

Dell™ OpenManage™ Software

Quick Installation Guide

Notes and Cautions



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



CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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The *Dell OpenManage Software Quick Installation Guide* is available in English, French, German, Spanish, Japanese, and Simplified Chinese on the *Dell Systems Management Tools and Documentation* DVD and on the Dell Support site at support.dell.com.

Maximizing the Value of Your Dell System

The *Dell Systems Management Tools and Documentation* DVD provides:

- **Streamlined installation, setup and configuration** — Provides the necessary tools that reduce the time required for setting up and configuring Dell™ systems and software. These tools permit automatic discovery and configuration of Dell-provided RAID controllers and network adapters, thereby reducing the time required to install the following operating systems:
 - Microsoft® Windows®
 - Red Hat® Enterprise Linux®
 - SUSE® Linux Enterprise Server

- **Utilities, drivers, and diagnostics** — Allows you to use the latest Dell-optimized drivers, utilities, and Online (operating system-based) diagnostics to update your system.
- **Systems Management** — Installs Dell OpenManage™ software applications that help enhance systems management experience and automate systems administration. These applications provide the tools needed to remotely monitor, diagnose, and update your systems.
- **Documentation** — Allows quick access to systems management software documentation, RAID controller documentation, and peripheral documents in supported languages.



NOTE: To view documentation on systems running Red Hat Enterprise Linux or SUSE Linux Enterprise Server operating systems, on the *Dell Systems Management Tools and Documentation* DVD, launch `index.htm` located at `<DVD_drive>\docs\<language_directory>`.

Dell Systems Management Tools and Documentation DVD Contents

The *Dell Systems Management Tools and Documentation* DVD contains the following directories:

- <DVD root>

The Dell Systems Build and Update Utility resides at the root of the DVD. Some of the tasks you can perform using this utility are:

- Update your system firmware and install an operating system
- Update the firmware and BIOS in a pre-operating system environment on multiple systems
- Configure your system hardware
- Customize the Server Update Utility (SUU) and use it to update your system

- **SYSMGMT**

The **SYSMGMT** directory contains the following directories:

- **svadmin** - this directory contains the systems management software products including Dell OpenManage Server Administrator.
- **ManagementStation** - this directory contains all the latest Dell systems management console products, including Dell Remote Access Controller Tools, Baseboard Management Controller Management Utility Console (BMC Utilities), Active Directory™ Snap-in Utility, and Dell OpenManage IT Assistant.

- **docs**

The **docs** directory contains documentation for systems, systems management software products, peripherals, and RAID controllers.

- **SERVICE**

The **SERVICE** directory provides the tools you need to manage your system, and delivers the latest diagnostics and Dell-optimized drivers for your system.

All the directories 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 deployment, monitoring and maintenance tools for Dell systems. This software allows you to manage your system with proactive monitoring, 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.

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

Table 1-1 describes the Dell OpenManage products.

Table 1-1. Dell OpenManage Systems Management Software Applications

Software Product	Function	DVD Name and DVD Path	Description
Dell Systems Build and Update Utility	Server setup and operating system installation	<i>Dell Systems Management Tools and Documentation</i> DVD Located at the DVD root directory	A utility that provides: <ul style="list-style-type: none">• Step-by-step system configuration including RAID controllers and network interfaces• Installation support for Windows, Red Hat Enterprise Linux, and SUSE Linux Enterprise Server operating systems• Dell-optimized device drivers for Dell systems

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

Software Product	Function	DVD Name and DVD Path	Description
Dell OpenManage Server Administrator	Local system management, including RAID configuration and management	<i>Dell Systems Management Tools and Documentation</i> DVD Located at the <DVD_drive>\SYSMGMT\svradmin directory	A management solution for Dell systems that provides a consolidated and consistent way to monitor, configure, and manage individual Dell systems. Server Administrator provides the following features: <ul style="list-style-type: none"> • Security management through role-based access control (RBAC), authentication, and encryption • Ability to review and report the configuration and status of a host-based RAID subsystem

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

Software Product	Function	DVD Name and DVD Path	Description
			<ul style="list-style-type: none">• Rapid access to detailed fault and performance information that is reported in the user interface and extensive logging• Allows local administration and support for remote administration of the local system• Enhanced features for configuring a system's locally attached RAID and non-RAID disk storage• Storage management information in an integrated graphical view• Status of local and remote storage attached to a managed system

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

Software Product	Function	DVD Name and DVD Path	Description
			<ul style="list-style-type: none">• Support for SAS, SCSI, SATA, and ATA, but not for Fiber Channel• 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• Ability to protect your data by configuring data redundancy, assigning hot spares, or rebuilding failed drives• A command line interface (CLI)

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

Software Product	Function	DVD Name and DVD Path	Description
RAC (iDRAC6, iDRAC, DRAC 5, DRAC 4, DRAC III, DRAC III/XT, DRAC/MC, ERA, ERA/O, and ERA/MC)	Local and remote systems management	<i>Dell Systems Management Tools and Documentation</i> DVD For Windows systems remote RAC is at <DVD_drive>\SYSMGMT\ManagementStation\windows\ManagementStation	These hardware and software solutions perform the following functions: <ul style="list-style-type: none"> • Remote administration of managed systems, including BIOS setup, shutdown, start up, and RAC security • Provide alert messages for system problems and enable remote system management • Provide remote access to an inoperable system, allowing you to obtain complete control of the local console • Help improve the overall availability of Dell systems

NOTE: Only iDRAC6 is supported on xx1x systems.

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

Software Product	Function	DVD Name and DVD Path	Description
IT Assistant	Status and reporting	<p>For Linux systems, remote RAC is at <DVD_drive>/SYSMGMT/ManagementStation/linux/rac</p> <p>Local RAC is at <DVD_drive>\SYSMGMT\srvadmin</p>	<p>From Dell OpenManage version 6.0.1 onwards, IT Assistant is no longer a part of the Typical installation. For information on installing and using IT Assistant, see the <i>Dell OpenManage IT Assistant User's Guide</i> on the Dell Support site at support.dell.com.</p>

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

Software Product	Function	DVD Name and DVD Path	Description
BMC Management Utility (BMU)	Remote management	<i>Dell Systems Management Tools and Documentation</i> DVD For Windows systems, the location is <DVD_drive>\SYSMGMT\ManagementStation\windows\ManagementStation. For Linux systems, it is <DVD_drive>/SYSMGMT/ManagementStation/linux/bmc	A utility that provides remote management and configuration of systems equipped with a baseboard management controller (BMC) using the IPMI protocol.

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

Software Product	Function	DVD Name and DVD Path	Description
Active Directory Snap-in Utility	Management of Dell-specific Microsoft Active Directory® objects	<p><i>Dell Systems Management Tools and Documentation</i></p> <p>DVD</p> <p>Located at the <DVD_drive>\SYSMGMT\ManagementStation\windows\ManagementStation directory</p>	<p>Provides an extension snap-in to the Microsoft Active Directory. This allows you to manage Dell-specific Active Directory objects. The Dell-specific schema class definitions and their installation are also included on the DVD.</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)*

Software Product	Function	DVD Name and DVD Path	Description
Dell Systems Service and Diagnostics Tools	Driver identification and installation to update your system	<i>Dell Systems Management Tools and Documentation</i> DVD Located at the SERVICE directory	Delivers the latest Dell-optimized drivers, utilities, and operating system-based diagnostics for your system.
Dell Online Diagnostics	Diagnose the health of your Dell system	<i>Dell Systems Management Tools and Documentation</i> DVD Located at the SERVICE directory	Runs operating system-based diagnostics to check the health of your Dell system.

For information about various Dell systems, the operating systems supported by these systems, and the Dell OpenManage components that can be installed on these systems, see the latest *Dell Systems Software Support Matrix* on the Dell Support site at support.dell.com.

Installing Your Operating System

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

- 1 Start the system.
- 2 Read and accept the software license agreement to continue.

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 media available and continue with the procedures described in this section.

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 provided with your system and follow the instructions to complete the installation process.

From Dell OpenManage version 6.0.1 onwards, you can install an operating system using either the Dell Unified Server Configurator or the Systems Build and Update Utility.

Installing Your Operating System Using Unified Server Configurator

The Dell Unified Server Configurator (USC) is a pre-installed configuration utility that enables systems and storage management tasks from an embedded environment throughout the system's lifecycle.

The USC resides on an embedded flash memory card, functions independently of the operating system, and can be started during the boot sequence.

You can use the USC to:

- Identify, download, and apply system updates without needing to search the Dell Support site (support.dell.com)
- Install and deploy an operating system
- Configure RAID
- Run diagnostics to validate the system and attached hardware

This guide describes in brief the procedure to install an operating system using USC. For detailed information on using USC to install an operating system and perform other systems management tasks, see the *Dell Unified Server Configurator User's Guide* on the Dell Support site at support.dell.com.

The first time you boot the system, the USC starts with the **User Settings** wizard displayed so that you can configure your preferred language and network settings.

- 1 Start the Unified Server Configurator by booting the system and pressing the <F10> key within ten seconds of the Dell logo being displayed.
- 2 Click **OS Deployment** in the left pane.
- 3 Click **Deploy OS** in the right pane.
- 4 If your system has a RAID controller, you have the option of launching the RAID Configuration wizard and configuring a virtual disk as the boot device. For information on configuring RAID, see the *Dell Unified Server Configurator User's Guide*.

- 5 Select the operating system you want to install and click **Next**. You may be required to wait as the driver extraction and copy process in the background may take time.



NOTE: All copied drivers are removed after 18 hours. You need to complete the operating system install within 18 hours in order for the copied drivers to be available. To remove the drivers before the 18 hour period is over, reboot the system and press the F10 key to re-enter the USC. Using the F10 key to cancel the OS installation or to re-enter the USC upon reboot removes the drivers during the 18 period.

- 6 Insert the OS installation media and click **Next**. The USC verifies that the installation media is appropriate for the operating system you selected. If the inserted installation media does not match the operating system selection, it will be ejected.
- 7 Click **Finish** to reboot the system and continue with the OS installation. Upon reboot, the system boots to the OS installation media.

Installing Your Operating System Using Dell Systems Build and Update Utility

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

- 1** Start the system.
- 2** Read and accept the software license agreement to continue.

If a message that bootable drives do not exist or an operating system was not found appears, 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 provided with your system and follow the instructions to complete the installation process.

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

- 1 Insert the *Dell Systems Management Tools and Documentation* DVD and restart your system.

The following options are available during system boot:

- **Dell Systems Build and Update Utility**
Takes you to the **Dell Systems Build and Update Utility Home** screen.
- **Optical Media (DVD) Check**
Checks if the DVD is created correctly and validates the content.
- **Skip Optical Media (DVD) 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 from the DVD.



NOTE: If you do not select an option within 10 seconds, the **Dell Systems Build and Update Utility** is selected by default and the system automatically boots through the DVD.

- **DTK Command Line Interface (Linux)**
Launches the command line interface of Dell OpenManage Deployment Toolkit.



NOTE: This option is available only on Linux systems.

- 2 Click **Configure** against **Server OS Installation** or click **Server OS Installation** on the left-hand pane on the **Dell Systems Build and Update Utility** Home page.
- 3 Follow the step-by-step instructions to configure your hardware and install your operating system.

For additional information about installing RAID, see *Getting Started With RAID* in the **docs** directory.

For more information on using Dell Systems Build and Update Utility, see the *Dell Systems Build and Update Utility Quick Reference Guide* in the **docs** directory or on the Dell Support site at support.dell.com.

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

- www.microsoft.com/windows2000/en/advanced/help/PAE_checklist.htm
- 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

Post-Installation Icons

When you use Dell Systems Build and Update Utility to install an operating system, Dell Systems Build and Update Utility allows you to copy the relevant systems management software installation files onto the hard drive and places the **Install Server Administrator** and **Delete Server Administrator Installation Files** icons on the desktop. These icons are created only if you are using Windows 2003 and Red Hat Enterprise Linux and are not available on the Windows Server 2008 and SUSE Linux Enterprise Server operating systems.

You can use the **Install Server Administrator** icon to install Server Administrator without the DVD. On systems running a supported Windows operating system, clicking this icon brings up the standard installation interface. On systems running a supported Red Hat Enterprise Linux operating system, clicking this icon runs the **Server Administrator** custom installation script. If you do not want to install Server Administrator, 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.

Installing Systems Management Software on a Managed System

The setup program provides both, a **Typical Setup** option and a **Custom Setup** option. The **Typical Setup** option (recommended) automatically installs all the detected software components that are necessary to manage your system. The custom setup option enables you to select the software components you want to install. The procedure in this document is based on the typical setup option.

For details about the custom setup option, see the *Dell OpenManage Installation and Security User's Guide*. The custom setup option allows you to choose if you want to install management station and managed system software in the same or different directories. You can also select the directory for installation.



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

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 and on which 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 in the **SERVICE** directory. You can verify the device driver under Windows by right-clicking **My Computer**, selecting **Manage**, and then clicking **Device Manager**.

- 4 Insert the *Dell Systems Management Tools and Documentation* DVD into the DVD drive.

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

The **Dell OpenManage Install** autorun menu is displayed.

- 5 Select the **Dell OpenManage Server Administrator** option and click **Install**.

The **Dell OpenManage Server Administrator** prerequisite status screen displays and runs the prerequisite checks for the managed system. Relevant informational, warning, or error messages, if any, are displayed. Resolve all error and warning situations.

- 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 **Typical** and click **Next**.

- 10** Click **Install** to proceed through the installation process.
The setup program automatically installs all 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 or SUSE Linux Enterprise Server Operating Systems

- 1** Log on as `root` to the system running a supported Red Hat Enterprise Linux or SUSE Linux Enterprise Server operating system where you want to install the managed system components.
- 2** Insert the *Dell Systems Management Tools and Documentation* DVD into the DVD drive.

- 3 If necessary, mount the DVD to a location of your choice using the `mount` command or a similar command.



NOTE: On the 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 need to manually mount the DVD-ROM and then run the executables.

- 4 Navigate to the `SYSMGMT/srvadmin/linux/supportscripts` directory. Execute the `srvadmin-install.sh` script as follows:

```
sh srvadmin-install.sh --express
```

or

```
sh srvadmin-install.sh -x
```

The script installs the typical software suite for your system configuration.



NOTE: You can log the output of the RPM installation by adding `2>&1 | tee -a /var/log/srvadmin.log` to the above shell script execution. The resulting command is `sh srvadmin-install.sh 2>&1|tee -a /var/log/srvadmin.log`

- 5 Start the Server Administrator services with the `sh srvadmin-services.sh start` command.

For information about the options that you can use with the `srvadmin -install.sh` script, see the *Dell OpenManage Installation and Security User's Guide*.

You can also download Web packages of versions 6.0.1 of the Dell OpenManage Server Administrator and Dell OpenManage Management Station software from the Dell Support site at support.dell.com. You can transfer the contents of these Web packages to CDs or USB keys for systems that do not have DVD drives.

Installing Systems Management Software on a Management Station

The **Typical** installation installs DRAC Tools and BMC. To choose the software components for installation or to install other features such as the Active Directory Snap-in Utility, see the **Custom** installation section of the *Dell OpenManage Installation and Security User's Guide*.



NOTE: From Dell OpenManage version 6.0.1 onwards, IT Assistant is no longer a part of the **Typical** installation. For information on installing IT Assistant, see the *Dell OpenManage IT Assistant User's Guide*.

You can install management station and managed system software in the same directory or different directories. You can also select the directory for installation.

Installing Management Station Software on Microsoft Windows Operating Systems

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 *Dell Systems Management Tools and Documentation* DVD into the DVD drive.

- 3** Install BMC/RAC by running **setup.exe** located at **ManagementStation\Windows**.

The **Dell OpenManage Management Station** prerequisite status screen is displayed and runs the prerequisite checks for the management station. Relevant informational, warning, or error messages, if any, are displayed. Resolve all error and warning situations.

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

Microsoft Windows Installer is launched and 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 **Typical** 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 is displayed. Messages are displayed, indicating the status and progress of the software components being installed.

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

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

Installing Management Station Software for Supported Red Hat Enterprise Linux or SUSE Linux Enterprise Server Operating System

Only DRAC Tools and BMU are supported on the Red Hat Enterprise Linux and SUSE Linux Enterprise Server operating systems.



NOTE: On 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 need to manually mount the DVD-ROM and then run executables.

To install BMU on 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 DVD to a location of your choice using the `mount` command or a similar command.
- 3** Navigate to the `SYSMGMT/ManagementStation/linux/bmc` directory and install the BMC software using the RPM commands specific to the operating system:
 - For systems running Red Hat Enterprise Linux, use:
`rpm -ivh osabmcutil*-RHEL-*.rpm`
 - For systems running SUSE Linux Enterprise Server, use:
`rpm -ivh osabmcutil*-SUSE-*.rpm`

To install the IPMItool BMC Management Utility, navigate to the operating system sub-directory under `SYSMGMT/ManagementStation/linux/bmc/ipmitool` corresponding to your operating system 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 DVD to a location of your choice using the `mount` command or a similar command.
- 3 Navigate to the `SYSMGMT/ManagementStation/linux/rac` directory and execute the `rpm -ivh *.rpm` command.

You can also download the Web packages of versions 6.0.1 of the Dell OpenManage Management Station software from the Dell Support site at support.dell.com. You can transfer the contents of these Web packages to CDs or USB keys for systems that do not have DVD drives.

Updating Drivers and Utilities

The `SERVICE` directory in the DVD contains device drivers and utilities that you can use to update your system. Copy the drivers and utilities to either a diskette or to your system's hard drive.

Download the latest product updates, such as drivers and Dell OpenManage applications, from the Dell Support site at support.dell.com.



NOTE: To extract drivers for systems running Red Hat Enterprise Linux or SUSE Linux Enterprise Server operating systems, use the DVD on a system running Windows and then copy or share the selected files to the final destination system.

- 1 Click the **Start** button, click **Run**, and then type `x: \SERVICE\setup.exe` (where x is the drive letter of your DVD 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. Firmware files normally require diskettes for the extraction.

- 4 Decompress the file.

See the *Dell OpenManage Server Administrator Compatibility Guide* or the *Dell Systems Software Support Matrix* in the **docs** directory for additional information about drivers and Dell OpenManage application versions.

Installing Dell OpenManage on VMware ESX Server Software

See the *Installing Dell OpenManage in a VMware ESX Server Software Environment* document at www.dell.com/vmware for installing Dell OpenManage on VMware[®] ESX Server[™].

Using Dell OpenManage with Citrix XenServer Dell Edition

Dell OpenManage Server Administrator is pre-installed in Citrix[®] XenServer Dell Edition[™], hence no installation steps are required. See the *Citrix XenServer Dell Edition Solution Guide* at <http://support.dell.com/support/edocs/software/Citrix/> for details on using Dell OpenManage with Citrix XenServer Dell Edition.

Installing Dell OpenManage on Microsoft Hyper-V and Hyper-V Server Software

For information on installing Dell OpenManage on Microsoft Hyper-V™ and Hyper-V server, see the *Dell OpenManage Installation and Security User's Guide* in the docs directory or on the Dell Support site at support.dell.com.

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, www.redhat.com, or www.novell.com.

Obtaining Technical Assistance

Before contacting Dell for technical assistance, see the Dell Support site at support.dell.com. If you need additional technical support, see "Getting Help" in your system's *Hardware Owner's Manual* 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. 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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