

Chapter 1: Introducing Windows XP

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- ✓ Figuring out where Windows XP fits into The Grand Scheme of Things
- ✓ Seeing what Windows can (and can't) do for you
- ✓ Perusing a brief history of Windows

Windows XP is one of the most sophisticated computer programs ever made. It cost more money to develop and took more people to build than any computer program, ever. So why is it so blasted hard to use? Why doesn't it do what you want it to do the first time? For that matter, why do you need it at all? That's what this chapter is all about.

What Windows XP Does (And Doesn't)

Someday you'll get really, really mad at Windows. I guarantee it. When you feel like putting your fist through the computer screen, tossing your Windows XP CD in a bonfire, or hiring an expensive Windows expert to drive out the devils within (insist on a Microsoft Certified System Exorcist, of course), read through this section. It may help you understand why and how Windows has limitations. It also may help you communicate with the geeky rescue team that tries to bail you out, whether you rely on the store that sold you the PC, the smelly guy in the apartment downstairs, or your eight-year-old daughter's nerdy classmate.

Hardware and software

At the most fundamental level, all computer stuff comes in one of two flavors: either it's hardware, or it's software:

- ◆ **Hardware:** Anything you can touch — a computer screen, a mouse, a CD. Your PC is hardware. Kick the computer screen and your toe hurts. Drop the big box on the floor and it smashes into a gazillion pieces. That's hardware.
- ◆ **Software:** Everything else — e-mail messages, that letter to your Aunt Martha, pictures of your last vacation, programs like Microsoft Office. If you have a roll of film developed and put on a CD, the shiny, round CD is hardware — you can touch it — but the pictures themselves are software. Get the difference? Windows XP is software. You can't touch it.



When you first set up your PC, Windows had you click I Accept to a licensing agreement that's long enough to wrap around the Empire State Building. If you're curious about what you accepted, a printed copy of the End User License Agreement is in the box that your PC came in or in the



CD packaging (if you bought Windows XP separately from your computer). If you can't find your copy, choose Start→Help and Support. Type **eula** in the Search text box and press Enter.

When you bought your computer, you paid for a license to use one copy of Windows on the PC that you bought. The PC manufacturer paid Microsoft a royalty so that it could sell you Windows along with your PC. You may think that you got Windows from, say, Dell — indeed, you may have to contact Dell for technical support on Windows questions — but, in fact, Windows came from Microsoft.

Why do I have to run Windows?

The short answer: You *don't* have to run Windows. The PC you have is a dumb box. (You needed me to tell you that, eh?) In order to get the dumb box to do anything worthwhile, you need a computer program that takes control of the PC and makes it do things such as show Web pages on the screen, respond to mouse clicks, or print ransom notes. An *operating system* controls the dumb box and makes it do worthwhile things, in ways that mere humans can understand.

Without an operating system, the computer can sit in a corner and count to itself, or put profound messages on the screen, such as Non-system disk or disk error. Insert system disk and press any key when ready. If you want your computer to do more than that, though, you need an operating system.

Windows is not the only operating system in town. The single largest competitor to Windows is an operating system called Linux. Some people (I'm told) actually prefer Linux to Windows, and the debates between pro-Windows and pro-Linux camps can become rather heated. Suffice it to say that, oh, 99 percent of all individual PC users stick with Windows. You probably will, too.

A terminology survival kit

Some terms pop up so frequently that you'll find it worthwhile to memorize them, or at least understand where they come from. That way, you won't be caught flatfooted when your first-grader comes home and asks if he can download a program from the Internet.

A *program* is *software* (see preceding section) that works on a computer. Windows, the *operating system* (see preceding section), is a program. So are computer games, Microsoft Office, Microsoft Word (which is the word processor part of Office), Internet Explorer (the Web browser in Windows), the Windows Media Player, those nasty viruses you've heard about, that screen saver with splatting suicidal bungee-jumping cows, and so on.

A special kind of program called a *driver* makes specific pieces of hardware work with the operating system. For example, your computer's printer has a driver; your monitor has a driver; your mouse has a driver; Tiger Woods has a driver.

Sticking a program on your computer, and setting it up so that it works, is called *installing*.

When you crank up a program — that is, get it going on your computer — you can say you *started* it, *launched* it, *ran* it, or *executed* it. They all mean the same thing.

If the program quits the way it's supposed to, you can say it *stopped*, *finished*, *ended*, *exited*, or *terminated*. Again, all of these terms mean the same thing. If the program stops with some sort of weird error message, you can say it *crashed*, *died*, *cratered*, *croaked*, *went belly up*, *GPFed* (techspeak for “generated a General Protection Fault” — don't ask), or employ any of a dozen colorful but unprintable epithets. If the program just sits there and you can't get it to do anything, you can say the program *froze*, *hung*, *stopped responding*, or *went into a loop*.



A *bug* is something that doesn't work right. (A bug is not a virus! Viruses work right far too often.) Admiral Grace Hopper often repeated the story of a moth being found in a relay of an old Mark II computer. The moth was taped into the technician's log book on September 9, 1947, with the annotation “1545 Relay #70 Panel F (moth) in relay. First actual case of bug being found.”

The people who invented all of this terminology think of the Internet as being some great blob in the sky — it's “up,” as in “up in the sky.” So if you send something from your computer to the Internet, you're *uploading*. If you take something off the Internet and put it on your computer, you're *downloading*.

And then you have *wizards*. Windows comes with lots of 'em. They guide you through complex procedures, moving one step at a time. Typically, wizards have three buttons on the bottom of each screen: Back, Next (or Finish), and Cancel (see Figure 1-1). Wizards remember what you've chosen as you go from step to step, making it easy to experiment a bit, change your mind, back up, and try a different setting without getting all the check boxes confused.

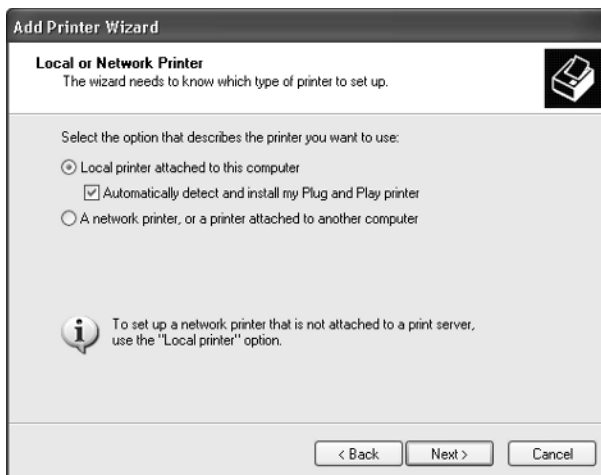


Figure 1-1:
The Add Printer Wizard helps you connect printers to your computer.



A brief history of booting

You probably know that the process of getting your computer started — from the time you hit the On button until the time the computer starts responding — is called *booting*, but do you know why? It's an old term, dating back to the dawn of computing history. When a computer starts, it has

to bring in a teensy-tiny program that, in turn, brings in all the other programs that make the computer work. The process resembles pulling yourself up by your own bootstraps — the tiny program is called a bootstrap loader, whence *boot*. The name stuck.

Where We've Been

Unlike Windows ME (which is a barely warmed-over remake of Windows 98) and Windows 2000 (which should've been called Windows NT 5.0), Windows XP is quite different from anything that has come before. To understand why Windows XP works so differently, you need to understand the genetic cesspool from which it emerged.

Let's start at the beginning. Microsoft licensed the first PC operating system, called DOS, to IBM in late 1981. MS-DOS sold like hotcakes for a number of reasons, not the least of which is that it was the only game in town. None of this sissy graphical stuff; DOS demanded that you type, and type, and type again, in order to get anything done.

The rise of Windows

The 'Softies only started developing Windows in earnest when the company discovered that it needed an operating system to run Excel, its spreadsheet program. Windows 1.0 shipped in November 1985. It was slow, bloated, and unstable — some things never change, eh? — but if you wanted to run Excel, you had to have Windows.

Excel 2.0 and Windows 2.0 shipped in late 1987. This breathtaking, revolutionary new version of Windows let you overlap windows — place one window on top of another — and it took advantage of the PC/XT's advanced computer chip, the 80286. Version 2.1 (also called Windows 286) shipped in June 1988, and some people discovered that it spent more time working than crashing. My experience was, uh, somewhat different. Windows 286 came on a single diskette.



Do you have Macintosh friends who like to taunt you about the ways Microsoft “stole” ideas from the old Mac systems? The next time those revisionist historians start kicking sand in your face, make sure you set the record straight. The fact is that both Apple and Microsoft stole many of their ideas from Xerox — specifically the Star machine built at Xerox's Palo Alto Research Center in the late 1970s and early 1980s. The Star had a desktop with icons and overlapping windows. It used a mouse, supported “point-and-click” interactions, popped up menus, ran on dialog boxes, used an Ethernet network just like the one you swear at today, and introduced the laser printer.



Windows 3.0 arrived in May 1990, and the computer industry changed forever. Microsoft finally had a hit on its hands to rival the old MS-DOS. When Windows 3.1 came along in April 1992, it rapidly became the most widely used operating system in history. In October 1992, Windows for Workgroups 3.1 (which I loved to call “Windows for Warehouses”) started rolling out, with support for networking, shared files and printers, internal e-mail, and other features you take for granted today. Some of the features worked. Sporadically. A much better version, Workgroups for Windows 3.11, became available in November 1993. It caught on in the corporate world. Sporadically.

eNTER NT

At its heart, Windows 3.x was built on top of MS-DOS, and that caused all sorts of headaches: DOS simply wasn't stable or versatile enough to make Windows a rock-solid operating system. Bill Gates figured, all the way back in 1988, that DOS would never be able to support an advanced version of Windows, so he hired a guy named Dave Cutler to build a new version of Windows from scratch. At the time, Dave led the team that built the VMS operating system for Digital Equipment Corp's DEC computers.

When Dave's all-new version of Windows shipped five years later in August 1993, Windows NT 3.1 (“New Technology”: yes, the first version number was 3.1) greeted the market with a thud. It was awfully persnickety about the kinds of hardware it would support, and it didn't play games worth squat.

NT and the “old” Windows

For the next eight years, two entirely different lineages of Windows co-existed. The old DOS/Windows 3.1 branch became Windows 95 (shipped in August 1995, “probably the last version of Windows based on DOS”), Windows 98 (June 1998, “absolutely the last version of Windows based on DOS, for sure”), and then Windows ME (Millennium Edition, September 2000, “no, honest, this is really, really the last version of Windows based on DOS”).

On the New Technology side of the fence, Windows NT 3.1 begat Windows NT 3.5 (September 1994), which begat Windows NT 4.0 (August 1996). Many companies still use Windows NT 3.51 and NT 4 for their servers — the machines that anchor corporate networks. In February 2000, Microsoft released Windows 2000, which confused the living daylights out of everybody: In spite of its name, Windows 2000 is the next version of Windows NT and has nothing at all in common with Windows 98 or ME.

Microsoft made oodles of money milking the DOS-based Windows cash cow and waited patiently while sales on the NT side gradually picked up. Windows NT 5.0, er, 2000 still didn't play games worth squat, and some hardware gave it heartburn, but Windows 2000 rapidly became the operating system of choice for most businesses and at least a few home users.

Merging the branches

Windows XP — in my opinion, the first must-have version of Windows since Windows 95 — officially shipped in October 2001. Twenty years after

Microsoft tip-toed into the big time with MS-DOS, the Windows XP juggernaut blew away everything in sight.

Some people think that Windows XP (the XP stands for eXPerience, according to the marketing folks) represents a melding or blending of the two Windows lineages: a little ME here, a little 2000 there, with a side of 98 thrown in for good measure. Ain't so. Windows XP is 100 percent, bona fide NT. Period. Not one single part of Windows ME — or any of the other DOS-based Windows versions, for that matter, not to mention DOS itself — is in Windows XP. Not one.

That's good news and bad news. First, the good news: If you can get Windows XP to work at all on your old computer, or if you buy a new PC that's designed to use Windows XP, your new system will almost certainly be considerably more stable than it would be with Windows ME or any of its progenitors. The bad news: If you learned how to get around a problem in Windows ME (or 98 or 95), you may not be able to use the same tricks in Windows XP. The surface may look the same, but the plumbing is radically different.



Microsoft went to a lot of effort to make Windows XP look like Windows ME. But that similarity is only skin deep. Beneath the façade, Windows XP is a gussied up version of Windows NT/2000. Windows XP is *not* a descendant of Windows ME or Windows 98, even though it's marketed that way. Tricks that work in Windows ME or 98 may or may not work in Windows XP.

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