

Differences between Home and Professional Editions

Microsoft Windows XP is a desktop operating system designed for both home and professional use. Windows XP Professional provides all the benefits of Windows XP Home Edition, plus additional remote access, security, performance, manageability and multilingual features that make it the operating system of choice for businesses of all sizes, as well

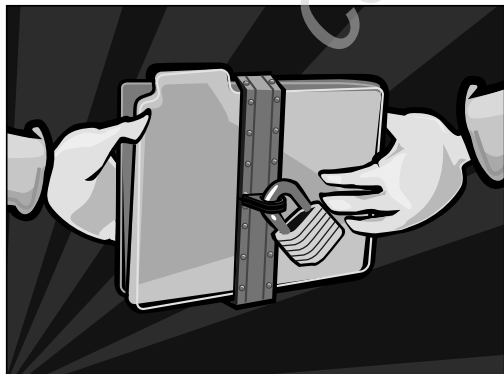
as for people who demand the most of their computing experience. It brings together many of the consumer features found in earlier versions of Windows, such as Windows 98 and Windows Me, and business features found in Windows 2000, and merges them into a single, flexible, and powerful desktop operating system.

Offline and Encrypted Files

The Professional Edition includes better support for file and folder management. Improved features include offline file support and encrypted files and folders. Offline files allow users to keep a local copy of files that are stored on a network share, while encrypted files allow users to keep sensitive documents safer through encryption. Both features are particularly useful for laptop users who prefer data on the go but who are also concerned about keeping the data safe when traveling.

Improved File Sharing

Windows XP Home Edition supports only simple file sharing, which is less secure and robust than full-scale user authentication that is used in the Professional Edition. Although most home users may not need more than simple file sharing, business and power users will appreciate the improved security provided by full authentication.



Dual-Processor Support

Professional Edition supports dual-processor computers, while Home Edition supports only a single CPU. If you are using any computation-intensive applications, like video editing or digital photography, dual-processor systems improve your desktop experience and speed up application tasks.

Remote Desktop Support

Remote desktop support allows you to remotely access Windows XP Professional from another Windows computer, so you can control your computer and work with all your data and applications while away from your home or office. The remote desktop functions much like other third-party software that gives you remote control of another computer, but it is built into the operating system.



Improved Network Integration

The Windows XP Home Edition leaves out one of the single biggest features found in the Professional Edition: the ability to participate in a Windows 2000 Server or Windows Server 2003 domain. Active Directory support is not included, so features such as Group Policy, centralized administration, roaming user profiles, and access control to files, folders, and applications are not available. Although most homes probably do not have an Active Directory network installed for casual or home use, small office/home office (SOHO) environments or small businesses all the way up to multinational corporations may want to install Active Directory because of the reduced maintenance costs and the degree of control it provides.

Web Services

The Home Edition lacks the ability to run scaled-down Web services. The Professional Edition can be set up to support a Web server, an FTP server, and a Telnet server. These services support a maximum of ten connections, so it is not recommended that they be used for any significant Web traffic. But for users testing and developing Web services for later deployment on the Internet, the Professional Edition is excellent for creating and refining basic Web services.

Multilingual User Interface Support

The Multilingual User Interface (MUI) add-on is available separately from Microsoft for users who need localized Windows desktops, menus, dialog boxes, and help files. This add-on is extremely helpful in regions where users are fluent in different languages but have access to the same desktops or laptops. MUI is used to switch the Windows interface to the language most familiar to the end user. In some cases, separate MUI packs are available for specific applications, such as Microsoft Office or Microsoft Messenger. Contact Microsoft for more information about MUI add-ons.



Additional Versions Available

As Windows XP grew in popularity, additional niche versions were created to support specific hardware configurations. Microsoft also manufactures Windows Media Center Edition, Tablet PC Edition, and 64-bit Edition, which are installed by independent system vendors (ISVs). As of this writing, these additional versions cannot be purchased separately but must be purchased as part of a hardware and software package. Much of this book can be used with those editions, though for functions specific to those editions, consult the online help.

Collect System Information

Microsoft has made great advances in making installation and configuration simpler for end-users and system administrators alike. For the most part, the process can be done with little to no intervention. However, there is still no substitute for knowing the details of what hardware, firmware, and connectivity are being configured on the system. Not only does Windows ask for some of this information during different phases of configuration, but if there are problems

with installing new hardware, software, or driver updates, having this information at hand goes a long way in helping to solve the problem.

If you plan on doing a number of installations, or have several computers at home that you maintain, you should collect the necessary information for each computer and keep it in a safe place where it can be referred to when needed — such as in a notebook or on a CD-ROM with the necessary drivers.

Use the SysInfo Utility

If you are running Windows 2000 or Windows XP, you can print out much of the necessary information with the SysInfo utility. Click Start, Programs, Accessories, System Tools, and then System Information. After the window has refreshed, click File and then Print to print out a list of the hardware components, driver information, and other useful details. The report is exhaustive and may take several pages to report. If you have Windows 98 or Me, right-click My Computer, click Properties, and then click the Device Manager tab.

Hardware Model Numbers

If you have purchased a computer from a hardware vendor, make sure you have a list of the model numbers for all the components in your system: motherboard, video card, hard drives, CD or DVD drive, and network card. You will need this information if you have to find and install updated device drivers for your system, or if there are known incompatibilities between some of the devices. In some cases, the only way to find out the particular model number of a component is to open the computer case and look at the component in question.



Firmware Versions

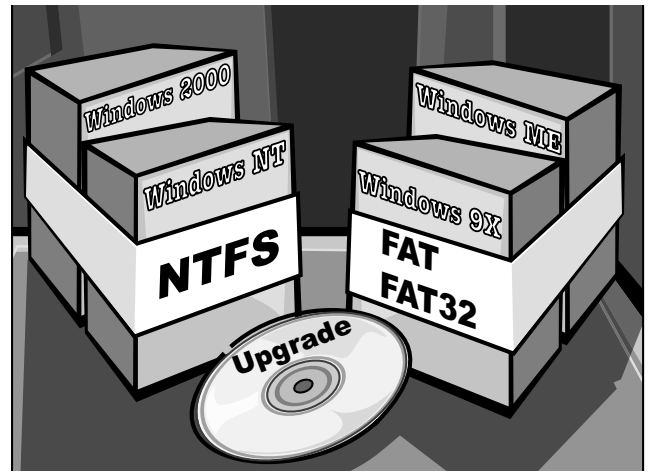
Some hardware devices have device-specific code embedded in them, called *firmware*. Firmware enables features and functions so that operating systems can make the best use of the hardware. Devices that often have firmware are motherboards (basic input/output system, or BIOS), CD or DVD drives, and network cards. Sometimes video cards have firmware as well. Check with each device's manufacturer to see if updated firmware is available for your device. **Caution:** You can completely disable hardware if you flash it with the wrong firmware, such as the wrong BIOS for your motherboard. Follow the manufacturer's instructions exactly, or have a computer professional help you.

Device Drivers

Device drivers are hardware-specific code used by the operating system so that it can interact with, manage, and control its functions. Windows XP ships with device drivers for a large number of hardware devices on the market, and new ones are sometimes made available on the Windows Update site. (See Chapter 3 for information on the Windows Update service.) You should check with the device manufacturer to see if new drivers have been made available since Windows XP's publication.

File System Type

If you are performing an upgrade from an earlier version of Windows, find out the file system type in use: FAT, FAT32, or NTFS. The first two of these are more likely found on Windows 9x or Windows Me machines, whereas NTFS is more likely found on Windows NT or Windows 2000 machines. The file system type is relevant, because NT features such as access control, encryption, and compression are not available in FAT or FAT32 file systems.



Internet Settings

Internet connectivity is perhaps the single most important function of any computer today. Whether you are connected to the Internet through AOL, through an independent Internet service provider (ISP), or through your company's service provider, you should have the necessary connection information so that you can set up your new computer properly. This information may already be available on your computer, or you may need to get it from your system administrator. On existing Windows systems, you can find this information by choosing Control Panel and then Network Connections.

Use the Upgrade Compatibility Wizard

The Upgrade Compatibility Wizard is one of the most useful tools available to anyone upgrading an older version of Windows to Windows XP. The wizard takes an inventory of system hardware, software, and device drivers; compares the existing system against a component database; and presents a report of its findings. It lets you know if your system needs a hardware upgrade to meet minimum system requirements for Windows XP or if your hardware is on the Windows Hardware Compatibility List (WHCL). This wizard helps you approach an upgrade forewarned and forearmed, able to correct any potential pitfalls or shortcomings before installation.

Although the Upgrade Compatibility Wizard does not guarantee it will find all known problems or system incompatibilities, it does help you avoid ones that have previously been reported to Microsoft and provides suggestions on how to avoid the problems (for example, install more memory, obtain upgraded device drivers, make more room on a hard drive).

The wizard can be run on any version of Windows, but it provides better results on Windows 2000- or Windows XP-based systems.

Use the Upgrade Compatibility Wizard

- 1 Insert the Windows XP CD.

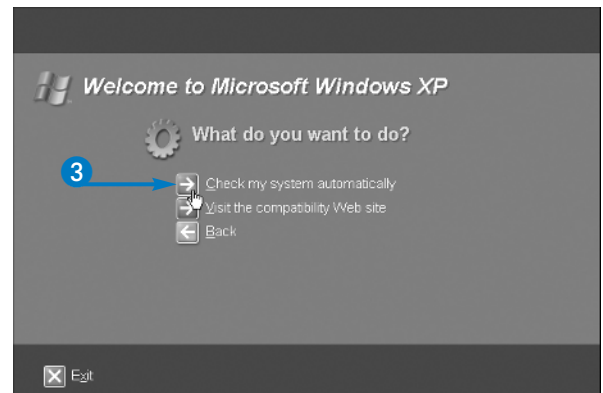
The Welcome to Microsoft Windows XP screen appears.

Note: You can also browse to the CD drive and click *Setup* to launch the CD.

- 2 Click the option to check system compatibility.

The next screen asks what you want to do.

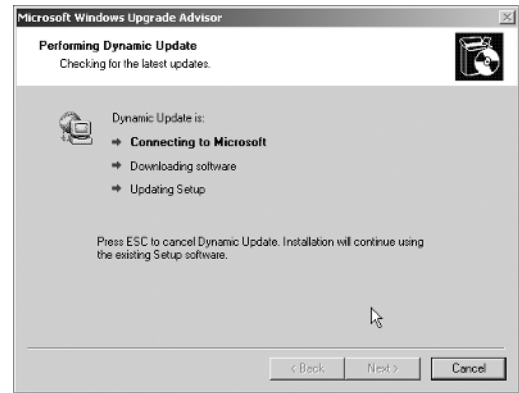
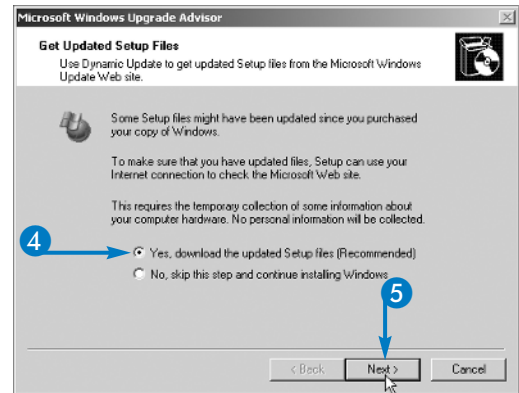
- 3 Click the option to check your system automatically.



The Microsoft Windows Upgrade Advisor window appears.

- 4 Click the recommended option to download the updated setup files.
- 5 Click Next.

The wizard downloads additional files needed to check your system.



What is the difference between the minimum and recommended system requirements for Windows XP?

- ▼ Microsoft uses the term *minimum* for the bare-bones system configuration needed to run an operating system. However, even though you can install Windows XP on a minimum configuration, system performance is barely tolerable, especially if you run any applications that take significant amounts of memory or processing power. The “recommended” system configuration should be considered the bare minimum for minimally tolerable performance. Most blocking issues reported by the Upgrade Compatibility Wizard are based on the minimum hardware requirements, not the recommended ones.

Should I upgrade from the recommended system requirements?

- ▼ Microsoft recommends that you have a Pentium-based 300 MHz processor, 128MB of RAM, an SVGA card (800×600 or better), and 1.5GB of hard drive space. In the real world, these requirements provide scant support for all that Windows XP has to offer. Most versions of Windows are RAM-hungry, so you should upgrade your RAM to at least 128MB and preferably 256MB. Next, upgrade your processor to 1 GHz or better (Intel or AMD), and then upgrade your hard drive and video. You will be glad you did.

Use the Upgrade Compatibility Wizard (Continued)

The Upgrade Compatibility Wizard generates two types of errors: blocking errors and incompatibility warnings. Blocking errors are ones that prevent you from running the installation program at all, such as insufficient disk space or RAM. Incompatibility warnings are generated either for hardware that may need additional files (marked with the red Do Not Enter symbol) or for software that does not support Windows XP (marked with the yellow warning triangle). The incompatibility warnings do not stop the upgrade process, but the hardware and software may not function properly, or at all, after the upgrade.

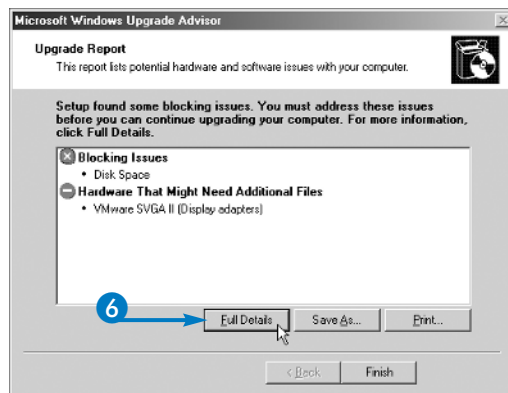
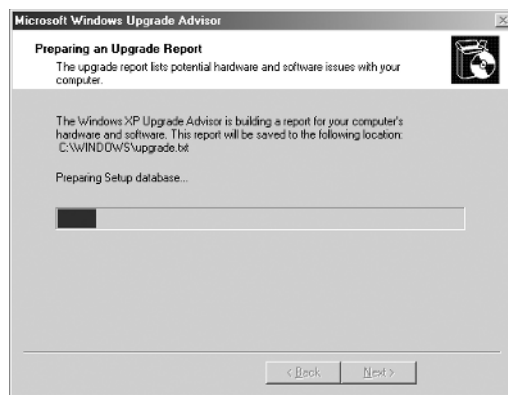
The Upgrade Compatibility Wizard bases its findings on the WHCL, which is a list of hardware and software tested by Microsoft and confirmed to work with Windows. The warnings do not mean that your existing hardware or software will not work, only that either there are known problems that have been reported to Microsoft, or that the particular hardware and software has not been tested by Microsoft. In any event, you should check the hardware and software manufacturer's Web site to see if known problems exist, or if updated components are available.

Use the Upgrade Compatibility Wizard (continued)

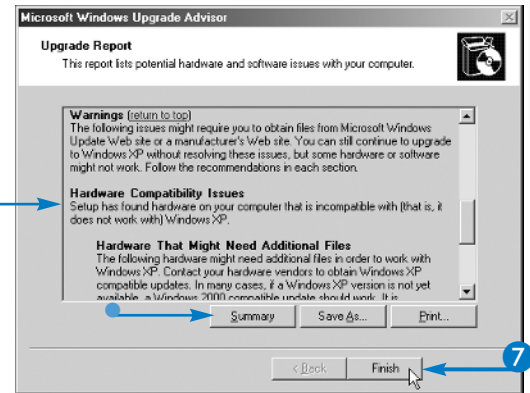
The Upgrade Compatibility Wizard checks your system for potential incompatibilities.

The wizard creates a summary report, showing you problems or potential problems that may occur.

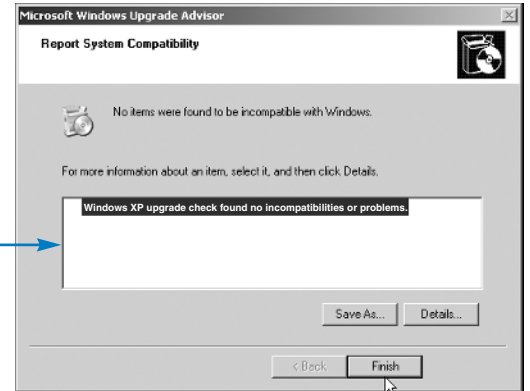
6 Click Full Details.



- Review details about the blocking issues or potential problems in the detailed report.
 - Click Summary to return to the summary report.
- 7 Click Finish.



- The wizard reports if there are no problems or potential pitfalls for your upgrade.



Does the Upgrade Compatibility Wizard work with all versions of Windows?

- ▼ The wizard does not work with Windows 95 or Windows NT 3.5x. You need to upgrade Windows 95 to Windows 98 or later, and upgrade Windows NT 3.5x to Windows NT 4.0 or later. If you are running those earlier versions, upgrading your hardware and performing a new install may be easier than upgrading your operating system.

What if I want to check compatibility before I buy Windows XP?

- ▼ Microsoft provides a downloadable version of the wizard, called the Upgrade Advisor. You can download the Advisor at www.microsoft.com/windowsxp/home/howtobuy/upgrading/advisor.asp and then run it on your computer. Running the Upgrade Advisor helps you determine what upgrades you need to make in order to run Windows XP.

Is there another way to run the Upgrade Compatibility Wizard?

- ▼ You can run the wizard without launching the initial setup screen. Open a DOS or CMD box, change to <CD drive letter>\i386, and run `winnt32.exe/checkupgrade` only. This launches the wizard and proceeds normally. This method is particularly useful if the source files are stored on a network share and you do not want to carry the installation CD with you.

Transfer Files and Settings

If you are performing a new install rather than an upgrade, you can use another wizard to transfer existing files and settings to Windows XP. The timesaving Files and Settings Transfer Wizard restores personal desktop settings and menu options that you have set up previously in other versions of Windows, including Internet Explorer security settings, bookmarks, and cookies.

Before running the wizard, you should perform some maintenance on your existing system. Run the Disk Cleanup

utility to remove temporary files and Internet Explorer cached files; this reduces the number of files to be transferred.

You should also be connected to a network share or have a CD or DVD burner available, because you probably cannot fit all the necessary files onto a floppy disk. You can save the files to a different partition on the same hard drive if you are not deleting or reformatting it during the install process. You can also install the settings directly across a network to the new computer; make sure you have the necessary shares and permissions set up before you do so.

Transfer Files and Settings

- 1 Insert the Windows XP CD.

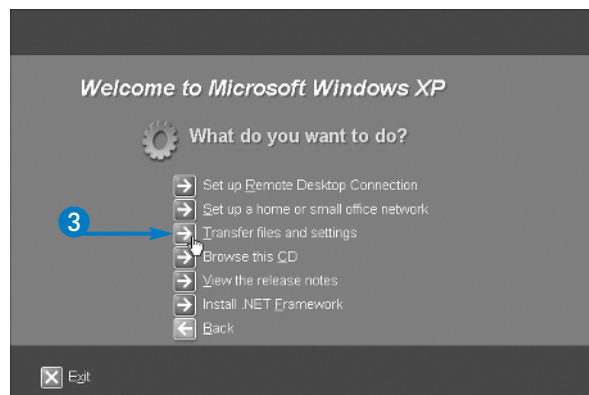
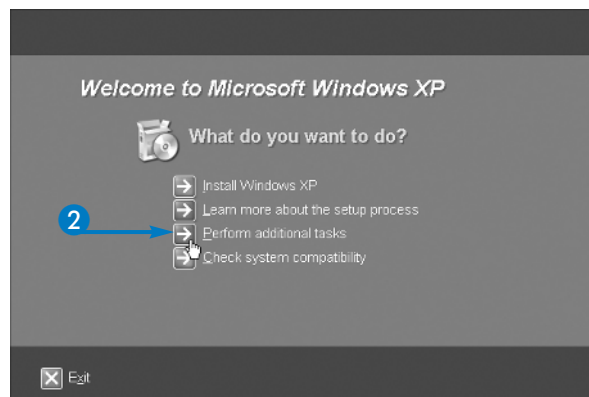
The Welcome to Microsoft Windows XP screen appears.

Note: You can also browse to the CD drive and click *Setup* to launch the CD.

- 2 Click the option to perform additional tasks.

The next screen asks what you want to do.

- 3 Click the option to transfer files and settings.

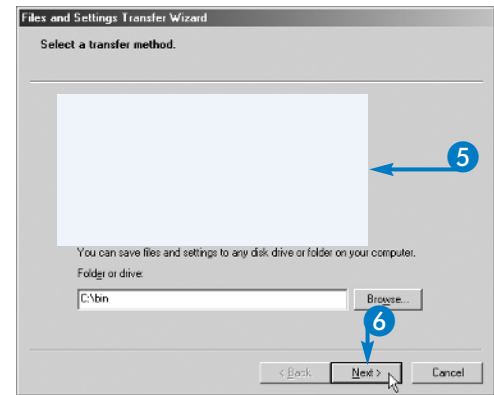
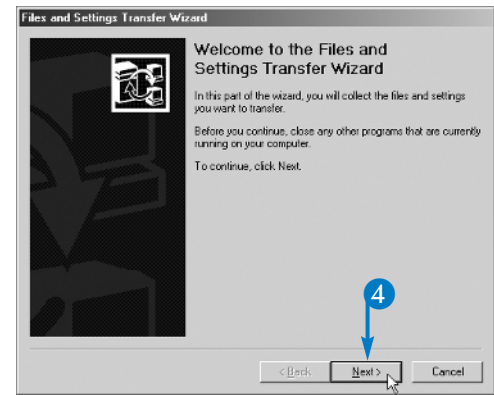


The Files and Settings Transfer Wizard appears.

- 4 Click Next.

The next screen asks you to select a transfer method.

- 5 Click the transfer method you want to use.
6 Click Next.



Can I use the wizard to keep my settings in a dual-boot environment?

- ▼ Yes, you can transfer the necessary settings to the new Windows XP installation if you have installed Windows XP to a different partition. Otherwise, you run the risk of overwriting settings in the shared partition. See Chapter 2 for more information on installation methods and caveats.

Does the wizard transfer any special folders I have set up on my computer?

- ▼ The wizard packages up any files and folders that you add to it during the transfer process, but it does not always create any special folders or paths on the new computer. If you have a special share that you want to transfer, re-create the share on the new computer before you run the wizard.

I ran the wizard, but when I log in to the new computer, I do not see the files anywhere.

- ▼ When you import the files and folders to the new system, you must be logged in as the same user. If there are Active Directory policies preventing you from logging in at more than one computer at a time, you need to save the files to an intermediate share first.

continued

Transfer Files and Settings (Continued)

The Files and Settings Transfer Wizard moves a large number of files and settings by default. It can also be used to move additional files and folders that can be selected when you run the wizard. You can point the wizard at any folder and move its contents, or you can select files by file type and have those moved to the new system.

Moving only settings does not take up much space. Moving files, especially if you have selected additional files and folders, takes up much more space. Plan on anywhere from 5MB to 600MB of space needed on the target

system — more if you choose to move movie, multimedia, or music files such as MP3s.

Although the wizard is good about packing up settings, there are a few caveats for the target system. First, the wizard moves only settings, not entire applications. Second, the specific application should be installed on the target system first, before the settings are imported. Third, the wizard supports only some third-party applications or may only support later versions. An updated list of supported applications can be found at <http://support.microsoft.com/default.aspx?scid=kb;en-us;304903>.

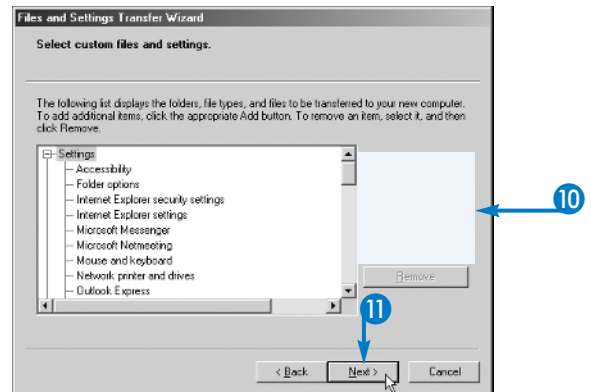
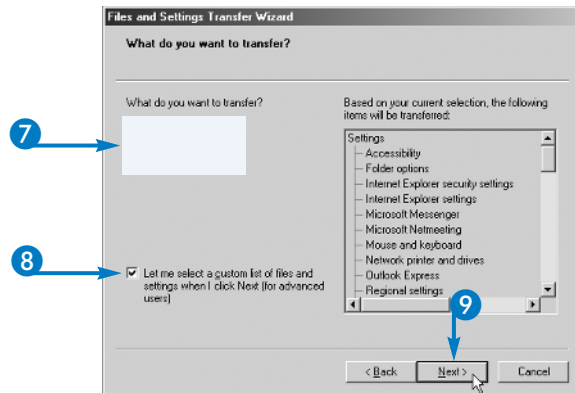
Transfer Files and Settings (continued)

The next screen asks what you want to transfer.

- 7 Click the option for what you want to transfer: settings, files, or both.
- 8 Click here to select a custom list of files.
- 9 Click Next.

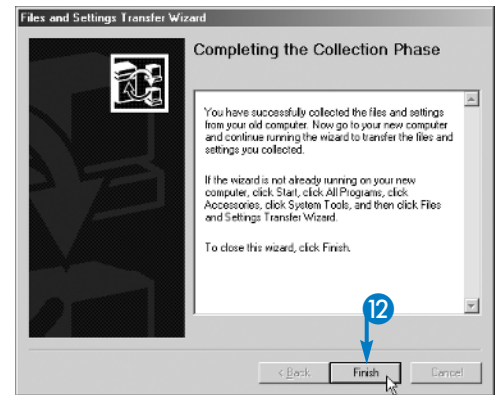
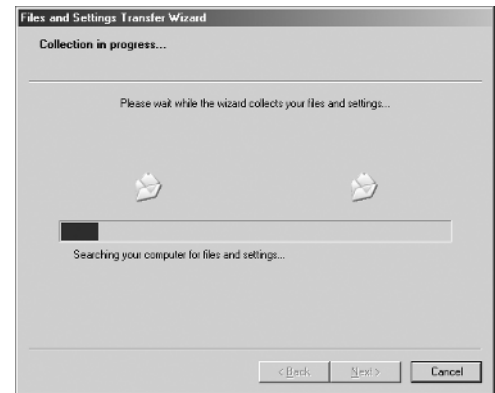
The next screen asks you to select custom files and settings.

- 10 Click a button to add settings, folders, files, or file types.
- 11 Click Next.



The wizard collects the selected files and settings.

12 Click Finish.



What information is migrated by the wizard?

- ▼ The wizard is designed to transfer settings for Windows, some Windows applications, and user files. The default settings are listed here.

Hardware settings	Mouse, keyboard, regional settings, network, dialup, and printer driver settings
Desktop settings	Wallpaper, colors, screen saver, menu and taskbar options, folder settings, audio settings
Software settings	Internet Explorer bookmarks and cookies, Microsoft Office settings, Outlook and Outlook Express settings, mail folders and address books, some third-party application settings
Files and folders	Desktop, My Documents, My Pictures, My Favorites, shared desktop, fonts

Restore Files and Settings

After you have collected your files and settings from the source computer, you can import and install them onto the target computer running Windows XP. Only Windows XP natively ships the Files and Settings Transfer Wizard as part of the operating system, giving you easy access to the wizard for any new installations you may be creating.

The Files and Settings Transfer Wizard contains a safety valve: If you are running the wizard from Windows XP,

it gives you the opportunity to create a Wizard Disk that you can run on the source machine without requiring the Windows XP install disk. This shortcut is extremely handy and gives you the ability to create another tool for your support toolbox so that you do not have to carry around the Windows XP install disk (which is worth its weight in gold).

The following task assumes you have already run the wizard to collect settings on the source computer. If you have not, see the previous task for more information.

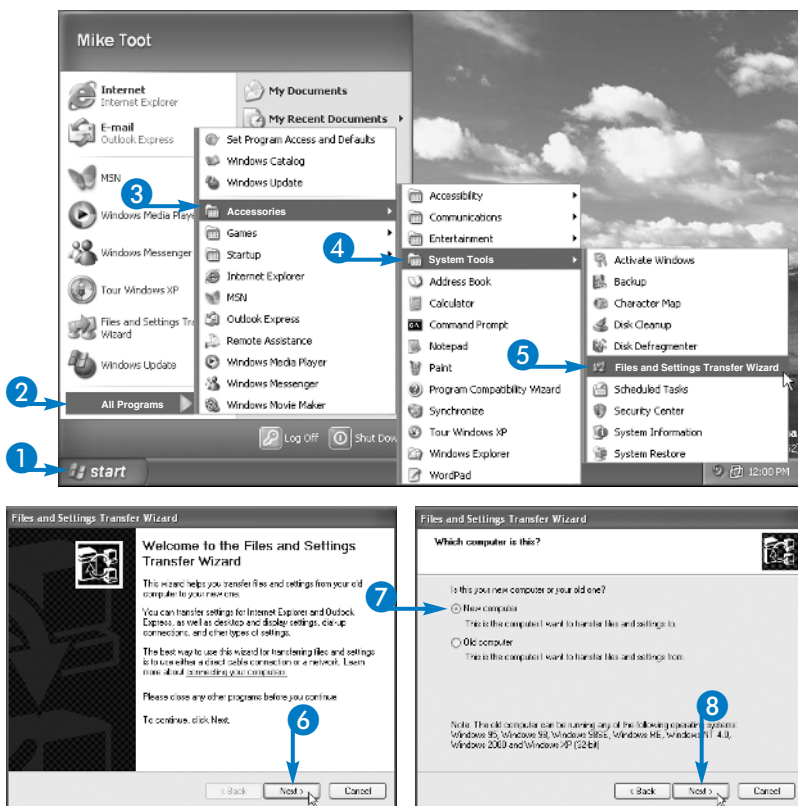
Restore Files and Settings

- 1 Click Start.
- 2 Click All Programs.
- 3 Click Accessories.
- 4 Click System Tools.
- 5 Click Files and Settings Transfer Wizard.

The Files and Settings Transfer Wizard appears.

- 6 Click Next.
- 7 Click New computer.
- 8 Click Next.

Note: If the Windows Security Alert appears, click Unblock.



- 9 Click the option to indicate that you do not need the Wizard Disk.
- 10 Click Next.

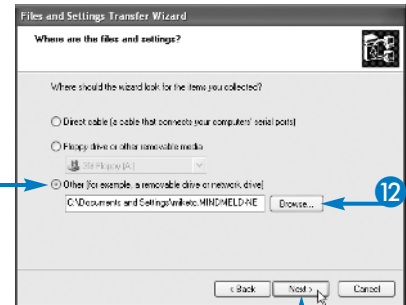
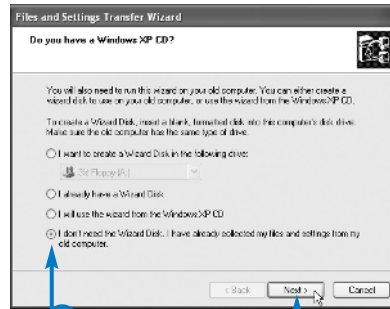
The next screen asks you where the files and settings are.

- 11 Click Other.
- 12 Click Browse to browse to the previously collected settings.
- 13 Click Next.

The source files and settings are applied to the new system.

- 14 Click Finish.

Note: After applying the settings, you need to log off and log on again for the new settings to take effect.



I have several users I need to migrate to new computers. Should I use the wizard for all of them?

- ▼ The wizard is an ideal tool if you only have a few users that you need to migrate to Windows XP, such as in a home or a SOHO environment. If you are using Active Directory, there may be easier ways to migrate users. See Chapter 13 for information on working with Active Directory.

Why do I get a Security Alert when I try to run the wizard?

- ▼ Windows XP Service Pack 2 includes a new Security Console that detects unauthorized attempts to access your computer or its files from across the network. If you are installing on a pre-SP2 installation, you will not see this message.

Why did my game (or other application) not migrate over?

- ▼ Most Windows applications modify the Registry in ways not detected by the wizard. Your best bet is to capture any saved game files (or other data files), reinstall the application, and then migrate the files to your new system.