

Dell OpenManage™ Software

# Quick Installation Guide

# Notes and Notices



**NOTE:** A NOTE indicates important information that helps you make better use of your computer.



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

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The *Quick Installation Guide* is available on the Dell™ PowerEdge™ *Installation and Server Management CD*, the *Dell Systems Management Consoles CD*, and the *Dell PowerEdge Documentation CD* in English, French, German, Spanish, Japanese, and Simplified Chinese.

## **Maximizing the Value of Your Dell PowerEdge System**

Use the supplied CDs to quickly get your system up and running. You will get consistent, reliable results and ensure trouble-free operation. The CDs provide:

- **Streamlined operating system installation** — Reduces the time required for the installation of Microsoft® Windows® and Red Hat® Enterprise Linux operating systems by guiding you through an easy-to-follow step-by-step process.
- **Setup and configuration** — Provides the necessary tools for setting up and configuring PowerEdge systems and software. The tools permit automatic discovery and configuration of Dell-provided RAID controllers and network adapters.
- **Utilities, drivers, and diagnostics** — Allows you to view and create Dell software driver and diagnostic diskettes.

- **Systems Management** — Installs Dell OpenManage™ software applications to help ensure maximum reliability and availability of your systems. These applications provide the tools needed to remotely monitor, diagnose, and update your systems.
- **Documentation** — Allows quick access to available system, systems management software, RAID controller, and peripheral documents in supported languages.



**NOTE:** To view documentation on systems that are running Red Hat Enterprise Linux, you must launch `index.htm` from within the appropriate language directory.

## Verifying the Dell OpenManage Systems Management Software Kit Contents

The systems management software kit includes, but is not limited to, the following components:

- The *Dell PowerEdge Installation and Server Management* CD is a bootable CD that provides the tools you need to configure your system and install your operating system. This CD contains the latest systems management software products, including Dell OpenManage Server Administrator diagnostics, storage management, and remote access services.
- The *Dell Systems Management Consoles* CD contains all the latest Dell systems management console products, including Dell OpenManage IT Assistant.
- The *Dell PowerEdge Service and Diagnostic Utilities* CD provides the tools you need to configure your system and delivers the latest diagnostics and Dell-optimized drivers for your system.
- The *Dell PowerEdge Documentation* CD helps you stay current with documentation for systems, systems management software products, peripherals, and RAID controllers.

Most of these CDs also contain **readme** files, which provide the latest product information.

Compare the contents of your system accessories box with the packing slip or invoice enclosed with your system. If any components are missing or damaged, call Dell within 30 days of the invoice date for a free replacement. For more information, see "Obtaining Technical Assistance."

## **Systems Management Software Overview**

Dell OpenManage systems management software is a suite of application programs for PowerEdge systems. This software allows you to manage your system with proactive monitoring, diagnosis, notification, and remote access.

Each system that you plan to manage with Dell OpenManage software products is called a *managed system*. *Managed system* applications include Server Administrator and remote access controller (RAC) software.



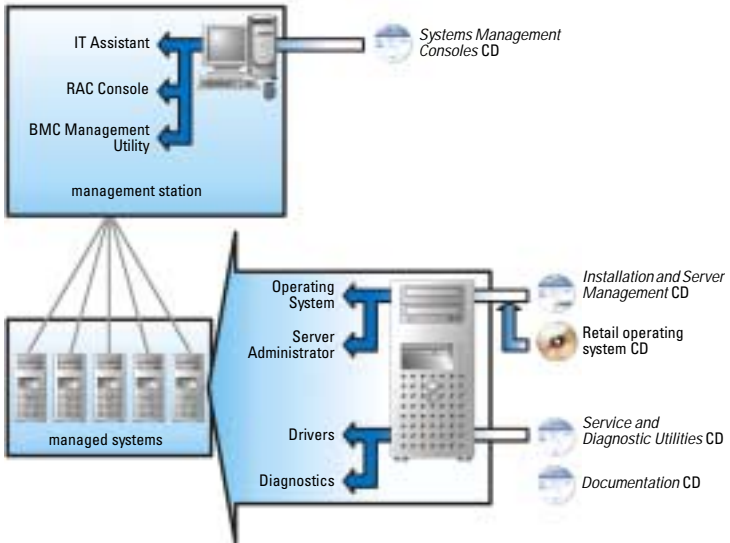
**NOTE:** Dell OpenManage Array Manager is not available under Windows if no previous Dell OpenManage Systems Management software (with Array Manager installed) is detected. Array Manager is only available for upgrade.



*A management station* can be used to remotely manage one or more *managed systems* from a central location.

Figure 1-1 illustrates the relationship between a management station and its managed systems. Figure 1-1 also shows the Dell OpenManage software products that may be installed on the management station and the managed systems.

**Figure 1-1. Example of a Management Station and Managed Systems**



## **Using Dell OpenManage on VMware ESX Server Software**

Dell OpenManage installation with VMware ESX Server software requires special steps. These steps vary depending on the Dell OpenManage version and ESX Server version; and only a limited number of combinations are supported. See the *VMware Systems Compatibility Guide* and the *VMware ESX Server Deployment Guide* located in the Resource Center at [www.dell.com/vmware](http://www.dell.com/vmware) for details. Instructions for installing supported versions of Dell OpenManage can be found in the *ESX Server Deployment Guide*.

Table 1-1 describes the Dell OpenManage products.

**Table 1-1. Dell OpenManage Systems Management Software Applications**

<b>Function</b>	<b>Software Product</b>	<b>CD</b>	<b>Description</b>
Local system management, including RAID configuration and management	Server Administrator	<i>Installation and Server Management</i>	<p>A management solution for PowerEdge systems that provides a consolidated and consistent way to monitor, configure, and manage individual Dell systems.</p> <p>Server Administrator provides the following features:</p> <ul style="list-style-type: none"><li>• Security management</li><li>• A command line interface (CLI)</li><li>• Extensive logging</li><li>• Ability to review and report the configuration and status of a host-based RAID subsystem</li></ul>

**Table 1-1. Dell OpenManage Systems Management Software Applications *(continued)***

<b>Function</b>	<b>Software Product</b>	<b>CD</b>	<b>Description</b>
			<ul style="list-style-type: none"><li>• Diagnostic tools to isolate hardware problems while the system is still operational</li><li>• Rapid access to detailed fault and performance information that is reported in the user interface</li><li>• Remote administration of monitored systems, including BIOS setup, shutdown, start up, and RAC security</li><li>• Enhanced features for configuring a system's locally attached RAID and non-RAID disk storage</li><li>• Storage management information in an integrated graphical view</li><li>• Status of local and remote storage attached to a monitored system</li><li>• Support for SAS and SCSI, but not for Fibre Channel</li></ul>

**Table 1-1. Dell OpenManage Systems Management Software Applications *(continued)***

<b>Function</b>	<b>Software Product</b>	<b>CD</b>	<b>Description</b>
			<ul style="list-style-type: none"><li>• Ability to perform controller and enclosure functions for all supported RAID and non-RAID controllers and enclosures from a single graphical interface or CLI, without the use of the controller BIOS utilities</li><li>• Ability to protect your data by configuring data redundancy, assigning hot spares, or rebuilding failed drives</li></ul>

**Table 1-1. Dell OpenManage Systems Management Software Applications *(continued)***

<b>Function</b>	<b>Software Product</b>	<b>CD</b>	<b>Description</b>
Status and reporting	IT Assistant	<i>Systems Management Consoles</i>	<p>A systems management console program, usually installed on one management station to collect information and provide a view of all managed systems. IT Assistant performs the following functions:</p> <ul style="list-style-type: none"><li>• Fault monitoring with notification through e-mail or console alerting to keep administrators informed of events reported from disk, memory, voltage, fan, and thermal conditions</li><li>• Inventory and asset reporting including service tag number, cost of ownership information, and specifics of the BIOS, microprocessors, and memory</li></ul>

**Table 1-1. Dell OpenManage Systems Management Software Applications *(continued)***

<b>Function</b>	<b>Software Product</b>	<b>CD</b>	<b>Description</b>
			<ul style="list-style-type: none"> <li>• In-context launch of device-specific tools such as Server Administrator, Remote Access console, Dell PowerConnect™ switch console, and Digital KVM console</li> </ul>
Remote management	Remote access controller (DRAC 4, DRAC III, DRAC III/XT, ERA, ERA/O, and ERA/MC)	<i>Systems Management Consoles</i>	<p>These hardware and software solutions perform the following functions:</p> <ul style="list-style-type: none"> <li>• Provide alert messages for system problems, enable remote system management, and reduce the need for the system administrator to go to a system</li> <li>• Help improve the overall availability of Dell systems</li> <li>• Provide remote access to an inoperable system, allowing you to obtain complete control of the local console</li> </ul>



**Table 1-1. Dell OpenManage Systems Management Software Applications (*continued*)**

<b>Function</b>	<b>Software Product</b>	<b>CD</b>	<b>Description</b>
	BMC Management Utility	<i>Systems Management Consoles</i>	A utility that provides remote management and configuration of systems equipped with a baseboard management controller (BMC) using the IPMI protocol.
Management of Dell-specific Microsoft Active® Directory objects	Active Directory Snap-in Utility	<i>Systems Management Consoles</i>	<p>Provides an extension snap-in to the Microsoft Active Directory Users Active Directory and Computers snap-in, which allows you to manage Dell-specific Active Directory objects. The Dell-specific schema class definitions and their installation are also included on the CD.</p> <p>You can use this option when the Dell-specific schema classes have been added to the Active Directory schema.</p>

**Table 1-1. Dell OpenManage Systems Management Software Applications (*continued*)**

<b>Function</b>	<b>Software Product</b>	<b>CD</b>	<b>Description</b>
Server setup and operating system installation	Server Assistant	<i>Installation and Server Management</i>	A utility that provides: <ul style="list-style-type: none"><li>• Step-by-step system configuration including RAID controllers and network interfaces</li><li>• Installation support for Windows and Red Hat Enterprise Linux operating systems</li><li>• Dell-optimized device drivers for PowerEdge systems</li></ul>

## Installing Your Operating System

Perform the following steps to determine if an operating system has been installed on your system:

- 1 Ensure that the keyboard, mouse, and monitor are connected to your system, and turn on your system.
- 2 Read and accept the software license agreement to continue.

Your system reboots. If a message appears and states that bootable drives do not exist or that an operating system was not found, then an operating system has not been installed on your system. Have your operating system CD available and continue with the next steps.

If an operating system has been preinstalled on your system, it is not necessary to continue with this process. Locate the operating system's *Installation Instructions* document that was provided with your system and follow those instructions to complete the installation process.

Perform the following steps to install an operating system on your system:

- 1 Insert the *Installation and Server Management* CD and restart your system.

The following options are available during system boot:

- Server Assistant - Boots through the CD.
- Server Assistant with CD media check - Checks if the CD is created correctly and for validity of content.
- Skip CD boot - Boot to hard drive — Boots from the hard drive and verifies if an operating system is installed on your system. If an operating system is not installed on your system, boots through the CD.



**NOTE:** If you do not select an option within 10 seconds, the system automatically boots through the CD.

- 2 Select **Server Setup** on the **Server Assistant** main page.
- 3 Follow the step-by-step instructions to configure your hardware and to install your operating system.

For additional information about installing RAID, see *Getting Started With RAID* on the documentation CD.



**NOTE:** When you use Server Assistant to install Windows or Red Hat Enterprise Linux operating systems, Server Assistant automatically copies the relevant Server Administrator installation files onto the hard drive and places **Install Server Administrator** and **Delete Server Administrator Installation Files** icons on the desktop.



**NOTE:** You can use the **Install Server Administrator** icon to install Server Administrator without the installation CD. On systems running Windows, clicking this icon brings up the standard installation interface. On systems running Red Hat Enterprise Linux, clicking this icon runs the Red Hat Enterprise Linux custom installation. If you do not want to install Server Administrator, you can remove the installation files by clicking the **Delete Server Administrator Installation Files** icon. After you confirm that you want to continue, all Server Administrator files, including the icons, are removed.





**NOTE:** When installing the Windows operating system, some hardware configurations with more than 4 GB of physical memory installed require additional steps after the operating system installation to fully utilize all installed memory. For more information on Physical Address Extension (PAE), see:


- [www.microsoft.com/windows2000/en/advanced/help/PAE\\_checklist.htm](http://www.microsoft.com/windows2000/en/advanced/help/PAE_checklist.htm)
- [www.microsoft.com/resources/documentation/windowsserv/2003/enterprise/proddocs/en-us/paex86\\_2.asp](http://www.microsoft.com/resources/documentation/windowsserv/2003/enterprise/proddocs/en-us/paex86_2.asp)
- [www.support.microsoft.com/default.aspx?scid=kb;en-us;283037](http://www.support.microsoft.com/default.aspx?scid=kb;en-us;283037)

## Installing Systems Management Software on a Managed System

The setup program provides both an **Express Setup** option and a **Custom Setup** option. The **Express Setup** option (recommended) automatically installs all of the detected software components that are necessary to manage your system. The **Custom Setup** option enables you to select which software components you want to install. The procedure in this document is based on the **Express Setup** option. See the *Dell OpenManage Installation and Security User's Guide* for information about **Custom Setup**.

 **NOTE:** See the installation readme file on the *Installation and Server Management* CD for a list of currently supported systems.

 **NOTE:** Install the SNMP agent on your managed system using your operating system medium before installing the managed system software.

 **NOTE:** To avoid booting to Server Assistant, remove the *Installation and Server Management* CD if you restart your system.

## **Installing Managed System Software for Supported Microsoft Windows Operating Systems**

- 1 Log on with administrator privileges to the system running a supported Windows operating system where you want to install the managed system components.
- 2 Verify that your system has a supported browser installed.
- 3 If you have a RAID controller installed on your system and you plan to install the storage management function, ensure that the device drivers for each RAID controller are also installed.

You can find device drivers on the *Service and Diagnostic Utilities* CD. You can verify the device driver under Windows by right-clicking **My Computer**, selecting **Manage**, and then clicking **Device Manager**.

- 4 Insert the *Installation and Server Management* CD into the CD drive.

The setup program should start automatically. If it does not, click the **Start** button, click **Run**, and then type `x:\srvadmin\windows\setup.exe` (where `x` is the drive letter of your CD drive). The setup program starts the prerequisite checker utility.

- 5 Review the results of the prerequisite checks performed and resolve any conditions that are listed.
- 6 Click the **Install, Modify, Repair, or Remove Server Administrator** button.
- 7 Click **Next** on the **Welcome** screen.
- 8 Accept the License Agreement and click **Next**.
- 9 Select **Express** setup and click **Next**.
- 10 Click **Install** to proceed through the installation process.  
The setup program automatically installs all of the managed system software for your hardware configuration.
- 11 When the installation is complete, click **Finish** and restart your system if prompted before using the software.



## Installing Managed System Software for Supported Red Hat Enterprise Linux Operating Systems

- 1 Log on as root to the system running a supported Red Hat Enterprise Linux operating system where you want to install the managed system components.
- 2 Insert the *Installation and Server Management* CD into the CD drive.
- 3 If necessary, mount the CD using the `mount /media/cdrom` command or a similar command.
- 4 If you plan to install DRAC 4 software, navigate to the `/srvadmin/linux/express-install-with-RAC4` directory. Then, from the directory, execute the following RPM command:

```
rpm -ihv *.rpm
```

- 5 Alternatively, execute the `srvadmin-install.sh` script from the `/srvadmin/linux/supportscripts` directory as follows:

```
sh srvadmin-install.sh --express  
or  
sh srvadmin-install.sh -x
```

The script installs the appropriate software for your system. It installs the RAC software only if a RAC device is detected.

- 6 Start the services with the `sh srvadmin-services.sh` start command.



**NOTE:** You can log the output of the RPM installation by adding `2>&1 | tee -a /var/log/srvadmin.log` to the above RPM command. The resulting command would be:

```
rpm -ihv *.rpm 2>&1|tee -a  
/var/log/srvadmin.log
```

## Installing Systems Management Software on a Management Station

The express installation installs IT Assistant and the RAC console. If you would like to install only one of them or install other features such as the BMC Management Utility, then see the custom installation sections of the *Dell OpenManage Installation and Security User's Guide*.



**NOTE:** Management station applications run only on systems running Windows XP Professional, Windows 2000 Professional (SP4), the Windows Server 2003 family (including Small Business Server [SBS]), and the Windows 2000 Server family (including SBS), and can manage systems running supported Windows and Red Hat Enterprise Linux operating systems. However, IT Assistant is not supported on Windows Server 2003 SBS, Windows 2000 Server SBS and Red Hat Enterprise Linux operating systems.



**NOTE:** IT Assistant and RAC Management Station are not supported features for the 64-bit versions of both Windows Server™ 2003 Standard and Windows Server 2003 Enterprise Editions.

## Installing Management Station Software on Microsoft Windows Operating Systems



**NOTE:** To successfully install IT Assistant, install the MSDE agent (if it is not already installed) on your management station using your *Systems Management Consoles* CD before installing the management station software. Then reboot after the MSDE installation.

To install applications onto the management station, perform the following steps:

- 1 Log on with administrator privileges to the system where you want to install the management station applications.
- 2 Insert the *Systems Management Consoles* CD into the CD drive.

The setup program should start automatically. If it does not, click the **Start** button, click **Run**, and then type `x:\windows\setup.exe` (where *x* is the drive letter of your CD drive). The setup program starts the prerequisite checker utility.

- 3 Review the results of the prerequisite checks performed and resolve any conditions that are listed.

- 4 Click the **Install, Modify, Repair, or Remove Management Station** button.

The **Welcome** screen is displayed.

- 5 Click **Next**.

The **License Agreement** screen is displayed.

- 6 Select **I Accept** and click **Next**.

The **Setup Type** screen is displayed.

- 7 Select **Express** and click **Next**.

The **Ready To Install** screen is displayed.

- 8 Click **Install** to accept the selected features and begin installation.

The **Installing Dell OpenManage Management Station** screen appears. Messages appear, stating the status and progress of the software components being installed.

When the selected components are installed, the **Install Wizard Completed** dialog box appears.

- 9 Click **Finish** to exit the **Dell OpenManage Management Station** installation.

## **Installing Management Station Software on the Red Hat Enterprise Linux Operating System**

The BMC Management Utility and the RAC components of the management station suite of software can be used on a management station running Red Hat Enterprise Linux.

To install the BMC Management Utility onto the management station, perform the following steps to launch the installation program:

- 1** Log on as root to the system where you want to install the management station components.
- 2** If necessary, mount the CD using the `mount /media/cdrom` command or a similar command.
- 3** Navigate to the `/linux/bmc` directory and execute the `rpm -ivh *.rpm` command.

To install the RAC Management Station component, perform the following steps to launch the installation program:

- 1** Log on as root to the system where you want to install the management station components.
- 2** If necessary, mount the CD using the `mount /media/cdrom` or similar command.
- 3** Navigate to the `/linux/rac` directory and execute the `rpm -ivh *.rpm` command.

## **Updating Drivers and Utilities**

The *Service and Diagnostic Utilities* CD contains device drivers and utilities that you can use to update your system. You must copy the drivers and utilities to either a diskette or to your hard drive to use them.

For the latest product updates, such as BIOS, firmware, drivers, and Dell OpenManage applications, go to the Dell Support website at [support.dell.com](http://support.dell.com).



**NOTE:** You can run the *Service and Diagnostic Utilities* CD only on systems running Windows. To extract drivers for systems that are running Red Hat Enterprise Linux, you must use the *Service and Diagnostic Utilities* CD on a system running Windows and then copy or share the selected files to the final destination system.

- 1 Insert the *Service and Diagnostic Utilities* CD into the CD drive on a system running Windows.

The setup program should start automatically. If it does not, click the **Start** button, click **Run**, and then type `x:\setup.exe` (where `x` is the drive letter of your CD drive).

- 2 Select the system, and from the **Select Drivers/Utilities Set**, select the file set that you want to update, and then click **Continue**.
- 3 From the **Drivers and Utilities Page**, select the utility or driver file that you want to update by clicking the link for the device name.

The system prompts you for a location in which to save the file. Files are delivered in compressed format. BIOS and firmware files normally require diskettes for the extraction.

- 4 Decompress the file.



See the *Dell OpenManage Server Administrator Compatibility Guide* for additional information about BIOS, firmware, drivers, and Dell OpenManage application versions.

## **Security Patches and Hotfixes**

It is strongly recommended that you download and install the latest security patches, hotfixes, and service or support packs for your operating system immediately after installation. Downloads for your operating system are available at [www.microsoft.com](http://www.microsoft.com) or [www.redhat.com](http://www.redhat.com)

## **Obtaining Technical Assistance**

Before contacting Dell for technical assistance, see the Dell Support website at [support.dell.com](http://support.dell.com). If you need additional technical support, see "Getting Help" in your system's *Installation and Troubleshooting Guide* for country- or region-specific information about contacting Dell by using telephone, fax, and Internet services.

Antes de entrar em contato com a Dell para obter assistência técnica, consulte o site de suporte na Web: [support.dell.com](http://support.dell.com). Você precisará do número da sua etiqueta de serviço para identificação

de seu equipamento. Caso necessite de suporte técnico adicional, é fornecida assistência técnica para hardware ao proprietário original do equipamento. Esse serviço está disponível de segunda a sexta-feira, das 7 às 19:00h, em português. Telefone: 0800-90-3355.

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