Dell Systems Service and Diagnostics Tools 6.5 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.

Contents

Using the Dell Systems Service and Diagnostics Tools

The Dell Systems Service and Diagnostics Tools delivers the latest Dell-optimized drivers, utilities, and online diagnostics (operating system-based) for Dell servers running on Microsoft Windows, Red Hat Enterprise Linux, or SUSE Linux Enterprise Server operating systems. System administrators can copy drivers and utilities to either a diskette or a hard drive to use them.

Files are delivered in one of the following compressed formats:

- **Self-Extracting Executable**—Run using the Windows operating system.
- **Application**—Run using the Windows operating system.
- **Tape Archive (TAR) or RPM Package Manager (RPM)**—Run using the Red Hat Enterprise Linux or SUSE Linux Enterprise Server operating systems.

NOTE: The Dell Systems Service and Diagnostics Tools 6.5 is no longer available in *Dell Systems Management Tools and Documentation DVD*. You can download the installation file from the Dell Support website at **support.dell.com**.

Prerequisites

To run Dell Systems Service and Diagnostics Tools, you need to have a system running on Windows that has enough hard disk space to download the driver files and utilities.

NOTE: Use Dell Systems Service and Diagnostics Tools to get latest updates for Dell servers running Windows, Red Hat Enterprise Linux, or SUSE Linux Enterprise Server operating systems.

Important Information

- The Dell Systems Service and Diagnostics Tools is not supported on Microsoft Windows Preinstallation Environment (Windows PE).

- You can run the Dell Systems Service and Diagnostics Tools only on systems running Microsoft Windows. To extract drivers or utilities for systems that are running Red Hat Enterprise Linux or SUSE Linux Enterprise Server, you must use the Dell Systems Service and Diagnostics Tools on a system running Windows and then copy or share the selected files to the final destination system.

Obtaining Dell Systems Service and Diagnostics Tools Software

To obtain Dell Systems Service and Diagnostics Tools as a bootable ISO image from the Dell support website and burn the image on a DVD:

1 Navigate to **support.dell.com**.

2 Click **Support for Enterprise IT: Start Here**.

3 Click **Drivers & Downloads**.

   ✏ **NOTE:** If you have already selected the service tag or model number, go to step 7.

4 Click **Select Model** or click the **Choose a model** icon.

5 Click **Servers, Storage, Networking**.

6 Click **PowerEdge Servers** and select your product model. Click **Confirm**.

7 Expand **System Management** by clicking the ^ symbol.

   ✏ **NOTE:** Click **Change Your Product** to select another model if different from the model chosen by the default service tag.

8 Click **Download Now** for **DVD ISO - Systems Service and Diagnostics Tools** and save the ISO file on a location of your choice.

9 Burn the ISO file on a DVD using any third party software.

Updating Drivers And Utilities

You can use the drivers and utilities provided to update a working system.

The utilities provided are:

- **Network Utility**—Use this utility to run diagnostics of a network card.
- **Dell Online Diagnostics**—Use this utility to run operating system-based diagnostics for your Dell system. For more information, see "Setting Up Dell Online Diagnostics."

To access the drivers and the utilities on the Dell Systems Service and Diagnostics Tools:

1 Insert the DVD that you created into the DVD drive on a system running Windows.

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

The **Dell Systems Service and Diagnostics Tools Home** page is displayed.

2 Select a server from the drop-down list.

3 From the **Select Drivers/Utilities Set**, select your operating system or system utilities and then click **Continue**.

4 From the **Utilities and Drivers Page**, select the driver file or the utility that you want to update by clicking the link for the device name.

The system prompts you for a location in which to save or run the file. Files are delivered in compressed format.

5 Decompress the file.

For additional information about drivers and Dell OpenManage application versions, see the *Dell Systems Software Support Matrix*.

Setting Up Diagnostics

Setting Up Dell Online Diagnostics

⚠️ **CAUTION: Installing srvadmin-hapi or srvadmin-omilcore using the rpm command fails on all SC platforms. Since SC platforms (for example, SC420 or SC430) do not support Intelligent Platform Management Interface (IPMI), Memory and DRAC diagnostics are not available on these systems.**

To set up online diagnostics:

1 Insert the DVD that you created into the DVD drive on a system running Windows.

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

The **Dell Systems Service and Diagnostics Tools Home** page is displayed.

2 Select a server from the drop-down list.

3 From the **Select Drivers/Utilities Set**, select your operating system and then click **Continue**.

4 From the **Utilities and Drivers Page**, select **Dell: Online Diagnostics**.

The system prompts you for a location in which to save the file. Files are delivered in compressed format.

5 Follow the sub steps depending on your operating system.

For Red Hat Enterprise Linux or SUSE Linux Enterprise Server:

a Unzip the **tar.gz** file to a specified location.

The extracted files contain an install script (**install.sh**) and RPM Package Manager (RPM) packages.

b Install the RPM packages using **install.sh**.

📝 **NOTE:** All required files are installed to the default install directory, /opt/dell/onlinediags. In the onlinediags directory, run startDiags.sh from an X Windows System for Linux session to launch the Graphical User Interface (GUI) application. To uninstall the application, execute uninstall.sh in the install directory.

For Windows:

a Launch the **.exe** package from the Dell Systems Service and Diagnostics Tools.

b Select a directory where you want to install the files.

c Install all the files required to run the application in the selected directory.

d Launch the utility using the GUI or Command Line Interface (CLI).

Running Online Diagnostics on Windows

To run Online Diagnostics using the GUI for Microsoft Windows, select **Start→ Programs→ Online Diagnostics** *x.x* (where *x.x* is the current version of Online Diagnostics).

To run Online Diagnostics in the CLI mode for Microsoft Windows, run **pediags** at **<InstallDir>/oldiags/bin**.

Running Online Diagnostics on Red Hat Enterprise Linux and SUSE Linux Enterprise Server

To run Online Diagnostics on Red Hat Enterprise Linux and SUSE Linux Enterprise Server operating systems:

1 Ensure that you have root privileges.

✍ **NOTE:** If you do not have root permission, use the sudo command.

2 To run Online Diagnostics using the GUI, go to the directory **/opt/dell/onlinediags/** and run the **./startdiags.sh** script.

3 To run Online Diagnostics using the CLI, go to the directory **/opt/dell/onlinediags/oldiags/bin** and run the **./pediags** command or run the **/opt/dell/onlinediags/oldiags/bin/pediags** command.

Setting Up Dell 32-bit Diagnostics And MP Memory Diagnostics Utility

1 Insert the DVD that you created into the DVD 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 DVD drive).

   The **Dell Systems Service and Diagnostics Tools Home** page is displayed.

2 Select a server from the drop-down list.

3 From the **Select Drivers/Utilities Set**, select **System Utilities**, and then click **Continue**.

4 From the **Utilities and Drivers Page,** select **Dell: 32 Bit Diagnostics (Diagnostics Utility)**. The system prompts you for a location in which to save the file.

5 Save the file on your system.

6 Double-click the executable file that you downloaded on your system.

7 Follow the instructions on the screen to extract the file.

   By default, the files are extracted to the **C:\dell\drivers\R***xxxxxx* folder. When you extract the files for the first time, the **Diagnostic Distribution Package** screen is displayed automatically. You can also access this screen by double-clicking the **C:\dell\drivers\R***xxxxxx***DDDP.EXE** file.

8 Perform any of the following using the Diagnostic Distribution Package.

   • Install to a USB flash drive.

   • Create a bootable diskette set.

   • Create a bootable image.

   • Create a bootable CD.

   • Update existing diagnostic partition.

9 Boot the system using the image you just created.

10 Follow the instructions on the screen to perform memory diagnostics or Dell 32-bit diagnostics.

Security Patches and Hotfixes

It is 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 **microsoft.com**, **redhat.com**, or **suse.com**.

Obtaining Technical Assistance

Before contacting Dell for technical assistance, see the Dell Support website at **support.dell.com**. If you need additional technical support, see "Getting Help" in your system's *Hardware Owner's Manual* for country/region-specific information about contacting Dell by using telephone, fax, and Internet services.

For Dell Enterprise Training and Certification programs, see **dell.com/training**. This service may not be offered in all locations.