigation pane, click **Monitoring.**
3. Click **Dell → Feature Management Dashboard**.
4. Select the monitoring feature you want to upgrade.
5. Under the **Tasks** pane, expand **Dell Monitoring Feature Tasks**.
6. Click on the upgrade task you want to perform.
7. On the **Run Task** upgrade screen, select **Use the predefined Run As Account** option.
8. Click **Run**.

   ⚠ CAUTION: If there are any dependencies or associations that have to be overridden, which result in data loss, the task will fail with the appropriate message. To proceed with the task, click Override and set the AutoResolve Warnings/Errors override to True. For more information, see **Feature Management Dashboard Task Fails**.

9. After the task is complete, click **Close.**

   While upgrading, any overrides (customizations to discovery, monitors, and rules) from previous versions of Dell Server Management Pack Suite are carried over to Dell Server Management Pack Suite version 6.0.

The following table lists the monitoring features that can be customized using the Feature Management Dashboard.

Table 4. Customizing Monitoring Features Using Feature Management Dashboard (Scalable vs Detailed)

Features	Scalable	Detailed
Servers and Rack Workstations Agent-based Monitoring	Inventory and health monitoring at server, rack workstation and component group level.	Detailed inventory and monitoring of the following components: memory, processors, sensors, network interfaces, storage controllers, disks, and volumes. Also, displays the BIOS information.
Servers and Rack Workstations Agent-free Monitoring	• Inventory up to individual components. • Health monitoring only at server, rack workstation and component group level.	• Inventory and health monitoring of individual components. • View metrics for power, temperature, network interface cards processor, memory, CUPS (Computer Usage per Second), PCIe SSD wear level and IO performance metrics.
Chassis Monitoring	• Chassis inventory. • Chassis slots summary. • Health monitoring of chassis.	Inventory and health monitoring of individual chassis components.

Table 5. Customizing Monitoring Features Using Feature Management Dashboard (Only Scalable)

Features	Scalable
DRAC Monitoring	• DRAC inventory • DRAC health monitoring
Chassis Modular Server Correlation	Correlate Dell Modular servers with Chassis (view inventory and health from chassis up to components inside Dell Modular server).

Removing Monitoring Features Using Dell Feature Management Dashboard

To remove the monitoring features, use the **Dell Feature Management Dashboard**. Before removing any of the monitoring features, close or resolve all open alerts. While removing a monitoring feature, the **Feature Management Dashboard** exports all override references as backup in the installation folder, but custom group information and override instance level information cannot be reused in the future.

To remove the monitoring features:

1. Launch the OpsMgr, click **Monitoring**.
2. In the **Monitoring** pane, browse to **Dell → Feature Management Dashboard.**

   The **Feature Management Dashboard** pane displays the list of monitoring features present in the OpsMgr.
3. Select the monitoring feature you want to remove.
4. Under the **Tasks** pane, expand **Dell Monitoring Feature Tasks**.

   NOTE: In System Center Operations Manager 2007 R2, the **Tasks** pane is referred to as **Actions** pane.
5. Click **Remove Feature** to remove the monitoring feature.

   For example, to remove**Servers and Rack Workstations Agent-based Monitoring** feature, click **Remove Agent-based Monitoring Feature** under the **Tasks** pane.
6. On the **Run Task — Remove Feature** screen, select the **Use the predefined Run As Account** option.
7. Click **Run**.

   ⚠ CAUTION: **If there are any dependencies or associations that have to be overridden, which result in data loss, the task fails with the appropriate message. To proceed with the task, click Override and set the AutoResolve Warnings/Errors override to True. For more information, see Feature Management Dashboard Task Fails.**
8. Click **Close** after the task is complete.

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Agent-based Monitoring Feature

Agent-based monitoring feature supports the discovery, and monitoring of Dell PowerEdge monolithic and modular, Dell PowerVault storage servers and supported Dell Precision Racks running the supported Windows operating system and OpenManage Server Administrator (OMSA). For information on supported OMSA versions, see *Dell Server Management Pack Suite Version 6.0 Release Notes.*

The Agent-based monitoring feature is automatically imported by the Dell Server Management Pack Suite installer.

Management Packs

After the Dell Server Management Pack Suite management packs are successfully imported, the following management packs should appear in the **Administration** pane of the OpsMgr console. For more information, see Importing The Dell Server Management Packs Into OpsMgr.

The following table lists the required management packs for the Agent-based monitoring feature.

Table 6. Agent-based Monitoring Feature and Required Management Packs

Feature	Default Location of Management Packs	Required Management Packs
Servers and Rack Workstations Agent-based Monitoring	**Library** C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Library **Scalable and Detailed Management Packs** C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Server Monitoring	**Library** • Dell.Connections.HardwareLibrary.mp • Dell.OperationsLibrary.Server.mp **Scalable Management Packs** • Dell.Model.Server.mp • Dell.WindowsServer.Scalable.mp • Dell.View.Server.mp • (Optional) Dell.WindowsServer.InformationAlertsOn.mp **NOTE:** Import Dell.WindowsServer.InformationAlertsOn.mp only if you want to receive Informational Alerts. **Detailed Management Packs** • Dell.WindowsServer.Detailed.mp and all scalable management packs

Management Server (MS) Requirements

Supported Operating Systems

Following lists the operating systems supported by OpsMgr for the management server:

*   For OpsMgr 2012 R2, OpsMgr 2012 SP1 and OpsMgr 2012, see **technet.microsoft.com/en-us/library/hh205990.aspx**.
*   For OpsMgr 2007 R2, see **technet.microsoft.com/en-us/library/bb309428(en-us).aspx**.

Software Requirements

The following table lists the software requirements in the management server for using the features of the suite.

Table 7. Pre-requisites for Software

Software	Purpose
DRAC tools from Dell OpenManage Server Administrator (Server Administrator)	Inventorying and monitoring the Dell server's and Rack Workstation's iDRAC and its NIC.
Dell License Manager (for iDRAC7 systems only)	Deploy licenses and collect reports from the management server. To launch **Dell License Manager** console, install Dell License Manager on the management server. For more information, see *Dell License Manager User's Guide* at **dell.com/support/manuals**.
Dell OpenManage Power Center	Launch the Dell OpenManage Power Center console, install Dell OpenManage Power Center on the management server to monitor and manage power consumption, and temperature in the data center using the OpsMgr console. For more information, see *Dell OpenManage Power Center Installation Guide* at **dell.com/support/manuals**.
Baseboard Management Controller (BMC) Management Utility	Run the Remote Power Control tasks or the LED Identification Control tasks on Dell-managed systems.

NOTE: Access DRAC tools, Dell OpenManage Server Administrator (Server Administrator), BMC Management Utility from the *Dell Systems Management Tools and Documentation* media, or download it from **dell.com/support**.

Management Server Action Account

The Management Server Action Account requires the following additional privileges on Dell systems for the following features.

Table 8. Management Server Action Account Privileges

Feature	User Privilege
Dell Agent-based monitoring DRAC discovery and the corresponding DRAC console launch	Admin or Power user
Clear ESM log	Admin or Power user Alternatively, if the Management Server Action Account has normal user privileges, operators can, instead of selecting **Use the predefined Run as Account**, enter task credentials with Power User (or higher) privileges to run the **Clear ESM Logs** task.

Managed System Requirements

Install any supported Server Administrator versions (including the Server Administrator Storage Management Service) on a managed node.

NOTE: If you want to upgrade or uninstall Server Administrator on the managed system, the **Alerts View** of the managed system may display the following error: `Script or Executable failed to run`. If the managed system is not a management server, then switch the system to the Maintenance Mode until the upgrade or uninstall completes. If the managed system is the **management server**, you may manually close the alerts after the upgrade or uninstall is complete.

NOTE: On systems using Server Administrator 7.2 DRAC tools, it is recommended to upgrade to Server Administrator 7.4 DRAC tools.

NOTE: For more information on the supported operating systems for the managed system, see *Dell OpenMange Server Administrator Installation Guide* at **dell.com/support/manuals**.

Feature Management Tasks

The following table lists the Agent-based monitoring feature tasks available on the **Feature Management Dashboard**. Some tasks listed below appear only after you have imported the Agent-based monitoring feature.

NOTE: In the Event log, ignore the errors pertaining to reimporting of existing management packs under the error logs. These errors occur when **Feature Management Dashboard** reimports all the dependent management packs that are already imported while importing a monitoring feature.

NOTE: Wait for a task to complete (view the state update change in the dashboard) before launching another task using the **Feature Management Dashboard**.

Table 9. Feature Management Tasks

Tasks	Description
Import Agent-based Detailed Feature	Imports the detailed feature of Agent-based monitoring feature.
Import Agent-based Scalable Feature	Imports the scalable feature of Agent-based monitoring feature.
Set Agent-based as Preferred Monitoring Method	This task enables the Agent-based monitoring feature as the preferred monitoring method for your Dell server and Rack Workstation, when the Dell servers and Rack Workstations in the setup are monitored through both, Agent-based and Agent-free monitoring feature.
Set to Agent-based Scalable Feature	If the Detailed feature is running on the system, the **Feature Management Dashboard** switches from the Detailed to the Scalable feature. On upgrading from the previous version, run this task to use the latest version for this monitoring feature.
Set to Agent-based Detailed Feature	If the Scalable feature is running on the system, the **Feature Management Dashboard** switches from the Scalable to the Detailed feature. On upgrading from the previous version, run this task to use the latest version for this monitoring feature.
Set Informational Alerts On	Informational alerts are turned on when the Agent-based Scalable monitoring is in use.
Set Informational Alerts Off	Informational alerts are turned off when the Agent-based Scalable monitoring is in use.
Refresh Dashboard	Updates the **Feature Management Dashboard** if it was not automatically updated.
Remove Agent-based Feature	Removes the Agent-based monitoring feature.

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Agent-free Monitoring Feature

Agent-free monitoring feature supports the discovery, and monitoring of Dell PowerEdge monolithic and modular servers, Dell PowerVault storage servers, and supported Dell Precision Racks using WSMAN and SNMP.

Management Packs

After the Dell Server Management Pack Suite management packs are imported, the m following management packs should appear in the **Administration** pane of the OpsMgr console. For more information, see [Importing The Dell Server Management Packs Into OpsMgr.](#)

The following table lists the required management packs and their default location for Agent-free monitoring feature.

Table 10. Agent-free Monitoring Feature and Required Management Packs

Feature	Default Location of Management Packs	Required Management Packs
Servers and Rack Workstations Agent-free Monitoring	**Library** C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Library **Scalable and Detailed Management Packs** C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Server Monitoring	**Library** • Dell.Connections.HardwareLibrary.mp • Dell.OperationsLibrary.Common.mp **Scalable Management Packs** • Dell.Model.Server.mp • Dell.OperationsLibrary.Server.mp • Dell.Server.OOB.mp • Dell.View.Server.mp **Detailed Management Packs** • Dell.Server.OOB.DetailedMonitoringOn. mp and all scalable management packs

Management Server (MS) Requirements

Table 11. Pre-Requisites for Software

Software	Purpose
OpsMgr 2012 or later (required)	The Agent-free monitoring feature is available only on management servers running OpsMgr 2012.
Microsoft's WS-ManagementAndSMASHDeviceDiscoveryTemplate (required)	Install Microsoft's **WS-ManagementAndSMASHDeviceDiscoveryTemplate** on the management server to perform an agent-free discovery of your systems. For more information, see **go.microsoft.com/fwlink/?LinkID=244308**.
Dell Connections License Manager (required)	Install and configure the licensing server. For more information, see *Dell Connections License Manager Installation Guide* at **dell.com/support/manuals**.
Dell License Manager (for iDRAC7 systems only)	To deploy licenses and collect reports from the management server. To launch **Dell License Manager** console, install Dell License Manager on the management server. For more information, see *Dell License Manager User's Guide* at **dell.com/support/manuals**.
Dell OpenManage Power Center	To launch Power Center console, install Dell OpenManage Power Center on the management server. For more information, see *Dell OpenManage Power Center Installation Guide* at **dell.com/support/manuals**.

Managed System Requirement

To discover and monitor managed node, iDRAC7 or later is required.

NOTE: Install iSM 2.0 or later on the managed node for Host-NIC discovery and monitoring.

Configuring Dell Connections License Manager URL

Perform this task before importing the Agent-free Monitoring feature, as Dell servers and Rack Workstations are discovered only after the Dell Connections License Server is configured.

NOTE: If you have already imported the Agent-free Monitoring feature, the Dell servers and Rack Workstations are discovered only in the next discovery cycle and an alert is generated in the **Feature Management Dashboard** prompting you to configure the Dell Connections License Manager URL. For more information, see [Feature Management Alerts](#).

1. Install the Dell Connections License Manager. For more information, see *Dell Connections License Manager Version 1.1 Installation Guide* at **dell.com/support/manuals**.

2. Obtain licenses for the monitoring feature. For more information, see the "Managing Dell Connections License Manager" section in the *Dell Connections License Manager Version 1.1 User's Guide* at **dell.com/support/manuals**.

3. Launch the OpsMgr 2012 console.

4. From the navigation pane, click **Monitoring.**

5. Expand **Monitoring → Dell → Feature Management Dashboard.**

6. Select **Servers and Rack Workstations Agent-free Monitoring** monitoring feature.

7. From the **Dell Monitoring Feature Tasks** pane, select **Configure License Server**.

   The **Run Task - Configure License Server** screen is displayed.

8. Click **Override**.

   The **Override Task Parameters** screen is displayed.

9. In the **LicenseWebServiceURL** parameter, under the **New Value** column type the license web service URL (the license webservice URL uses the default port as 8543) in the following format **http://<License Server IP>: <port number>/**.

   For example: `http://10.56.123.255:8543/`.

10. In the **LicenseWebUIURL** parameter, under the **New Value** column type the license web UI URL (the license web UI URL uses the default port as 8544) in the following format **http://<License Server IP>: <port number>/**.

    For example: `http://10.56.123.255:8544/`.

11. Click **Override**.

    The **Run Task - Configure License Server** screen is displayed.

12. Click **Run**.

    The **Task Status - Configure License Server** screen is displayed. The **Configure License Server** task takes several minutes to complete.

    NOTE: Wait for the task to complete (view the state update change in the dashboard) before launching another task using the **Feature Management Dashboard**.

Feature Management Tasks

The following table lists the Agent-free Monitoring feature tasks available on the **Feature Management Dashboard**. Some tasks listed below appear only after you have imported the Agent-free monitoring feature.

NOTE: In the Event log, ignore the errors pertaining to reimporting of existing management packs under the error logs. These errors occur when **Feature Management Dashboard** reimports all the dependent management packs that are already imported while importing a monitoring feature.

NOTE: Wait for a task to complete (view the state update change in the dashboard) before launching another task using the **Feature Management Dashboard**.

Table 12. Feature Management Tasks

Tasks	Description
Configure License Server	Configures the Dell Connections License Manager. For more information, see [Configuring Dell Connections License Manager URL](#). NOTE: Perform this task before importing the Agent-free Monitoring (for Server and Rack Workstations), as the Dell servers and Rack Workstation are discovered only after the Dell Connections License Server is configured.
Launch Dell Connections License Manager	Launches the Dell Connections License Manager console. For more information, see *Dell Connections License Manager Version 1.1 User's Guide* at **dell.com/support/manuals**. NOTE: While configuring the Dell Connections License Manager, the License Manager task is enabled only after the configuration of the LicenseWebUI URL is completed. For more information, see [Configuring Dell Connections License Manager URL](#). NOTE: The **Configure License Server** and **Launch Connections License Manger** are common tasks for all the monitoring features on the **Feature Management Dashboard**.
Refresh Dashboard	Updates the **Feature Management Dashboard** if it was not automatically updated.
Import Agent-free Scalable Feature	Enables the scalable feature of Agent-free monitoring feature.
Import Agent-free Detailed Feature	Enables the detailed feature of Agent-free monitoring feature.
Set to Agent-free Scalable Feature	If the detailed feature is running on the system, the **Feature Management Dashboard** switches from the detailed feature to the scalable feature. On upgrading from the previous version, run this task to use the latest version for this monitoring feature.
Set to Agent-free Detailed Feature	If the scalable feature is running on the system, the **Feature Management Dashboard** switches from the scalable feature to the detailed feature. On upgrading from the previous version, run this task to use the latest version for this monitoring feature.

Tasks	Description
Set Agent-free as Preferred Monitoring Method	Enables the Agent-free monitoring feature as the preferred monitoring method for your Dell server and Rack Workstation, when the Dell servers and Rack Workstation in the setup are monitored through both, Agent-based monitoring feature, and Agent-free monitoring feature.
Remove Agent-free Monitoring Feature	Removes the Agent-free monitoring feature.

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DRAC Monitoring Feature

DRAC monitoring feature supports discovery, and monitoring for various generations (iDRAC6, iDRAC7, and iDRAC8 systems) using SNMP.

Management Packs

After the Dell Server Management Pack Suite management packs are successfully imported, the management packs listed below should appear in the **Administration** pane of the OpsMgr console. For more information, see Importing The Dell Server Management Packs Into OpsMgr.

The following table lists the required management packs for DRAC monitoring feature.

Table 13. DRAC Monitoring Feature And Required Management Packs

Feature	Default Location of Management Packs	Required Management Packs
DRAC Monitoring	Library C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Library **Scalable and Detailed Management Packs** C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Remote Access Monitoring	Library • Dell.Connections.HardwareLibrary.mp • Dell.OperationsLibrary.Common.mp **Management Packs** • Dell.DRAC.OM07.mp — OpsMgr 2007 R2 • Dell.DRAC.OM12.mp — OpsMgr 2012 • Dell.Model.DRAC.mp • Dell.OperationsLibrary.DRAC.mp • Dell.View.DRAC.mp

Management Server (MS) Requirements

The following table lists the software requirements in the Management Server for using the DRAC monitoring features of the suite.

Table 14. Software Requirements

Software	Purpose
(Optional) Dell License Manager (for iDRAC 7 systems only)	To deploy licenses and collect reports from the management server. To launch **Dell License**

Software	Purpose
	Manager console, install Dell License Manager on the management server. For more information, see *Dell License Manager User's Guide* at **dell.com/ support/manuals**.
(Optional) Dell OpenManage Power Center	To launch **Power Center** console, install **Dell OpenManage Power Center** on the management server. For more information, see *Dell OpenManage Power Center Installation Guide* at **dell.com/support/manuals**.

DRAC Monitoring Requirement

To monitor the health of DRAC devices, associate the community string **Run As account** with the **SNMP Monitoring Account** with the target as **Dell Remote Access Controller** class or respective DRAC object (if you have different Run As accounts for different DRAC devices).

Feature Management Tasks

The following table lists the DRAC monitoring tasks available on the **Feature Management Dashboard**. Some tasks listed below appear only after you have imported the DRAC monitoring feature.

NOTE: In the Event log, ignore the errors pertaining to reimporting of existing management packs under the error logs. These errors occur when **Feature Management Dashboard** reimports all the dependent management packs that are already imported while importing a monitoring feature.

NOTE: Wait for a task to complete (view the state update change in the dashboard) before launching another task using the **Feature Management Dashboard**.

Table 15. Feature Management Tasks

Tasks	Description
Import DRAC Monitoring Feature	Enables the DRAC monitoring feature.
Upgrade DRAC Monitoring Feature	Upgrades to the latest version of the DRAC monitoring feature.
Refresh Dashboard	Updates the **Feature Management Dashboard** if it was not automatically updated.
Remove DRAC Monitoring Feature	Removes the DRAC monitoring feature.

7

Chassis Monitoring Feature

Chassis monitoring feature supports discovery, and monitoring of Chassis Management Controller (CMC) on Dell PowerEdge FX2, Dell PowerEdge VRTX chassis, and Dell PowerEdge M1000e chassis using SNMP.

Management Packs

After the Dell Server Management Pack Suite management packs are successfully imported, the following management packs should appear in the **Administration** pane of the OpsMgr console. For more information, see Importing The Dell Server Management Packs Into OpsMgr.

The following table lists the required management packs for the chassis monitoring feature.

Table 16. Chassis Monitoring Feature And Required Management Packs

Feature	Default Location of Management Packs	Required Management Packs
Chassis Monitoring	**Library** C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Library **Scalable and Detailed Management Packs** C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Chassis Monitoring	**Library** • Dell.Connections.HardwareLibrary.mp • Dell.OperationsLibrary.Common.mp **Scalable Management Packs** • Dell.CMC.OM07.mp — OpsMgr 2007 R2 • Dell.CMC.OM12.mp — OpsMgr 2012 • Dell.Model.Server.mp • Dell.OperationsLibrary.CMC.mp • Dell.View.CMC.mp **Detailed Management Packs** • Dell.Chassis.Detailed.mp and all scalable management packs

Management Server (MS) Requirements

Software Requirements

Table 17. Software Requirements

Software	Purpose
DRAC tools from Dell OpenManage Server Administrator	• To discover Chassis and Chassis Slot Summary and Server Modules for CMC Chassis • Chassis Detailed Monitoring

Chassis Monitoring Requirements

- To monitor the health of Chassis devices, associate the community string **Run As account** with the **SNMP Monitoring Account** with the target as **Dell Modular Chassis** class or respective Chassis object (if you have different Run As accounts for different Chassis devices).
- Enable Remote Access Controller Admin (RACADM) on CMC devices, and CMC module on Dell PowerEdge VRTX devices for slot discovery and correlation to work. For more information, see *RACADM Command Line Reference Guide for iDRAC7 and CMC* available at **dell.com/support/ manuals**.
- To discover Chassis Slots and Chassis Slot Summary for CMC, create **Run As Accounts** and associate it to the profiles — **Dell CMC Login Account** Run As Profiles. Also, enable the **CMC Slot Discovery** from the OpsMgr console. For more information, see Configuring Dell Chassis Management Controller Feature For Correlating Server Modules With Chassis Slot Summary.
- To perform Chassis Detailed monitoring, create **Run As Accounts** with WS-Man credentials needed for accessing the Dell CMCs and associate it to the profiles — **Dell CMC Login Account** Run As Profiles.

> **NOTE:** On systems using Server Administrator 7.2 DRAC tools, it is recommended to upgrade to Server Administrator 7.4 DRAC tools for the modular server slot correlation, and slot-discovery features to function properly.

Configuring Dell Chassis Management Controller Feature For Correlating Server Modules With Chassis Slot Summary

To configure CMC feature for correlating server modules, create **Run As Accounts** and associate it to Run As Profiles to populate chassis slot summary.

1. Create a **Run As Account** of type Simple Authentication that has privileges to connect to the CMC module on the chassis. Also, use **Basic** or **Digest** Run As Account types for configuring the user credentials.
2. Select the **More Secure** or **Less Secure** option in **Run As Account** configuration, so that you can selectively distribute the configuration to specific management servers.

   For information on creating a **Run As Account** of type Simple Authentication, see the "Creating A Simple Authentication Run As Account" section of the *Dell Server Management Pack Suite Version 6.0 For Microsoft System Center Operations Manager User's Guide* at **dell.com/support/manuals.**

   > **NOTE:** Add the **Server Management Action** account to the OpsMgr administrator group.
3. Associate the created Run As Accounts with the **Dell CMC Login Account** profile and select the appropriate class, group, or object on which you can configure the profile.

- To enable slot summary discovery for CMC, override the enable property to **True** in **Dell CMC Slot Discovery**. It is disabled by default.

> **NOTE:** After the slot discovery, if you remove the link between **Run As Account** with **Run As Profile**, or disable the slot-discovery workflow, the discovered slots remain with old data.

Feature Management Tasks

The following table lists the Chassis monitoring tasks available on the **Feature Management Dashboard**. Some tasks listed below appear only after you have imported the Chassis monitoring feature.

> **NOTE:** In the Event log, ignore the errors pertaining to reimporting of existing management packs under the error logs. These errors occur when **Feature Management Dashboard** reimports all the dependent management packs that are already imported while importing a monitoring feature.

> **NOTE:** Wait for a task to complete (view the state update change in the dashboard) before launching another task using the **Feature Management Dashboard**.

Table 18. Feature Management Tasks

Tasks	Description
Import Chassis Monitoring Scalable Feature	Imports the chassis monitoring scalable feature.
Import Chassis Monitoring Detailed Feature	Imports the chassis monitoring detailed feature.
Set to Chassis Scalable Feature	If the Detailed feature is running on the system, the **Feature Management Dashboard** switches from the detailed feature to the scalable feature. On upgrading from the previous version, run this task to use the latest version for this monitoring feature.
Set to Chassis Detailed Feature	If the scalable feature is running on the system, the **Feature Management Dashboard** switches from the scalable feature to the detailed feature.
Remove Chassis Monitoring Feature	Removes the chassis monitoring feature (both scalable and detailed monitoring feature).
Refresh Dashboard	Updates the **Feature Management Dashboard** if it was not automatically updated.

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Chassis Modular Server Correlation Feature

Chassis Modular Server Correlation feature supports:

- Correlation of Dell Modular Servers with Chassis slots.

    📝 **NOTE:** Enable CMC slot discovery for the correlation feature to work.

- Correlation of Chassis Shared Storage components with Dell servers.

    📝 **NOTE:** Enable Chassis detailed monitoring for the correlation of chassis shared components with Dell servers.

Management Packs

After the Dell Server Management Pack Suite management packs are successfully imported, the following management packs should appear in the **Administration** pane of the OpsMgr console. For more information, see Importing The Dell Server Management Packs Into OpsMgr.

The following table lists the required management packs for Chassis Modular Server Correlation monitoring feature.

Table 19. Chassis Modular Server Correlation Monitoring Feature And Required Management Packs

Feature	Default Location of Management Packs	Required Management Packs
Chassis Modular Server Correlation	**Library** C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.0\Library **Management Packs** C:\Program Files\Dell Management Packs\Server Mgmt Suite \6.0\ChassisModular ServerCorrelation	**Library** • Dell.Connections.HardwareLibrary. mp • Dell.OperationsLibrary.Common.m p **Management Packs** • Dell.ChassisModularServer.Correlati on.mp

Management Server (MS) Requirements

Chassis Modular Server Correlation Monitoring Requirements

Chassis Blade Correlation In Distributed OpsMgr Environment

In a distributed OpsMgr 2007 R2 environment, enable server proxy on the management server where you discover and monitor the CMC.

To enable the proxy agent:

1. In the OpsMgr console, click **Administration**.
2. In the **Administration** pane, expand **Administration → Device Management → Management Servers.**
3. Select the management server where you have discovered the chassis devices.
4. Right-click and select **Properties**.
5. In the **Management Server Properties** dialog box, click the **Security** tab.
6. Select the **Allow this server to act as a proxy and discover managed objects on other computers** option.
7. Click **OK**.

Feature Management Tasks

The following table lists the Chassis Modular Server Correlation feature tasks available on the **Feature Management Dashboard**. Some tasks listed below appear only after you have imported the Chassis Modular Server Correlation monitoring feature.

> **NOTE:** In the Event log, ignore the errors pertaining to reimporting of existing management packs under the error logs. These errors occur when **Feature Management Dashboard** reimports all the dependent management packs that are already imported while importing a monitoring feature.

> **NOTE:** Wait for a task to complete (view the state update change in the dashboard) before launching another task using the **Feature Management Dashboard**.

Table 20. Feature Management Tasks

Tasks	Description
Import Chassis Modular Server Correlation Feature	Enables the chassis modular server correlation feature.
Upgrade Chassis Modular Server Correlation Feature	Upgrades to the latest version of the chassis modular server correlation feature.
Remove Chassis Modular Server Correlation Feature	Removes the chassis modular server correlation feature.
Refresh Dashboard	Updates the **Feature Management Dashboard** if it was not automatically updated.

Troubleshooting

The following chapter provides information for troubleshooting installation related errors.

Feature Management Dashboard Does Not Populate

In a distributed setup, the management server where the Dell Server Management Pack suite is installed first is selected to host all feature management activities such as discoveries, alerts and tasks. The management server on which the Dell Server Management Pack suite is installed first populates the Feature Management Dashboard. However, if you have manually imported the Feature Monitoring management pack without running the installer on the management server, the Feature Management Pack host is not selected and hence, the **Feature Management Dashboard** will not be populated.

To populate the **Feature Management Dashboard**:

1. In the OpsMgr console, click **Authoring**.
2. In **Authoring**, expand **Management Pack Objects**.
3. Click **Object Discoveries**.
4. In the **Look for:** field, search **Dell Feature Management Host Discovery**.
5. Right-click **Dell Feature Management Host Discovery** and select **Overrides → Override the Object Discovery → For all objects of class: Dell Feature Management Host Discovery**.
6. Select **FmpHostFqdn** and set the override value to FQDN of the management server where the feature management activities have to run.

Feature Management Dashboard Task Fails

Performing upgrade task in **Feature Management Dashboard** can result in data loss; for example, if there are any dependencies or associations on the monitoring feature being modified, the upgrade task will fail with the appropriate message.

⚠ **CAUTION: Overriding task parameters will results in management pack or operational data loss.**

1. Launch OpsMgr console and click **Monitoring**.
2. In the **Monitoring** pane, browse to **Dell → Feature Management Dashboard.**
   The **Feature Management Dashboard** pane displays the list of management packs present in OpsMgr and the management pack version to which you can upgrade.
3. Select the monitoring feature.
4. Under **Tasks**, expand **Dell Monitoring Feature Tasks**.
5. Click the upgrade monitoring task.
   For example, to upgrade **Chassis Monitoring** feature, click **Upgrade Chassis Monitoring Feature** under **Dell Monitoring Feature Tasks**.

6. On the **Run Task — Upgrade Monitoring Feature** screen, click **Override**.

   The **Override Task Parameters** screen is displayed.

7. From the drop-down menu in the **New Value** column, change the value of **AutoResolve Warnings/ Errors** to **True**.

8. Click **Override**.

9. Click **Run** to run the task.

Feature Management Alerts

The following alerts are generated in the Feature Management Alerts on the dashboard.

Table 21. Feature Management Alerts

Alert Text	Alert State	Cause	Resolution
Dell FMP: Dell Device Helper Utility is either not present or incompatible with Dell Agent-free monitoring Management Pack.	Critical	The Dell Device Helper Utility version 6.0 was not found or the Dell Device Helper Utility is corrupted. A version higher than 6.0 of Dell Device Helper Utility was found. A version lower than 6.0 of Dell Device Helper Utility was found.	Run the Dell Server Management Pack Suite version 6.0 installer on the management server.
Dell FMP: Dell License Server is not configured properly.	Critical	The Dell Connections License Server is not configured.	Install and configure the Dell Connections License Server URL. For more information, see Configuring Dell Connections License Manager URL.
Dell FMP: Dell License Server is not reachable.	Critical	Unable to contact the Dell Connections License Server.	Make sure that the Dell Connections License Server URL is configured correctly. For more information, see Configuring Dell Connections License Manager URL. Check if the Dell Connections License Server is accessible.
Dell FMP: Dell Licenses for a feature are insufficient or not available.	Critical	Licenses are not present on the Dell Connections License Server.	Purchase additional licenses and import them into the Dell Connections License Server.

Alert Text	Alert State	Cause	Resolution
		License usage for a monitoring feature has exceeded the monitoring capacity.	
	Warning	License usage for a monitoring feature is approaching the total monitoring capacity.	Purchase additional licenses and import them into the Dell Connections License Server.
	Critical	Unable to process licenses for a monitoring feature.	Make sure that the Dell Connections License Server is configured correctly. For more information, see *Dell Connections License Manager Version 1.1 User's Guide* at **dell.com \support\manuals**. Check if the Dell Connections License Server is accessible. Check the access privileges for getting the license from the Dell Connections License Server.

Health Service Of The Feature Management Host Server Cannot Be Obtained

In a distributed setup, the management server where the Dell Server Management Pack suite is installed first is selected to host all feature management activities such as discoveries, alerts and tasks. If the selected management server has stopped functioning, the executed Feature Management tasks fails, and **Feature Management Dashboard** will not populate. If such a selected management server is corrupt or health service cannot be obtained, decommission the management server to remove stale objects. For more information, see **technet.microsoft.com/en-us/library/hh456439.aspx**.

To populate the **Feature Management Dashboard**:

1. In the OpsMgr console, click **Authoring**.
2. In **Authoring**, expand **Management Pack Objects**.
3. Click **Object Discoveries**.
4. In the **Look for:** field, search **Dell Feature Management Host Discovery**.
5. Right-click **Dell Feature Management Host Discovery** and select **Overrides → Override the Object Discovery → For all objects of class: Dell Feature Management Host Discovery**.

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6. Select **FmpHostFqdn** and set the override value to FQDN of the management server where the feature management activities have to run.

Manually Configuring The User Credentials For Dell Device Helper Utility

The Dell Device Helper Utility requires user credentials to obtain licenses from the Dell Connections License Manager. If the installer fails to configure the user credentials for the Dell Device Helper Utility, then manually configure the user credentials.
To configure the user credentials for Dell Device Helper Utility:

1. Click **Start** → **Run**.
2. Type **DcomCnfg** to open the **DCOM Configuration** window.
3. Expand **Component Services** → **Computers** → **My Computer** → **COM+ Applications** → **Dell Device Helper.**
4. Right-click **Dell Device Helper** and click **Properties**.
5. In the **Dell Device Helper Properties** window, click the **Identity** tab.
6. Select **This user:** option and provide the user credentials.
7. Click **OK**.

   NOTE:
   - Add the user to the Dell Connections License Manager groups. For more information, see Creating Connections License Manager Domain Groups.
   - The user must be a local administrator on the management server where the Device Helper Utility is installed.

Dell Connections License Statistics Are Not Updated In The Feature Management Dashboard

Workflow related to updating the Dell Connections License statistics run as part of the Management Server Action Account (MSAA). Add the MSAA to the **Dell Connections License Users** group.

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Appendix

Installing the WS-Management and SMASH Device Template

To install the WS-Management and SMASH Device template:

1. Download the SMASH Library MPB file — **WS-ManagementAndSMASHDeviceDiscoveryTemplate.msi** from **go.microsoft.com/fwlink/?LinkID=244308** to a temporary location.
2. Run the .msi to copy SMASH Library MPB file to the user/default location.
3. Launch the OpsMgr 2012 console.
4. From the navigation pane, click **Administration.**
5. Expand **Administration**, right-click **Management Packs**, and select **Import Management Packs.**
6. Click **Add → Add from disk**.
7. Type the location details or navigate to the location where you downloaded the Microsoft's SMASH Library MPB file.
8. Select the MPB file and click **Open**.

   The **Import Management Packs screen** appears with the template displayed in the **Import List**.
9. Click **Install.**

   NOTE: To discover a Dell system using the Agent-free Monitoring feature, the Dell Connections License Server URL has to be configured and setup. For more information, see Configuring Dell Connections License Manager URL.

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Accessing Documents From Dell Support Site

To access the documents from Dell Support site:

1. Go to **dell.com/support/manuals**.
2. In the **Tell us about your Dell system** section, under **No**, select **Choose from a list of all Dell products** and click **Continue**.
3. In the **Select your product type** section, click **Software and Security**.
4. In the **Choose your Dell Software** section, click the required link from the following:

   - **Client System Management**
   - **Enterprise System Management**
   - **Remote Enterprise System Management**
   - **Serviceability Tools**

5. To view the document, click the required product version.

   NOTE: You can also directly access the documents using the following links:

   - For Enterprise System Management documents — **dell.com/openmanagemanuals**
   - For Remote Enterprise System Management documents — **dell.com/esmmanuals**
   - For Serviceability Tools documents — **dell.com/serviceabilitytools**
   - For Client System Management documents — **dell.com/OMConnectionsClient**
   - For OpenManage Connections Enterprise systems management documents — **dell.com/OMConnectionsEnterpriseSystemsManagement**
   - For OpenManage Connections Client systems management documents — **dell.com/OMConnectionsClient**