


# **Dell Server Management Pack Suite Version 6.1.1 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 product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

<b>Chapter 1: Overview.....</b>	<b>5</b>
Terms used in this document.....	5
Prerequisites.....	6
Monitoring Features supported by Dell Server Management Pack Suite.....	6
Supported OpsMgr versions for Monitoring Features .....	6
<b>Chapter 2: Installing the Dell Server Management Pack Suite.....</b>	<b>8</b>
Installing Dell Server Management Pack Suite using the Installer.....	8
Upgrading Dell Server Management Pack Suite from previous versions.....	9
Upgrading from Dell Server Management Pack Suite version 6.1.....	9
Upgrading from Dell Server Management Pack Suite version 6.0.....	9
Upgrading from version 5.2.0 and prior versions.....	9
Upgrading from previous Operations Manager.....	9
Upgrading from OpsMgr 2012 SP1 to OpsMgr 2012 R2.....	9
Upgrading from OpsMgr 2012 to OpsMgr 2012 SP1.....	9
Upgrading from OpsMgr 2007 R2 to OpsMgr 2012.....	10
Using the Repair option in the Installer.....	10
Uninstalling the Dell Server Management Pack Suite.....	10
Removing Dell Server Management Pack Suite using the Installer.....	10
Uninstalling the Dell Server Management Pack Suite using Windows Control Panel.....	11
Configuring OpsMgr 2012 to monitor Traps and Trap-Based Unit Monitors.....	11
Creating Run As Account for SNMP monitoring.....	12
Associating Multiple Run As Accounts.....	12
<b>Chapter 3: Installing Monitoring Features.....</b>	<b>13</b>
Importing Dell Server Management Packs into OpsMgr.....	13
Feature Management Dashboard.....	13
Importing Monitoring Features using Feature Management Dashboard.....	14
Upgrading Monitoring Features using the Feature Management Dashboard.....	15
Removing Monitoring Features using Dell Feature Management Dashboard.....	16
<b>Chapter 4: Agent-based Monitoring Feature.....</b>	<b>18</b>
Management Packs.....	18
Management Server (MS) requirements.....	18
Supported Operating Systems.....	18
Software requirements.....	19
Management Server Action Account (MSAA).....	19
Managed System requirements.....	19
Feature Management tasks.....	20
<b>Chapter 5: Agent-free Monitoring Feature.....</b>	<b>21</b>
Management Packs.....	21
Management Server (MS) requirements.....	21
Managed System requirements.....	22

Feature Management tasks.....	22
<b>Chapter 6: DRAC Monitoring Feature.....</b>	<b>24</b>
Management Packs.....	24
Management Server (MS) requirements.....	24
DRAC monitoring requirement.....	25
Feature Management tasks.....	25
<b>Chapter 7: Chassis Monitoring Feature .....</b>	<b>26</b>
Management Packs.....	26
Management Server (MS) requirements.....	26
Software requirements.....	26
Chassis Monitoring requirements.....	27
Feature Management tasks.....	27
<b>Chapter 8: Chassis Modular Server Correlation Feature.....</b>	<b>29</b>
Management Packs.....	29
Management Server (MS) requirements.....	29
Chassis Modular Server Correlation monitoring requirements.....	29
Feature Management tasks.....	30
<b>Chapter 9: Troubleshooting.....</b>	<b>31</b>
Feature Management Dashboard does not populate.....	31
Feature Management Dashboard task fails.....	31
Feature Management alerts.....	32
Health Service of the Feature Management Host Server is nonfunctional.....	32
<b>Chapter 10: Appendix.....</b>	<b>33</b>
Installing the Web Services Management (WS-Man) and SMASH Device Template.....	33
Associate Run As-Account task — Agent-free Monitoring Feature.....	33
<b>Chapter 11: Accessing support content from the Dell EMC support site.....</b>	<b>34</b>

# Overview

This guide provides information to install, configure, and use Dell Server Management Pack Suite version 6.1.1

The integration of Dell Server Management Pack Suite version 6.1.1 with Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager, Microsoft System Center 2012 Operations Manager, or Microsoft System Center Operations Manager 2007 R2 environment allows you to manage, monitor, and ensure the availability of your Dell devices.

**CAUTION:** To avoid data corruption, data loss, or both; perform the procedures in this document only if you have proper knowledge and experience in using Microsoft Windows operating system and 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 Management Pack Suite Installer, Installation Guide, and Release Notes files are packaged in a self-extracting executable `Dell_Server_Management_Pack_Suite_v6.1.1_Axx.exe` (where xx is the Dell Server Management Pack Suite version 6.1.1 release number) file. You can download the executable from [dell.com/support](http://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/OMConnectionsEnterpriseSystemsManagement](http://dell.com/OMConnectionsEnterpriseSystemsManagement).

## Topics:

- [Terms used in this document](#)
- [Prerequisites](#)
- [Monitoring Features supported by Dell Server Management Pack Suite](#)
- [Supported OpsMgr versions for Monitoring Features](#)

## Terms used in this document

**Table 1. Terms used in this document**

Term	Refers to
OpsMgr	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.
OpsMgr 2012	Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager, and Microsoft System Center 2012 Operations Manager, unless otherwise specified.
Dell Remote Access Controller (DRAC)	iDRAC6, iDRAC7, and iDRAC8, unless otherwise specified.
Chassis	Chassis Management Controller (CMC), unless otherwise specified.
Servers	Servers and Rack Workstations, unless otherwise specified.
Agent-based monitoring	Servers and Rack Workstation Agent-based Monitoring, unless otherwise specified.
Agent-free monitoring	Servers and Rack Workstations Agent-free Monitoring, unless otherwise specified.

# Prerequisites

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

- Install one of the following versions of 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](http://support.microsoft.com/kb/2802159).
  - 2012
  - 2007 R2
- Microsoft .NET version 3.5.

# Monitoring Features supported by Dell Server Management Pack Suite

**Table 2. Dell Server Management Pack Suite Features**

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

# Supported OpsMgr versions for Monitoring Features

**Table 3. Supported OpsMgr versions for Monitoring Features**






Monitoring Features	OpsMgr	
	2012 R2/ 2012 SP1/ 2012	2007 R2
<b>Servers and Rack Workstations Agent-based Monitoring</b>		
<b>Servers and Rack Workstations Agent-free Monitoring</b>		
<b>DRAC</b>		
<b>Chassis</b>		
Scalable		
Detailed		
<b>Chassis Modular Server Correlation</b>		
Chassis Modular Server Correlation		

**Table 3. Supported OpsMgr versions for Monitoring Features (continued)**

Monitoring Features	OpsMgr	
	2012 R2/ 2012 SP1/ 2012	2007 R2
Chassis Shared Storage Component Correlation with Dell Modular Servers		

## Supported Dell Hardware devices for OpsMgr versions

**Table 4. 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: <ul style="list-style-type: none"> <li>• Chassis Monitoring Feature <ul style="list-style-type: none"> <li>○ Scalable</li> </ul> </li> <li>• Chassis Modular Server Correlation Monitoring Feature</li> </ul>
Dell PowerEdge FX2		

# Installing the Dell Server Management Pack Suite

The topics in this section describe how to install, upgrade, and uninstall the Dell Server Management Pack Suite.

## Topics:

- [Installing Dell Server Management Pack Suite using the Installer](#)
- [Upgrading Dell Server Management Pack Suite from previous versions](#)
- [Upgrading from previous Operations Manager](#)
- [Using the Repair option in the Installer](#)
- [Uninstalling the Dell Server Management Pack Suite](#)
- [Configuring OpsMgr 2012 to monitor Traps and Trap-Based Unit Monitors](#)

## Installing Dell Server Management Pack Suite using the Installer

### Prerequisites

- NOTE:** Ensure that you have local administration privileges on the management server where Dell Server Management Pack Suite is installed.

### Steps

1. Download the `Dell_Server_Management_Pack_Suite_v6.1.1_Axx.exe` (where xx is the Dell Server Management Pack release number) from [dell.com/support](http://dell.com/support).
2. To extract the contents of the self-extractable zip file, run the `.exe` file and specify a path.
3. Launch the `Dell_Server_Management_Pack_Suite.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**.
7. Click **Install**.
8. 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\6.1.1`.

The following are automatically imported after the installation of Dell Server Management Pack Suite:

- Agent-based monitoring feature.
- Agent-free monitoring feature, if prerequisites are complete.
- Dell Feature Management Pack. The [Feature Management Dashboard](#) is displayed under **Monitoring > Dell** on the OpsMgr console. See the individual monitoring sections for importing the monitoring features.

### Example

- NOTE:** The Agent-free monitoring feature requires the installer to run on all the management servers that are used to monitor the Dell 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\6.1.1\Library`.

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

### Next steps

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.exe` is extracted.


## Upgrading Dell Server Management Pack Suite from previous versions

You can upgrade to Dell Server Management Pack Suite version 6.1.1 using the installer.

### Upgrading from Dell Server Management Pack Suite version 6.1

#### About this task

The installer detects the installed features from Dell Server Management Pack Suite version 6.1, and automatically upgrades the Feature Management Pack to version 6.1.1.

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

### Upgrading from Dell Server Management Pack Suite version 6.0

#### About this task

Upgrading from Dell Server Management Pack Suite version 6.0 to version 6.1.1 is also supported. The installer detects the installed features from Dell Server Management Pack Suite version 6.0, and automatically upgrades the Feature Management Pack to version 6.1.1.

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

### Upgrading from version 5.2.0 and prior versions

Upgrade from Dell Server Management Pack Suite version 5.2.0 or earlier versions to version 6.1.1 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 does not affect 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](http://technet.microsoft.com/en-us/library/dn249707.aspx).

### Upgrading from OpsMgr 2012 to OpsMgr 2012 SP1

Upgrading to OpsMgr 2012 SP1 does not affect 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](http://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](http://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 Repair option in the Installer


### About this task

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

### Steps

1. Run the `Dell_Server_Management_Pack_Suite.exe` file from the extracted location.  
The welcome screen for Dell Server Management Pack Suite 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. Click **Install**.  
A progress screen displays the progress of the installation. Once the installation is completed, the **Installation Completed Successfully** screen is displayed.
5. Click **Finish**.

### Example

 **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

### About this task

To remove Dell Server Management Pack Suite using the installer:

### Steps

1. Run the `Dell_Server_Management_Pack_Suite.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.

### Next steps

 **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](http://technet.microsoft.com/en-us/library/cc974489.aspx).

## Uninstalling the Dell Server Management Pack Suite using Windows Control Panel

### About this task

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

### Steps

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

## Configuring OpsMgr 2012 to monitor Traps and Trap-Based Unit Monitors

### About this task


To monitor traps, and trap-based unit monitors in OpsMgr 2012:

### Steps

1. Launch OpsMgr 2012, and click **Administration**.
2. In the **Administration** pane, browse to **Run As Configuration** → **Profiles**.
3. From the list of available profiles, right-click **SNMP Monitoring Account** and click **Properties**. The **Introduction** screen is displayed.
4. Click **Next**. The **Specify the Run As profile's general properties** screen is displayed.
5. Click **Next**. The **Run As Accounts** screen is displayed.
6. Click **Add**. The **Add a Run As Account** screen is displayed.
7. Select the community string from the **Run As account** drop-down list to discover the devices.
  - NOTE:** Create a Community String **Run As Account** if none is present. For more information, see [Creating Run As Account for SNMP monitoring](#).
  - NOTE:** If you are using multiple Run As Accounts to discover devices, associate each device with its associated Run As Account. For more information, see [Associating multiple Run As Accounts](#).
8. Click **OK**.
9. After the wizard is complete, click **Close**.


## Creating Run As Account for SNMP monitoring

### Steps

1. Launch OpsMgr 2012, and click **Administration**.
2. In the **Administration** pane, browse to **Run As Configuration > Accounts**.
3. Right-click **Accounts** and click **Create Run As Account**.  
The **Introduction** screen is displayed.  
 **NOTE:** For more information on Run As Account for Network Monitoring, see the Microsoft TechNet site at [technet.microsoft.com/en-us/library/hh212920.aspx](http://technet.microsoft.com/en-us/library/hh212920.aspx).
4. Click **Next**.  
The **General Properties** screen is displayed.
5. Select **Community String** from the **Run As Account type:** drop-down list.
6. Type the community string name in the **Display name:** text box and click **Next**.
7. Provide the account credentials in the **Community string** text box and click **Next**.  
The **Distribution Security** screen is displayed.
8. Select the **Less secure - I want the credentials to be distributed automatically to all managed computers** option, and click **Create**.
9. After the wizard is complete, click **Close**.

## Associating Multiple Run As Accounts

### Steps

1. Follow step 1 to step 6 under [Configuring OpsMgr 2012 to monitor Traps and Trap-Based Unit Monitors](#).
2. On the **Add a Run As Account** screen, select the **A selected class, group, or object** option.
3. Click **Select > Class**.  
The **Class Search** screen is displayed.  
 **NOTE:** You can also associate the community string **Run As Account** with Object and Group. For more information, see the Microsoft documentation for OpsMgr 2012 at [technet.microsoft.com](http://technet.microsoft.com).
4. In the **Filter by (optional)** text box enter the class name. Depending on the type of device, type **Dell Server**, **Dell CMC**, **Dell DRAC/MC**, or **Dell RAC** classes.
5. Click **Search**.
6. Under **Available items**, select the class you want to add.
7. Click **OK**.
8. On the **Add Run As account** screen, click **OK**.
9. Repeat step 2 to step 8 for each type of class you want to manage.
10. Click **Save**.
11. After the wizard is complete, click **Close**.

# Installing 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.

## Topics:

- [Importing Dell Server Management Packs into OpsMgr](#)
- [Feature Management Dashboard](#)

## Importing Dell Server Management Packs into OpsMgr

### About this task

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

### Steps

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\6.1.1**.
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**.

## Feature Management Dashboard

The **Feature Management Dashboard** provides facilities for the configuration of Dell Server Management Pack Suite monitoring features to monitor the various Dell systems — Dell servers, Dell Sleds, Dell Precision Racks, Dell Remote Access Controllers (DRAC), Dell PowerEdge FX2, Dell PowerEdge VRTX, Dell PowerEdge M1000e, and integrated DRAC (iDRAC).

- [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 Feature Management Dashboard

## About this task

**Feature Management Dashboard** allows you to view the available Dell Server Management Pack Suite monitoring features and configure them automatically for importing, upgrading, and removing the management packs 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.

To import the monitoring features:

## Steps

1. Launch the OpsMgr console.
2. From the **Navigation** pane, click **Monitoring**.
3. Expand **Monitoring > Dell > Feature Management Dashboard**.

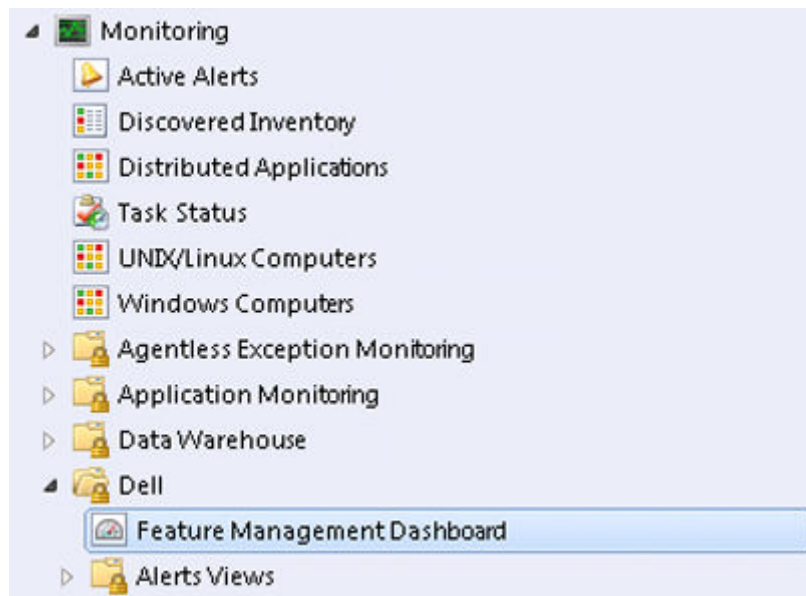


Figure 1. Monitoring pane

On the **Feature Management Dashboard** pane you can view the list of monitoring features installed, the version currently in use, the version you can upgrade to, the level of monitoring, total node count, and required licenses.

Feature Name	Description	Monitoring Level	In Use Version	Available Version	Total Node Count	Required Licens...	Licensed Feature
Chassis Modular Server Correlation	Perform correlat...	Not Installed	Not Installed	6.1.1	Not Applicable	Not Applicable	No
Chassis Monitoring	Monitor Dell ch...	Not Installed	Not Installed	6.1.1	0	Not Applicable	No
DRAC Monitoring	Monitor Dell re...	Not Installed	Not Installed	6.1.1	0	Not Applicable	No
Server and Rack Workstation Agent...	Monitor Dell Po...	Scalable Feature	6.1.1	6.1.1	1	Not Applicable	No
Server and Rack Workstation Agent-f...	Monitor Dell Po...	Scalable Feature	6.1.1	6.1.1	0	0	Yes

Figure 2. Feature Management Dashboard

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

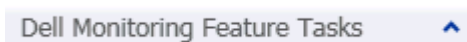
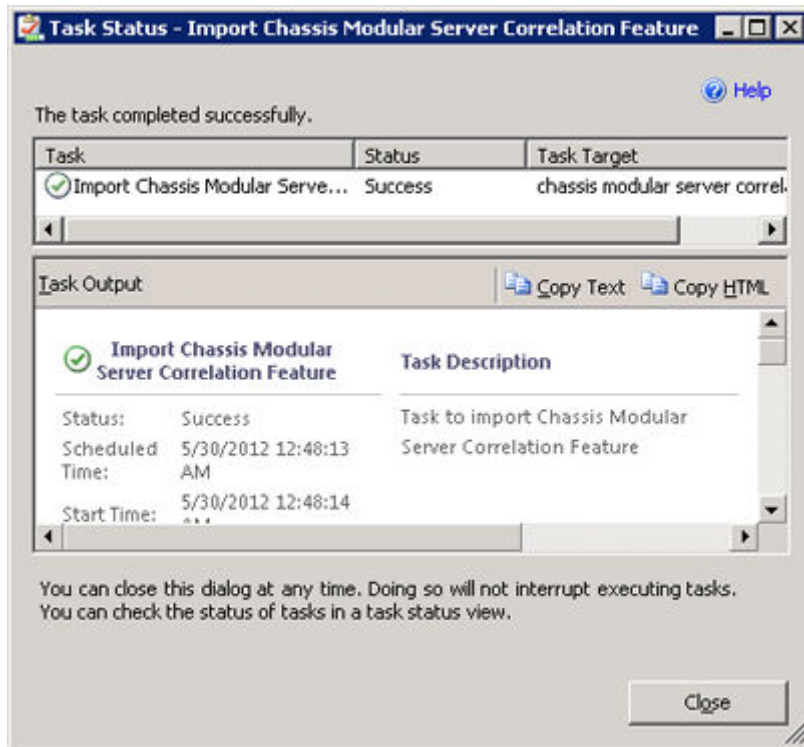


Figure 3. Dell Monitoring Feature Tasks

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**.



**Figure 4. Task Status**

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 Feature Management Dashboard

### Steps

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 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 has to be overridden, which results 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](#).

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 6.1.1.

**Next steps**

**Table 5. Customizing Monitoring Features using Feature Management Dashboard (Scalable vs Detailed)**

Features	Scalable	Detailed
<b>Servers and Rack Workstations Agent-based Monitoring</b>	Inventory and health monitoring at server and component group level.	Detailed inventory and monitoring of the following components: memory, processors, sensors, network interfaces, storage controllers, disks, and volumes. Also, display the BIOS information.
<b>Servers and Rack Workstations Agent-free Monitoring</b>	<ul style="list-style-type: none"> <li>• Inventory up to individual components.</li> <li>• Health monitoring only at server and component group level.</li> </ul>	<ul style="list-style-type: none"> <li>• Inventory and health monitoring of individual components.</li> <li>• View metrics for power, temperature, network interface cards processor, memory, CUPS (Computer Usage per Second), PCIeSSD wear level and IO performance metrics.</li> </ul>
<b>Chassis Monitoring</b>	<ul style="list-style-type: none"> <li>• Chassis inventory.</li> <li>• Chassis slots summary.</li> <li>• Health monitoring of chassis.</li> </ul>	Inventory and health monitoring of individual chassis components.
<b>DRAC Monitoring</b>	<ul style="list-style-type: none"> <li>• iDRAC inventory</li> <li>• iDRAC health monitoring</li> </ul>	Not Applicable.
<b>Chassis Modular Server Correlation</b>	Correlate Dell Modular servers with Chassis (view inventory and health from chassis up to components inside Dell Modular server).	Not Applicable.



## Removing Monitoring Features using Dell Feature Management Dashboard

**About this task**

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:


**Steps**

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.

### Results

 **NOTE:** Performing Remove Monitoring Feature task in **Feature Management Dashboard** may fail if there are overrides referenced to custom group, or instances. In such a case, ensure to remove the overrides that are associated to custom group, or instances.

# Agent-based Monitoring Feature

Agent-based monitoring feature supports the discovery, and monitoring of Dell PowerEdge monolithic and modular servers, 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 6.1.1 for Microsoft System Center Operations Manager Release Notes*.

The Dell Server Management Pack Suite installer automatically imports the Agent-based monitoring feature.

## Topics:

- [Management Packs](#)
- [Management Server \(MS\) requirements](#)
- [Managed System requirements](#)
- [Feature Management tasks](#)

## 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 Dell Server Management Packs into OpsMgr](#).

**Table 6. Agent-based Monitoring Feature and required Management Packs**

Feature	Default Location of Management Packs	Required Management Packs
<b>Servers and Rack Workstations Agent-based Monitoring</b>	<p><b>Library</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Library</p> <p><b>Scalable and Detailed Management Packs</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Server Monitoring</p>	<p><b>Library</b></p> <ul style="list-style-type: none"> <li>• Dell.Connections.HardwareLibrary.mp</li> <li>• Dell.OperationsLibrary.Server.mp</li> </ul> <p><b>Scalable Feature</b></p> <ul style="list-style-type: none"> <li>• Dell.Model.Server.mp</li> <li>• Dell.WindowsServer.Scalable.mp</li> <li>• Dell.View.Server.mp</li> <li>• (Optional) Dell.WindowsServer.InformationAlertsOn.mp</li> </ul> <p><b>NOTE:</b> Import Dell.WindowsServer.InformationAlertsOn.mp only if you want to receive Informational Alerts.</p> <p><b>Detailed Feature</b></p> <ul style="list-style-type: none"> <li>• Dell.WindowsServer.Detailed.mp and all scalable management packs.</li> </ul>

## 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](http://technet.microsoft.com/en-us/library/hh205990.aspx).

- For OpsMgr 2007 R2, see [technet.microsoft.com/en-us/library/bb309428\(en-us\).aspx](http://technet.microsoft.com/en-us/library/bb309428(en-us).aspx).

## Software requirements

**Table 7. Prerequisites for Software**

Software	Purpose
(Optional) DRAC tools from Dell OpenManage Server Administrator (Server Administrator)	To inventory and monitor Dell server's and Rack Workstation's iDRAC and its NIC.
(Optional) Dell License Manager (for iDRAC7 or later systems only)	To launch <b>Dell License Manager</b> console, deploy licenses and collect reports; install Dell License Manager on the management server. For more information, see <i>Dell License Manager User's Guide</i> at <a href="http://dell.com/support/home">dell.com/support/home</a> .
(Optional) Dell OpenManage Power Center	To launch Dell OpenManage Power Center console. To monitor and manage power consumption, and temperature in the data center using the OpsMgr console, install Dell OpenManage Power Center on the management server. For more information, see <i>Dell OpenManage Power Center Installation Guide</i> at <a href="http://dell.com/support/home">dell.com/support/home</a> .
(Optional) Baseboard Management Controller (BMC) Management Utility	To 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, and Dell License Manager from *Dell Systems Management Tools and Documentation* media, or download it from [dell.com/support](http://dell.com/support).

## Management Server Action Account (MSAA)

**Table 8. MSAA privileges**

Feature	User Privilege
DRAC discovery and corresponding DRAC console launch	Admin or Power user.
Clear ESM log	Admin or Power user.  Alternatively, if the MSAA has normal user privileges, operators can, instead of selecting <b>Use the predefined Run as Account</b> , enter task credentials with Power User (or higher) privileges to run the <b>Clear ESM Logs</b> task.

## Managed System requirements

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

- 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 OpenManage Server Administrator Installation Guide* at [dell.com/support/home](http://dell.com/support/home).

# Feature Management tasks

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

- i** **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.
- i** **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
<b>Import Agent-based Detailed Feature</b>	Imports the detailed feature of Agent-based monitoring feature.
<b>Import Agent-based Scalable Feature</b>	Imports the scalable feature of Agent-based monitoring feature.
<b>Set Agent-based as Preferred Monitoring Method</b>	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.
<b>Set to Agent-based Scalable Feature</b>	If the Detailed feature is running on the system, the <b>Feature Management Dashboard</b> 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.
<b>Set to Agent-based Detailed Feature</b>	If the Scalable feature is running on the system, the <b>Feature Management Dashboard</b> 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.
<b>Set Informational Alerts On</b>	Informational alerts are turned on when the Agent-based Scalable monitoring is in use.
<b>Set Informational Alerts Off</b>	Informational alerts are turned off when the Agent-based Scalable monitoring is in use.
<b>Refresh Dashboard</b>	Updates the <b>Feature Management Dashboard</b> .
<b>Refresh Node Count</b>	Updates the node count.
<b>Remove Agent-based Monitoring Feature</b>	Removes the Agent-based monitoring feature.

# Agent-free Monitoring Feature

Agent-free monitoring feature provides detailed inventory and monitoring of Dell PowerEdge servers (12th generation of Dell PowerEdge servers or later) through the server's iDRAC; using WSMAN and SNMP.

Dell Server Management Pack Suite installer automatically imports the Agent-free monitoring feature if the prerequisites are met.

## Topics:

- [Management Packs](#)
- [Management Server \(MS\) requirements](#)
- [Managed System requirements](#)
- [Feature Management tasks](#)

## Management Packs

After the Dell Server Management Pack Suite management packs are 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](#).

**Table 10. Agent-free monitoring feature and required Management Packs**

Feature	Default Location of Management Packs	Required Management Packs
<b>Servers and Rack Workstations Agent-free Monitoring</b>	<p><b>Library</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Library</p> <p><b>Scalable and Detailed Management Packs</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Server Monitoring</p>	<p><b>Library</b></p> <ul style="list-style-type: none"> <li>• Dell.Connections.HardwareLibrary.mp</li> <li>• Dell.OperationsLibrary.Common.mp</li> </ul> <p><b>Scalable Feature</b></p> <ul style="list-style-type: none"> <li>• Dell.Model.Server.mp</li> <li>• Dell.OperationsLibrary.Server.mp</li> <li>• Dell.Server.OOB.mp</li> <li>• Dell.View.Server.mp</li> </ul> <p><b>Detailed Feature</b></p> <ul style="list-style-type: none"> <li>• Dell.Server.OOB.DetailedMonitoringOn.mp and all scalable management packs.</li> </ul>

## Management Server (MS) requirements

**Table 11. Prerequisites for software**


Software	Purpose
(Required) OpsMgr 2012 or later	Agent-free monitoring feature is available only on management servers running OpsMgr 2012.
(Required) SMASH Library MPB from Microsoft	Agent-free monitoring feature requires SMASH library MPB from Microsoft to discover Dell servers. For more information, see <a href="#">Installing the WS-Management and SMASH Device Template</a> .

**Table 11. Prerequisites for software (continued)**

Software	Purpose
(Optional) Dell License Manager (for iDRAC7 or later systems only)	To launch <b>Dell License Manager</b> console, deploy licenses and collect reports; install Dell License Manager on the management server. For more information, see <i>Dell License Manager User's Guide</i> at <a href="http://dell.com/support/home">dell.com/support/home</a> .
(Optional) Dell OpenManage Power Center	To launch Dell OpenManage Power Center console. To monitor and manage power consumption, and temperature in the data center using the OpsMgr console, install Dell OpenManage Power Center on the management server. For more information, see <i>Dell OpenManage Power Center Installation Guide</i> at <a href="http://dell.com/support/home">dell.com/support/home</a> .
WSMAN connectivity to iDRAC	To discover servers through Agent-free monitoring.
MaxEnvelopeSizekb value in WinRM setting is higher (for Windows Server 2008 R2 only)	To discover servers through Agent-free monitoring, have sufficient envelope size to accommodate WinRM responses.


## Managed System requirements


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

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

## Feature Management tasks

The following table lists the Agent-free Monitoring feature tasks available on the **Feature Management Dashboard**. Some tasks listed in the Feature Management tasks table 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
<b>Import Agent-free Scalable Feature</b>	Imports the scalable feature of Agent-free monitoring feature.
<b>Import Agent-free Detailed Feature</b>	Imports the detailed feature of Agent-free monitoring feature.
<b>Set to Agent-free Scalable Feature</b>	If the detailed feature is running on the system, the <b>Feature Management Dashboard</b> 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.
<b>Set to Agent-free Detailed Feature</b>	If the scalable feature is running on the system, the <b>Feature Management Dashboard</b> 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.

**Table 12. Feature Management tasks (continued)**

<b>Tasks</b>	<b>Description</b>
<b>Set Agent-free as Preferred Monitoring Method</b>	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.
<b>Associate Run-As Account</b>	This task associates the Run As Account used for SMASH discovery with all Dell Server objects, required for health monitoring. For more information, see <a href="#">Associate Run As-Account task</a> .
<b>Remove Agent-free Monitoring Feature</b>	Removes the Agent-free monitoring feature.
<b>Refresh Dashboard</b>	Updates the <b>Feature Management Dashboard</b> .
<b>Refresh Node Count</b>	Updates the node count.

# DRAC Monitoring Feature

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

## Topics:

- [Management Packs](#)
- [Management Server \(MS\) requirements](#)
- [Feature Management tasks](#)

## Management Packs

After the Dell Server Management Pack Suite management packs are successfully imported, the management packs listed in the DRAC monitoring feature and required Management Packs table should appear in the **Administration** pane of the OpsMgr console. For more information, see [Importing the Dell Server Management Packs into OpsMgr](#).

**Table 13. DRAC monitoring feature and required Management Packs**

Feature	Default Location of Management Packs	Required Management Packs
<b>DRAC Monitoring</b>	<p><b>Library</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Library</p> <p><b>Scalable and Detailed Management Packs</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Remote Access Monitoring</p>	<p><b>Library</b></p> <ul style="list-style-type: none"> <li>• Dell.Connections.HardwareLibrary.mp</li> <li>• Dell.OperationsLibrary.Common.mp</li> </ul> <p><b>Management Packs</b></p> <ul style="list-style-type: none"> <li>• Dell.DRAC.OM07.mp — OpsMgr 2007 R2</li> <li>• Dell.DRAC.OM12.mp — OpsMgr 2012</li> <li>• Dell.Model.DRAC.mp</li> <li>• Dell.OperationsLibrary.DRAC.mp</li> <li>• Dell.View.DRAC.mp</li> </ul>

## Management Server (MS) requirements

**Table 14. Software requirements**

Software	Purpose
(Optional) Dell License Manager (for iDRAC7 systems only)	To deploy licenses and collect reports from the management server. To launch <b>Dell License Manager</b> console, install Dell License Manager on the management server. For more information, see <i>Dell License Manager User's Guide</i> at <a href="http://dell.com/support/home">dell.com/support/home</a> .
(Optional) Dell OpenManage Power Center	To launch <b>Power Center</b> console, install <b>Dell OpenManage Power Center</b> on the management server. For more information, see <i>Dell OpenManage Power Center Installation Guide</i> at <a href="http://dell.com/support/home">dell.com/support/home</a> .

## 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 in the **Feature Management Dashboard**. Some tasks listed in the Feature Management tasks table 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
<b>Import DRAC Monitoring Feature</b>	Enables the DRAC monitoring feature.
<b>Upgrade DRAC Monitoring Feature</b>	Upgrades to the latest version of the DRAC monitoring feature.
<b>Refresh Dashboard</b>	Updates the <b>Feature Management Dashboard</b> .
<b>Refresh Node Count</b>	Updates the node count.
<b>Remove DRAC Monitoring Feature</b>	Removes the DRAC monitoring feature.

# Chassis Monitoring Feature

Chassis monitoring feature supports discovery and monitoring of Chassis Management Controller (CMC) on Dell PowerEdge FX2/ FX2s chassis, Dell PowerEdge VRTX chassis, and Dell PowerEdge M1000e chassis using SNMP and WS-Man.

Chassis monitoring feature also supports Detailed monitoring of individual chassis components in OpsMgr 2012.

## Topics:

- [Management Packs](#)
- [Management Server \(MS\) requirements](#)
- [Feature Management tasks](#)

## 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. Required Management Packs**

Feature	Default Location of Management Packs	Required Management Packs
<b>Chassis Monitoring</b>	<p><b>Library</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Library</p> <p><b>Scalable and Detailed Management Packs</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Chassis Monitoring</p>	<p><b>Library</b></p> <ul style="list-style-type: none"> <li>• Dell.Connections.HardwareLibrary.mp</li> <li>• Dell.OperationsLibrary.Common.mp</li> </ul> <p><b>Scalable Feature</b></p> <ul style="list-style-type: none"> <li>• Dell.CMC.OM07.mp — OpsMgr 2007 R2</li> <li>• Dell.CMC.OM12.mp — OpsMgr 2012</li> <li>• Dell.Model.Server.mp</li> <li>• Dell.OperationsLibrary.CMC.mp</li> <li>• Dell.View.CMC.mp</li> </ul> <p><b>Detailed Feature</b></p> <ul style="list-style-type: none"> <li>• Dell.Chassis.Detailed.mp and all scalable management packs.</li> </ul>

## Management Server (MS) requirements

### Software requirements

**Table 17. Software requirements**

Software	Purpose
DRAC tools from Dell OpenManage Server Administrator	<ul style="list-style-type: none"> <li>• To discover Chassis and Chassis Slot Summary and Server Modules for CMC Chassis</li> <li>• Chassis Detailed Monitoring</li> </ul>

## 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).
- For slot discovery and correlation to work; enable Remote Access Controller Admin (RACADM) on CMC devices, and CMC module on Dell PowerEdge VRTX devices. For more information, see *RACADM Command Line Reference Guide for iDRAC7 and CMC* available at [dell.com/support/home](http://dell.com/support/home).
- 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 required for accessing the Dell CMCs, and associate it to the profiles — **Dell CMC Login Account** Run As Profiles.

**NOTE:** For the modular server slot correlation, and slot-discovery features to function properly; upgrade systems using Server Administrator 7.2 DRAC tools to Server Administrator 7.4 DRAC tools.

## Configuring Dell Chassis Management Controller feature for Correlating Server Modules with Chassis Slot Summary

### About this task

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

### Steps

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 *Dell Server Management Pack Suite Version 6.1.1 for Microsoft System Center Operations Manager User's Guide* at [dell.com/OMConnectionsEnterpriseSystemsManagement](http://dell.com/OMConnectionsEnterpriseSystemsManagement).

**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 in the Feature Management tasks table 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**

<b>Tasks</b>	<b>Description</b>
<b>Import Chassis Monitoring Scalable Feature</b>	Imports the chassis monitoring scalable feature.
<b>Import Chassis Monitoring Detailed Feature</b>	Imports the chassis monitoring detailed feature.
<b>Set to Chassis Scalable Feature</b>	If the Detailed feature is running on the system, the <b>Feature Management Dashboard</b> 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.
<b>Set to Chassis Detailed Feature</b>	If the scalable feature is running on the system, the <b>Feature Management Dashboard</b> switches from the scalable feature to the detailed feature.
<b>Remove Chassis Monitoring Feature</b>	Removes the chassis monitoring feature (both scalable and detailed features).
<b>Refresh Node Count</b>	Updates the node count.
<b>Refresh Dashboard</b>	Updates the <b>Feature Management Dashboard</b> .

# Chassis Modular Server Correlation Feature

Chassis Modular Server Correlation feature supports:

- Correlation of Dell Modular Servers with Chassis slots.  
 ⓘ **NOTE:** CMC slot discovery is disabled by default. Hence, enable CMC slot discovery for the correlation feature to work.
- Correlation of Chassis Shared Storage components with Dell servers.  
 ⓘ **NOTE:** Imports Chassis detailed monitoring for the correlation of chassis shared components with Dell servers.

## Topics:

- [Management Packs](#)
- [Management Server \(MS\) requirements](#)
- [Feature Management tasks](#)

## 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](#).

**Table 19. Chassis Modular Server Correlation monitoring feature and required Management Packs**

Feature	Default Location of Management Packs	Required Management Packs
<b>Chassis Modular Server Correlation</b>	<p><b>Library</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\Library</p> <p><b>Management Packs</b></p> <p>C:\Program Files\Dell Management Packs\Server Mgmt Suite\6.1.1\ChassisModular ServerCorrelation</p>	<p><b>Library</b></p> <ul style="list-style-type: none"> <li>• Dell.Connections.HardwareLibrary.mp</li> <li>• Dell.OperationsLibrary.Common.mp</li> </ul> <p><b>Management Packs</b></p> <ul style="list-style-type: none"> <li>• Dell.ChassisModularServer.Correlation.mp</li> </ul>

## Management Server (MS) requirements

### Chassis Modular Server Correlation monitoring requirements

### Chassis Blade correlation in distributed OpsMgr environment

#### About this task

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:

### Steps

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 **Management Server Properties**, click **Security**.
6. Select **Allow this server to act as a proxy and discover managed objects on other computers**.
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 in the Feature Management tasks table 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
<b>Import Chassis Modular Server Correlation Feature</b>	Enables the chassis modular server correlation feature.
<b>Upgrade Chassis Modular Server Correlation Feature</b>	Upgrades to the latest version of the chassis modular server correlation feature.
<b>Remove Chassis Modular Server Correlation Feature</b>	Removes the chassis modular server correlation feature.
<b>Refresh Dashboard</b>	Updates the <b>Feature Management Dashboard</b> .

# Troubleshooting

The following chapter provides information for troubleshooting installation related errors.

## Topics:

- [Feature Management Dashboard does not populate](#)
- [Feature Management Dashboard task fails](#)
- [Feature Management alerts](#)
- [Health Service of the Feature Management Host Server is nonfunctional](#)


## Feature Management Dashboard does not populate

### About this task

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** does not populate.

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. To run the feature management activities, select **FmpHostFqdn** and set the override value to FQDN of the management server.

 **NOTE:** To schedule the feature management workflows in OpsMgr 2007 R2 clustered environment; override the FmpHostFqdn value to the cluster's FQDN.

## Feature Management Dashboard task fails

### About this task

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 fails with the appropriate message.

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

### Steps

1. Launch OpsMgr console and click **Monitoring**.
2. In the **Monitoring** pane, browse to **Dell > Feature Management Dashboard**. **Feature Management Dashboard** 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**. **Override Task Parameters** are 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

**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	<p>The required Dell Device Helper Utility version was not found or the Dell Device Helper Utility is corrupted.</p> <p>A version higher than the required Dell Device Helper Utility version was found.</p> <p>A version lower than the required Dell Device Helper Utility version was found.</p>	Run the Dell Server Management Pack Suite version 6.1.1 installer on the management server.

## Health Service of the Feature Management Host Server is nonfunctional

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 task fails, and **Feature Management Dashboard** is not populated. If such a selected management server is corrupt or health service is not obtained, decommission the management server to remove stale objects. For more information, see [technet.microsoft.com/en-us/library/hh456439.aspx](http://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**.
6. Select **FmpHostFqdn** and set the override value to FQDN of the management server where the feature management activities have to run.

## Appendix

### Topics:

- Installing the Web Services Management (WS-Man) and SMASH Device Template
- Associate Run As-Account task — Agent-free Monitoring Feature

## Installing the Web Services Management (WS-Man) and SMASH Device Template

### About this task


To install the WS-Man and SMASH Device template:

### Steps

1. Download the SMASH Library MPB file — **WS-ManagementAndSMASHDeviceDiscoveryTemplate.msi** from [go.microsoft.com/fwlink/?LinkID=244308](http://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** is displayed with the template in the **Import List**.
9. Click **Install**.

## Associate Run As-Account task — Agent-free Monitoring Feature

Associate Run As-Account task associates the Run As Account used for SMASH discovery with all Dell Server objects, required for health monitoring. This task is available as an option for performing object-level association.

 **WARNING: Perform the Associate Run As-Account task only if necessary. This task affects the configuration of all Dell Server objects. Dell Server Run As Account Association unit monitor automatically performs the object-level association.**

# Accessing support content from the Dell EMC support site

Access supporting content related to an array of systems management tools using direct links, going to the Dell EMC support site, or using a search engine.

- Direct links:
  - For Dell EMC Enterprise Systems Management and Dell EMC Remote Enterprise Systems Management—<https://www.dell.com/esmmanuals>
  - For Dell EMC Virtualization Solutions—<https://www.dell.com/SoftwareManuals>
  - For Dell EMC OpenManage—<https://www.dell.com/openmanagemanuals>
  - For iDRAC—<https://www.dell.com/idracmanuals>
  - For Dell EMC OpenManage Connections Enterprise Systems Management—<https://www.dell.com/OMConnectionsEnterpriseSystemsManagement>
  - For Dell EMC Serviceability Tools—<https://www.dell.com/serviceabilitytools>
- Dell EMC support site:
  1. Go to <https://www.dell.com/support>.
  2. Click **Browse all products**.
  3. From the **All products** page, click **Software**, and then click the required link.
  4. Click the required product and then click the required version.

Using search engines, type the name and version of the document in the search box.