

Movin' on up!

When and how to
upgrade to Windows XP.
by Russell Shaw

If you purchased your PC within the last couple of years, it almost certainly already has Windows XP installed on it, since that operating system was introduced in the fall of 2001. But you don't necessarily have to purchase a new PC to move up.

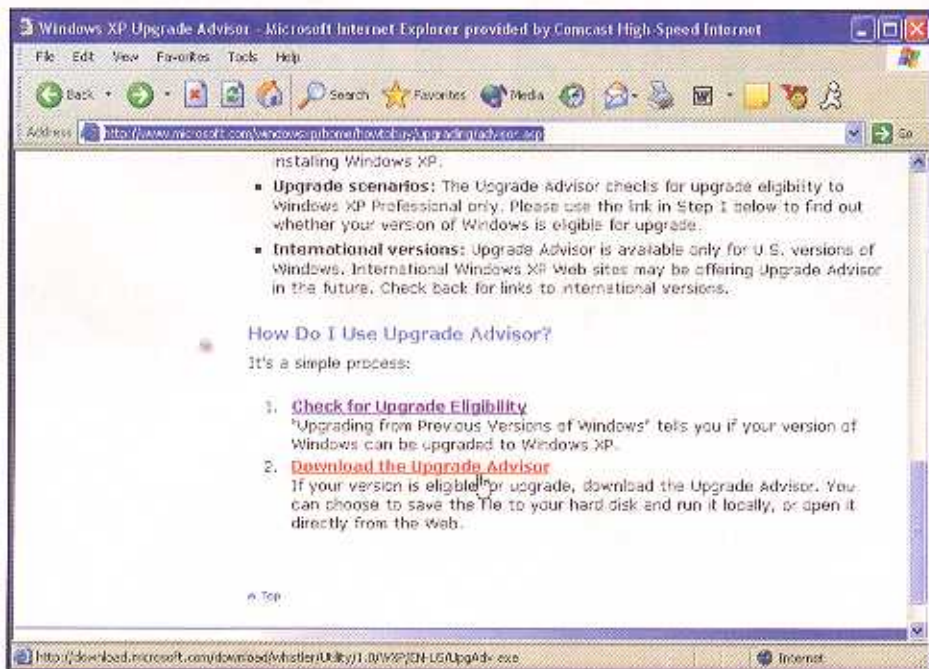
If your machine is running an older version of Windows—Windows ME or Windows 98, for example—it can probably

handle the increased demands of Windows XP. What do we mean by “probably?” Well, if you had previously upgraded that same machine from Windows 95 or even Windows 3.1, your computer is—for all intents and purposes—a museum piece. Maybe the Smithsonian would be interested?

Microsoft advises that Windows XP should be installed only on computers equipped with at least a Pentium II processor

running at 300 megahertz (three hundred million cycles per second, abbreviated MHz) and a minimum of 128 megabytes (MB) of random-access memory (RAM). But that's the absolute *minimum* requirement for XP.

You'll have a much better experience running XP on a machine that's outfitted with a 400MHz Pentium II and 256MB of RAM. By comparison, today's typical budget PC (we're talking



→ Download Microsoft's Windows XP Upgrade Advisor tool, and the utility will scour your computer looking for any obstacles that will impact or even prevent your upgrade to Windows XP.

GLITCHES AND GOTCHAS

Windows XP is the most feature-rich, most dependable, and most stable operating system Microsoft has ever released. Despite all this wonderful news, however, you might still encounter a glitch or two after you've made the upgrade. The most annoying problems will involve software or hardware that worked fine with your previous operating system, but that just refuses to play with XP.

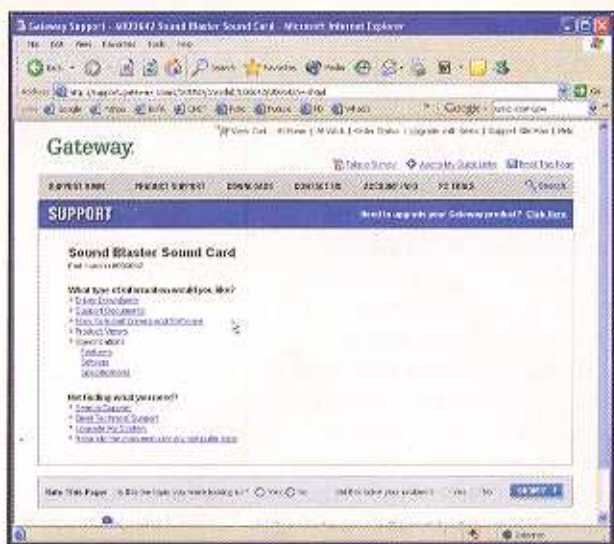
On some older Gateway PCs, for example, Windows XP seems to have considerable difficulty with the driver software for Creative Labs' Sound Blaster sound card. Although the Sound Blaster is one of the most common sound cards in the industry, you might discover that upgrading to Windows XP causes it to cease functioning. This doesn't mean the sound card is broken; it's just that Windows XP can't communicate with it.

The solution is usually pretty easy: visit your computer manufacturer's Website and click on the Support or Download icon. You might have to do a little exploring, but you should be able to find a page that lists various device drivers—special-purpose software that enables your hardware and software to communicate with each other.

You might also discover that some older software programs will cease functioning after you've made the XP upgrade. Older antivirus software, such as the 2001 edition of Symantec's Norton AntiVirus, are simply incompatible with XP.

Once you've determined that this is the case, your best option is to uninstall the offending program. Fortunately, Windows XP makes this process very easy. Click on the Start menu and choose the Control Panel menu item. Next, click on Add/Remove Programs. Click on the program you wish to uninstall and then click on the Remove button. This process will make sure that all vestiges of the old program are deleted from your hard drive.

Don't be discouraged if you do encounter one of these glitches or gotchas. Windows XP really is easy to install or upgrade to—and it's even easier to use.



→ If one of your hardware devices stops working after you've upgraded to XP, download a new device driver.

about a machine priced below \$500) is outfitted with a Pentium 4 Celeron processor running at 2.4 gigahertz (two billion, four hundred thousand cycles/second, abbreviated GHz).

The only other reason not to upgrade to Windows XP is if you are heavily dependent on old—dare we say ancient—software that still runs on Microsoft's old DOS operating system. Unlike Windows 98 or even Windows ME, for that matter, Windows XP does not offer a convenient way to launch these types of applications.

That's because Microsoft removed most of the computer code that was required to run DOS programs in an effort to render Windows XP more reliable.

But chances are good that you moved beyond DOS years ago, and that your PC is fast enough. If that's the case, there's no shortage of reasons for making the move.

WHY SHOULD I BOTHER WITH AN UPGRADE?

The most compelling reason for upgrading your PC to Windows XP is that the newer operating system

is much more stable. If you spent any meaningful time with Windows ME or Windows 98, you probably experienced an operating-system crash: for no apparent reason, the computer would suddenly freeze up and refuse to respond. Efforts to revive it invariably resulted in what cynics called "the blue screen of death:" a blue page displaying an esoteric error message vainly trying to explain what happened.

The reason previous versions of Windows were so unstable is because they didn't do a good job of managing RAM. Every program

that's running at a given time, including large chunks of the operating system itself, must reside in RAM.

If you launched a program—Microsoft Word, for example—and then launched a second program—say, Adobe Acrobat—Windows often did a poor job of making sure that Word didn't try to grab the same memory that Acrobat was using (and vice versa). And if that happened: Bam! The blue screen of death made its dramatic entrance.

Windows XP isn't impervious to failure, but it crashes far less often because it actively protects the memory space that each program has reserved for itself. If a single application crashes, Windows XP is usually able to isolate the unstable program, so it doesn't take everything else down with it.

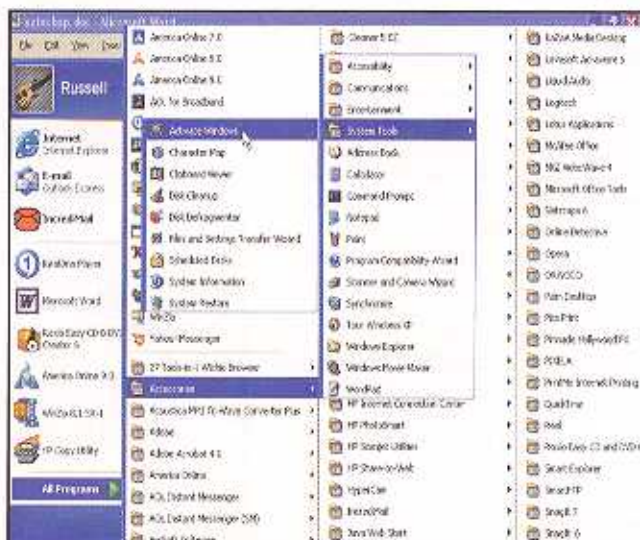
Still not convinced you should make the upgrade? Let's examine three other major improvements.

OTHER IMPROVEMENTS YOU'LL ENCOUNTER IN XP

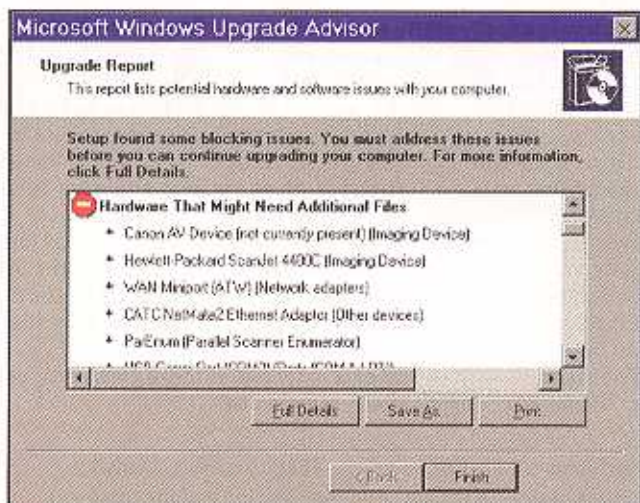
The hard drives in modern computers are getting increasingly large, making it more and more difficult to find the pictures, documents, songs, and other files we like to squirrel away on our computers. Windows XP makes the task easy, thanks to its powerful built-in search utility.

Named, appropriately enough, Search Companion, this feature marks a tremendous improvement over the clunky and confusing search function built into earlier versions of Windows. With Search Companion, you can hunt for pictures, music, documents, names in your address book, and even information contained on the Internet using just one tool.

System Restore is another outstanding Windows XP feature.



→ After it's installed, Windows XP must be activated before it can be used. After activation, this menu item will disappear.



→ The Upgrade Advisor has discovered that the PC being prepared for a Windows XP installation needs a few software updates.

This tool monitors changes to your computer, such as when you prepare to install a new program. It takes a snapshot of the system before the installation takes place.

If the system hiccups, you can launch System Restore and turn back time to a state when the computer was stable. All your personal data files (Word documents, the Websites listed on your Favorites list, archived

email messages and more) are all preserved from loss.

And you needn't rely on Windows XP to establish these restore points—you can set your own at any point in time. In fact, it's a good idea to establish a manual restore point whenever you're planning to make significant changes to your computer, whether that be installing (or uninstalling) a new program, a new hardware

device, or deleting old files you think you no longer need.

The last major upgrade in Windows XP that we'll discuss lies beneath the surface. Windows File Protection prevents you from accidentally replacing or removing "protected" system files. It also safeguards any files installed by the Windows Setup program.

If these improvements aren't enough motivation for you, you should know that the vast majority of new programs that Microsoft is developing will run *only* on Windows XP, and the company is pushing other developers to do the same.

The reason for this aggressive stance is that it's the only way that new programs can take full advantage of what XP has to offer. Programs that take advantage of XP's memory-protection technology, for instance, can't run on an operating system that doesn't offer memory protection.

ARE YOU READY TO ROCK THE HOUSE?

Okay, now that we've got you



➔ Microsoft's Windows XP upgrade utilities will render your move to the new operating system relatively painless.

all fired up to make the move to Windows XP, let's go to the next step and make double sure your current computer is up to the job. You'll need to download Microsoft's free Upgrade Advisor tool, which will scan your system. If the utility judges your system to be capable of running XP, it will go on to inform you whether you can

use the \$99 upgrade CD, or if you must purchase the full operating system (which costs \$199). To download the Upgrade Advisor, activate your Internet connection and point your Web browser to this address:
www.microsoft.com/windowsxp/home/howtobuy/upgrading/advisor.asp

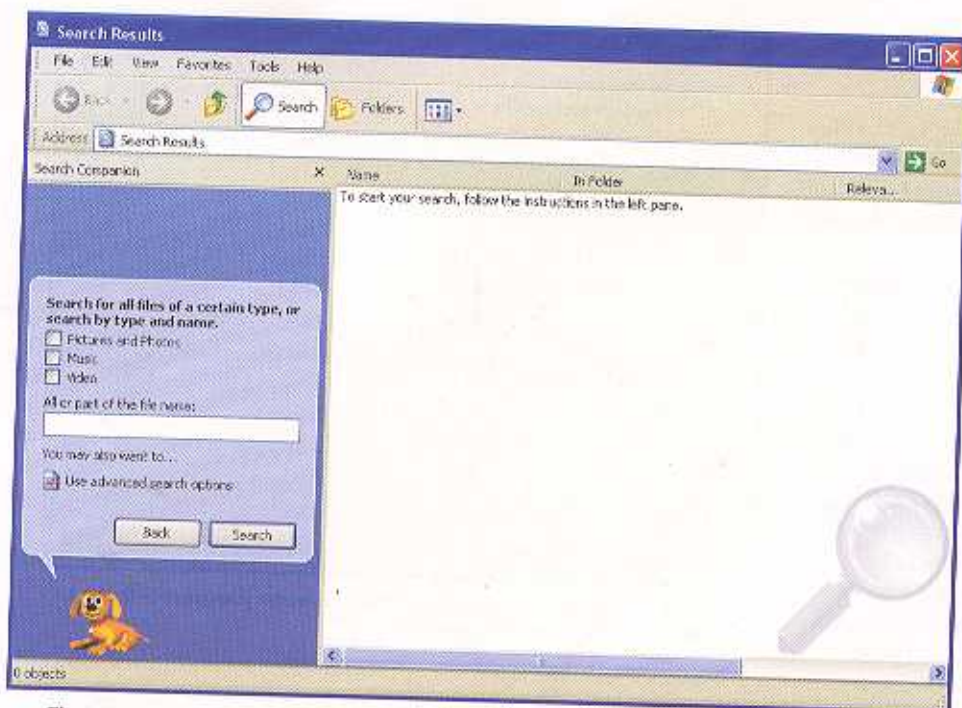
ACTIVATE WINDOWS XP

At this point, Windows XP is fully installed, but you won't be able to use until it's been "activated." Activating your copy of Windows XP is Microsoft's rather ham-fisted way of preventing software piracy—it prevents you from using one upgrade disc and installing XP on multiple computers. XP must be activated within 30 days of being installed on your computer, or you'll have to repeat the entire installation process.

You can activate XP one of two ways: over the Internet or by phone. To activate over the Internet, click on the Windows Activation icon that will appear in the Tool bar at the bottom of the screen. Alternatively, you can click on the Start menu, point to Accessories, All Programs, System Tools, and—finally—Activate Windows. (Both the icon and the menu choice will disappear once XP has been activated.)

When the activation process begins, click on the menu item that reads "Yes, let's activate Windows over the Internet now." If you're interested in reading Microsoft's privacy statement, click on the item that reads "Read the Windows Product Activation Privacy Statement." When you're finished, click the Back button on your Web browser, and then click Next.

Click the button that reads "Yes, I want to register and activate Windows at the same time." Type in your contact information in the boxes provided and click Next. (An asterisk appears next to the boxes that must be filled out; providing the rest of the information is optional.) A message about being connected to an activation server will appear. You'll soon see a message indicating that your copy of Windows XP has been activated. Click OK and you're done!



→ The Windows XP Search Companion is the best search tool that Microsoft has ever developed, but we could do without the animated pooch digging around the window.

Scroll down the page and click on the link that reads "Download the Upgrade Advisor." Downloading the Upgrade Advisor will take about two minutes on a fast Internet connection; less than 30 minutes using dial-up. Once the file is downloaded, use the Run command in your current version of Windows to start the program.

Upgrade Advisor will spend a few minutes analyzing your PC, and then it will produce a report containing two types of information: Blocking Issues and Compatibility Warnings.

Blocking Issues are those that will prevent you from installing Windows XP on your computer in its current state. Typical problems might be insufficient memory installed in your computer (in which case, upgrading your memory should fix the problem), or the presence of a software program that Microsoft knows will cause

problems with a Windows XP upgrade (in which case, you'll need to uninstall the program).

Compatibility Warnings will identify hardware and software installed on your machine that won't prevent a Windows XP upgrade, but that might not—or definitely *will not*—function after you've upgraded.

But you needn't worry—the Upgrade Advisor will also suggest a course of action for fixing the problem. Typically, it's simply a matter of obtaining a software upgrade, a patch, or a new device driver from the software developer or the manufacturer of the device.

Once your PC passes the Upgrade Advisor tests, you'll need to decide whether you want to upgrade to Windows XP Home Edition or Windows XP Professional Edition. The only reason to move up to the more expensive Professional edition is if you want to access your

computer from a second computer at a remote location, build a large computer network, restrict access to some of your files to individual users, or if you're a "power" user.

If none of those labels describe your needs or aspirations, you'll do just fine with the less expensive XP Home edition.

Once you've done all the prep work, you're ready to buy your new operating system. The software is too big to download, so you'll need to purchase a physical disc from Microsoft, an online merchant, or a brick-and-mortar retailer (a computer, office-supply, or warehouse store, for example).

The first thing you should do when you open your upgrade package is to write down the Product Key number. You'll find it on a label on the back of the disc envelope, and you'll need it during the installation process. Don't lose the Product Key or the disc—you

never know when you might need them again.

LET'S DO IT

Once you have your upgrade disc, you're ready to go. Make sure that your PC is connected to the Internet when you drop the upgrade disc in your CD- or DVD-ROM drive.

Thanks to a cool Windows XP feature called Dynamic Update, the installation routine will automatically scour the Internet for new device drivers for common peripheral hardware, such as your scanner or printer.

When the software launches, choose the Upgrade installation option and click next. Read through—or at least glance at—the license agreement and click Accept. (If you don't accept the license agreement, of course, you can't install the software.) Enter the Product Key from the

label on the disc sleeve.

Review the information about the previously described Dynamic Update, select Yes, and then click Next to start the installation process. When the "Welcome to Windows" screen finally appears, you're almost done.

Unless you're planning to use your computer in another country (or want the OS to use a language other than English), stick with the default choices the software presents you with.

You'll next be asked to make an important choice between two file systems for your hard drive. The old file system is known as FAT32 (FAT is an acronym for File Allocation Table); the new file system is called NTFS (an acronym for New Technology File System).

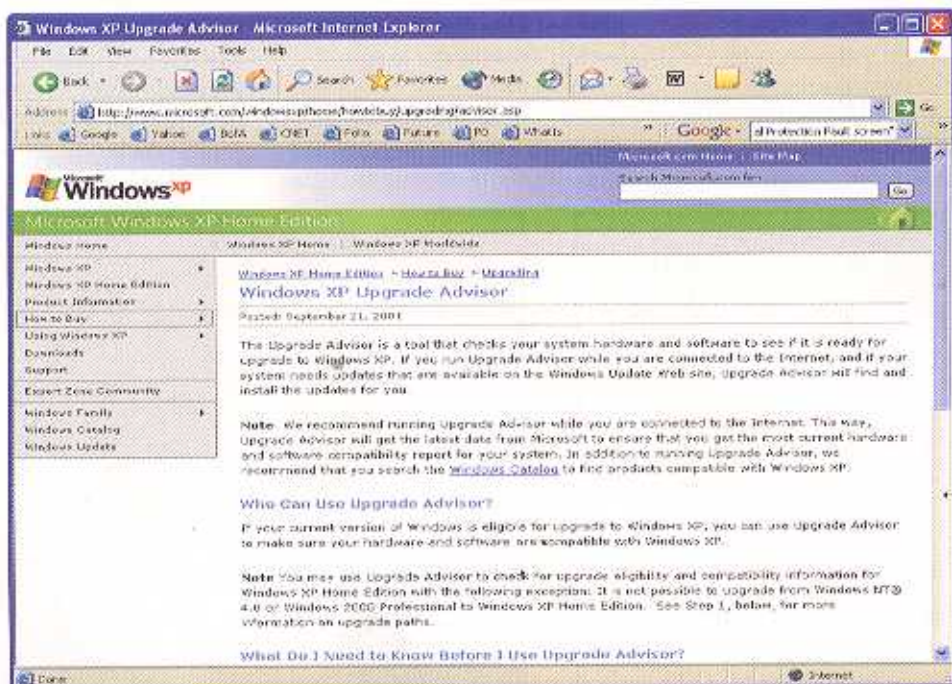
Choose the NTFS option unless your hard drive is smaller than

32GB. The new file system is faster and more reliable than FAT32, and it can handle larger hard drive partitions, too.

Before you can use Windows XP, however, you'll need to activate it. Refer to the sidebar "Activate Windows XP" and we'll step you through the process.

If everything has gone according to plan, your copy of Windows XP should be up and running. But the longer you deal with computers, the more you'll become aware that things don't *always* go according to plan. Refer to the sidebar "Glitches and Gotchas" and we'll discuss some of the more common problems you might run into.

Don't worry, we'll give you plenty of solutions, as well. But if you're reasonably fortunate and all the stars are in alignment, none of them will apply to you! ■



➔ Microsoft's Windows XP Upgrade site will provide you with most of the information you need to know about upgrading; more than you probably need, in fact.