

# Systems Management Tools And Documentation

## Version 8.4

### 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.

## Copyright

© 2016 Dell Inc. All rights reserved. This product is protected by U.S. and international copyright and intellectual property laws. Dell and the Dell logo are trademarks of Dell Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

# Contents

<b>1 About.....</b>	<b>4</b>
Systems Management Software DVDs.....	4
Managed system and management station.....	4
Systems Management Tools and Documentation DVD.....	4
Managed system software.....	4
Management station software.....	5
<b>2 Installing management station software on Microsoft Windows.....</b>	<b>7</b>
Installing management station software on Microsoft Windows Server 2008 Core and Hyper-V Server.....	7
Installing management station software using the CLI mode.....	7
Uninstalling management station software using the CLI mode.....	8
<b>3 Installing management station software on supported Red Hat Enterprise Linux, Novell SUSE Linux Enterprise Server, and VMware ESX/ESXi Server.....</b>	<b>10</b>



# About

The Systems Management Tools and Documentation Installation Guide provides an overview of the management station software and installation instructions for the same. For information on installing Server Administrator, see the *Server Administrator Installation Guide* on the *Systems Management Tools and Documentation DVD*.

## Systems Management Software DVDs

The systems management software includes three DVDs, and they are:

- *Systems Management Tools and Documentation DVD*
- *Server Updates DVD*
- *Management Console DVD*

For information on systems that support systems management software, supported operating systems, and components, see *Systems Software Support Matrix* at [dell.com/openmanagemanuals](http://dell.com/openmanagemanuals).

## Managed system and management station

Depending on the way you use the systems management tools, you can classify the systems as:

- **Managed System**  
A managed system is any system that is monitored and managed using Server Administrator or Management Console. A Server Administrator is one of the systems management tools on the *Systems Management Tools and Documentation DVD*. You can manage systems running Server Administrator locally or remotely through a supported web browser. For more information on Server Administrator, see the *Server Administrator User's Guide* on the *Systems Management Tools and Documentation DVD*.
- **Management Station**  
A management station is a laptop, desktop, or server that you use to remotely manage one or more managed systems from a central location. You can use tools such as:
  - Intelligent Platform Management Interface (IPMI) Utilities
  - Remote Access Controller (RAC) tools
  - Dell OpenManage Essentials or Server Administrator Web Server

## Systems Management Tools and Documentation DVD


The *Systems Management Tools and Documentation DVD* contains the systems management software. The systems management software helps you to manage the systems by monitoring the system components, diagnosing issues, notifying through alerts, and troubleshooting remotely. Systems management software is classified into managed system software and management station software.

### Managed system software

The following applications include the managed system software:

- Server Administrator

Server Administrator provides comprehensive one-to-one in-band server managements solutions to manage a server locally and remotely using a web browser-based Graphical User Interface (GUI) and Command Line Interface (CLI). Server Administrator installs server-specific Remote Access Card (RAC) and network interface management components.

 **NOTE: When you perform a fresh installation on a system running a 64-bit operating system, a 64-bit version of the Server Administrator is used for the installation. If you want to upgrade Server Administrator, a 32-bit version of the Server Administrator is used for the upgrade.**

- Local Remote Access Controller

Local Remote Access Controller enables the system to receive email alerts for warnings or errors related to voltage, temperature, and fan speed. Remote Access Controller also logs event data and the most recent crash screen (available only on systems running Microsoft Windows operating system) to help you diagnose the probable cause of a system crash.


## Management station software

The following applications include the management station software that you can install using the *Systems Management Tools and Documentation DVD*:

- Active Directory Snap-In

The Active Directory (AD) Snap-In utility provides an extension snap-in to the Microsoft Active Directory to manage AD objects specific to products on this DVD.

 **NOTE: Both 32-bit and 64-bit installers are available. When you install Active Directory Snap-In from autorun, Active Directory Snap-In initiates the installer corresponding to the operating system architecture.**

 **NOTE: When you perform first time installation on a system running a 64-bit operating system, a 64-bit version of the Server Administrator is used for the installation. If you want to upgrade Server Administrator, a 32-bit version of the Server Administrator is used for the upgrade.**

- BMC/IPMI Utilities

BMC Management Utility (BMU) is a utility that provides remote management and configuration of systems equipped with a Baseboard Management Controller (BMC) or iDRAC using the IPMI protocol. IPMI utilities are CLI-based management station software.

For more information on BMU, see the *Baseboard Management Controller Utilities User's Guide*

 **NOTE: Only 32-bit installer is available.**

- RAC Tools

The RAC console is a management station software designed to provide remote management capabilities for the systems. You can remotely connect to the RAC hardware and access the RAC features either by using a web browser or the RACADM Command Line Interface (CLI). RACADM CLI is the command-line user interface to the RAC.

You can install RAC either on the managed system or on the management station.

For information on installing RAC on the managed system, see the *Server Administrator Installation Guide*. For information on installing on the management station, see [Installing Management Station Software on Windows](#). For more information on RAC, see the *Remote Access Controller User's Guide*.

 **NOTE: Both 32-bit and 64-bit installers are available. When you install RAC Tools from autorun, RAC Tools initiate the installer corresponding to the operating system architecture.**

- Dell Lifecycle Controller

Dell recommends using the Embedded Management, Integrated Dell Remote Access Controller 8 (iDRAC8) with Lifecycle Controller instead of Dell Systems Build and Update Utility (SBUU). SBUU is replaced with Lifecycle Controller on Dell's 13<sup>th</sup> generation of PowerEdge servers. iDRAC with Lifecycle Controller is an Embedded Systems Management application for operating system deployment and lifecycle management of PowerEdge servers. You can access Dell Lifecycle Controller by pressing <F10> during system boot up. The local GUI of iDRAC8 with Lifecycle Controller allows you to do the following in a pre-OS environment:

- Hardware configuration



- Operating system and hypervisor deployments
- Hardware updates
- Hardware diagnostics
- Easy maintenance of PowerEdge servers

The Lifecycle Controller is embedded on all Dell's 11<sup>th</sup> generation and later PowerEdge servers. No tools or downloads are required to use the capabilities of Lifecycle Controller.

For more information, see the following documents available at **dell.com/support/manuals**:

- *Dell Lifecycle Controller Version <Version Number> User's Guide*
- *Dell Lifecycle Controller Remote Services Version <Version Number> Quick Start Guide*
- *Dell Lifecycle Controller Web Services Interface Guide*
- *Lifecycle Controller Integration Best Practices*

- Dell OpenManage Essentials

Dell recommends using Dell OpenManage Essentials as replacement for IT Assistant. Dell OpenManage Essentials (OME) provide improved capabilities such as:

- Discovering and inventorying the systems.
- Monitoring systems' health.
- Viewing and managing system alerts.
- Performing system updates.
- Viewing hardware inventory and compliance reports.

For more information regarding Dell OpenManage Essentials, contact service provider.

- iDRAC Service Module

The iDRAC Service Module is a lightweight optional software application that can be installed on a Dell's 12<sup>th</sup> generation and later PowerEdge servers. Using the iDRAC Service Module you can configure the features on the supported operating system. The iDRAC Service Module provides additional Server Management data to iDRAC and presents one-to-many consoles with access to Systems Management data through OS interfaces.

The iDRAC Service Module also complements the iDRAC interfaces such as the GUI, RACADM CLI, and WSMAN with additional monitoring features. For more information, see *iDRAC Service Module <Version Number> Installation Guide* available at **dell.com/support/home**.

- Dell OpenManage Deployment Toolkit (DTK)

The Dell OpenManage Deployment Toolkit (DTK) includes a set of utilities, sample scripts, and sample configuration files that you can use to deploy and configure the Dell systems. You can use DTK to build script-based and RPM-based installation for deploying large number of systems on a pre-operating system environment in a reliable way, without changing their current deployment processes. Using DTK you can install operating systems on Dell systems in BIOS or Unified Extensible Firmware Interface (UEFI) mode.

In addition to the command-line utilities used to configure various system features, DTK also provides sample scripts and configuration files to perform common deployment tasks and documentation. These files and scripts describe the use of the DTK in Microsoft Windows Pre-installation Environment (Windows PE) and Linux environments. For more information, see the following documents available at **dell.com/openmanagemanuals**:

- *Dell OpenManage Deployment Toolkit Version <Version Number> User's Guide*
- *Dell OpenManage Deployment Toolkit Version <Version Number> Command Line Interface Reference Guide*
- *Dell OpenManage Deployment Toolkit Version <Version Number> Installation Guide*

# Installing management station software on Microsoft Windows

1. Log on with administrator privileges to the system on which you want to install the management station applications.
2. Insert the *Systems Management Tools and Documentation* DVD into the DVD drive or download the web installer.

 **NOTE:** You can download the web installer from [dell.com/support/home](http://dell.com/support/home).

3. Run **autorun.exe**.

 **NOTE:** If you are using the DVD to install, select the management station application that you want to install, and then click **Install**.

4. Follow the instructions in the Install Wizard.

 **NOTE:** You cannot install remote RAC (RAC installed on the management station) and local RAC (RAC installed on the managed system) on the same system.

## Installing management station software on Microsoft Windows Server 2008 Core and Hyper-V Server

Windows Server 2008 Core or Hyper-V Server operating system does not support a graphical user interface (GUI) based installation of the software components. Install the software in CLI mode on Server Core. For more information on Server Core, see the Microsoft website.

 **NOTE:** Log in as a built-in Administrator to install systems management software on Windows Server 2008 and Windows Vista. For more information on built-in Administrator account, see the Windows Server 2008 Help.

### Installing management station software using the CLI mode

 **NOTE:** Run the Command Prompt as an administrator to successfully perform tasks using the CLI mode.

To install the RAC Tools, launch the MSI file using the command:

- For 32-bit: `msiexec /i RACTools.msi`
- For 64-bit: `msiexec /i RACTools_x64.msi`

 **NOTE:** On the *Systems Management Tools and Documentation* DVD:

- The **RACTools.msi** file is located at **SYSMGMT\ManagementStation\windows\DRAC**
- The **RACTools\_x64.msi** file is located at **SYSMGMT\ManagementStation\windows\DRACx64**

To install BMU, launch the MSI file using the command:

```
msiexec /i BMC.msi
```

 **NOTE:** Only 32-bit installer is available.

 **NOTE:** The **BMC.msi** file is located at **SYSMGMT\ManagementStation\windows\BMC** on the *Systems Management Tools and Documentation* DVD.

To install Active Directory Snap-In, launch the MSI file using the command:



- For 32-bit: `msiexec /i ADSnapIn.msi`
- For 64-bit: `msiexec /i ADSnapIn_x64.msi`

 **NOTE: On the *Systems Management Tools and Documentation* DVD:**

- The **ADSnapiIn.msi** file is located at **SYSMGMT\ManagementStation\windows\ADSnapiIn**
- The **ADSnapiIn\_x64.msi** file is located at **SYSMGMT\ManagementStation\windows\ADSnapiInx64**

To install the localized version of the management station software, at the command prompt type the following: `msiexec / I <management_station_software>.msi TRANSFORMS= <language_transform>.mst`

 **NOTE: Replace *<language\_transform>.mst* with the appropriate language file:**

- 1031.mst (German)
- 1034.mst (Spanish)
- 1036.mst (French)
- 1041.mst (Japanese)
- 2052.mst (Simplified Chinese)

## Uninstalling management station software using the CLI mode

To uninstall management station software, run the commands as listed in the table below.

**Table 1. Commands to uninstall management station software**

Management Station Software	Architecture	Command
RAC Tools	32-bit	<code>msiexec /x RACTools.msi</code> (or) <code>msiexec /x {425E3BF1-52FE-47BE-9F1C-1B9DE4B0652C}</code>
	64-bit	<code>msiexec /x RACTools_x64.msi</code> (or) <code>msiexec /x {80652619-E6FA-43A4-9B41-B1895918617D}</code>
BMC	32-bit	<code>msiexec /x BMC.msi</code> (or) <code>msiexec /x {6405B99D-0A9F-43BD-AE9F-592D5C0C49F1}</code>
	64-bit	Not applicable
Active Directory Snap-In	32-bit	<code>msiexec /x ADSnapIn.msi</code> (or) <code>msiexec /x {19A10AEC-6970-4704-BFB3-79AA2635ACDC}</code>
	64-bit	<code>msiexec /x ADSnapIn_x64.msi</code> (or) <code>msiexec /x {C37F913A-2892-4D05-83BB-672EF2FA45BD}</code>
Systems Management	32-bit	<code>msiexec /x SysMgmt.msi</code> (or) <code>msiexec /x {6D71D78C-9BD1-405B-8208-513E2B753BAB}</code>



Management Station Software	Architecture	Command
	64-bit	<pre>msiexec /x SysMgmt_.msi</pre> (or) <pre>msiexec /x {BC9A6F51-98C3-4186-BF16-C73117D9CAFD}</pre>



# Installing management station software on supported Red Hat Enterprise Linux, Novell SUSE Linux Enterprise Server, and VMware ESX/ESXi Server

Only RAC tools and BMU are supported on the Red Hat Enterprise Linux, SUSE Linux Enterprise Server, and VMware ESX/ESXi Server operating systems.

On systems running Red Hat Enterprise Linux 5 operating system, DVDs are auto-mounted with the **-noexec mount** option. This option does not allow you to run any executable from the DVD. You must mount the DVD-ROM manually and then run the executables.


To install BMU, navigate to the **SYSMGMT/ManagementStation/linux/bmc** directory and install the BMU RPM specific to the operating system as follows:

- For systems running Red Hat Enterprise Linux, type `rpm -ivh osabmcutil*-RHEL-*.rpm`
- For systems running SUSE Linux Enterprise Server, type `rpm -ivh osabmcutil*-SUSE-*.rpm`

To install the latest version of RAC Tools:

1. Uninstall the existing IPMI tool:
  - a. Query the existing IPMI tool: `rpm -qa | grep ipmitool`  
If the IPMI tool is already installed, the query returns `ipmitool-x.x.xx-x.x.xx`.
  - b. To uninstall the IPMI tool:
    - On systems running SUSE Linux Enterprise Server and VMware ESX Server, type `rpm -e ipmitool-x.x.xx-x.x.xx`
    - On systems running Red Hat Enterprise Linux 6.x, type `rpm -e ipmitool`
    - On systems running Red Hat Enterprise Linux 7.x, type `rpm -e OpenIPMI-tools`

 **NOTE: The settings made by the existing IPMITOOL is retained.**

 **NOTE: Red Hat Enterprise Linux 5.x is not supported from OpenManage 8.4**

2. Browse to the **SYSMGMT/ManagementStation/linux/rac/<OS>** directory and then type `rpm -ivh *.rpm`