Technique 1 Getting the Latest Version of Windows

Save Time By

- Getting the right version of Windows XP — the first time
- Updating Windows to the latest version
- Making the best installation decisions
- Bringing over all your old files and settings quickly — or maybe not

Appearances to the contrary, Windows XP hasn't taken over the earth. Three years after Microsoft unleashed Windows XP on an unsuspecting world, only half of the roughly 400,000,000 Windows machines alive were running XP. The other 200,000,000 were still chugging along with Windows 2000, or even <*shudder*> 98 or Me.

With the advent of Service Pack 2 and its considerable improvements in dozens of different areas, Microsoft is betting that more people will buy new computers, thereby acquiring Windows XP. If the Softies are lucky, many folks who just said "No" to the original Windows XP may be convinced to part with their hard-earned clams to upgrade their current machines to the "reloaded" Windows XP SP2.

If you're struggling with the question of whether to get Windows XP Home or part with the extra hundred bucks and go straight for Windows XP Professional, the first part of this technique pays for the book several times over — and saves you a bunch of time in the process.

If you have a new PC, or you've just installed Windows XP on an older PC, you need to wade through the arcana of Service Pack 2, and make a few key decisions with precious little unbiased advice. This technique points the way.

If you're faced with the chore of upgrading an older version of Windows to Windows XP, this technique includes a handful of school-of-hard-knocks recommendations that can save you hours (days!) of hassle. When is it safe to stick in the upgrade CD and let it have its way with your machine? When do you need to reformat the whole ^%$#@! hard drive before installing XP? Find the straight answers here.

Finally, in this technique, I take you behind the scenes with the Files and Settings Transfer Wizard, a remarkable Wizard if ever a Wiz there Wuz. Bet you didn't know that you can use it to transfer files when you switch computers at the office — even if you're moving to a computer that's been around forever — and save yourself a headache in the process.

Installing Service Pack 2

Windows XP Service Pack 2 may sound like a patch — it's called a *Service Pack*, after all — but in reality SP2 embodies a massive upgrade for Windows XP. No doubt you've heard lots of horror stories about upgrading to SP2, or buying a new machine with SP2 installed. Some of the horror stories are true — but most of them, fortunately, are way overblown, and there are ways (which I discuss in this technique) to minimize your chances of turning your PC into SP2 Road Kill. If you don't have SP2, you should get it, right now.

You gotta ask yourself one question...Do I feel lucky? Well, do ya, punk?

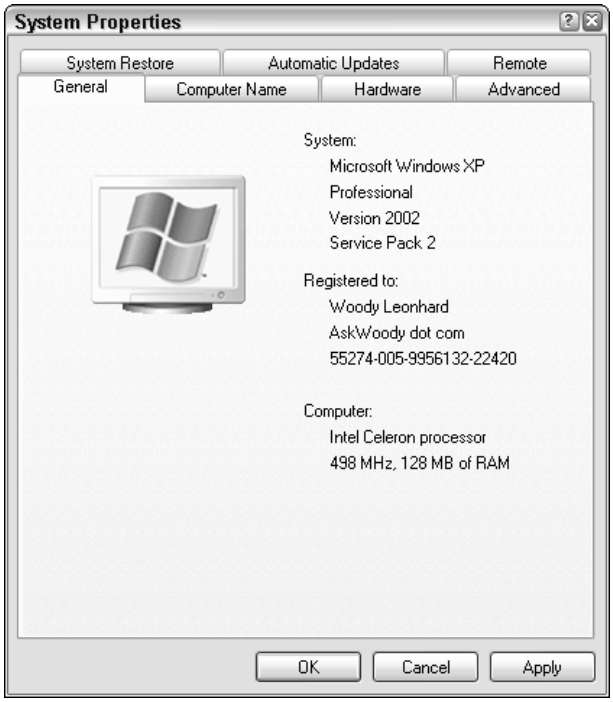
Oops. Wrong movie.

If you decide to upgrade to Service Pack 2, seriously consider wiping out your entire hard drive, reinstalling Windows XP, applying Service Pack 2, and then bringing back all your programs, data, and settings. It's a Herculean task, but your system runs better for it. If you're willing to install from scratch, and you have a day or two to spare, jump in this technique to the section called "Breezing through clean installs." Back up your data, install Windows XP, install SP2, and then follow along here in the section called "Setting up Service Pack 2". Then bring your programs and data back. Your PC will thank you for it.

If you just unpacked a new computer with Windows XP, or if you're brave enough to ignore the hype and upgrade to Windows XP Service Pack 2 in spite of your brother-in-law's podiatrist's secretary's nail stylist's recommendation, here's the best way to proceed:

1. **Make sure you aren't running SP2 already. Click Start, right-click My Computer, and choose Properties (see Figure 1-1).**

   If you see the phrase "Service Pack 2" (or anything later — perhaps "Service Pack 3"), you already have SP2 and can skip this section completely.



• **Figure 1-1: Service Pack 2 identifies itself on the System Properties dialog box.**

2. **Check your hardware manufacturer's Web site to make sure that your BIOS is up to date. While you're there, search the site for any specific recommendations about installing Windows XP Service Pack 2.**

   The BIOS is a small, crucial program that lets your computer communicate with the outside world. If you have an older edition of your computer's BIOS, it may work fine with the version of Windows that you're using now — and die when confronted with Service Pack 2.

Installing a new BIOS is almost always quick and painless, it's frequently free or almost free, and the latest BIOS may well make your PC run better. You should update your BIOS every couple of years anyway. Just be sure to follow your computer manufacturer's instructions precisely. If you've never updated a BIOS, or need a refresher course, check out `www.howstuffworks.com/bios.htm`.

3. If you can't get the latest BIOS, at the very least you must protect yourself from a well-known bug in the SP2 installer that causes PCs to completely freeze in the middle of installation. If you can't get the BIOS, download and install the so-called Prescott C-0 Stepping Patch at `support.microsoft.com/?kbid=885626`.

Microsoft screwed this one up big time. They discovered the bug after Service Pack 2 shipped. Instead of spending millions of dollars to reissue Service Pack 2, they decided to release a patch that has to be run *before* you install SP2.

4. Follow Technique 52 to install and run Spybot-Search & Destroy. Then follow Technique 53 to install and run Ad-Aware.

Both of these steps are necessary to clean garbage out of your system before you install Service Pack 2. There's one specific piece of software — a, uh, "permission-based contextual marketing network" program called T.V. Media that throws the SP2 installer for loops.

5. Follow Technique 60 and perform a complete backup of your system.

If you can run Norton Ghost, or some other program that makes a full mirror image of your hard drive, all the better.

6. Make sure you're the only one logged on to your computer, and shut down all running programs.

If you have Fast User Switching enabled (see Technique 8), make sure all other users are logged off.

7. Make sure you have Service Pack 2 ready.

Got the update CD? Great. That's all you need. If you can't find the CD at your local computer shoppe and don't want to order it from Microsoft (`www.microsoft.com/athome/security/protect/cd/confirm.aspx`; allow four to six weeks), it's easy to find online. If you have a fast Internet connection, go to `www.microsoft.com/technet/prodtechnol/winxppro/maintain/winxpsp2.mspx`, click the Download and Deploy Service Pack 2 to Multiple Computers link, and download the SP2 installation file — all 270MB of it. If you're limping along with a slow connection, or you want to follow the Microsoft Party Line, you can use Windows Update (see the next step).

Depending on which patches you already have installed, Windows Update may only download a portion of the full SP2 package. If there's any chance that you might want to rerun the SP2 installer, or if you want to have a copy of SP2 to give to a friend or co-worker, avoid Windows Update.

8. Run the update.

Stick the CD in the drive and follow the instructions on-screen. Or double-click the `Windows XP-KB835935-SP2-ENU.exe` file and run it. Or, choose Start➪All Programs➪Windows Update, and wade through a zillion questions to get SP2 Express Update going.

9. When the installer finishes, restart your computer.

SP2 immediately asks for security information, which I discuss in the next section.

Setting Up Service Pack 2

Immediately upon installing Service Pack 2, or unpacking and plugging in a new computer with Service Pack 2, Windows XP demands answers to a few key security questions. Depending on your route to enlightenment... er, depending on the way you received Service Pack 2, the physical appearance of the questions may vary. But in the end, Windows XP only wants to know how to handle its Security Center settings (see Figure 1-2).

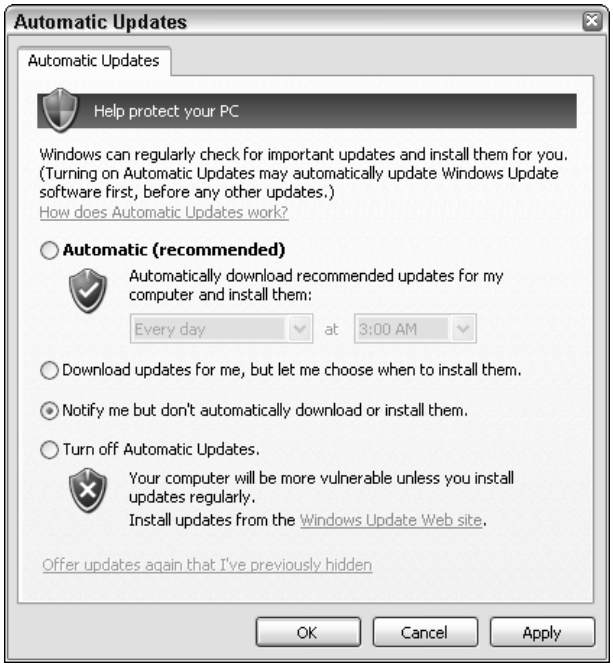
• Figure 1-2: You establish key security settings during SP2 setup.

If you've already gone through the initial setup and you want to rethink your answers to the key questions, you can bring up the Security Center by choosing Start➪Control Panel and double-clicking Security Center.

My strong recommendations for the three Security Center settings:

- **Firewall:** Set to ON, signifying that Windows Firewall is turned on, unless you have a third-party firewall (such as Zone Alarm, which I cover in Technique 51).
- **Automatic Updates:** Set to notify you when updates are available, but not install until you give your permission.

This may be the most controversial recommendation in the entire book, but I believe it's in your best interests to control when (or, indeed, if) patches are installed, simply because Microsoft's record with botched patches has been so abysmal. You can do so by clicking the Automatic Updates icon at the bottom of the Security Center, and then selecting one of the two middle buttons in the Automatic Updates dialog box (see Figure 1-3). See Technique 55 for the gory details.



• Figure 1-3: I tell Windows Update to notify me about updates, but leave the driving to me.

- **Virus Protection:** May not show anything at all: Windows Security Center is notorious for not correctly identifying the status of antivirus protection. Regardless of what the Security Center says, you need to have one of the major antivirus packages installed, and update it daily.

When setup is complete, some of your programs may not work. See the next section for details.

Recovering from SP2 Problems

Most Service Pack 2 problems that I encounter fall into two broad categories:

- Hardware that doesn't work because new drivers are needed.
- Programs that don't work because of Windows Firewall settings.

Immediately after you install Service Pack 2, run through Technique 58 and make sure that all your drivers are up to date. If you have a program that doesn't work, look at Technique 50 for detailed information on poking through Windows Firewall.

With a bit of luck, you'll have Service Pack 2 up and running in no time.

Choosing Between XP Home and XP Professional

Everybody knows that Windows XP Professional is "better" than Windows XP Home, right? That's why XP Professional costs a hundred bucks more. But the simple fact is that most individual Windows users (that is, people who aren't connected to a Big Corporate Network) are better off with Windows XP Home.

There are some exceptions, however. Aren't there always?

Chances are very good that the company you bought your computer from advertises that it "recommends Windows XP Professional". You know why? Because Microsoft forced PC manufacturers to boldly post that phrase, as part of their licensing agreement: If Frodo Computer Co wanted to sell Windows XP, Frodo had to say "Frodo recommends Windows XP Professional", conspicuously, whether anybody at Frodo Inc gave two cat's whiskers about XP Pro or not. As this book went to press, Microsoft's, uh, creative marketing requirement was being contested in court.

Here are the cases when you must choose XP Professional:

- **You're connected to a Big Corporate Network (a *domain* in Microsoft-speak).** Your network administrator will almost undoubtedly insist that you use Windows XP Professional Edition. And you mustn't anger the network administrator. Besides, he or she has good reasons, mostly revolving around security. End of discussion.
- **You currently run Windows 2000 or NT 4, and you want to upgrade to XP without wiping out your hard drive.** You can install XP Home on a PC that currently runs Windows 2000 or NT, but you have to reformat the hard drive in the process. (See the next section for details.) With the Professional Edition, you can skip that step.
- **You want to set up a slave machine to use with the Remote Desktop feature.** The *Remote Desktop* feature (see Figure 1-4) allows XP Professional machines to act as slaves. You can take control over your slave PC using just about any computer that can connect to the slave over a network, and the slave behaves as if you were sitting right in front of it. This setup is great for retrieving files you left at home or printing a document at the office while you're on the road. Two important details
  - XP Professional must be running on the slave machine, but you can have any version of Windows on the master machine.
  - Both XP Home and XP Professional have a similar feature called *Remote Assistance* (see Technique 61), but someone has to be sitting at the slave machine to get Remote Assistance to work.

• Figure 1-4: XP Professional's Remote Desktop lets you take over and operate a PC from anywhere.

If you want to be able to access your PC as a slave, and someone will always be around the slave machine to click a few times when you make the connection, XP Home (with Remote Assistance) works just as well as XP Professional (with Remote Desktop).

- **You want to use specific kinds of exotic hardware, a handful of special-purpose software, or you need the extra security of NTFS file encryption.** Only XP Professional supports dual processor systems, or the 64-bit Itanium processor (in yer dreams). XP Home doesn't include the settings to run more than one monitor simultaneously, which is great for gamers and people with *biiiiig* spreadsheets, but most video card manufacturers have multiple-monitor-capable drivers of their own.

- **You want to clump together two or more hard drives so that they look like a single hard drive (what the big-time geeks call *dynamic disks*), or to set up a mini-Web site.** XP Professional also supports a very secure form of file encryption, so that you can password-protect all your files.

- **You want to have Windows handle all your backups and restores.**

Microsoft really bungled this one. XP Home has a handy Backup capability, but restoring those backups is, ahem, less than dependable. (See Technique 60.) XP Professional contains a very versatile — but quite complex — backup/restore feature called ASR. If you're willing to do your own backups, possibly with a third-party utility, such as Norton Ghost for making full disk mirror copies (`www.symantec.com`), or ZipBackup (`www.zipbackup.com`) for backing up individual files or folders, XP Home is fine.

- **If you're using XP on a portable, and you want to automatically synchronize network files when you unplug the portable from the network, you probably want XP Professional.** For most people struggling with the idea of spending an extra hundred dollars on XP Professional, it boils down to one question: whether Offline Files (in XP Professional only and shown in Figure 1-5) works better than the older Briefcase (which is available in XP Home). The timesaving answer: If you have a lot of files that you frequently need to synchronize between your laptop and the network, XP Professional is worth the money.

Figure out where you stand with those seven issues, and you'll quickly discover whether you need to spend the extra money on XP Professional.

• **Figure 1-5: Offline Files synchronize themselves automatically.**

Get the upgrade?

If you're upgrading Windows from an earlier version, Microsoft gives you a price break. In fact, most of the boxes you see on store shelves are for the upgrade version of Windows XP. You don't need to have an older version of Windows running on the machine in question in order to take advantage of the upgrade. If no older version of Windows is hanging around — perhaps you deleted it in order to perform a clean install of Windows XP — all you need to do is insert an old Windows CD (Windows 95, 98, 98SE, Me, NT 4, or 2000) for a moment at one specific point early in the installation process. There's no check to see if the old version of Windows is registered properly — on this or any other machine. All the upgrade requires is that old CD.

Microsoft says that Windows 95 does not qualify for an upgrade to Windows XP, and you can't upgrade a Windows 95 PC to Windows XP, leaving all your files in place. But if you're willing to reformat the hard drive, the Windows 95 CD works just fine for verification during the installation.

Upgrading Quickly

If you're installing Windows XP on a machine that has another version of Windows running, the most important decision you make is whether to upgrade Windows on top of the current version or wipe out the hard drive entirely, reformat it, and start all over from scratch.

Make the wrong decision, and you'll regret it for months or years to come.

In my experience, people who have done a *clean install* — where they completely wipe out the hard drive and install Windows XP from scratch — have many fewer problems down the road than those who upgrade *in-place*.

The problem: A clean install takes more time now, but results in a much more stable copy of Windows. An in-place upgrade goes much faster now, but the resulting system may be less stable over the long term.

Even upgrading to Service Pack 2 goes much more cleanly and works far better if you wipe out the old copy of Windows prior to installing SP2.

You need to also make sure that any peripherals you own will work with Windows XP: You're in for a rude awakening if you have an old CD burner, for example, that doesn't coexist with Windows XP. Check the manufacturer's Web site for XP-specific drivers.

Multiboot systems

If you have two hard drives, or a lot of extra space in a second partition of one hard drive, you might want to consider installing two (or more) versions of Windows on the same machine. Windows XP works well in multiboot configurations: Every time you reboot the system, you have to pick which version of Windows you want to run. In some cases,

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you can share data between the two different versions of Windows, but you almost always want to install two copies of any software that you use. A good overview of the advantages and pitfalls is at www.winxpfix.com/page5.htm (scroll way down to the bottom of the page). Detailed instructions are at www.blackviper.com/Articles/OS/Multiboot/multiboot1.htm.

In-place upgrades in a snap

In my experience, *upgrading in-place* (which is to say, without wiping out your hard drive, deleting the old copy of Windows, and installing a completely new version) from Windows 2000 to XP Professional almost always goes quite well. Upgrading in-place from a fully functional Windows Me system to XP Home or XP Professional typically goes well, too. With other combinations, your chances for success aren't as great. Most frequently, old drivers can't make the leap to XP. Occasionally, the hardware itself isn't supported under XP — or not supported well enough.

If you decide to upgrade in-place, keep in mind that your options may be limited by your current version of Windows. Make sure that you're upgrading along one of the acceptable paths (see Table 1-1).

In addition to the permitted in-place upgrades I list in Table 1-1, Microsoft has a specially priced "step-up" pack if you decide to move from XP Home to XP Professional.

To perform an in-place upgrade, follow these steps:

1. **Make sure your PC is upgraded to the latest BIOS.**

   Don't skip this step. The BIOS is a program that runs deep inside your PC. Windows XP talks directly to the BIOS. If you aren't running the latest version of the BIOS, don't attempt to upgrade to Windows XP. I've seen more fatal Windows XP upgrade problems that could be attributed to problems with an outdated BIOS than all other problems combined.

   Contact your computer's manufacturer (or look at its Web site), and follow the instructions to download and install the latest BIOS. If you have never updated your BIOS, take a look at the instructions and, if you're intimidated, get help. Any local PC shop or user group has plenty of people who have experience updating BIOSs.

2. **Start your computer.**

   Make sure that it's connected to the Internet and to any other networks.

3. **Follow the instructions in Technique 60 to create a full snapshot of your hard drive.**

   That can save your tail if the upgrade goes to Hades in a Multimedia Handbasket.

4. **Turn off any antivirus programs, firewalls, and other background programs. Close any running programs, and make sure you save that novel you've been writing for the last ten years.**

   Your system can survive for a few minutes while you upgrade.

5. **Insert the upgrade CD (see Figure 1-6) and click Install Windows XP.**

• **Figure 1-6: This way to install Windows XP.**

6. **Follow the instructions on-screen.**

   When the installer asks if you want to perform a Dynamic Update, do so. If you're connected to the Internet, Dynamic Update reaches out to

TABLE 1-1: ACCEPTABLE WINDOWS XP IN-PLACE UPGRADE PATHS

Upgrading From	Windows XP Home	Windows XP Professional	Other Info
Windows 3.*x*, 95, NT 3.*x*	No	No	You can use your old Windows 95 disk to verify installation if you're willing to reformat your drive.
Windows 98	Yes	Yes	Generally regarded as the most difficult upgrade path; lots of potential for problems with older hardware.
Windows 98 Second Edition (SE)	Yes	Yes	Most upgrades go well, but some fail miserably.
Windows Millennium Edition (Me)	Yes	Yes	If the upgrade goes well, the difference in stability will amaze you.
Windows NT Server	No	No	Windows XP is not a server.
Windows 2000 Server	No	No	
Windows NT 4	No	Yes	
Windows 2000	No	Yes	Windows 2000 has many settings and features that are available only in XP Professional.

Microsoft's big computers and pulls down the latest versions of all the software that you need. It takes a while longer to use Dynamic Update, but in the end, you get the most stable version of Windows XP available.

Windows starts and restarts itself a couple of times, and in the end, you get to run through a flashy (and not very informative) infomercial.

Breezing through clean installs

Performing a clean install takes quite a bit of up-front work:

1. **Write down all your settings:**

   - Telephone numbers, IDs, passwords, and mail settings (servers, Secure Password Authorization, and so on) for all your Internet service providers.

When you type a password into your computer, the characters appear as dots or stars. Unfortunately, if you've told Windows to keep track of your passwords, you may have, ahem, forgotten which passwords you used. There's an amazing, little, free utility called Snadboy Revelation (`www.snadboy.com`) that lets you peek behind the dots or stars that show on-screen. Download, install it, click the dots or stars, and presto! Revelation shows you the password that you forgot.

   - Web addresses, IDs, and passwords for all your favorite Web sites.
   - If you have a network, make sure you know its name. If you assigned a manual (static) IP address to your PC, make sure you get it, too. (See the sidebar, "Finding the name and IP address," elsewhere in this technique.)

2. **Upgrade your computer to the latest BIOS.**

   Don't skip this step. The BIOS is a program that runs deep inside your PC. Windows XP talks directly to the BIOS. Having the latest version of the BIOS before you even try to upgrade is important. I've seen more fatal Windows XP upgrade problems attributable to outdated BIOSs than all other problems combined. Contact your computer's manufacturer (or look

on its Web site), and follow the instructions to download and install the latest BIOS. If you don't feel comfortable with the instructions, find someone to help you.

3. **Follow the instructions in Technique 60 to create a full snapshot of your hard drive — a nice idea in case the upgrade turns ugly.**

4. **Back up all your data files. All of them.**

   You can put the files on a second hard drive, copy them to a PC on your network, or burn the data to CD. You may want to use the Windows XP Files and Settings Transfer Wizard. See the next section for details.

5. **Make sure you have CDs for all your applications.**

   You have to reinstall them, too.

If you can't find the installation CD and registration key for an expensive program, such as Microsoft Office, seriously consider upgrading in-place. When you wipe out your hard drive in a clean install, you take all the programs along with it. You have to reinstall the programs, and if you can't find your registration key, you may need to buy a new copy of the program! (With Office, things aren't quite so dire — you can call and explain, and you usually get a key over the phone. But it's a real pain in the neck.)

6. **Tell your computer to boot from the CD.**

   The easiest way to verify that your PC is set up to boot from the CD is to put the Windows XP CD in your computer (don't install anything!) and then shut it down normally. When you restart the computer, the Windows Setup screen appears (see Figure 1-7).

   If the Windows Setup screen doesn't appear, you need to muck around with your computer's BIOS to change the *boot order* so that the computer boots your CD drive before booting your hard drive. Every machine is different; look at your computer's documentation (or hop onto the manufacturer's Web site) to see how to change the boot order.

• **Figure 1-7: The Windows XP Setup screen.**

7. **With the Windows XP installation CD in the drive, start your computer.**

   Make sure the computer is plugged into your network, if you have one, and if it's supposed to dial the Internet directly, make sure the modem is connected to a working phone line.

Do not reformat your hard drive manually. It's much faster and less error-prone to reformat during the installation.

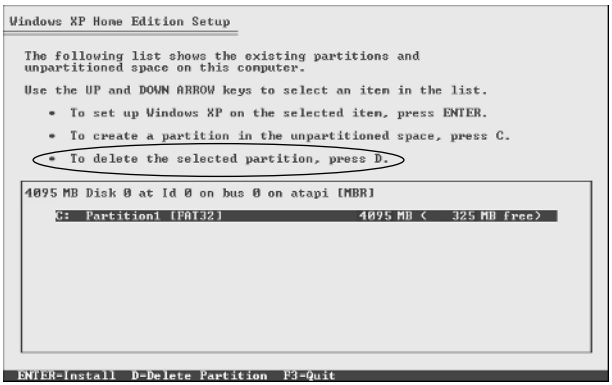
8. **Follow the Setup screens.**

   In the Welcome to Setup screen, press Enter to set up Windows XP. You have to agree to the End User License Agreement, and you may be asked to insert a CD to verify that you have an older version of Windows.

9. **When you get to the Setup screen that allows you to delete a partition, select the partition that contains the current version of Windows and press D (see Figure 1-8).**

This key step effectively erases all the data in that partition. It's the point of no return. The Windows XP setup routine asks you, ***twice***, if you're sure.

10. **Click Yes twice.**

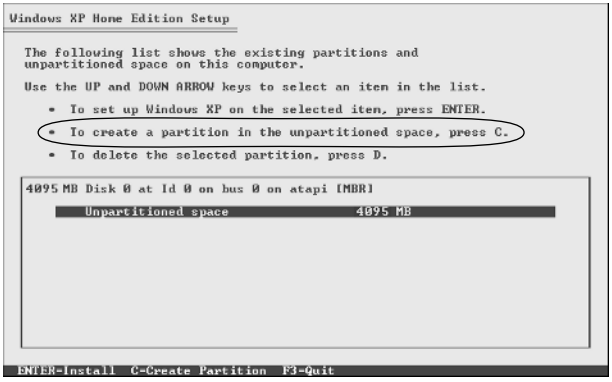


• **Figure 1-8: To perform a clean install, delete the partition that includes the current copy of Windows.**

11. Create a new partition (or partitions) to replace the old ones by pressing C.

See Figure 1-9.

This is the partition that will hold your fresh copy of Windows XP.



• **Figure 1-9: Press C to create a new partition.**

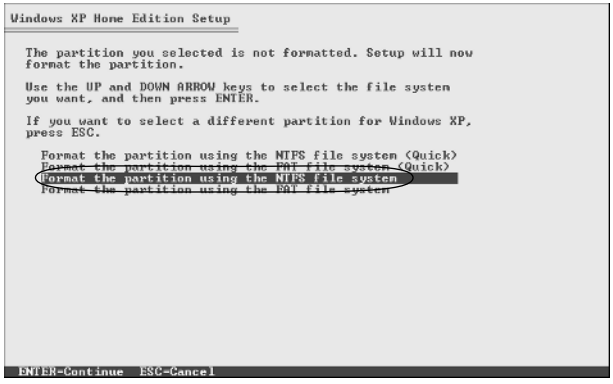
12. Unless you have compelling reasons to the contrary, format the new partition with the Windows NT File System (NTFS) (see Figure 1-10).

With very few exceptions, the only good reason to use the older FAT32 type of formatting is if you have more than one operating system on this computer, and one of the other operating systems is DOS, Windows 95, or Windows 98/SE/Me. (Those older versions of Windows can't "see" data on an NTFS drive partition.)

Avoid the temptation to do a quick format. Now is the time to make sure your whole hard drive is in proper working order, and a quick format cuts too many corners.

13. At this point, you can go get a latte or figure out a workable scheme to end world hunger.

Windows doesn't need you for a half hour or so (depending on the size of the drive), and when you come back, the final questions you need to answer in order to complete the installation are mundane.



• **Figure 1-10: Format the partition with NTFS.**

When Windows asks you to activate, don't bother. There's no advantage to activating right now. Read Technique 2 first.

As soon as you're up and running, Windows steps you through the process of reattaching your computer to your network (if you have one) and to the Internet.

Finding the name and IP address

If you're going to perform a clean install on a PC attached to a network, you need to know the network's name. It helps to use the same computer name, too, so that people

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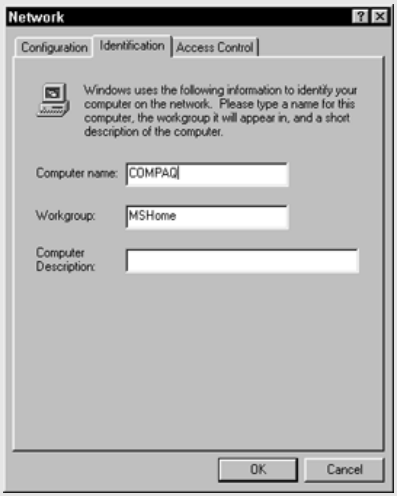
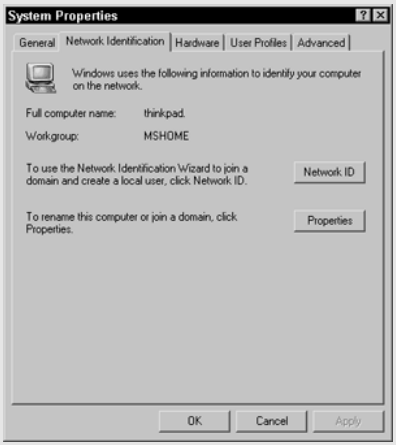
who use the network can find things (such as printers) in the same location after the Windows XP upgrade. So you need to find and write down the network and computer name before you perform the install, so you can tell your PC its name when it comes back from being reformatted.

In Windows 98/SE/Me, choose Start➪Settings➪Control Panel➪Network➪Identification, and you see the info you need in the following window.



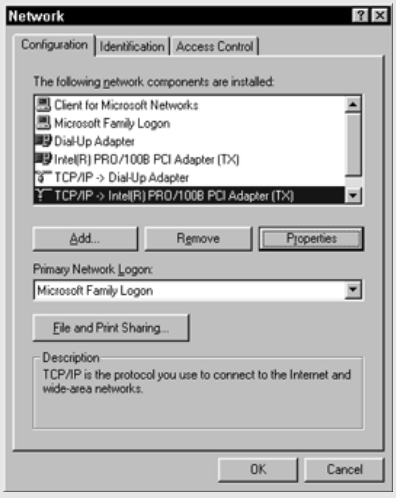
To find the network name in Windows 2000, choose Start➪Settings➪Control Panel➪System➪Network Identification, and a window like the following one appears with the network name.



In both cases, the computer name appears in the Workgroup area of the same dialog box.

After you have the network name and the computer name, you're ready to track down your computer's IP address. Usually your network cards pick up their unique IP addresses dynamically from the network itself. (IP addresses are sets of four numbers, each between 0 and 255, which uniquely identify your computer on the network. They're usually written something like `192.168.0.1`.) In some cases, though, you have to set the IP address manually — for example, many high-speed Internet connections require you to set a static IP address by monkeying around inside Windows itself. If you've ever had to mess around with IP addresses, you know how much time it can take to get them right.

If you're going to perform a clean install of Windows XP, it's important that you figure out if you have a static IP address on the PC that's being upgraded, and if so, precisely what that IP address is. In Windows 98/SE/Me, choose Start➪Settings➪Control Panel➪Network (or Network and Dial-Up Connections). In Windows 98/SE/Me, you see a dialog box like the one shown in the following figure. Double-click the TCP/IP -> entry that lists your network connector, and then click the IP Address tab.



In Windows 2000, choose Start➪Settings➪Network and Dial-Up Connections. Right-click Local Area Connection and choose Properties. Then click Internet Protocol (TCP/IP) and click Properties.

In Windows 98/SE/Me or 2000, if you have a manually assigned, static IP address, the Use the Following IP Address radio button is selected. Write down the address and all the other information in this dialog box. You need it to get Windows working after you perform the upgrade.

Transferring Files and Settings

Moving to a new system rates right up there on the tedium scale with root canals and rush hour. Fortunately, Windows XP has a wizard that can make things go faster — and maybe even a little better.

If you perform a clean install of Windows XP (described in the preceding section), you can use the Files and Settings Transfer Wizard to pull the data off your machine before upgrading it. When you're done upgrading, the same wizard puts the data on the fresh, new system. If you're fortunate enough to buy a new machine with Windows XP preinstalled, and if you can keep your old machine around for a day or two after the new one arrives, the Files and Settings Transfer Wizard has you working in no time.

The wizard also comes in handy when you simply want to transfer a lot of files or transfer certain program settings between machines.

Understanding what gets transferred

You can lose an enormous amount of time if you think something will come across when it won't! The Files and Settings Transfer Wizard lets you transfer files only, settings only, or both files and settings.

Settings includes all the Windows settings (your desktop, taskbar, screen saver, and the like), Internet Explorer and Outlook/Outlook Express settings, modem options and dial-up networking info, favorites, cookies, and the like. You also get the Registry entries brought over for all Microsoft products (including Office, of course), plus recent versions of applications from many other vendors (see the sidebar, "The wizard transfers non-Microsoft files, too").

Files include all fonts, sounds, Microsoft Office files, everything in My Documents and several other common folders, plus most (if not all) the files from recent versions of applications from many other vendors (see the sidebar, "The wizard transfers non-Microsoft files, too").

The Files and Settings Transfer Wizard does not, will not, and cannot transfer programs! You have to manually install the programs on the new PC, typically from their original CDs, before transferring their files and settings with the wizard.

The wizard transfers non-Microsoft files, too

Microsoft put a great deal of effort into creating a Files and Settings Transfer Wizard that works quite well with data from other products — even competing products. Among the big ones: Adobe Acrobat Reader, AOL and AOL Instant Messenger, Eudora Pro, ICQ, Lotus SmartSuite, MusicMatch Jukebox, Photoshop, Prodigy, Quicken, QuickTime, Real Jukebox, RealPlayer, WinZip, WordPerfect Office, and Yahoo! Messenger.

(continued)

Of course, Microsoft doesn't guarantee that the files and settings from competing products will come across intact. If a company changes the location of its Registry entries or the filename extensions on its files, the wizard doesn't have a clue. But by and large, it works quite well.

If you need a precise list of the versions of third-party programs that Microsoft has tested for the Files and Settings Transfer Wizard, look at `support.microsoft.com/?kbid=304903`. An obscure list is also located on many Windows XP computers, usually at `c:\Windows\System32\migapp.inf`.

You can transfer files and settings from systems running Windows 95, 98/SE/Me, NT 4, 2000, or XP onto any Windows XP machine. The Files and Settings Transfer Wizard doesn't transfer files from Windows NT Server or Windows 2000 Server machines.

The wizard does transfer settings and files to any Windows XP machine — even if it's been running for a long, long time. If you need to copy a bunch of files from one machine to another — perhaps you changed cubicles and need to get all your Microsoft Office files moved across — the wizard can save you a lot of time.

Choosing storage media for transferring your files

The Files and Settings Transfer Wizard works with a diverse array of storage media:

- **Diskettes:** Floppy disks (and lots of 'em) work in a pinch, particularly if you're transferring settings only, but if you're transferring any data at all, *fuhgeddaboutit*.
- **COM ports:** A direct PC-to-PC cable can be used to connect the 9-pin serial ports (COM ports) on two machines. This method is only marginally faster than diskettes. You have to use a specific kind of cable commonly called a *null modem* (I've also heard it called a *laplink cable* — one of the wires is crossed-over). No, you can't use your 25-pin serial ports. No, you can't use a USB or FireWire cable.
- **Removable drives/USB flash drives:** Removable drives (such as Zip drives) and USB flash drives work well. If you have a hard drive that you can transport by hook or by crook between the machines — perhaps with the aid of a screwdriver — that does quite well, too.
- **CD/RW:** You can burn the data to a CD. This approach generally isn't as fast as using removable drives or hard drives, and you may need to burn quite a few CDs, if you have a lot of files.
- **Network:** By far the best way is to have both machines connected to a network. If you're performing a clean upgrade on a networked machine, you can easily save your files and settings to some other PC on the network, perform the upgrade, and then retrieve the files and settings after the upgrade is done.

Transferring files and settings on a clean install

If you're performing a clean install and need to copy your data before wiping out your hard drive, this section is for you. It's also a good backup approach before you upgrade to Service Pack 2. In all other cases, starting on the receiving machine is easiest — skip to the next section, "Breezing through a transfer."

If you're performing a clean install of Windows XP (in other words, if you're deleting all your old data), the Files and Settings Transfer Wizard still works very well indeed. To get started, here's what you need to do:

1. **Before you install Windows XP (or upgrade to SP2), start Windows normally and insert the Windows XP CD.**
2. **A screen appears. Choose Perform Additional Tasks➪Transfer Files and Settings, and then click Next.**
3. **Use the wizard to save your files and settings to another hard drive on the PC (one that you're not reformatting!), or use one of the other methods to get the data transferred off the machine.**

4. **After you finish the clean install, start with Step 1 in the section, "Breezing through a transfer," and retrieve the data from where it's stored.**

Breezing through a transfer

So you have the data from your old machine in hand (or on a disk) and you want to transfer it onto your new machine. Here's how:

1. **Install the latest version of the Files and Settings Transfer Wizard on the receiving machine.**

   The version that originally shipped with Windows XP has quite a few bugs. But the version in Service Pack 2 works much better. Run through Windows Update (Start➪All Programs➪Windows Update) to see if a newer version is available.

2. **If you want to pull data across for a specific program, make sure that program is installed on the receiving computer.**

   For example, if you want to have the Files and Settings Transfer Wizard bring across settings for Adobe Acrobat Reader, you need to ensure that Reader is installed on the receiving PC.

3. **Exit all running programs, and then choose Start➪All Programs➪Accessories➪System Tools➪Files and Settings Transfer Wizard.**

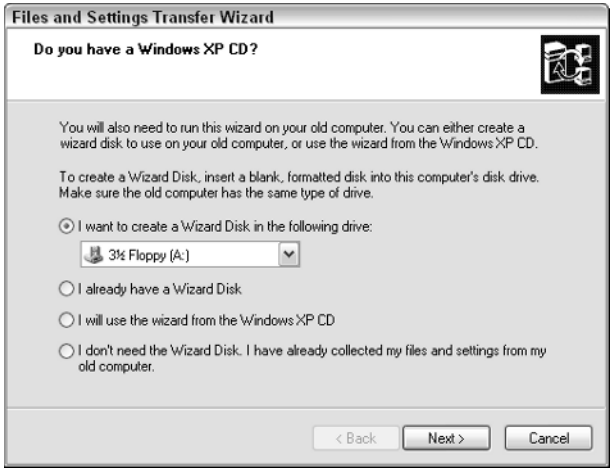
   The initial wizard splash screen appears. Click Next. The wizard asks which computer you're using (see Figure 1-11).

4. **Select the New Computer radio button and then click Next.**

   You have an opportunity to create a copy of the wizard on a disk.

5. **If you're using a newer version of the wizard than the one on your CD — and you probably are — select I Want to Create a Wizard Disk in the Following Drive to make a copy on a diskette, and then click Next (see Figure 1-12).**

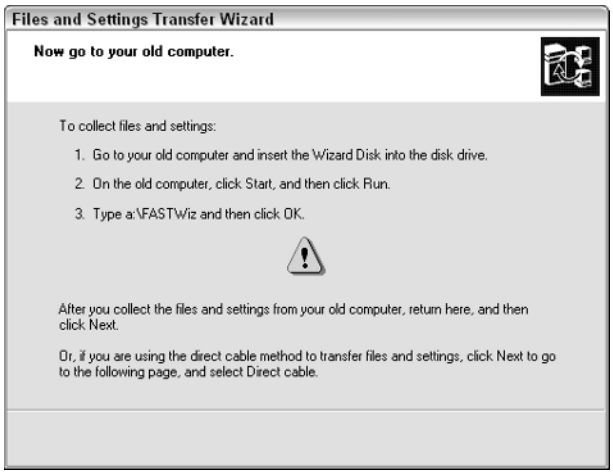
• **Figure 1-11: Identify the receiving computer.**



• **Figure 1-12: If you are working with the latest version of FSTW, make a copy on diskette instead of relying on the one that shipped with your CD.**

The wizard then has you move over to the "sending" machine (see Figure 1-13).

6. **To use the Wizard Disk, insert it into the sending machine, choose File➪Run, type** a:\fastwiz, **and press Enter.**



• **Figure 1-13: Time to retrieve the files from the sending machine.**

If you decide to use the version of the wizard on the Windows XP CD (instead of a version you downloaded), insert the XP CD into the CD drive of the sending PC. A screen appears. Choose Perform Additional Tasks➪Transfer Files and Settings. Then click Next.

7. Pick the transfer medium (see Figure 1-14) and click Next.

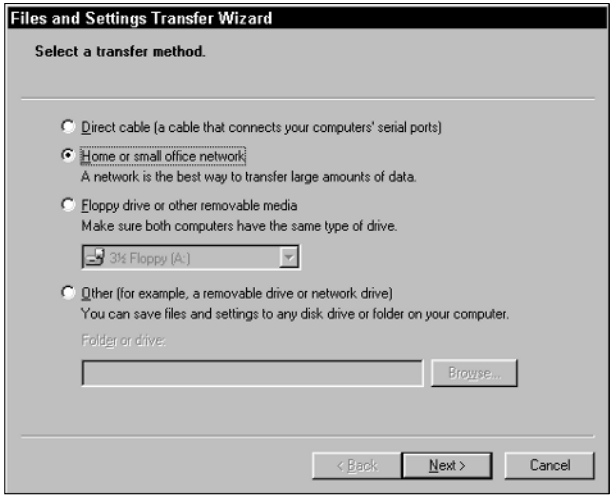
The wizard is smart enough to scale back the amount of data it offers to transfer, if you're using a slower transfer method.

8. When the What Do You Want to Transfer page appears, click Files or Settings or Both and then click Next.

If you want to specify precisely which settings, folders, and types of files get sent, don't hesitate to check the Let Me Select a Custom List of Files and Settings When I Click Next box. Pick the files you want, and click Next.

The wizard warns you if you need to install any specific programs on the receiving machine.

9. Before the transfer begins, if the two machines are connected directly, the wizard displays a password on the receiving machine and has you type it on the sending machine.



•**Figure 1-14: If it's available, your best choice is by network.**

Transferring a lot of big files can take hours, so be patient!

The Files and Settings Transfer Wizard is, hands down, the fastest way to get application data transferred from one machine to another.

The fastest way to shoot data from one machine to another is over the network. If you have the luxury of running both the old and the new machines in the same location, seriously consider setting up a simple network — for all sorts of good reasons. See Technique 45 for details.