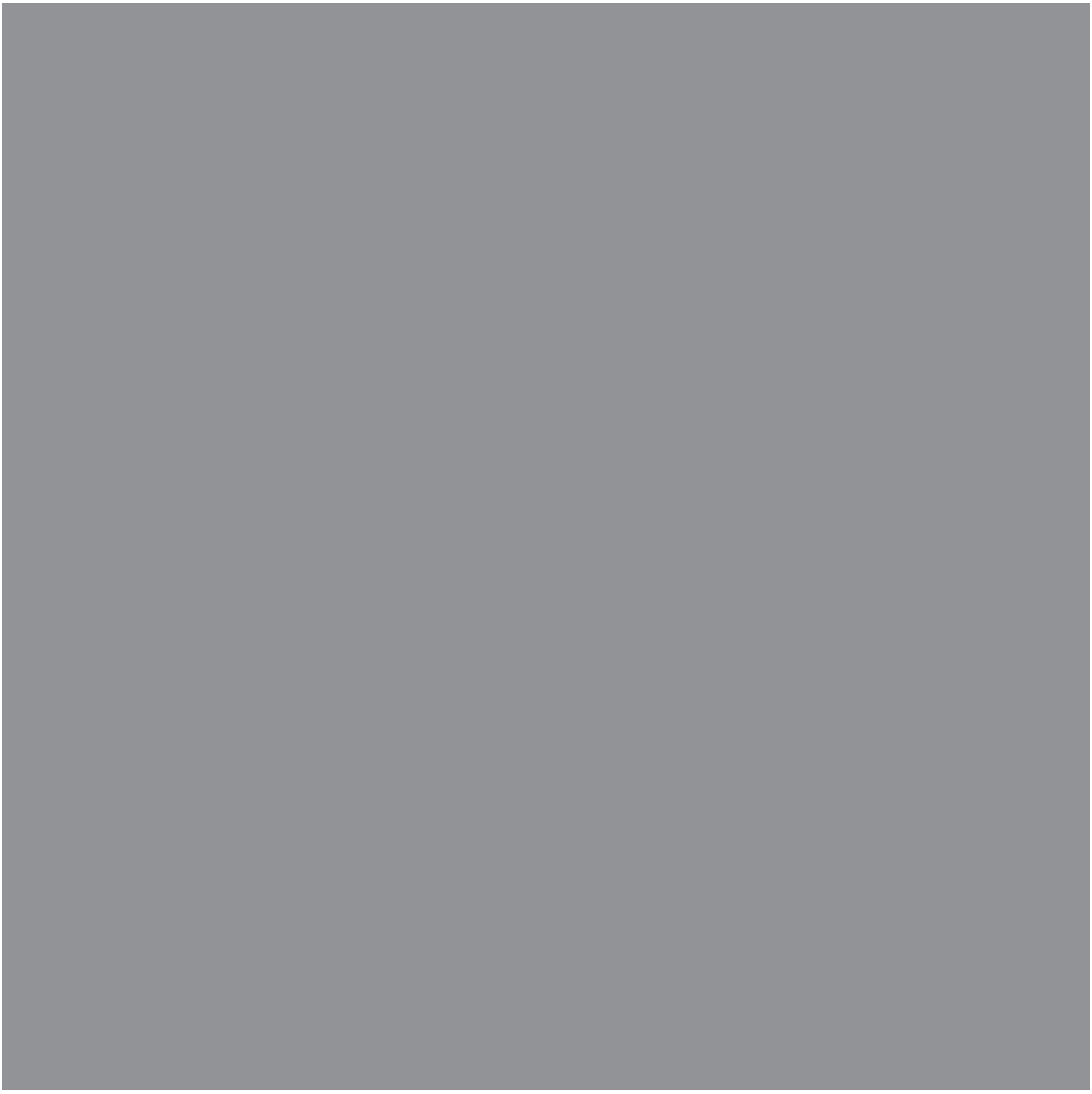
Troubleshooting and Maintenance Guide



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Maintenance

This section includes information about tasks you can perform to help ensure the trouble-free operation of your computer, and to ease the recovery of important information on your computer should problems arise in the future.

Creating Data Backup Discs

You can use the CD or DVD burning software included on your computer to create backup discs of important information including personal files, e-mail messages, and Web site bookmarks.

When writing data to a backup disc, you should use software that includes *write verification* functionality. This verification feature compares the data on your hard disk drive with the data copied to the disc to ensure it is an exact copy. Depending on your disc burning software, you may need to manually enable this feature.

Removing Unused Programs

1. Click the **Windows Start Button**®, and then click **Control Panel**.
2. Click **Uninstall a program**. The Programs and Features window opens.
3. Select the program you want to remove, and click **Uninstall**.
4. Follow the onscreen instructions.

NOTE: Some programs have their own uninstall features. If you cannot uninstall a program from the Control Panel, refer to the program documentation or Help.

Running the Disk Cleanup Program

The Disk Cleanup program frees up space on your hard disk drive by removing temporary and unused files (including Temporary Internet Files and files in the Recycle Bin). You can run Disk Cleanup manually, or you can set it up to run automatically.

Running Disk Cleanup manually

1. Click the **Windows Start Button**, **All Programs**, **Accessories**, **System Tools**, and then click **Disk Cleanup**.

   Disk Cleanup searches for files to delete and calculates how much disk space can be saved.
2. Choose the files to delete by placing a check mark in the check box next to the file types listed.
3. Click **OK**, and then click **Delete Files** to finish deleting the selected files.

Scheduling Disk Cleanup to run automatically

1. Click the **Windows Start Button**, **All Programs**, **Accessories**, **System Tools**, and then click **Task Scheduler**.
2. Click **Action**, and then click **Create Basic Task**.
3. Type a name for the task and an optional description.
4. Click **OK**, then click **OK** again.
5. Select the reoccurrence, and click **Next**.
6. Select the time to run Disk Cleanup and click **Next**. Disk cleanup may take a long time, so select a time when the computer is on but not in use.
7. Select **Start a program** and click **Next**.
8. Under **Program/Script**, click **Browse**.
9. Type *cleanmgr.exe* and click **Open**.
10. Review the summary of the schedule you have set. When done, click **Finish**.

    Disk Cleanup runs at the time you have set.

Running the Disk Defragmenter Program

When Windows Vista stores files on your hard disk drive, it often divides them into multiple pieces (or *fragments*) so they fit into available space on the drive. When you attempt to open a fragmented file, it must be retrieved from more than one place, so the process takes more time.

The Disk Defragmenter program groups the fragmented files together on your hard disk drive to improve computer performance. This does not affect the location of files and folders on your computer.

NOTE: The Disk Defragmenter program may take a long time to complete. You can run it unattended overnight.

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1. Save your work and close all open programs.
2. Press the Ctrl key, the Alt key, and the Delete key at the same time.
3. Click **Start Task Manager**.
4. On the Applications tab, select all the programs that are listed, and then click **End Task**. Close the Task Manager.
5. Click the **Windows Start Button**, choose **All Programs**, **Accessories**, **System Tools**, and then click **Disk Defragmenter**.
6. Click **Defragment Now**.

If Disk Defragmenter repeatedly starts, a hidden background program is still accessing the hard disk drive. Restart the computer in Safe Mode and run the Disk Defragmenter program again:

1. Click the **Windows Start Button**, click the arrow next to the **Lock** button, and then click **Restart**.

2. Press the F8 key as soon as the first logo screen appears.
3. On the Windows Advanced Options menu, use the arrow keys to select **Safe Mode** and press the Enter key.
4. Press the Enter key again to select the operating system.
5. Log on to Windows Vista. When the Desktop message appears, click **Yes** to continue in Safe Mode.
6. After Windows Vista starts, use the previous procedure to run the Disk Defragmenter program.

Checking for Hard Disk Drive Errors

Perform the following procedure to check the integrity of the hard disk drive in Windows Vista. Close all open programs before beginning the disk check.

1. Click the **Windows Start Button**, and then click **Computer**.
2. In the window that opens, right-click the hard disk drive that you want to check, and click **Properties**.
3. In the Properties window, click the **Tools** tab.
4. Under Error-checking, click **Check Now**.
5. If desired, click the check box next to **Automatically fix file system errors** and **Scan for and attempt recovery of bad sectors**.
6. Click **Start**. If prompted to restart, click **Yes** to restart the computer.

Understanding Hard Disk Drive Space

HP and Compaq computers with the Windows Vista operating system preinstalled *may* appear to have a hard disk drive smaller than what is stated in the product specifications, in the documentation, or on the box. Hard disk drives are described and advertised by manufacturers in terms of decimal (base 10) capacity. Windows Vista and other programs, such as FDISK, use the binary (base 2) numbering system.

In decimal notation, one megabyte (MB) is equal to 1,000,000 bytes, and one gigabyte (GB) is equal to 1,000,000,000 bytes. In the binary numbering system, one megabyte is equal to 1,048,576 bytes, and one gigabyte is equal to 1,073,741,824 bytes. Because of the different measuring systems, you may see a difference between the size reported by Windows Vista and the size advertised. The storage capacity of the hard disk drive is as advertised.

Windows Vista reports smaller capacity in the Windows Explorer tool and in the Computer window because it shows information about one partition on the hard disk drive at a time. The first partition contains the System Recovery information.

Recommended Maintenance Schedule

Daily	Weekly	Monthly	Quarterly (seasonally)
Manage e-mail ■ Delete e-mail from unknown sources. ■ Do not open untrusted attachments. ■ Organize e-mail.	**Protect against viruses, adware, and spyware** ■ Update definition files or schedule a weekly automatic update. ■ Run a full virus, adware, and spyware scan or schedule a weekly automatic scan.	**Use Windows Update** ■ Check for updates or schedule a monthly automatic update. (See the *Getting Started Guide* for details.)	**Set new passwords** (See the *Getting Started Guide* for details.)
	Optimize performance ■ Run Disk Cleanup. (See "Running the Disk Cleanup Program" on page 2.) ■ Run Disk Defragmenter. (See "Running the Disk Defragmenter Program" on page 3.) ■ Check for disk errors. (See "Checking for Hard Disk Drive Errors" on page 4.)	**Review the Start menu** ■ Set to open only needed applications: 1 Click the **Windows Start Button**, **All Programs**, then click **Windows Defender**. 2 Click **Tools**. 3 Click **Software Explorer**. 4 In the Category list, select **Startup Programs**. 5 Select the program that you want to prevent from running and click **Disable**.	**Clean the computer, monitor, keyboard, and mouse** ■ For detailed cleaning instructions, go to: **http://www.hp.com/support** Select your country/region and language, search on your computer model number, and then search on the keyword *cleaning*.

Recommended Maintenance Schedule (*continued*)

Daily	Weekly	Monthly	Quarterly (seasonally)
	Clean up Web browser files ■ Delete cookies. ■ Delete cache. ■ Delete history files.	**Clean up the desktop** ■ Delete or uninstall unneeded icons and applications. (See "Removing Unused Programs" on page 1.)	
	Empty the Recycle Bin ■ This, and other cleanup tasks, can be performed with the Disk Cleanup program. (See "Running the Disk Cleanup Program" on page 2.)	**Maintain overall condition** ■ Check cleanliness. ■ Make sure ventilation is unobstructed. ■ Secure all connections and cabling.	
	Back up important files to CD or DVD (See "Creating Data Backup Discs" on page 1.)	**Create a Restore Point** (See "Microsoft System Restore" on page 23.)	

Troubleshooting Computer Problems

This section contains a series of tables that describe possible solutions to problems that may occur when using your computer. Each table contains:

- **Symptoms** that describe the sign or warning message for the type of problem.
- **Possible solutions** that describe what you should do to try to solve the problem.

The troubleshooting tables appear in the following order:

- Audio
- CD and DVD Drives
- Video
- Display (Monitor)
- Hard Disk Drive
- Hardware Installation
- Internet Access
- Keyboard and Mouse
- Power
- Performance
- Miscellaneous

For additional information about monitor problems, or for problems relating specifically to your printer, refer to the documentation provided by the product's manufacturer.

Audio

Symptom	Possible solution
No sound is produced.	Press the Mute button on the keyboard to see if the Mute feature is turned on. *Or* 1 Click the **Windows Start Button**, and then click **Control Panel**. 2 Click **Hardware and Sound**, and then **Adjust system volume**. 3 If applications are muted, click the Mute button to unmute.
	Click the task bar **Volume** icon ( ), or use the keyboard controls to increase the volume.
	Ensure powered (active) speakers are turned on.
	Turn off your computer, and reconnect the speakers.
	Press the Sleep button (select models only), or press the Esc key on the keyboard to resume from sleep mode.
	Replace the passive speaker system with an active speaker system (sold separately). Active speakers have a power cord and On button and connect to the Audio Out (green) connector on the computer.
	Unplug headphones if they are connected to your computer.
Codec error messages appear when certain audio files are played.	Open the file in Windows Media Player. Ensure Windows Media Player is configured to automatically download codecs. ■ If the correct codec is available, the file will play. Note that you must be connected to the Internet to download the codec file. ■ If the correct codec is not available, check to see if there is an update available for Windows Media Player. For more information, open Windows Media Player Help, and then search the online Help for *codec*.

CD and DVD Drives

Symptom	Possible solution
The CD or DVD drive cannot read a disc or takes too long to start.	Ensure the disc is inserted with the label facing up and centered in the tray.
	Wait at least 30 seconds to let the drive determine the type of media.
	Clean the disc with a disc cleaning kit, available from most computer stores.
	The driver may be corrupted or outdated. Refer to "Updating Drivers" on page 22 for detailed information about restoring and updating drivers.
I cannot remove a CD or DVD.	Turn on your computer, and press the Eject button nearest the drive to open the tray. If you suspect a problem with the actual Eject button: **1** Click the **Windows Start Button** and then **Computer**. **2** Right-click the CD or DVD drive you want to open. **3** Select **Eject** from the menu.
I cannot create (burn) a disc.	Ensure the disc is inserted with the label facing up and centered in the tray.
	Verify that you are using the correct disc type (media) for the drive. Try a different brand of disc.
	Make sure the disc is clean and undamaged. If recording stopped during a recording session, the disc may be damaged; use a different disc.
	Use the correct type of disc for the type of files you are recording.
	When using a CD-R disc, make sure that it is blank when recording music and is blank or appendable (with space to add more data files) when recording data.
	Verify that you are using the correct disc type when making a copy of a disc. Some recording programs can record only to the same disc type as the source. For example, you can record a DVD only to a DVD+R/–R or a DVD+RW/–RW disc, and you can record a CD only to a CD-R or a CD-RW disc.
	Make sure the disc is in the correct drive and you specify the same drive in the CD or DVD recording software.
	Select a slower write speed for the recording drive, if it is available.
	The recording software may not let you add a track if it exceeds the available space on your disc. You can make space available by removing one or more tracks from the list before recording the files to disc.
	Close all software programs and windows before recording.

CD and DVD Drives (*continued*)

Symptom	Possible solution
I cannot create (burn) a disc. (*continued*)	Make sure you have enough space available on your hard disk drive to store a temporary copy of the content. Click the **Windows Start Button**, then **Computer**. Right-click on the hard disk drive and select **Properties** to view the space available. If you are on a network, copy the files from a network drive to your hard disk drive first, and then record them to disc. Close all programs and windows and then restart your computer.
I cannot add data to a DVD.	Make sure you set the correct recording option (append or add data files) in your DVD burning software.
Titles of music tracks are not displayed for the CD.	The computer must be connected to the Internet for the artist, title, and track information to appear when playing music CDs. This information is not recorded on the disc. Track information may not be available for every CD.
An error message appears when capturing video.	You may need to select the capture device if your computer has both an analog and a digital video capture device. Refer to the Help menu in the video capture program to find out how to change the video device selection.
I cannot play a DVD movie on a DVD player.	Your DVD player cannot play video files recorded onto the DVD as data files. To play a movie properly, use a video recording program. Some video files may be viewed on a computer, but not on a home DVD video player.

Video

Symptom	Possible solution
Some video files do not play.	Your file may be corrupt or in an unsupported format. Open the video file in a video editor, and then resave the file in a supported format.
Codec error messages appear when I play certain video files.	Open the file in Windows Media Player. Ensure Windows Media Player is configured to automatically download codecs. ■ If the correct codec is available, the file will play. Note that you must be connected to the Internet to download the codec file. ■ If the correct codec is not available, check to see if there is an update available for Windows Media Player. For more information, open Windows Media Player Help, and then search the online Help for *codec*.

Video (*continued*)

Symptom	Possible solution
Error message: *Files Needed To Display Video Are Missing or Corrupt.*	1 Click the **Windows Start Button**, right-click **Computer**, and then select **Properties**. 2 Under Tasks, click **Device Manager**. 3 Click the plus sign (**+**) next to **Sound, video and game controllers**. 4 Right-click **TV tuner** (select models only) and then select **Update Driver Software**. 5 Select **Search automatically for updated driver software**. 6 Follow the instructions to update the driver. 7 If prompted, restart the computer.

Display (Monitor)

In addition to the information listed here, also refer to the documentation that came with your monitor.

Symptom	Possible solution
Screen is blank, and monitor power light is not lit.	Reconnect the power plug on the back of the monitor and the wall outlet.
	Press the On button on the front of the monitor.
Screen is blank.	Press the space bar or move the mouse to make the screen display visible again.
	Press the Sleep button (select models only), or press the Esc key on the keyboard to resume from sleep mode.
	Press the On button to turn on the computer.
	Inspect the monitor video connector for bent pins: ■ If any of the pins are bent, replace the monitor connector cable. ■ If no pins are bent, reconnect the monitor connector cable to the computer.
Images on the screen are too large or too small, or the images are fuzzy.	Adjust the monitor resolution setting in Windows Vista: 1 Right-click the desktop, and then select **Personalize**. 2 Click **Display Settings**. 3 Adjust the **Resolution** slider as needed.

Hard Disk Drive

Symptom	Possible solution
Computer seems to be locked up and not responding.	Use the Windows Task Manager to close any programs not responding or restart the computer: **1** Press the Ctrl key, the Alt key, and the Delete key on the keyboard at the same time. **2** Click **Start Task Manager**. **3** Select the program that is not responding, and click **End Task**. *Or* If closing programs does not work, restart the computer: **a** Press the Ctrl key, the Alt key, and the Delete key on the keyboard at the same time. **b** Click the arrow next to the **Shut Down** button and then click **Restart**. **c** If this does not work, press and hold the On button for 5 or more seconds to turn off the computer. Then, press the On button.
Hard disk drive error message displays.	Press the Help **?** button on the keyboard to open the Help and Support Center, or refer to the *Limited Warranty and Support Guide* to contact Support.

Hardware Installation

Symptom	Possible solution
A new device is not recognized as part of the system.	Install the device driver from the CD provided with the device, or download and install the driver from the device manufacturer's Web site. You may need an updated driver for Windows Vista. Contact the device vendor directly for an update. For HP peripherals, visit the HP Web site. Refer to the *Limited Warranty and Support Guide* for details.
	Ensure that all cables are properly and securely connected and that the pins in the cable or connector are not bent.
	Turn off the computer, turn on the external device, and then turn on the computer to integrate the device with the computer.

Hardware Installation (*continued*)

Symptom	Possible solution
A new device is not recognized as part of the system. (*continued*)	Restart the computer, and follow the instructions for accepting the changes. Deselect the automatic settings in the operating system for the card, and choose a basic configuration that doesn't cause a resource conflict. You can also reconfigure or disable devices to resolve the resource conflict.
A new device does not work.	You must be logged in with administrative privileges to install or uninstall a device driver. If you need to switch users, click the **Windows Start Button**, click the **Arrow** button next to the **Lock** button, and then click **Switch User**. Choose a user with administrative privileges.
A device does not work after installing a new device.	To resolve a device conflict, you may need to disable one of the devices or uninstall an old device driver: **1** Click the **Windows Start Button**, right-click **Computer**, and then select **Properties**. **2** Under Tasks, click **Device Manager**. **3** Click the plus sign (**+**) next to the problem device and check for exclamation points in a yellow circle near the device icon. The exclamation point means there is a device conflict or problem with the device. Exclamation points do not always appear when a device is not working properly. **4** If you have removed a hardware device and the device driver is listed in the Device Manager, this may be causing the device conflict. To uninstall the old driver for the new device driver to work properly, do the following: Right-click the device, click **Uninstall**, and then click **OK**. **5** Double-click the name of the device, and select **Properties**. **6** If available, click the **Resources** tab to verify that there is a device conflict. **7** Click the **General** tab to see if your device is enabled and working properly. If it is available, click the **Troubleshoot** button, and follow the onscreen instructions in the device troubleshooter wizard. **8** Restart the computer. Click the **Windows Start Button**, click the **Arrow** button next to the **Lock** button, and then click **Restart**.

Internet Access

Symptom	Possible solution
I cannot connect to the Internet.	Verify Internet settings, or contact your Internet Service Provider (ISP) for assistance.
	Verify that you are using the proper cables for your Internet connection type. Your computer may have a modem and an Ethernet network adapter (also called a network interface card, or NIC). A modem uses a standard telephone cable to make a dial-up connection. A NIC uses a network cable to connect to a local area network (LAN). Do not connect a telephone cable to the NIC. Do not plug a network cable into a telephone service line; doing so may damage the NIC. For more information about connecting to the Internet, press the Help **?** button on the keyboard to open the Help and Support Center.
	Verify that the Web browser is installed and set up to work with your ISP.
	Try to connect again later, or contact your ISP for assistance.
I cannot automatically start Internet programs.	Log in to your ISP, and start the desired program.
Web pages load slowly.	Verify that the correct modem speed and COM port are selected: **1** Click the **Windows Start Button**, and then click **Control Panel**. **2** Click **Hardware and Sound**. **3** Double-click **Phone and Modem Options**. **4** Select the **Modems** tab, and then click the **Properties** button. **5** In the *Device status* area, verify the modem is working properly. Note that Web pages do not always load as quickly as files stored on your computer. Web pages may also load slowly if there is a high demand for the Web site at that time.
The AOL program opens even when it is not being used.	You may want to remove the AOL program. To uninstall AOL: **1** Click the **Windows Start Button**, and then click **Control Panel**. **2** Click **Uninstall a program**. **3** Select **America Online**, click **Uninstall**, and then follow the onscreen instructions. **NOTE:** Removing the AOL program will not cancel your account with AOL.

Internet Access (*continued*)

Symptom	Possible solution
My Internet browser home page changed to something I did not want.	You may have *spyware* on your computer. Spyware is software that usually runs silently in the background on your computer, collecting and sending information about you and your use of the computer to another person or system on the Internet. You can find and remove spyware from your computer by using any one of a number of software programs available for this purpose, including Windows Defender. To scan for spyware using Windows Defender: 1 Click the **Windows Start Button**, **All Programs**, then click **Windows Defender**. 2 Click **Scan**. Many of the popular virus protection programs also have some tools that scan for and remove spyware from your computer. To avoid getting spyware on your computer: ■ Do not install programs if you are not sure they come from reputable companies. Check the company's Web site carefully for information about what is included with the program. ■ Do not automatically click **Yes** when a download window asks if it is OK to install a program on your computer. Read the message in the window and make sure it is a software program that you really want.
Unwanted pop-up advertisements display on my computer when connected to the Internet.	This is typically caused by *adware* or advertising-supported software. You can configure your Web browser to block pop-ups (available in Internet Explorer by clicking **Tools** and then **Pop-up Blocker**). To remove adware from your computer, use the antispyware/adware program included on your computer (select models only) or any number of available software programs that remove adware programs. Note that many of the popular antivirus programs have tools that scan for and remove adware from your computer.

Keyboard and Mouse

Symptom	Possible solution
Keyboard commands and typing are not recognized by the computer.	Turn off the computer by using the mouse, reconnect the keyboard to the back of your computer, and then turn on your computer. Refer to the *Limited Warranty and Support Guide* to contact Support.
Keyboard Print button does not work.	Use the Print menu item in the program (usually located on the File menu).
Wireless keyboard does not work or is not detected.	■ Ensure the keyboard is within the range of the receiver. ■ Replace the batteries in the wireless keyboard. ■ Refer to the documentation that came with the keyboard.
Wireless mouse does not work or is not detected.	■ Ensure the mouse is within the range of the receiver. ■ Replace the batteries in the wireless mouse. ■ Refer to the documentation that came with the mouse.
Cursor does not respond to mouse movement.	Restart your computer using the keyboard: **1** Press the Alt and Tab keys on the keyboard at the same time to navigate to an open application. **2** Press the Ctrl and S keys on the keyboard at the same time to save your changes in the selected application (Ctrl+S is the keyboard command for Save on most — *not all* — applications). **3** After saving changes in all open applications, press the Ctrl and Esc keys on the keyboard at the same time to display the Start menu. **4** Use the arrow keys to select the **Arrow** button next to the **Lock** button. Select **Shut Down**, and then press the Enter key on the keyboard. **5** After the shutdown is complete, reconnect the mouse connector to the back of your computer, and then turn on your computer.
Cursor responds slowly to mouse movement.	Use a mouse pad or other rough surface under the mouse. If you have a rollerball mouse, clean the roller ball. For detailed cleaning instructions, go to: **http://www.hp.com/support** Select your country/region and language, search on your computer model number, and then search on the keyword *cleaning*.
Cursor does not move using the arrow keys on the number key pad.	Press the Num Lock key. The Num Lock light should not be on if you want to use the arrow keys on the number key pad.

Keyboard and Mouse (*continued*)

Symptom	Possible solution
Cursor moves only vertically or horizontally (or does not move smoothly on the screen).	Remove the rollerball cover from bottom of mouse (rotate it counter-clockwise), remove the ball, and clean it with a damp, lint-free cloth (not paper). Also clean the rollers on which the ball moves.
Mouse does not work or is not detected.	Unplug and reconnect the mouse cable to your computer.
	If the mouse is still not detected, turn off the computer, reconnect the mouse cable, and then restart the computer.
Optical mouse does not track cursor well.	Place the mouse on a mouse pad or white sheet of paper, or gently wipe the light sensor lens on the bottom of the mouse with a lint-free cloth (not paper).
Cursor moves too fast or too slow.	Adjust the cursor speed: **1** Click the **Windows Start Button**, **Control Panel**, **Hardware and Sound**, and then **Mouse**. **2** Click the **Pointer Options** tab. **3** Adjust the **Motion** slider toward **Slow** or **Fast** to decrease or increase the speed at which the pointer (cursor) responds to mouse movement. **4** Click **OK**.

Power

Symptom	Possible solution
Computer will not turn on or start.	Ensure that cables connecting the computer to the external power source are plugged in properly.
	When the cables connecting the computer to the external power source are plugged in properly and the wall outlet is functioning, the green power supply light on the back of the computer should be on; if the light is not on, refer to the *Limited Warranty and Support Guide* to contact Support.
	If the display (monitor) is blank, the monitor may not be properly connected. Connect the monitor to the computer, plug it in, and turn it on. Refer to the Display (Monitor) troubleshooting section on page 11.
	Set the line voltage selection switch to the correct setting for your country/region, or refer to the *Limited Warranty and Support Guide* to contact Support.
	Test the outlet by connecting a different electrical device to the outlet.

Power (*continued*)

Symptom	Possible solution
Computer will not turn on or start. (*continued*)	Incompatible memory (RAM) may have been installed. Reinstall the old memory to return your computer to its original state. Refer to the *Upgrading and Servicing Guide* for instructions.
	Reseat the hard disk drive's data and power cables. See the *Upgrading and Servicing Guide* for instructions.
Invalid system disk or Non-System disk or disk error message displays.	When drive activity stops, remove the disk and press the spacebar. The computer should start up.
Computer does not turn off when the On button is pressed.	Press and hold the On button until the computer turns off.
Computer shuts down automatically.	The computer may be in an exceedingly hot environment. Let it cool down. Ensure computer air vents are not blocked and internal fan is running. Note that your computer may not have an internal fan.
Computer date and time display is incorrect.	The real-time clock (RTC) battery may need to be replaced. Battery life is approximately seven years. Before replacing the battery, try resetting the date and time in your operating system by using the Control Panel. If the problem persists, replace the battery. See the *Upgrading and Servicing Guide* for instructions on replacing the battery.

Performance

Symptom	Possible solution
Applications and files take longer to open or respond.	If you created multiple user accounts on your computer, make sure other users are not logged in. If there are multiple users logged in at one time, system resources must be shared among the multiple users.
	Run the Disk Cleanup program to delete unwanted files (including temporary Internet files, installed components and programs that you no longer use, and files in the Recycle Bin) from your hard disk drive: **1** Click the **Windows Start Button**, **All Programs**, **Accessories**, **System Tools**, and then click **Disk Cleanup**. **2** Select the drive on which you want to perform the cleanup. **3** Choose the files to delete by placing a check mark in the check box next to the file types listed. **4** Click **OK**, and then click **Yes** to permanently delete the files.

Performance (*continued*)

Symptom	Possible solution
Applications and files take longer to open or respond. (*continued*)	Run the Disk Defragmenter program to group fragmented files together on your hard disk drive and improve performance. This does not affect the location of files and folders on your computer. **NOTE:** The Disk Defragmenter program may take a long time to complete. It is a good idea to run it overnight. To run the Disk Defragmenter program: **1** Save your work and close all open programs. **2** Press the Ctrl key, the Alt key, and the Delete key at the same time. **3** Click **Start Task Manager**. **4** On the Applications tab, select all the programs that are listed, and then click **End Task**. **5** Click the **Windows Start Button**, choose **All Programs**, **Accessories**, **System Tools**, and then click **Disk Defragmenter**. **6** Click **Defragment now**. Remove unused programs: **1** Click the **Windows Start Button**, and then click **Control Panel**. **2** Click **Uninstall a program**. The Programs and Features window opens. **3** Select the program you wish to remove and click **Uninstall**. Follow the onscreen instructions. Check for hard disk drive errors: **1** Close all open programs and windows. **2** Click the **Windows Start Button**, and then click **Computer**. **3** Right-click the hard disk drive that you want to check, and then click **Properties**. **4** In the System Properties window, click the **Tools** tab. **5** Under Error-checking, click **Check Now**. **6** If desired, select the buttons next to **Automatically fix file system errors** and **Scan for and attempt recovery of bad sectors**. **7** Click **Start**. If prompted to restart, click **Yes** and allow the computer to restart.

Miscellaneous

Symptom	Possible solution
Insufficient memory message displays.	Close all open programs, and then try the desired task again, or restart your computer (click the **Windows Start Button**, click the **Arrow** button next to the **Lock** button, and then click **Restart**). If the message displays again, consider purchasing and installing additional memory.
Remote sensor is not receiving a signal from the remote control (select models only).	**1** Click the **Windows Start Button**, right-click **Computer**, and then select **Properties**. **2** Under Tasks, click **Device Manager**. **3** Click the plus (**+**) sign next to **Universal Serial Bus Controllers**. **4** If the eHome Infrared Receiver is listed under Universal Serial Bus Controllers, Windows Vista is properly detecting the IR Receiver. If it is not listed, go to the next step. **5** Unplug the end of the USB cable on the remote sensor from the computer and plug it into the same USB port. **6** Disconnect all other USB devices, leave the remote sensor plugged in, and then restart the computer. Plug in other USB devices after the remote sensor appears in the Device Manager window.
Memory card reader (select models only) cannot read my memory card.	Do not insert or remove memory cards when the in-use light is flashing. To do so may cause data loss, or it may permanently damage the card reader.
	Some cards have a Read/Write or Security switch on the card. Make sure the switch is set to Write Enabled before attempting to write data to it.
	Make sure the amount of data you are storing has not exceeded the storage limit of the card.
	Make sure the memory card is one of the supported types: CompactFlash (I, II, and Microdrive), Memory Stick, Memory Stick Pro, MultiMedia, Secure Digital, SmartMedia, or xD. Some models may support additional types.
	Make sure the memory card is fully inserted into the correct slot.
	Inspect the ends of the memory cards for dirt or material closing a hole or spoiling a metal contact. Clean the contacts with a lint-free cloth and small amounts of isopropyl alcohol. Replace the memory card if necessary.

Repairing Software Problems

Your computer uses the operating system and installed software programs during normal operation. If your computer works improperly or stops because of the software, you may be able to repair it.

Some software repairs are as simple as restarting your computer, and others require performing a System Recovery from files on your hard disk drive.

NOTE: It is important that you perform the computer repair methods in the order described in this document.

Software Repair Overview

This section lists the available methods to fix your computer if you are experiencing software problems. Detailed instructions about each method are in the sections that follow. You must perform the procedures in the order listed here.

- Restarting Your Computer
- Turning Off Your Computer
- Updating Drivers
- Microsoft System Restore
- Software Program and Hardware Driver Reinstallation
- System Recovery

NOTE: If you are replacing a hard disk drive, you only have to run the System Recovery.

Restarting Your Computer

Restarting is the simplest repair method for your computer. When you restart, the computer reloads the operating system and software into its memory.

To restart your computer:

1. Close all open programs and windows.
2. Click the **Windows Start Button**.
3. Click the **Arrow** button next to the **Lock** button, and then click **Restart**.

Turning Off Your Computer

When you turn off your computer and then turn it on again, you force the computer to reload the operating system into its memory, which clears some tracking information. This may eliminate some problems that can remain after performing a restart.

To turn off your computer:

1. Close all open programs and windows.
2. Click the **Windows Start Button**.
3. Click the **Arrow** button next to the **Lock** button, and then click **Shut Down**.
4. Start your computer by pressing the On button.

Updating Drivers

A *driver* is a software program that allows your computer to communicate with an attached device, such as a printer, a hard disk drive, a mouse, or a keyboard.

Complete the following procedure to update a driver, or to revert to an earlier version of the driver if the new one does not solve your problem:

1. Click the **Windows Start Button**, right-click **Computer**, and then select **Properties**.
2. Under Tasks, click **Device Manager**.
3. Click the plus sign (**+**) to expand the device whose driver you want to update or rollback, (for example, DVD/CD-ROM drives).
4. Double-click the specific item (for example, HP DVD Writer 640b), and then click the **Driver** tab.
5. To update a driver, click **Update Driver**, and follow the onscreen instructions.

   Or

   To revert to an earlier version of a driver, click **Rollback Driver**, and follow the onscreen instructions.

Microsoft System Restore

Microsoft® Windows Vista™ includes a feature that allows you to restore your computer configuration to that of a previous time when a current software problem did not exist. The feature does this by creating a *restore point* where it records the computer settings at that time and date.

When a new program is installed the operating system automatically creates a restore point before it adds the new software. You can also set them manually.

If you experience a problem that you think may be due to software on your computer, use System Restore to return the computer to a previous restore point.

NOTE: Always use this System Restore procedure before using the System Recovery program.

To start a System Restore:

1. Close all open programs.
2. Click the **Windows Start Button**.
3. Choose **All Programs**.
4. Choose **Accessories**.
5. Choose **System Tools**.
6. Click **System Restore**.
7. Click **Next**.
8. Follow the onscreen instructions.

To manually add restore points:

1. Close all open programs.
2. Click the **Windows Start Button**.
3. Choose **Control Panel**.
4. Click **System and Maintenance**, then click **System**.
5. Click **System protection**.
6. Under Automatic restore points, select the disk that you want to create a restore point for.
7. Click **Create**.
8. Follow the onscreen instructions.

For more information about software restore points:

1. Click the **Windows Start Button**.
2. Click **Help and Support**. The Help and Support Center displays.
3. Type *system restore* into the Search box, and then click **Search**.

Software Program and Hardware Driver Reinstallation

If an individual factory-installed software program or hardware driver is damaged, you can reinstall the software program or hardware driver using the Recovery Manager program. (Select models only.)

NOTE: To ensure your computer includes the program, perform steps 3 through 5 of the following procedure. If the Recovery Manager program is listed in the PC Help & Tools folder, your computer includes the program.

NOTE: Do not use the Recovery Manager program to reinstall software programs that came on CDs or DVDs included in the computer box. Reinstall these programs directly from the CDs or DVDs.

To start a Software Program or Hardware Driver Reinstallation:

1. Close all applications and folders.
2. Uninstall the damaged application:
   a. Click the **Windows Start Button**, **Control Panel**.
   b. Under Programs, click **Uninstall a program**.
   c. Select the program you want to remove, and then click **Uninstall**.
   d. Click **Yes** if you want to continue with the uninstall process.
3. Click the **Windows Start Button**.
4. Click **All Programs**.
5. Click **PC Help & Tools**.
6. Click **Recovery Manager**.
7. Follow the onscreen instructions.
8. When you have finished recovering, restart the computer.

NOTE: Do not skip this last step. You must restart the computer when you are finished recovering software programs or hardware drivers.

System Recovery

After you have tried the previously mentioned methods of repairing your computer, you can run a System Recovery as a last resort to reinstall the factory-shipped operating system, software programs, and hardware drivers.

System Recovery — Completely erases and reformats the hard disk drive — this includes deleting all data files you have created. System Recovery reinstalls the operating system, programs, and drivers. However, you must reinstall any software that was not installed on the computer at the factory. This includes software that came on CDs included in the computer accessory box, and software programs you installed since your purchase.

NOTE: If your computer includes an HP Personal Media Drive (select models only), you must remove it before starting the System Recovery program.

System Recovery should be attempted in the following order:

- Through the Windows Vista Start menu.
- By pressing the F11 key on the keyboard during startup.
- Through the recovery discs.

NOTE: If you are replacing the hard disk drive, you must use the recovery discs to reinstall the operating system and software on the hard disk drive.

Starting System Recovery through the Windows Vista Start menu

If the computer is working and Windows Vista is responding, use these steps to perform a System Recovery:

1. Turn off the computer.
2. Remove the HP Personal Media Drive if your computer includes one. Disconnect all peripheral devices from the computer except the monitor, the keyboard, and the mouse.
3. Turn on the computer.
4. Click the **Windows Start Button**.
5. Click **All Programs**.
6. Click **PC Help & Tools**.

7 Click **Recovery Manager**.

You are asked if you want to perform a Microsoft System Restore:

- If you want to perform a Microsoft System Restore, click **Yes**, and follow the onscreen instructions.
- If you do not want to perform a Microsoft System Restore, click **No** to start the recovery process, and follow the onscreen instructions.

NOTE: System Recovery deletes any data or programs that you created or installed after purchase. Be sure to back up any data that you want to keep onto a removable disc.

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8 Complete the computer startup, finish the registration process, and wait until you see the desktop. Then, turn off the computer, reconnect all peripheral devices, and then turn on the computer.

Starting System Recovery through system startup

If Windows Vista is not responding, but the computer is working, use these steps to perform a System Recovery:

1 Turn off the computer. If necessary, press and hold the On button until the computer turns off.

2 Remove the HP Personal Media Drive if your computer includes one. Disconnect all peripheral devices from the computer except the monitor, the keyboard, and the mouse.

3 Press the On button to turn on the computer.

4 During the startup, do the following to enter the Recovery Manager program: When the first screen with the HP or Compaq logo appears, press the F11 key on the keyboard. (You have only a few seconds to press the F11 key before the normal startup process continues.)

5 The computer starts the Recovery Manager program; wait for the onscreen instructions to display, and then follow those instructions.

NOTE: System Recovery deletes any data or programs that you created or installed after purchase. Be sure to back up any data that you want to keep onto a removable disc.

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6 Complete the computer startup, finish the registration process, and wait until you see the desktop. Then, turn off the computer, reconnect all peripheral devices, and turn on the computer.

Starting System Recovery from recovery discs

1. If the computer works, create a backup CD or DVD containing all data files that you want to save. Remove the backup disc from the disc tray when you are finished.
2. Insert recovery disc #1 into the appropriate drive tray (CD or DVD), and close the tray.
3. If the computer works: Click the **Windows Start Button**, click the **Arrow** button next to the **Lock** button, and then click **Shut Down**.

   Or

   If the computer is not responding: Press and hold the On button approximately 5 seconds until the computer turns off.
4. Disconnect all peripheral devices from the computer except the monitor, the keyboard, and the mouse.
5. Disconnect or remove all external drives and remove the HP Personal Media Drive if your computer includes one.
6. Press the On button to turn on the computer.
7. The computer starts the recovery from the recovery disc. Follow the onscreen instructions when they are displayed.

NOTE: The System Recovery option deletes any data or programs that you created or installed after purchase. Be sure to back up any data that you want to keep onto a removable disc.

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8. When the Recovery Manager finishes, remove the last disc.
9. Click **Finish** to restart the computer.
10. After the computer restarts, a series of startup screens appears. To proceed with the initial Windows Vista setup, you must answer a few questions.
11. Complete the computer startup, finish the registration process, and wait until you see the desktop. Then, turn off the computer, reconnect all peripheral devices, and turn on the computer.
12. Reinstall software not originally installed on the computer by the factory.
13. Copy data files from the backup disc to your hard disk drive.

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