Getting Started
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Understanding hard disk drive space

The hard disk drive on the Hewlett-Packard and Compaq computers with the Microsoft® Windows operating system preinstalled may appear to be smaller than the size 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. Microsoft Windows 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 Microsoft Windows and the size advertised. The storage capacity of the hard disk drive is as advertised.

Microsoft Windows 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. One of the partitions contains the System Recovery information.
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## 1 Getting information

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<tr>
<th>Type of information</th>
<th>Where to find</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Set up your computer.</td>
<td>Setup poster included with your computer.</td>
</tr>
<tr>
<td>● See how-to videos about using the features of your computer.</td>
<td>Visit <a href="http://www.hp.com/supportvideos">www.hp.com/supportvideos</a> (English only)</td>
</tr>
<tr>
<td>● Use the computer.</td>
<td>Getting Started (this guide)</td>
</tr>
<tr>
<td>● Connect to the Internet.</td>
<td></td>
</tr>
<tr>
<td>● Recover factory settings.</td>
<td></td>
</tr>
<tr>
<td>● Learn how to use the Microsoft® Windows® 7 operating system.</td>
<td>Help and Support</td>
</tr>
<tr>
<td>● Find Windows 7 password information.</td>
<td>Click the <strong>Start</strong> button, and then click <strong>Help and Support</strong> or visit <a href="http://www.hp.com/go/win7">www.hp.com/go/win7</a>.</td>
</tr>
<tr>
<td>● Troubleshoot the most common computer hardware and software issues.</td>
<td>Windows 7 troubleshooting tools</td>
</tr>
<tr>
<td>● Find links to driver updates.</td>
<td>1. Click the <strong>Start</strong> button, click <strong>Control Panel</strong>, and then click <strong>System and Security</strong>.</td>
</tr>
<tr>
<td>● Read frequently asked questions.</td>
<td>2. Under <strong>Action Center</strong>, click <strong>Find and fix problems (troubleshooting)</strong>.</td>
</tr>
<tr>
<td>● Find electronic user guides and specifications for your computer model.</td>
<td>HP Support Web site: <a href="http://www.hp.com/support">www.hp.com/support</a></td>
</tr>
<tr>
<td>● Order parts and find additional troubleshooting help.</td>
<td></td>
</tr>
<tr>
<td>● Upgrade or replace components of your computer.</td>
<td><strong>Upgrading and Servicing Guide</strong></td>
</tr>
<tr>
<td>● Find computer warranty information.</td>
<td>Click the <strong>Start</strong> button, click <strong>All Programs</strong>, and then click <strong>User Guides</strong>.</td>
</tr>
<tr>
<td>● Get technical support.</td>
<td>If the guide is not available there, visit <a href="http://www.hp.com/support">www.hp.com/support</a></td>
</tr>
<tr>
<td>● Get up-to-date information and help from the Windows community.</td>
<td><a href="http://www.hp.com/support">Limited Warranty and Support Guide</a> or the <strong>Warranty and Support Information</strong> included with your computer.</td>
</tr>
<tr>
<td>● Connect to a TV.</td>
<td><strong>Watching and Recording TV</strong></td>
</tr>
<tr>
<td></td>
<td>Click the <strong>Start</strong> button, click <strong>All Programs</strong>, and then click <strong>User Guides</strong>.</td>
</tr>
<tr>
<td></td>
<td>If the guide is not available there, visit <a href="http://www.hp.com/support">www.hp.com/support</a></td>
</tr>
<tr>
<td>Type of information</td>
<td>Where to find</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Get special utilities for computer owners.</td>
<td>PC Help &amp; Tools folder</td>
</tr>
<tr>
<td></td>
<td>Click the Start button, click All Programs, and then click PC Help &amp; Tools.</td>
</tr>
<tr>
<td>Maintain your computer.</td>
<td>HP Support Assistant — Maintains your computer performance and resolve</td>
</tr>
<tr>
<td></td>
<td>problems faster by using automated updates, onboard diagnostics, and</td>
</tr>
<tr>
<td></td>
<td>guided assistance.</td>
</tr>
<tr>
<td></td>
<td>Click the Start button, click All Programs, click HP, and then click</td>
</tr>
<tr>
<td></td>
<td>HP Support Assistant.</td>
</tr>
<tr>
<td>Find ergonomic information.</td>
<td>Safety &amp; Comfort Guide</td>
</tr>
<tr>
<td></td>
<td>Click the Start button, click All Programs, and then click User Guides</td>
</tr>
<tr>
<td></td>
<td>or visit <a href="http://www.hp.com/ergo">www.hp.com/ergo</a>.</td>
</tr>
</tbody>
</table>

**WARNING!** To reduce the risk of electrical shock or damage to your equipment: Place the computer in a location away from water, dust, moisture, and soot. These can increase the inside temperature, or can cause fire or electrocution.

**WARNING!** Do not disable the power cord grounding plug. Plug the power cord in a grounded (earthed) outlet that is easily accessible at all times.

**WARNING!** Disconnect power from the equipment by unplugging the power cord from the electrical outlet.

**WARNING!** The power supply is preset for the country/region in which you purchased your computer. If you move, check the voltage requirements for your new location before plugging the computer into an AC power outlet.

**WARNING!** To prevent direct exposure to laser beam, do not try to open the enclosure of the CD or DVD drives.

**NOTE:** Some features might not be available on systems that are shipped without a version of Microsoft Windows.
2 Setting up your computer

- Follow the steps on the setup poster included with your computer.
- Place the computer so that all ventilation openings are unobstructed and cabling is not in a walkway or where it can be stepped on or damaged by placing furniture on it.
- Connect all power cords from the monitor, computer, and accessories to a power surge protection device that is specifically labeled as having surge protection, an uninterruptible power supply (UPS), or a similar device. If the computer has a television tuner, or a modem or telephone connection, protect the computer by using surge protection with these signal inputs as well. Connect the television cable or the telephone line cord to the surge protection device, and then connect the device to the computer.
- Download and install operating system updates.
- Look in the computer box for additional printed details or updates.
- Read the Safety and Regulatory Information document in the User Guides folder.
- Read the Safety & Comfort Guide for proper workstation setup, posture, health and work habits, and electrical and mechanical safety information. Click the Start button, click All Programs, and then click User Guides or visit www.hp.com/ergo.

Protecting your computer

<table>
<thead>
<tr>
<th>Computer risk</th>
<th>Computer feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unauthorized use of the computer or user account</td>
<td>User password</td>
</tr>
<tr>
<td>Unauthorized access to Setup Utility, BIOS settings, and other system identification information</td>
<td>Administrator password</td>
</tr>
<tr>
<td>Computer viruses</td>
<td>Antivirus software</td>
</tr>
<tr>
<td>unauthorized access to data and ongoing threats to the computer</td>
<td>Firewall software</td>
</tr>
<tr>
<td>Windows 7 critical security updates</td>
<td>Microsoft continually updates the Windows 7 operating system.</td>
</tr>
</tbody>
</table>

- A password is a group of characters that you choose to secure computer information.

- The free trial antivirus software that is preinstalled on your computer can detect most viruses, remove them, and, in most cases, repair damage caused by viruses. For protection against new viruses beyond the trial period, purchase an extended update service.
Guidelines for installing software and hardware devices

After you complete the initial computer setup, you might want to install additional software programs or hardware devices. Check the operating system, memory, and other requirements listed before purchasing new software or hardware for your computer. Follow the software manufacturer’s directions to install the new software.

NOTE: Use only licensed original software. Installing copied software could result in an unstable installation, infect the computer with a virus, or be illegal.

Connecting to the Internet

Steps to connect to the Internet:

1. Connect the hardware (might be sold separately).
   ◦ For a modem, connect to a telephone line (DSL) or cable line and to your computer.
   ◦ For a wired network connection, connect an Ethernet cable to the computer and to a network router or LAN device.
   ◦ For a wireless network connection, use a wireless router with the computer to connect to a WLAN with an Internet connection.

2. Get Internet service.
   ◦ Sign up with an ISP. If you already have an account with an ISP, skip this step and follow the instructions provided by the ISP.
   ◦ If you did not set up the computer for Internet service during the initial setup, do so now by using Online Services:
     a. Click the Start button, click All Programs, click Online Services, and then click Get Online.
     b. Follow the onscreen instructions to select an ISP and set up Internet service.

   NOTE: Online Services provides a list of ISPs; however, you might choose another ISP or transfer an existing account to this computer. To transfer existing accounts, follow the instructions provided by the ISP.

3. Using your Internet connection through your ISP, open a Web browser and browse the Internet.

NOTE: If you have issues connecting to the Internet, see Internet access on page 10.
Transferring files and settings to your new computer

You can copy files from another computer to your new computer by using CDs or DVDs, memory sticks, and external hard drives. You can also use Windows Easy Transfer software, which is included with Windows 7 (select models only), to copy files and settings to a storage device or, using an Easy Transfer Cable, directly from another computer to the new computer. The Easy Transfer Cable is a USB cable designed specifically to connect two computers and to work with the Windows Easy Transfer software.

**NOTE:** The Easy Transfer Cable is sold separately. A standard USB cable does not work.

To transfer your files and settings:

1. Click the **Start** button, type **Windows Easy Transfer** into the **Start Search** box, and then click **Windows Easy Transfer**.
2. Follow the onscreen instructions in the Windows Easy Transfer wizard to transfer your files to your new computer.

**NOTE:** Some features might not be available on systems that are shipped without a version of Microsoft Windows.

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3 Troubleshooting and maintenance

Refer to the documentation provided by the product manufacturer for information about peripheral-specific problems, such as issues with a monitor or a printer. The following tables present some issues you might encounter while installing, starting up, or using your computer and possible solutions.

For more information or for additional troubleshooting options, see Getting information on page 1.

### Computer does not start

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error message: Hard disk drive error.</td>
<td>Contact Support.</td>
</tr>
<tr>
<td>Computer will not turn on or start.</td>
<td>Ensure that the 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 it is not, contact Support.</td>
</tr>
<tr>
<td></td>
<td>If the display (monitor) is blank, the monitor might not be properly connected. Connect the monitor to the computer, plug it in, and turn it on. See Display (monitor) on page 6.</td>
</tr>
<tr>
<td>Symptom</td>
<td>Possible solution</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Computer seems to be locked up and is not responding.</td>
<td>Use the Windows Task Manager to close any programs not responding, or restart the computer:</td>
</tr>
<tr>
<td></td>
<td>1. Press the Ctrl+Alt+Delete keys on the keyboard simultaneously.</td>
</tr>
<tr>
<td></td>
<td>2. Click Start Task Manager.</td>
</tr>
<tr>
<td></td>
<td>3. Select the program that is not responding, and then click End Task.</td>
</tr>
<tr>
<td></td>
<td>If closing programs does not work, restart the computer:</td>
</tr>
<tr>
<td></td>
<td>1. Press the Ctrl+Alt+Delete keys on the keyboard simultaneously.</td>
</tr>
<tr>
<td></td>
<td>2. Click the Arrow button next to the red Shut Down button, and then click Restart.</td>
</tr>
<tr>
<td></td>
<td>Or, press and hold the On button on the computer for 5 or more seconds to turn off the computer, and then press the On button to restart the computer.</td>
</tr>
</tbody>
</table>

### Power

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error message: Invalid system disk or Non-System disk or Disk error.</td>
<td>When drive activity stops, remove the disc and press the spacebar on the keyboard. The computer should start up.</td>
</tr>
<tr>
<td>Computer does not turn off when the On button is pressed.</td>
<td>Press and hold the On button until the computer turns off. Check Power Settings.</td>
</tr>
<tr>
<td>Computer shuts down automatically.</td>
<td>● The computer might be in an exceedingly hot environment. Let it cool down.</td>
</tr>
<tr>
<td></td>
<td>● Ensure that computer air vents are not blocked and that the internal fan is running — see Keeping the computer free of dust, dirt, and heat on page 15. (Your computer might not have an internal fan.)</td>
</tr>
</tbody>
</table>

### Display (monitor)

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen is blank, and monitor power light is not lit.</td>
<td>Reconnect the power plug to the back of the monitor and to the wall outlet.</td>
</tr>
<tr>
<td></td>
<td>Press the On button on the monitor.</td>
</tr>
</tbody>
</table>
## Symptom | Possible solution
--- | ---
Screen is blank. | Press the space bar on the keyboard or move the mouse to make the screen display visible again.
| Press the Sleep button (select models only), or 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 7:
1. Click the **Start** button, and then click **Control Panel**.
2. Under **Appearance and Personalization**, click **Adjust Screen Resolution**.
3. Adjust resolution as necessary, and then click **Apply**.

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

### Keyboard and mouse (with cable)

| Symptom | Possible solution |
--- | --- |
Keyboard commands and typing are not recognized by the computer. | Use the mouse to turn off the computer, unplug and reconnect the keyboard to the back of your computer, and then restart your computer. |
Mouse (with cable) 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, unplug and reconnect the mouse cable, and then restart the computer. |
Cursor does not move using the arrow keys on the number keypad. | Press Num Lock on the keyboard to turn off Num Lock, so that the arrow keys on the number keypad can be used. |
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cursor does not respond to mouse movement.</td>
<td>Use the keyboard to save changes in all open programs, and then restart your computer:</td>
</tr>
<tr>
<td></td>
<td>1. Press the Alt+Tab keys simultaneously to navigate to an open program.</td>
</tr>
<tr>
<td></td>
<td>2. Press the Ctrl+S key simultaneously to save your changes in the selected program (Ctrl +S is the keyboard shortcut for Save on most—not all—programs).</td>
</tr>
<tr>
<td></td>
<td>3. Repeat step 1 and step 2 to save changes in all open programs.</td>
</tr>
<tr>
<td></td>
<td>4. After saving changes in all open programs, press the Ctrl+Esc keys on the keyboard simultaneously to display the Windows Start menu.</td>
</tr>
<tr>
<td></td>
<td>5. Use the arrow keys to select the <strong>Arrow</strong> button that is next to Shut Down. Select <strong>Shut Down</strong>, and then press Enter.</td>
</tr>
<tr>
<td></td>
<td>6. After the shutdown is complete, unplug and reconnect the mouse connector to the back of your computer, and then restart your computer.</td>
</tr>
<tr>
<td>Cursor responds slowly, moves only vertically or horizontally, or does not track smoothly.</td>
<td>For a mouse with a roller ball:</td>
</tr>
<tr>
<td></td>
<td>● Clean the roller ball: Remove the roller ball cover from bottom of mouse (rotate it counterclockwise), remove the ball, and clean it by using a damp, lint-free cloth (not paper). Also clean the rollers on which the ball moves.</td>
</tr>
<tr>
<td></td>
<td>● Use a mouse pad or other rough surface under the mouse.</td>
</tr>
<tr>
<td></td>
<td>For an optical mouse:</td>
</tr>
<tr>
<td></td>
<td>● Clean the optical mouse: Gently wipe the light sensor lens on the bottom of the mouse by using a lint-free cloth (not paper).</td>
</tr>
<tr>
<td></td>
<td>● Use a mouse pad, white sheet of paper, or other less reflective surface under the mouse.</td>
</tr>
</tbody>
</table>

**Keyboard and mouse (wireless)**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless keyboard or mouse does not work or is not detected.</td>
<td>● Ensure that you are using the wireless keyboard or wireless mouse within range of the receiver, approximately 10 meters (32 feet) for normal use, and within 30 cm (12 inches) during initial setup or for re-synchronization.</td>
</tr>
<tr>
<td></td>
<td>● Ensure that the mouse is not in Suspend mode, which occurs after 20 minutes of inactivity. Click the left mouse button to reactivate it.</td>
</tr>
<tr>
<td></td>
<td>● Replace the batteries in the keyboard and mouse.</td>
</tr>
<tr>
<td></td>
<td>● Re-synchronize the keyboard and mouse to the receiver using the following steps.</td>
</tr>
</tbody>
</table>
The receiver, wireless keyboard, and wireless mouse shown in the following illustrations are examples; your models might vary. IMPORTANT: During these steps, place the wireless keyboard and wireless mouse on the same level as the receiver, within 30 cm (12 inches) of the receiver, and away from interference from other devices.

1. Unplug the receiver from a USB connector on the computer, and then reconnect it. Your computer model might have a connector dedicated to the receiver. If you have a choice, use a USB connector on the front of the computer.

2. Check that the mouse is on (A), and push and hold the Connect button (B) on the underside of the mouse for 5 to 10 seconds until the LED on the receiver lights or stops flashing. The receiver connection session times out after 60 seconds. To ensure that the connection was established, and that the receiver did not time out instead, move the mouse and check for response on the screen.

3. After the mouse connection is established, continue by using the steps that follow to repeat the procedure for the keyboard.

4. Push and hold the Connect button (C) on the underside of the keyboard for 5 to 10 seconds until the LED on the receiver lights or stops flashing.

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### Speakers and sound

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume is very low or unsatisfactory.</td>
<td>Ensure that you connected the speakers to the Audio Out (lime green) connector on the back of the computer. (Additional audio connectors are used for multiple-channel speakers.) Detached non-powered speakers (speakers without a separate power source, such as batteries or a power cord) do not produce satisfactory sound. Replace the non-powered speakers with powered speakers.</td>
</tr>
</tbody>
</table>
### Symptom: No sound is produced.

For Windows 7:

1. Click the **Start** button, click **Control Panel**, click **Action Center**, and then click **Troubleshooting**.

2. Under **Hardware and Sound**, click **Troubleshoot and audio playback**.

If you use an HDMI connector on the graphics card (select models only) to connect your monitor to the computer, you should also connect analog speakers to the computer Audio Line Out connector if you want to hear sound during the initial setup of the computer. Refer to the Setup Poster to connect analog speakers.

If you are using built-in monitor speakers, use the monitor front-panel Volume button to adjust volume. Use the front-panel buttons to enter the onscreen display (OSD) and ensure that audio is enabled and that the volume is set appropriately.

Ensure that you connected powered (active) speakers and that they are turned on.

Turn off your computer, and then unplug and reconnect the speakers. Ensure that the speakers are connected to an audio connector, not a Line In or headphone connector.

To resume from Sleep mode, press the Sleep button (select models only), or press Esc.

Unplug headphones if they are connected to your computer (or speaker system).

### Symptom: Internet programs do not start automatically.

Log in to your ISP, and start the desired program.

### Symptom: I cannot connect to the Internet.

For Windows 7:

1. Click the **Start** button, click **Control Panel**, click **Action Center**, and then click **Troubleshooting**.

2. Under **Network and Internet**, click **Connect to the Internet**.

Verify that you are using the proper cables for your Internet connection type. Your computer might have a dial-up modem and an Ethernet network adapter (also called a network interface card, or NIC). A modem uses a standard telephone cable, whereas the network adapter uses a network cable, to connect to a local area network (LAN). Do not connect a telephone cable to the network adapter, and do not plug a network cable into a telephone service line; doing so might damage the network adapter.
Symptom | Possible solution
---|---
Run the wireless setup wizard:

1. Click the **Start** button, click **Control Panel**, click **Network and Internet**, and then click **Network and Sharing Center**.

2. In the Network and Sharing Center window, click **Set up a connection or network** to open the wizard, and then follow the onscreen instructions.

If your system has an external antenna, try to move the antenna to a better position. If the antenna is internal, try to move the computer.

Try to connect again later, or contact your Internet service provider (ISP) for assistance.

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**Software troubleshooting**

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

To repair software problems, try these methods:

- Turn the computer off completely and then turn it on again. This is the easiest (and sometimes the best) way.
- Update the drivers (see **Updating drivers on page 12**).
- Use Microsoft System Restore (see **Microsoft System Restore on page 12**) — Restore your computer to a configuration that was in use before the software was installed.
- Reinstall the software program or hardware driver. (See **Software program and hardware driver reinstallation on page 13**) — Restores the software (if it came with the product) or hardware driver to factory defaults.
- System Recovery (see **System Recovery on page 16**) — Erase and reformat the hard disk drive, and then reinstall the operating system, programs, and drivers. This erases all data files you have created.
Updating drivers

A driver is a software program that enables your computer to communicate with an attached device, such as a printer, hard disk drive, mouse, or 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 Start button.
2. Type Device Manager into the Start Search box, and then click Device Manager to open the Device Manager window.
3. Click the plus sign (+) to expand the type of device you want to update or rollback. (For example, DVD/CD-ROM drives).
4. Double-click the specific item (for example, HP DVD Writer 640b).
5. Click the Driver tab.
6. To update a driver, click Update Driver, and then follow the onscreen instructions.
   Or, to revert to an earlier version of a driver, click Rollback Driver, and then follow the onscreen instructions.

Microsoft System Restore

If you have a problem that might be due to software that was installed on your computer, use System Restore to return the computer to a previous restore point. You can also set restore points manually.

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

NOTE: Some features might not be available on systems that are shipped without a version of Microsoft Windows.

To start a System Restore:

1. Close all open programs.
2. Click the Start button, right-click Computer, and then click Properties.
3. Click System protection, System Restore, click Next, and then follow the onscreen instructions.
To add restore points manually:

1. Close all open programs.
2. Click the Start button, right-click Computer, click Properties, and then click System protection.
3. Under Protection Settings, select the disk for which you want to create a restore point.
4. Click Create, and then follow the onscreen instructions.

Software program and hardware driver reinstallation

If any of your factory-installed software programs or hardware drivers are damaged, you can reinstall it by using the Recovery Manager program (select models only).

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.

Before you uninstall a program, be sure you have a way to reinstall it. Check to be sure that it is still available from where you initially installed it (for example, discs or the Internet). Or check to be sure that the program is in the list of programs you can reinstall from the Recovery Manager.

NOTE: Some features might not be available on systems that are shipped without a version of Microsoft Windows.

To check the list of installable programs in the Recovery Manager:

1. Click the Start button, All Programs, Recovery Manager, and then click Recovery Manager. If prompted, click Yes to allow the program to continue.
2. Under I need help immediately, click Software Program Reinstallation.
3. Click Next at the Welcome screen. A list of programs opens. Check whether your program is there.

To uninstall a program:

1. Close all software programs and folders.
2. Uninstall the damaged program:
   a. Click the Start button, and then click 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.
To reinstall a program using the Recovery Manager:

1. Click the **Start** button, click **All Programs**, click **Recovery Manager**, and then click **Recovery Manager**.

2. Click **Software Program Reinstallation**, and then click **Next** at the Welcome screen.

3. Choose the program you want to install, click **Next**, and follow the onscreen instructions.

4. When you have finished reinstalling, restart the computer. **Do not skip this last step.** You must restart the computer after recovering software programs or hardware drivers.

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**Maintenance**

It is important that you perform simple maintenance of your computer to ensure that it works at peak performance.

### Weekly

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software cleanup</td>
<td>Use Disk Cleanup or safe third-party cleaning tools to remove junk files and temporary files that accumulate and slow down your system. Also, check for programs you no longer need and uninstall them.</td>
</tr>
<tr>
<td>Defragmentation</td>
<td>Run Disk Defragmenter to keep your hard disk in good condition and improve system performance. Frequently performing this task does not harm your system.</td>
</tr>
<tr>
<td>Virus scan</td>
<td>Perform a full virus scan every week to catch viruses that might have slipped through unnoticed. Most antivirus products have a scheduling feature to keep track of this automatically.</td>
</tr>
</tbody>
</table>

### Monthly

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware cleanup</td>
<td>Thoroughly clean the inside and outside of your computer.</td>
</tr>
<tr>
<td>Software updates</td>
<td>Use Windows Updates to fix operating system bugs and improve performance. Also, be sure to check for driver updates for your hardware and new versions of your favorite programs.</td>
</tr>
<tr>
<td>Windows Update</td>
<td>Run Windows Update monthly to install updates.</td>
</tr>
<tr>
<td>Hard disk diagnostic</td>
<td>Sometimes a failing hard disk can be caught beforehand by using Hard Disk Diagnostic.</td>
</tr>
</tbody>
</table>

### Yearly

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Recovery</td>
<td>In time, your system might still get bogged down, depending on the computer usage. Use System Recovery to wipe your Windows operating system installation clean, restoring it to the original configuration when you first started your system. <strong>Make a backup of important data files before proceeding with a System Recovery.</strong> See System Recovery on page 16 for further details.</td>
</tr>
</tbody>
</table>
## Backing up your data

Use CD or DVD recording software that is installed on your computer to create (or “burn”) backup discs of important information, including personal files, e-mail messages, and Web site bookmarks. You can also move data to an external hard disk drive.

## Keeping the computer free of dust, dirt, and heat

Keeping your computer system free of dust, dirt, and heat will prolong its life. Dust, pet hair, and other particles can build up, creating a blanket effect; as a result, components can overheat, or, in the case of the keyboard and mouse, not work smoothly and effectively. Check your system once a month for visible signs of dust and debris, and clean it about once every three months. Visit [www.hp.com/support](http://www.hp.com/support) for additional cleaning instructions.

### Cleaning the computer vents

Air vents keep the computer and monitor cool. Keep these vents clean by using a small, battery-powered vacuum cleaner. (A battery-powered vacuum cleaner eliminates the risk of electric shock.)

1. Vacuum the vents on the computer case and the monitor case.
2. Remove any debris that has accumulated in and around the computer connectors (for example, the Ethernet and USB connectors).

### Cleaning the computer and monitor

Follow these steps to clean the computer and monitor:

1. Unplug the power to the computer and the monitor.
2. To clean the monitor screen, use a clean, dry cloth. **Do not use water on the monitor screen.** For more thorough cleaning, use a clean cloth and antistatic screen cleaner.
3. Use a clean, dry cloth to dust the computer case and the monitor case.

**NOTE:** To remove sticker residue or a spill on the computer or monitor case, use isopropyl (rubbing) alcohol and a lint-free cloth.

### Cleaning the keyboard and mouse

When cleaning the keyboard keys, use a low setting on a battery-powered vacuum cleaner, to avoid removing key caps and springs.

1. Vacuum between the keys of the keyboard and along the grooves.
2. Use a clean, dry cloth and isopropyl (rubbing) alcohol to clean buildup on the keyboard keys and along its edges.
3. Wipe the body of the mouse and the mouse cord by using cleaning wipes.

If you have a roller-ball mouse, clean the ball and rollers inside:

1. Turn the mouse upside down, and rotate the ball-cover ring counterclockwise to remove the ring and release the roller ball.
2. Rinse the roller ball with soap and warm water.
3. Clean the rollers inside the mouse with a cotton swab dampened with isopropyl (rubbing) alcohol.
4. After the roller ball and rollers are completely dry, replace the ball and ball-cover ring.
System Recovery

System Recovery completely erases and reformats the hard disk drive, deleting all data files you have created, and then 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 media included in the computer accessory box, and any software programs you installed after purchase.

**NOTE:** Always use the System Restore procedure before you use the System Recovery program — see Microsoft System Restore on page 12.

**NOTE:** Some features might not be available on systems that are shipped without a version of Microsoft Windows.

You must choose one of the following methods to perform a System Recovery:

- Recovery Image — Run the System Recovery from a recovery image stored on your hard disk drive. The recovery image is a file that contains a copy of the original factory-shipped software. To perform a System Recovery from a recovery image, see System Recovery from the Windows 7 Start Menu on page 16.
  
  **NOTE:** The recovery image uses a portion of the hard disk drive that cannot be used for data storage.

- Recovery Discs — Run the System Recovery from a set of recovery discs that you create from files stored on your hard disk drive or purchased separately. To create recovery discs, see Recovery discs on page 18.

System Recovery options

You should attempt a System Recovery in the following order:

1. Through the hard disk drive, from the Windows 7 Start menu.

2. Through the hard disk drive, by pressing the F11 key on the keyboard during system startup.

3. Through recovery discs that you create.

4. Through recovery discs purchased from HP Support. To purchase recovery discs, visit www.hp.com/support.

System Recovery from the Windows 7 Start Menu

**CAUTION:** System Recovery deletes all data and programs you created or installed. Back up any important data to a removable disc.
If the computer is working and Windows 7 is responding, use these steps to perform a System Recovery.

1. Turn off the computer.
2. Disconnect all peripheral devices from the computer except the monitor, keyboard, and mouse.
3. Turn on the computer.
4. Click the Start button, click All Programs, click Recovery Manager, and then click Recovery Manager. If prompted, click Yes to allow the program to continue.
5. Under I need help immediately, click System Recovery.
6. Select Yes, and then click Next. Your computer restarts.

**NOTE:** If your system does not detect a recovery partition, it prompts you to insert a recovery disc. Insert the disc, select Yes, and then click Next to restart the computer and run Recovery Manager from the recovery disc. Under I need help immediately, click System Recovery, and then continue with step 7 below. Insert the next system-recovery disc when prompted.

7. If you are prompted to back up your files, and you have not done so, select Back up your files first (recommended), and then click Next. Otherwise, select Recover without backing up your files, and then click Next.
8. System Recovery begins. After System Recovery is complete, click Finish to restart the computer.
9. Complete the registration process, and wait until you see the desktop.
10. Turn off the computer, reconnect all peripheral devices, and turn the computer back on.

### System Recovery at system startup

**CAUTION:** System Recovery deletes all data and programs you created or installed. Back up any important data to a removable disc.

If Windows 7 is not responding, but the computer is working, follow 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. Disconnect all peripheral devices from the computer, except the monitor, keyboard, and mouse.
3. Press the On button to turn on the computer.
4. As soon as you see the initial company logo screen appear, repeatedly press the F11 key on your keyboard until the Windows is Loading Files... message appears on the screen.
5. Under I need help immediately, click System Recovery.
6. If you are prompted to back up your files, and you have not done so, select Back up your files first (recommended), and then click Next. Otherwise, select Recover without backing up your files, and then click Next.
7. System Recovery begins. After System Recovery is complete, click Finish to restart the computer.
8. Complete the registration process, and wait until you see the desktop.
9. Turn off the computer, reconnect all peripheral devices, and turn the computer back on.
System Recovery from recovery discs

**CAUTION:** System Recovery deletes all data and programs you created or installed. Back up any important data to a removable disc.

To create recovery discs, see Recovery discs on page 18.

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To perform a System Recovery using recovery discs:

1. If the computer is working, create a backup DVD containing all the data files you want to save, and then remove the backup disc from the drive tray.
2. Insert recovery disc #1 into the DVD drive tray, and close the tray.
3. If the computer works, click the Start button, click the Arrow button next to Shut Down, and then click Shut Down. Or, if the computer is not responding, press and hold the On button for approximately 5 seconds, or until the computer turns off.
4. Disconnect all peripheral devices from the computer except the monitor, keyboard, and mouse.
5. Press the On button to turn on the computer. If you are prompted to choose between running System Recovery from disc or from hard drive, select Run program from disc, and then click Next.
6. Under I need help immediately, click Factory Reset.
7. If you are prompted to back up your files, and you have not done so, select Back up your files first (recommended), and then click Next. Otherwise, select Recover without backing up your files, and then click Next.
8. If you are prompted to insert the next recovery disc, do so.
9. When the Recovery Manager is finished, remove all recovery discs from the system.
10. Click Finish to restart the computer.

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Recovery discs

You should create a set of recovery discs from the recovery image stored on your hard disk drive. This image contains the operating system and software program files that were originally installed on your computer at the factory. You can create only one set of recovery discs for your computer, and the discs can be used only with this computer. Store the recovery discs in a safe place.

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**NOTE:** Some features might not be available on systems that are shipped without a version of Microsoft Windows.
Choosing recovery discs

- To create recovery discs, your computer must have a DVD writer, and you must use only high-quality blank DVD +R or DVD-R discs.

  **NOTE:** You cannot use CDs or DVD+RW, DVD-RW, DVD+RW DL, DVD-RW DL, DVD+R DL, or DVD-R DL discs to create recovery discs.

- Use high-quality discs to create your set of recovery discs. It is normal for discs to be rejected if they are not defect-free. You will be prompted to insert a new blank disc to try again.

- The number of discs in the recovery-disc set depends on your computer model (typically 1–3 DVD discs). The Recovery Disc Creator program tells you the specific number of blank discs needed to make the set.

  **NOTE:** The process of creating recovery discs takes some time to verify that the information written on the disc is correct. You can quit the process at any time. The next time you run the program, it resumes where it left off.

Creating recovery discs

To create recovery discs:

1. Close all open programs.

2. Click the **Start** button, click **All Programs**, click **Recovery Manager**, and then click **Recovery Disc Creation**. If prompted, click **Yes** to allow the program to continue.

3. Follow the onscreen instructions. Label each disc as you make it (for example, Recovery 1, Recovery 2).
The power to make a change

Thank you for your purchase. HP is dedicated to producing the highest quality, best performing, and easiest to use computers in the world. HP also designed this product with the environment in mind. But to reduce its impact even further, we need your help.

Let’s work together to make a change.

<table>
<thead>
<tr>
<th>How you can help</th>
<th>What we do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle your old computer.</td>
<td>We design with the environment in mind.</td>
</tr>
<tr>
<td>Disposing of electronic waste responsibly has been an HP priority for more than 20 years. If this computer is a replacement for an older computer you no longer need, go to <a href="http://www.hp.com/go/recycle">www.hp.com/go/recycle</a> to find out if HP can help you dispose of your old computer with minimum impact on the planet.</td>
<td>While we want you to enjoy this computer for many years to come, we recognize that you will eventually dispose of it. We have designed it so it can be easily dismantled and recycled as much as possible. The packaging that came with your computer is also designed for maximum recyclability.</td>
</tr>
<tr>
<td>Don’t use a screen saver.</td>
<td>We design to be more energy efficient.</td>
</tr>
<tr>
<td>Screen savers can prevent your HP computer from going to sleep and thereby waste power. Screen savers can also reduce the life of your monitor by increasing the number of hours the LCD backlight is on.</td>
<td>This computer has HP Power Management Technology, which can reduce computer energy use up to 45% compared to computers without power management. HP computers keep energy needs to a minimum, saving you money and reducing your carbon footprint.</td>
</tr>
<tr>
<td>Don’t disable the power settings.</td>
<td>We design our products to use better and fewer materials.</td>
</tr>
<tr>
<td>The power management tools on this computer are set to minimize energy use without impacting performance. Please do not disable them.</td>
<td>Ensuring the health of you, your family, and our planet is a key priority at HP. We are committed to using the safest materials in the production of this and all our other products.</td>
</tr>
</tbody>
</table>