Dell Server Management Pack Suite for Microsoft System Center Operations Manager

Release Notes



Release Type and Definition

The Dell Server Management Pack Suite for Microsoft System Center 2012 R2 Operations Manager, System Center 2012 SP1 Operations Manager, System Center 2012 Operations Manager, and System Center Operations Manager (SCOM) 2007 R2 enables the monitoring of Dell Servers, Dell Remote Access Controllers (DRAC), and Dell Chassis Management Controllers (CMC).

The management packs provide Dell-specific views that you can use to observe and drill down the system status in a network.

Version

6.2

Release Date January 2016

Previous Version 6.1.1

Importance

RECOMMENDED: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current.

What is Supported?

Requirements of operating system (management server, managed system) and supported firmware versions for the monitoring features

Server (Agent-based) Monitoring Feature

Management Server (MS) Requirements:

Supported Operating Systems

Following are the supported operating systems for the management server:

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

Managed System Requirements

To enable Server (Agent-based) Monitoring feature, install any supported Server Administrator version (including the Server Administrator Storage Management Service). The following table lists the supported Server Administrator versions on the managed system and the corresponding features.

Table – Server (Agent-based) Monitoring Requirements

| Feature | v8.1 | v8.2 |
|------------------------------------|------|------|
| | | 10.2 |
| Discovery, inventory, and | Yes | Yes |
| monitoring of Dell servers running | | |
| the Windows operating system | | |
| | | |
| | | |
| Basic network interface attributes | Yes | Yes |
| | | |
| Enriched network interface | Yes | Yes |
| attributes | | |
| Manitaring iDDAC | Voc | Voc |
| Monitoring iDRAC | Yes | Yes |
| View the Express Service code | Yes | Yes |
| · | | |
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Server (Agent-free) Monitoring Feature

Management Server (MS) Requirements

Supported Operating Systems

Following are the supported operating systems for the management server:

 \bullet For OpsMgr 2012 R2, OpsMgr 2012 SP1 and OpsMgr 2012, see technet.microsoft.com/enus/library/hh205990.aspx

Managed System Requirements

Supported Firmware Versions

| iDRAC7 | 12th generation | 1.6x.6x, and 2.xx.xx.xx |
|--------|-----------------|-------------------------|
| iDRAC8 | 13th generation | 2.xx.xx.xx |

Chassis Monitoring Feature

Management Server (MS) Requirements

Supported Operating Systems

Following are the list of supported operating systems for the management server:

Only OpsMgr 2012 versions supports Chassis Detailed edition.

• For OpsMgr 2012 R2, OpsMgr 2012 SP1 and OpsMgr 2012, see technet.microsoft.com/en-us/library/hh205990.aspx.

SCOM 2007 R2 and OpsMgr 2012 versions supports Chassis Scalable edition.

• For OpsMgr 2007 R2, see technet.microsoft.com/en-us/library/bb309428(en-us).aspx

Managed System Requirements

Supported Firmware Versions

| Chassis | Firmware Versions |
|----------|-------------------|
| M1000e | 5.10, 5.11 |
| VRTX | 2.0.4, 2.1 |
| FX2/FX2s | 1.20 and 1.30 |

DRAC Monitoring Feature

Management Server (MS) Requirements

Supported Operating Systems

Following are the supported operating systems for the management server:

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

Managed System Requirements

Supported Firmware Versions

| DRAC | Firmware Versions |
|-------------------------------|-------------------------|
| iDRAC6 Modular | 3.42, and 3.50 |
| iDRAC6 Monolithic | 1.95, and 1.96 |
| iDRAC7 Modular and Monolithic | 1.6x.6x, and 2.xx.xx.xx |
| iDRAC8 | 2.xx.xx.xx |

Chassis Modular Server Correlation Feature

The Chassis Modular Server Correlation feature depends on the Chassis, Modular Server combinations as listed under the specific features above.

What's New?

- Support for Dell branded OEM servers, and Dell OEM Ready servers
- Simplified discovery and monitoring; Chassis and Chassis Modular Server Correlation does not require RACADM utility

Fixes

Issue: If OMSA is not installed; the server's hostname may be reported incorrectly in DRAC inventory. As a result, Server Administrator console launch and Remote Desktop tasks may fail.

Versions Affected

- DRAC Monitoring 6.x

Issue: NIC and Teamed NIC association (Intel) may be reported incorrectly.

Versions Affected

- Server Monitoring (Agent-based) 6.x

Important Notes

Management Pack Suite Structure

The Dell Server Management Pack Suite consists of the following management packs, which are installed in the installation folder.

Dell.FeatureManagement.Pack.mp

 Dell Feature Management Pack (FMP) provides a dashboard to monitor supported Dell Management Pack Suite features, configure/manage licenses, import (scalable/detailed), upgrade, and remove management features. For more information, see the Installation Guide.

Server Monitoring

Dell.WindowsServer.Scalable.mp

 Dell Windows Server Scalable Management Pack for agent-based discovery and monitoring of Dell Servers.

Dell. Windows Server. Detailed.mp

• Dell Windows Server Detailed Management Pack for agent-based detailed discovery and monitoring of Dell Servers and its components.

Dell.WindowsServer.InformationAlertsOn.mp

 Dell Overrides utility for turning ON the Informational Alerts provided in the Dell Windows Server Scalable Management Pack.

Dell.Server.OOB.mp

• Dell Server (Agent-free) Management Pack for agentless server discovery with detailed inventory and monitoring of 12G and 13G Dell Servers on OpsMgr 2012 (RTM, SP1 and R2). Requires licenses and Dell Device Helper Utility to be configured. Refer to the Installation Guide for details.

Dell.Server.OOB.DetailedMonitoringOn.mp

• Dell Server Agent-free Detailed Monitoring On - Overrides MP enable detailed component-level monitoring for the Dell Server (Agent-free) Management Pack.

Dell.Model.Server.mp

• Library file for Server monitoring

Dell.OperationsLibrary.Server.mp

• Library file for Server monitoring

Dell.View.Server.mp

Library file for Server monitoring

Chassis Monitoring

Dell.CMC.OM07.mp

• Dell Chassis Management Controller Management Pack for discovery, monitoring, and trap processing of CMC devices with SCOM 2007 R2.

Dell.CMC.OM12.mp

• Dell Chassis Management Controller Management Pack for discovery, monitoring, and trap processing of CMC devices with OpsMgr 2012 versions. This is the scalable edition.

Dell.Chassis.Detailed

 Detailed edition of the Dell Chassis Management Controller Management Pack with OpsMgr 2012 versions. This management pack supports detailed discovery and monitoring of Dell Chassis and its components.

Dell.Model.CMC.mp

• Library file for CMC monitoring

Dell.OperationsLibrary.CMC.mp

• Library file for CMC monitoring

Dell.View.CMC.mp

• Library file for CMC monitoring

Remote Access Monitoring

Dell.DRAC.OM07.mp

 Dell Remote Access Controller Management Pack for discovery, monitoring and trap processing of DRAC devices with SCOM 2007 R2.

Dell.DRAC.OM12.mp

• Dell Remote Access Controller Management Pack for discovery, monitoring and trap processing of DRAC devices with OpsMgr 2012 versions.

Dell.Model.DRAC.mp

• Library file for DRAC monitoring

Dell.OperationsLibrary.DRAC.mp

• Library file for DRAC monitoring

Dell.View.DRAC.mp

• Library file for DRAC monitoring

Chassis Modular Server Correlation

Dell.ChassisModularServer.Correlation.mp

 Dell Chassis Blade Correlation utility for turning ON the correlation of chassis with discovered modular server blades. This MP requires Dell.Model.Server, Dell.Model.CMC and Dell.WindowsServer.Scalable MPs.This management also supports the correlation of Chassis storage assigned to modular server blades.

Library

Dell.Connections.HardwareLibrary.mp

• Dell Base folder utility for the basic folder structure and root node.

Dell.OperationsLibrary.Common.mp

• Library file used by Dell Management Pack Suite components.

NOTE: The Library folder also contains the DLLs used by the components of the Management Pack Suite.

Server Monitoring (Agent-based)

- The Attribute "Enable Correlation" for "Dell Windows Server Physical and Teamed Relationship Discovery Rule" is set to "False" for all Teamed Network Interface (Enriched) in the Dell Windows Server (Detailed Edition) Management Pack. Set the attribute value to "True", to see the relationships between Physical and Teamed Network Interfaces in the "Complete Diagram View", "Modular Systems Diagram View" and "Monolithic Servers Diagram View"
- The Performance Rules "Total Transmitted Packets", "Received Bytes", "Total Received Packets" and "Transmitted Bytes" are disabled by default for all Physical Network Interface (Enriched) in the Dell Windows Server (Detailed Edition) Management Pack. Enable these rules to generate performance statistics for the Physical Network Interfaces.
- The Performance Rules "Total Transmitted Packets", "Received Bytes", "Total Received Packets" and "Transmitted Bytes" are disabled by default for all Teamed Network Interface (Enriched) in the Dell Windows Server (Detailed Edition) Management Pack. Enable these rules to generate performance statistics for the Teamed Network Interfaces.
- The Dependency Monitor "Dell Server Availability Rollup (from iDRAC)" is disabled by default for all Dell Servers in the Dell Scalable management pack. Enable this monitor to roll up the iDRAC network interface health to the Dell Server health.
- The Performance Rule "Dell Server (Agent-based) Physical Disk (SSD) Performance", is disabled by default for all Physical Disks and is a part of the Dell Windows Server (Detailed Edition)
 Management Pack. Enable this rule to generate performance statistics for the Remaining Rated Endurance Level of the SSDs (Solid State Drives).

Server Monitoring (Agent-free)

- To use the Server Agent-free features, download the Microsoft WS-Management template from the Microsoft download location mentioned in the Dell Server Management Pack Suite Version 6.2 User's Guide.
- Performance rules are disabled by default. Enable "Dell Server Performance rule" to view the Server performance data (temperature, power and Network Interface Card (NIC) and CPU, Memory, IO and CUPS).
- Performance Unit Monitors are disabled by default. Enable the performance unit monitors to get performance health status.
- Health Monitoring for components under Software RAID controllers is not supported. Data required for health monitoring not available from the device for such components.
- Network Link status for PowerEdge FX2/FX2s shows internal NIC connectivity; network cable removal does not affect Network Link status for PowerEdge FX2/FX2s.

Remote Access Monitoring

- The Unit Monitor "Device Status Check" is disabled for all Dell Remote Access Controllers in the Dell Remote Access Controller Management Pack for SCOM 2007 R2.
- 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).

Chassis Monitoring

- In Slot discovery, the slot name for the slots containing FD332 Storage block, will be shown as SLOT-(Slot Number).
- Slot names displayed by CMC Slot Discovery may differ from the slot names shown by the CMC web console.
- The Discovery Rule "Dell Chassis Detailed Discovery" in the Dell Chassis (Detailed Edition) Management Pack discovers and monitors the Chassis components (Storage, Fans, Chassis accounts for the Dell Chassis in your network and have them associated with the "Dell CMC Login Account". For more information on configuring Run As Accounts refer to the User's Guide. This discovery also uses RACADM to connect to the Dell Chassis. The racadm uses Internet Explorer Proxy Settings of SCOM Health Service user account to connect to the CMC Devices. Ensure that Internet Explorer Proxy Settings of the SCOM Health Service user account is configured such that CMC devices are reachable. For instructions on modifying the Internet Explorer settings, see Microsoft KB article 135982.

- The Discovery Rule "Dell CMC Slot Discovery" is disabled for all Dell Chassis Management Controllers in the Dell Chassis Management Controller Management Pack. Enable this rule to discover server modules and free slots for Dell Chassis Management Controllers after you have created Run As Accounts for the CMC devices in your network and associated them with the "Dell CMC Login Account". For more information on configuring Run As Accounts refer to the User's Guide.
- The Unit Monitor "Device Status Check" is disabled for all Dell Chassis Management Controllers in the Dell Chassis Management ControllerManagement Pack for SCOM 2007 R2.
- 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).

Known Issues

Issue (368):

Memory of type DDR4 reported by Server Monitoring (Agent-based) is displayed as "Unknown".

Resolution

None.

Versions Affected

- Server Monitoring (Agent-based) 6.x
- OpenManage Server Administrator 8.x.x

Issue (546218):

If Dell OpenManage Power Center is installed on a port other than the default port 8463, the associated Console Task fails.

Resolution

Install the Dell OpenManage Power Center on default port on the management server.

Versions Affected

Server Monitoring (Agent-based) 6.x

Issue (307678):

Dell Server "Operating System" attribute may not show the trademark and registered symbols properly.

Resolution

None.

Versions Affected

Server Monitoring (Agent-based) 6.x

Issue (310069):

After you remove the management pack, the management pack folders still show up in SCOM console.

Resolution

Close and re-open the SCOM console.

Versions Affected

All.

Issue (406763):

When the network cable is pulled out, iDRAC object may not accurately reflect the state of the iDRAC network interface for modular blade.

Resolution

None.

Versions Affected

- Server Monitoring (Agent-based) 6.x
- iDRAC Modular Firmware all versions

Issue (420180):

After server reboot, it may be possible for the network interface ordering to change, and hence may be mapped to a different network interface name. Performance statistics are collected based on the network interface name, and hence may start collecting for a different network interface.

Resolution

None.

Versions Affected

• Server Monitoring (Agent-based) 6.x

Issue (323381):

With certain firmware versions of the iDRAC6 monolithic device, the firmware version attribute may have a value with a trailing "\n".

Resolution

None.

Versions Affected

- DRAC Monitoring 6.x
- iDRAC6 Monolithic Firmware

Issue (433503):

Temporary files are not removed when racadm tool fails. When remote racadm takes a long time to get server module/free slot information from CMC device, SCOM may terminate the "CMC Slot Discovery" scripts. As a result, you will see "Script or Executable failed to Run" alert in the SCOM Alerts View and some files will be left over in the %windir%\Temp\ChassisRemoteAccess_Logs directory on the management station managing the CMC device. You can ignore the alert and manually remove the temporary files.

Resolution

Remove the temporary files manually.

Versions Affected

Chassis Monitoring 6.x

Issue (554331):

On SCOM 2007 R2 distributed setups, though a FMP task is completed functionally and Task History too shows this as complete, on occasions SCOM may still continue to have task popup in running state.

Resolution

Close the task popup window.

Versions Affected

- Feature Management (6.x)
- SCOM 2007 R2 (Distributed Environment)

Issue (545775):

After the user updates the default port number, CMC/DRAC firmware with version 3.0 returns wrong URL.

Resolution

None.

Versions Affected

- Chassis Monitoring 6.x
- DRAC Monitoring 6.x

Issue (551424):

Servers discovered via Agent-based are shown with the default logical device icon.

Resolution

None.

Versions Affected

Server Monitoring (Agent-based) 6.x

Issue (554882):

When Dell Server Management Pack Suite is installed on one of the management server of a distributed setup, workflows may have propagated to the other management servers that expect the Dell Device Helper utility to be present. This generates a Warning event in both Operations Manager console and Windows event log with id 21406. This may be seen during the uninstallation of Dell Server Management Pack Suite.

Resolution

If required, install Dell Server Management Pack Suite on the remaining management servers of the distributed setup, for more information refer installation guide. Otherwise, ignore the alerts.

Versions Affected

All.

Issue (129331):

The display name of Fan components of the M1000e chassis are the same (they all show 'Dell Fan' as the name).

Resolution

None.

Versions Affected

Chassis Monitoring 6.x

Issue (199431)

Component under Software RAID controller, Inventory for Bus Type and Media Protocol in Virtual Disk are unsupported.

Resolution

Please refer to iDRAC documentation for updated support.

Versions Affected

All.

Issue (405):

If an SSD disk fails, then the Performance views and health for Physical Disks may be shown incorrectly. Also, the SSD disk does not provide the serial number.

Resolution

Remove or replace the failed disk. Wait for the next discovery cycle.

Versions Affected

- Server Monitoring (Agent-based) Detailed Edition 6.x
- OpenManage Server Administrator 8.x.x

| Issue (412): Inventory field Manufacturer for SATA Disks displays incorrectly as "ATA". |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resolution None. |
| Versions Affected |
| Server Monitoring (Agent-free) |
| Issue (537, 567, and 543) Health monitors for Power Supply Group, Memory Group, CPU, and Memory are disabled because the device does not support real-time health for these components. |
| Resolution None. |
| Version Affected Server Monitoring (Agent-free) |
| Issue (564) Unit Monitors for Memory Group Redundancy are disabled. |
| Resolution |
| None. |
| Version Affected |
| Server Monitoring (Agent-based) |
| Issue (533) |

Inventory field Manufacturer for PD shown as "ST9500530" instead of "Seagate".

Resolution

None.

Version Affected Server Monitoring (Agent-free)

Issue (609)

NIC Inventory field for Virtual MAC Address shown as "00:00:00:00:00:00", if Virtual MAC Address has not been configured for the NIC.

Resolution

None.

Versions Affected Server Monitoring (Agent-free) 6.x

Issue (BITS105160)

If no scope is selected in Authoring Pane and Dell.DRAC.OM07 MP is imported, a Dialog Box with message "Object not found" is displayed in OpsMgr.

Resolution

Close the Dialog Box. Select a scope target in the OpsMgr Authoring Pane.

Version Affected DRAC Monitoring

Issue (BITS038761)

While upgrading from SCOM 2007 (with CMC/DRAC) to SCOM 2012, the auto-import of CMC (2012), and DRAC (2012) MPs happens in the second discovery cycle after the upgrade (few cases it upgrades in the first cycle).

Resolution

Apply manually.

Version Affected

DRAC Monitoring 6.x

Chassis Monitoring 6.x

Issue (BITS135710)

Agent-free servers lose their health after Chassis shared storage to blade correlation is performed.

Resolution

None.

Version Affected

Server Monitoring (Agent-free) 6.x

Issue (BITS039066)

Overrides for CMC and DRAC devices, if present in a single custom override MP, are not automatically transferred after SCOM upgrade from 2007 R2 to 2012.

Resolution

Apply manually.

Version Affected

All.

Issue (BITS038154)

Server sub-component display names are not proper.

| Resolution |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| None |
| |
| Version Affected |
| Server Monitoring (Agent-free) 6.x. |
| Issue (BITS039041) |
| While upgrading DRAC MP from 4.1 to 5.0, FMP is designed to transfer all the overrides from DRAC 4.1 mp to DRAC 5.0 MP specific. When the overrides are for the base class "iDRAC", it is mapped to "iDRAC6Monolithic" class alone. The mapping is not done for the "iDRAC6Modular" class. |
| Resolution |
| Apply manually. |
| Versions Affected |
| DRAC Monitoring 6.x |
| |
| Issue (129331) |
| The display name of Fan components of the M1000e chassis are the same (they all show 'Dell Fan' as the name). |
| Resolution |
| Upgrade M1000e firmware to 5.0.1 |
| Versions Affected |
| All. |
| Issue (669) |
| Negotiated Speed of PhysicalDisk shown as 'Not Applicable'. |
| Resolution |
| None. |
| Note. |
| Versions Affected |
| Server Monitoring (Agent-free) 6.x |
| Issue (674) |
| CMOS Battery health is not reflecting correct status when CMOS battery is removed. Health is reported as healthy instead of critical. |
| Resolution |
| None. |
| Versions Affected |

Server Monitoring (Agent-free/Agent-Based) 6.x

Issue (675)

SMBIOS inventory attributes are displayed incorrectly. In BIOS inventory, BIOS Major and Minor versions are displayed as SMBIOS Major & Minor version attributes. Primary BIOS and current language attributes are shown as 'Not Applicable'.

Resolution

None.

Versions Affected

Server Monitoring (Agent-free) 6.x

Issue (678)

Performance graphs are not displayed, if NIC cards in the server do not support NIC statistics information.

Resolution

None.

Versions Affected

Server Monitoring (Agent-free) 6.x

Issue (707)

The attribute "Family" in few processors may populate incorrectly.

Resolution

None.

Versions Affected

Server Monitoring (Agent-based) 6.x

Issue (741 and 742)

The active/ connected connector may display all the hard disks under it, even though few disks are connected to a different connector.

Resolution

None.

Versions Affected

Server Monitoring (Agent-based and Agent-free) 6.x

Issue (743 and 865)

| In some of the 13th generation of PowerEdge servers and C6320, one or more instances of voltage sensors may be missing. |
|-------------------------------------------------------------------------------------------------------------------------|
| Resolution |
| None. |
| Versions Affected |
| Server Monitoring (Agent-free) 6.x |
| Issue (827) |
| Even after removing the power supply module, the overall enclosure sensor status may still be displayed as Healthy. |
| Resolution |
| None. |
| Versions Affected |
| Server Monitoring (Agent-based) 6.x |
| Issue (842) |
| IPV4 Gateway IP of disconnected NIC, may display same value of connected NIC. |
| Resolution |
| None. |
| Versions Affected |
| Server Monitoring (Agent-free) 6.x |
| Issue (862) |
| PCIe devices displays product name instead of manufacturer's name, which are connected in PCI slots. |
| Resolution |
| None. |
| Versions Affected |
| Chassis Monitoring (Detailed) 6.x |
| Issue (863) Chassis may go to unresponsive state after some time, when it configured with AD user. |
| Resolution Change IP manually via front chassis LCD panel. |
| Versions Affected Chassis Monitoring (Detailed) 6.x, Firmware 1.30 |
| Issue (876) |

In Chassis inventory, the IP address may not be updated for the IO module.

Resolution

None.

Versions Affected

Chassis Monitoring (Detailed), Firmware 5.0.1

Issue (895)

If FM120 server is removed from SCOM monitoring, the main server component, and the logical FM component under which the FM120 server was grouped may still be shown.

Resolution

None.

Versions Affected

Server Monitoring (Agent-Free & Agent-Based) 6.x

Issue (899)

If Modular servers, which are correlated to a Chassis slot, are removed from SCOM monitoring, the main server object may still be shown.

Resolution

None.

Versions Affected

Chassis Modular Server Correlation,

Server Monitoring (Agent-Free & Agent-Based) 6.x

Issue (904)

Health of power supply instances may incorrectly show as warning, when power supply modules is set to Standby mode.

Resolution

None.

Versions Affected

Chassis Monitoring (Detailed) 6.x

Issue (921)

Slot summary information may be shown incorrectly, occasionally.

Resolution

None.

Versions Affected

Chassis Monitoring (Detailed) 6.x

Issue (927)

Fan instances may be missing from Chassis detailed inventory occasionally.

Resolution

None.

Versions Affected

Chassis Monitoring (Detailed) 6.x

Issue (930)

Information alert may not be generated, when the CMC controller is re-inserted.

Resolution

None.

Versions Affected

Chassis Monitoring (Scalable) 6.x

Issue (931)

For HostNIC, SDCard and License component inventory, the 'Display Name' Attribute will be displayed twice

Resolution

None.

Versions Affected Server Monitoring (Agent-Free) 6.2

Installation

To install the Dell Server Management Pack Suite, run the installer executable. For detailed installation, pre-requisites, configuration, upgrade and uninstallation instructions, refer to the Installation Guide.

Contacting Dell

Note: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- 1. Visit www.dell.com/support.
- 2. Select your support category.
- 3. Verify your country or region in the **Choose a Country/Region** drop-down menu at the top of page.
- 4. Select the appropriate service or support link based on your need.

For information about documentation support:

- 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 & 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:

- o For Client System Management documents dell.com/OMConnectionsClient
- o For Enterprise System Management documents **dell.com/openmanagemanuals**
- o For Remote Enterprise System Management documents **dell.com/esmmanuals**
- o For Serviceability Tools documents **dell.com/serviceabilitytools**

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