



Windows XP inside and out

Easier than Windows 2000 and less crash-prone than Me, XP is Microsoft's biggest operating system upgrade in years – and its most controversial. Last month, we looked at XP's main new features; now, Scott Spanbauer tests it in the field to see what works, what doesn't and if you should make the leap

What everyone wants to know about Windows XP is 'Should I buy it?' The simple answer, for most Windows 98 and Me users whose systems can handle it, is yes.

Windows XP could be the most stable version of Windows yet – it's at least as stable as 2000, according to Microsoft. It's also the most feature-laden and you can thank its dual bloodlines for that. From Windows NT and 2000, it inherits a secure, stable core; from 9x and Me it inherits compatibility with hardware and software, as well as tools for working with digital images, video and audio. In either of XP's two flavours – Home Edition or

Professional – it's a great match for the latest PCs with their fast CPUs, capacious hard drives and speedy CD burners.

For users who upgrade, initial reports are mostly positive see our online feature *Upgrading to XP* at www.pcadvisor.co.uk/about/printplus.cfm. Microsoft has greatly improved the installation experience since Windows 2000's incompatibility nightmare. Our tests reveal minor incompatibilities but, as with any upgrade, we won't know the complete story on compatibility until millions have tried XP.

Once beyond the upgrade process, our testers liked the way Windows XP booted up swiftly. Only a few who upgraded old

machines at, or below, Microsoft's minimum requirements noticed even a small slowdown in performance.

And everyone was favourably impressed by the new operating system's reliability. If you're coming from the crash-prone 9x/Me camp, this is the single best reason to upgrade. Based on the same core OS as Windows 2000 and NT, both versions of this new OS pay much closer attention to how applications, drivers and Windows itself use your system's memory, preventing one bit of code from affecting another. Even if an application is incredibly buggy, XP can usually prevent it from crashing Windows or other applications.

Big bother?

Some PC users accustomed to installing Windows wherever and whenever they feel like it feared that XP's Windows Product Activation antipiracy mechanism would be an inconvenience. Last month's *PC Advisor* website poll highlighted these concerns.

However, the copy-control scheme probably won't affect most licence-abiding Windows users (for the reason why, see *Product Activation: how bad is it really?* on page 159).

Because Windows XP unites so many features, new and old, we've grouped them into five major areas: user interface, digital media tools, user security features, maintenance and help and internet tools.

Variation on a theme

Windows XP's interface is nothing revolutionary. You get more control over how the OS looks and works, including whether icons appear on the desktop, how system folders, such as the Control Panel, appear and what texture and colour the windows and icons display. On the whole, the changes are good; you can disable most of the ones you don't like.

But, there's one annoying feature you can't shut off: the balloon text that pops up periodically from several icons in the

notification area (the System Tray). We were particularly antagonised by one rather intrusive pitch to sign on to Microsoft's Passport authentication system. Be patient – it eventually fades away.

Windows XP's new themes – collections of colour settings and background images for windows – have rounded corners, shading and textured window frames and buttons. Choose blue, blobby windows, olive green or silver. Other themes should be available in the Plus add-on pack or at Microsoft's website.

Personal portal

The most significant changes are in the Start menu and Taskbar. The Start menu now displays links to essential system folders, frequently used applications, and common tasks. It is a good personal portal to XP, but can be cancelled as well.

The Taskbar sports two new space-saving features. Links to documents or windows for the same application (for

instance, multiple web browser windows or Word documents) now pop up vertically from a single Taskbar button. System Tray icons that you rarely use disappear after a while, but you can locate them by clicking a button that expands the area.

Other changes in appearance – including drop shadows, richly coloured seethrough icons, animated cursors and window movements, may tax your graphics board and CPU, but can be turned off. We found them helpful in differentiating one window from another, simplifying work with onscreen objects.

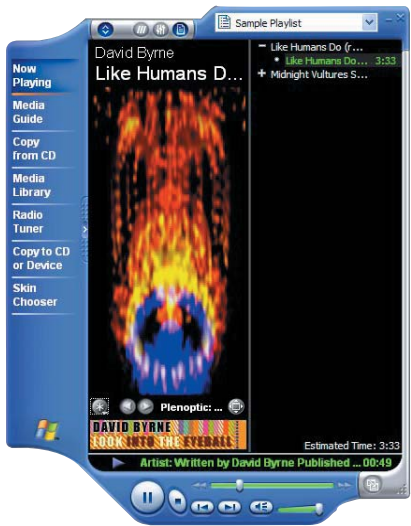
One screen innovation you'll want to try out if you have a portable computer or a desktop LCD (liquid crystal display) monitor is ClearType. This font-smoothing technology is turned off by default; you can find it by clicking Control Panel's Display icon, selecting the Appearance tab and then choosing Effects. ClearType refines your LCD's jagged pixels and makes the display easier on the eyes.

FEATURE	FIRST APPEARED IN...
Interface	
Themes	Windows 95
Simplified folder views	Windows Me
Window/cursor animation	Windows 98
Fast User Switching	Windows XP
Digital media	
Windows Media Player for Windows XP	Windows XP
Windows Movie Maker	Windows Me
CD ripping	Windows Me
Security	
User log-in and file security	Windows NT 3.1
Remote Desktop	Windows XP
File/folder encryption	Windows NT 4.0
PC health	
System Restore	Windows Me
Remote Assistance	Windows XP
Internet	
Internet Explorer 6.0	Free download as of August 2001
Windows Messenger	Windows XP
Personal firewall	Windows XP
Internet Connection Sharing	Windows 98 SE
Other	
Windows Product Activation	Office 2000

Sound and vision

Windows XP inherits many of Me's digital media features. If you download digital audio files, copy CD tracks or use digital images, Windows XP can help.

Microsoft tirelessly promotes its latest media player, Windows Media Player for XP. The differences between it and Media



↑ The latest version of Media Player plays DVDs and lets you record on to CD at your recorder's highest rate

Player 7.1 (a free download for users of previous versions of Windows), however, are few. If you have a CD-R (recordable) or CD-RW (rewriteable) drive, the XP player lets you burn CDs at your recorder's highest rate. Media Player limits you to dual-speed.

The CD-burning speed boost is a real improvement, but two other major differences are noncritical. If your system has a Windows Media Player-compatible DVD decoder installed, you can watch DVDs in Media Player as well as in the decoder's interface. Otherwise, Windows XP's setup program will detect an existing non-compatible decoder and attempt to

download a free update automatically.

As before, you can convert audio CD tracks to Microsoft's WMA format. But if you want to turn them into MP3s, you'll need a third-party plug-in. Unlike the DVD decoder, this isn't free: Microsoft says several offerings will be available online for about \$10 each. However, you can do the job for free with software such as MusicMatch.

Windows Movie Maker is basically the same 'lite' video transfer and editing utility included in Me. Its biggest weakness is that you can only watch videos on a PC – there's no option for output to standard

video devices such as VCRs. Microsoft has added some higher-resolution video-capture modes, but Movie Maker remains best suited for emailing brief, low-resolution clips.

Finally, XP gives digital photography aficionados a camera-friendly download, viewing and printing interface. The My Pictures folder presents links to specific tasks: slideshow viewing, printing, ordering prints online and uploading images to a website. Web publishing options are still limited to MSN and Xdrive, but Microsoft says other services are soon to appear.

The Scanner and Camera Wizard lets you download, view and delete images stored on an attached camera, as well as take photos from the monitor – if your camera complies with Microsoft's Windows Image Acquisition specification. The software is good, although these features may be a subset of the capabilities your camera's own software already offers if it is compatible with Windows XP. Microsoft says most 2000 versions of digital camera software will work with XP.

Security and sharing

If you're unfamiliar with Windows 2000 and NT, get ready for changes in the way you access your PC's contents. In 9x, security was easy to bypass. Anyone could read, edit or delete any file on the hard disk, since neither the underlying MS-DOS operating system nor the FAT and FAT32 file systems had any mechanism for controlling file access, other than the read-only flag. That's a problem if your system is physically accessible to others.

Windows XP maintains tight control over who does what. Users must log in, so that only authorised users can access files. This not only protects your data, but preserves settings and preferences.

Windows XP recognises three kinds of users. Administrators have full control over all aspects of system configuration; the other two, Limited and Guest, have curtailed capabilities. You'll want to pay attention during installation, when both the Home Edition and Professional versions prompt you to create user accounts – by default they make everyone an Administrator.

Administrators are able to create and delete accounts, override passwords on accounts and tinker with other users' files and settings. The only way to keep all your data secure is to be the only Administrator.

If several people use the same PC try a new feature called Fast User Switching. This gives each user a private 'profile', with its own settings and user history. A user can remain logged in – programs running and all – while another user takes over and launches other programs with their own profile.

Switching between two logged-in user accounts takes only seconds, as long as the machine has sufficient RAM – 128MB is plenty for moderate multiuser loads. Since Windows XP resists crashing much better than 9x and Me, the new feature could change the way you share a PC. For example, you could leave your QuickBooks file open for weeks, while the kids play games, download files and surf the web.

Remote Desktop uses the same underlying multiuser technology, allowing you to connect to and control your PC over a phoneline or the web. Competing with third-party remote-control applications like Symantec's PCAnywhere, Remote Desktop is exclusive to XP Professional, so the PC you wish to control must run that version. The system dialling in, however, needs only a Windows Terminal Services client (some are included on the XP CD-ROM or are available for download).

PRODUCT ACTIVATION: HOW BAD IS IT REALLY?

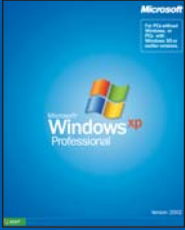
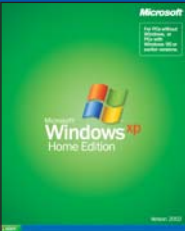
Windows Product Activation, which is designed to enforce Microsoft's licence terms by preventing users from running one copy of Windows XP on several PCs, has alarmed people who fear it will hamper legitimate hardware upgrades. In a recent *PC Advisor* poll, over 50 percent of respondents said they were put off upgrading to XP by the process.

But Microsoft appears to have listened to the complaints. Within 30 days of installing the OS, you must activate it with Microsoft, a process all our testers found painless. Windows XP sends a numeric identifier generated from 10 of your PC's components to Microsoft's server, which in turn sends you a certificate activating your copy of XP on that machine.

If you try to install Windows XP on a different PC, producing a new hardware identifier, a dialog box will pop up asking you to call a operator and explain the discrepancy. If satisfied with your response (Microsoft says it will give users the benefit of the doubt), the operator will issue you a new certificate.

If you have a network card and leave it alone, you should be able to remove or replace up to six other signature elements without triggering activation, Microsoft says. Otherwise, you can change up to four other elements before having to contact Microsoft. Adding components never triggers a challenge.

Importantly, WPA resets after 120 days, using whatever you have then as the activated configuration. So after four months you can install XP on a second PC, activate it and keep the first one operating without falling foul of WPA. Doing so would violate the licence, but Microsoft is probably wise to cut us all some slack here.



Help is at hand

Windows XP's Help system simplifies troubleshooting and configuring your PC. From a new web page-like Help and Support Centre on the Start menu, you can browse standard help content, jump over to Microsoft product newsgroups, check for fixes on Windows Update and launch any of the troubleshooting tools pioneered in earlier Windows versions.

A couple of new tools could make XP a must-have upgrade for some, especially if you've ever tried remote troubleshooting over the phone for a colleague, friend or

relative. Remote Assistance, also based on Windows Terminal Services, allows one XP user to request help from another, either via email or through the Windows Messenger instant messaging client.

Depending on which level of control the person requesting help allows, the respondent can view the remote PC while chatting over Windows Messenger – the equivalent of looking over someone's shoulder while they explain what's wrong – or take complete command of the PC remotely. Again, the only drawback is that both systems must be running XP.

System Restore is another terrific help tool, allowing you to take your system's configuration back to a specific point in time – uninstalling applications and drivers and reversing settings. System Restore monitors your activity and creates restore points at sensible moments, such as just before you install new drivers. You can set your own restore points, too.

A related feature is Driver Rollback. When you install a new driver, the OS retains a copy of the old one as a backup in case the new one causes problems.

HITS

- Stability **Yes, a Windows PC (other than a Windows 2000 box) can really run crash-free for days, even weeks.**
- Remote Desktop **(requires Windows XP Professional). Take control of your desktop computer from the road.**
- Remote Assistance **Connect to an XP-equipped computer, troubleshoot it and even reboot it if necessary.**
- User Accounts **Keep your applications running and your data secure while others log on.**
- Windows Messenger **This open standards-based utility could become the tool of choice for real-time online connections.**

MISSES

- Windows Product Activation **Not too bad, but this antipiracy scheme is still an inconvenience for law-abiding users.**
- An uninvited dog **If you hated the talking paper clip, you'll be apoplectic with rage at the intrusion of the new, enthusiastic canine 'helper' in XP's search utility.**
- System Tray balloon text **Though it eventually goes away, the intermittent prodding to create a .net Passport account is very irritating.**
- No Java Virtual Machine **The first time you encounter a Java-based website, Microsoft's Java interpreter is a lengthy download away.**
- Windows Movie Maker **Still missing commonly used video output options.**

SHOULD YOU GET XPRIENCED?

IF YOU HAVE...	AND USE YOUR PC FOR...	THEN YOU SHOULD...	BECAUSE...
Windows 9x/Me on a PC that doesn't meet Windows XP's requirements	mission-critical business tasks (email, Office) or multitasking – or if stability is a problem	buy a new system with Windows XP Professional or Home Edition	you'll get a fast, inexpensive PC running the most stable, feature-rich version of Windows yet
	web browsing, email, entertainment – and stability is not a problem	stick with what you have	XP's better stability and security don't offset the cost of upgrading, plus you'll avoid installation hassles
Windows 9x/Me on a PC that meets XP's requirements	mission-critical business tasks (email, Office) or multitasking – or if stability is a problem	upgrade to Windows XP Professional with a clean install	your PC is far less likely to crash, and you can protect files and email from others who share the PC
	web browsing, email, entertainment – and stability is not a problem	upgrade to Windows XP Home Edition, but dual-boot for now	your PC is less likely to crash; if an application or device doesn't work with XP, you can boot to 9x/Me
Windows 2000 on a PC that meets Windows XP's requirements	mission-critical business tasks (email, Office, other productivity software)	stick with what you have for another six months	you already have XP's key productivity features – stability and security
	web browsing, email, entertainment and other personal tasks	upgrade to Windows XP Professional	you'll have better compatibility with games, applications and hardware, plus new media tools, remote access and Fast User Switching

A nod to the web

Like Windows 98 and Me, XP introduces a new version of Internet Explorer. But 6.0 delivers almost as few new features as, well, Internet Explorer 5.5. Most bolster support for web standards, hence the important role IE 6.0 will play in Microsoft's .net effort, through the Passport authentication system.

What else does IE 6.0 offer? A snazzy look for navigation icons and a new Explorer bar. The slight inconvenience of no Java support. If you need it, you'll be prompted to download the 5MB Java Virtual Machine from Microsoft's site.

More interesting than IE 6.0 is the Windows Messenger application, which lets webcam-equipped users video-conference

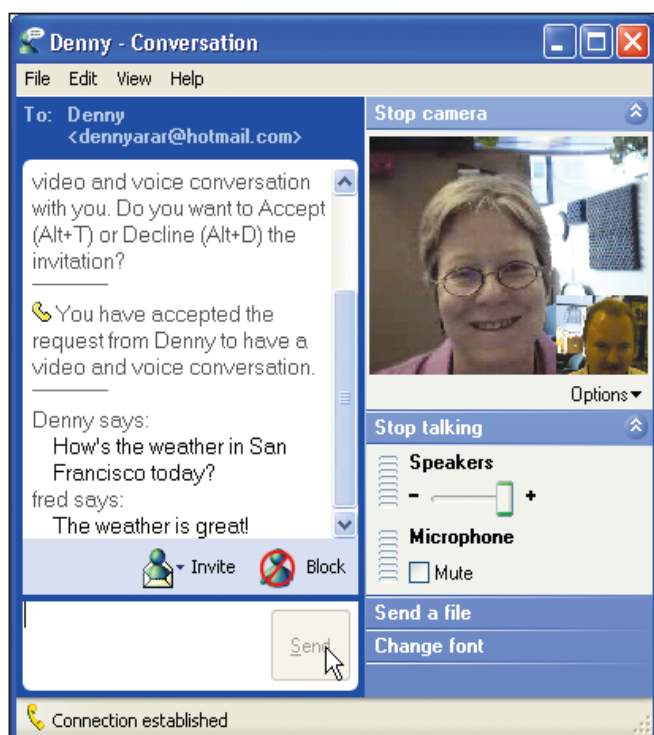
with each other. Microsoft says the program could interact with other clients – including AOL's – in the future, since it is based on the non-proprietary Session Initiation Protocol standard.

A valid eXperience

XP contains firewall software that protects your PC against attempts by hackers to access it through your web connection. It's no-frills but does its job well. The firewall's default settings suffice to deter incoming probes. However, it is a one-way affair. If a virus attacks in an email attachment (as Trojan horses do), it's free to upload your data or perform harmful outgoing tasks.

Finally, Windows XP includes support for the increasingly popular 802.11b wireless ethernet standard, which it automatically integrates it into your other network connections.

We may be unimpressed with some Windows XP features, but for security and stability that far surpass 9x's and decent performance Windows XP gets a *PC Advisor* thumbs-up. It's just a shame we have to pay more than our US counterparts. ■



← Windows Messenger lets users video-conference with each other, as long as they both have webcams



Find out how Windows XP performed in our lab tests and read our upgrade guide at www.pcadvisor.co.uk/about/printplus.cfm