





Desktop operating systems

Multi-OS options such as dual-booting and virtualisation software have made it easier than ever to use whichever operating system is best suited to the task you need to perform. Here's our take on the relative strengths of the major contenders

	 WINDOWS XP	 WINDOWS VISTA	 APPLE LEOPARD 10.5	 LINUX	
INTERFACE	<ul style="list-style-type: none"> Familiar and responsive, even on older systems. It's not always intuitive, but you probably know how to get around the operating system pretty well by now Lacks consistency. Menus, dialog boxes and appearances can vary widely across applications Lacks hardware acceleration and 3D effects present in Vista and OS X; virtual desktops only with third-party software Rudimentary file search, especially without an add-on such as Windows Live Desktop <p>Rating: GOOD</p>	<ul style="list-style-type: none"> Still confusing to navigate, but in different ways. Some Control Panel applications contain useful new settings, but many are unchanged from XP and lurk in new locations Transparency, animation, and other effects provide visual cues about files and programs Flip 3D program switching lets you scroll through a 3D animation of all your running applications System-wide search finds files, programs and web pages on or beyond your hard drive <p>Rating: VERY GOOD</p>	<ul style="list-style-type: none"> Interface is uncluttered, efficient and logical Subtle transparency and 3D effects aid with navigating dialog boxes and windows Exposé lets you see and choose among all of your open windows or the desktop with the press of a key. The forthcoming Spaces feature adds virtual desktops Dashboard desktop widgets are built-in Spotlight searches file metadata, and will expand to the internet in OS X 10.5 <p>Rating: EXCELLENT</p>	<ul style="list-style-type: none"> Gnome and KDE interfaces emulate the Mac OS and Windows XP, respectively, in many ways; they offer virtual desktops, as well Hardware graphics acceleration is available, but requires expert configuration Beagle desktop search utility indexes local files and websites <p>Rating: GOOD</p>	INTERFACE
SECURITY	<ul style="list-style-type: none"> Unpatched, Windows XP can't connect to the internet for more than a few minutes before worms attack and crash it It will remain the biggest malware target for years to come Requires Service Pack 2, third-party bi-directional firewall and antivirus software, and who knows how many future patches and upgrades for safe online usage Windows XP Professional Edition supports file and folder encryption <p>Rating: FAIR</p>	<ul style="list-style-type: none"> Improves on Windows XP's security with User Access Control and ActiveX tweaks, but is a major malware target May still require a third-party bi-directional firewall, since its own firewall settings for outgoing connections are for experts only Includes Windows XP's file- and folder-level encryption options. The Business and Ultimate Editions' industrial-strength encryption protects your hard disk from tampering <p>Rating: GOOD</p>	<ul style="list-style-type: none"> Supports strict separation of user and system files for maximum security Default settings aren't secure Target disk boot mode can turn your Mac into an external hard drive for another system. It's useful for system recovery, but it bypasses user file passwords Includes disk encryption <p>Rating: VERY GOOD</p>	<ul style="list-style-type: none"> Linux is more secure than Windows; for example, by default Ubuntu doesn't even create the root user account that's a logical target for Linux malware. And like the Mac OS it's more obscure. A lower installed user base attracts fewer malware authors than Windows does Disk encryption requires expert configuration or third-party utilities <p>Rating: VERY GOOD</p>	SECURITY
SOFTWARE	<ul style="list-style-type: none"> Included utilities, such as Outlook Express and Windows Media Player, offer minimal features but do the job Free upgrade to the more-secure Internet Explorer 7.0 Lots of top-notch free and commercial software available Gaming platform of choice - for now <p>Rating: EXCELLENT</p>	<ul style="list-style-type: none"> Includes enhanced versions of Media Player, Media Center (except in Business edition) and Movie Maker, plus new mail, calendar and DVD-authoring tools Won't run 16bit applications and some 32bit XP utilities Current game performance is slow compared with XP DirectX 10.0 promises a dramatic boost to 3D gaming <p>Rating: VERY GOOD</p>	<ul style="list-style-type: none"> The iLife suite's slick iPhoto digital-photography tool lets you edit, print and share photos. iWeb builds sites and iMovie and iDVD offer lightweight digital video production A dearth of available game titles compared with Windows, but Photoshop and Microsoft Office are both here to stay <p>Rating: VERY GOOD</p>	<ul style="list-style-type: none"> Access to thousands of free applications, including office suites, graphics and media editors, games, and software-development tools. Some of these programs rival commercial OS X and Windows applications If you want Microsoft Office, use virtualisation or dual-boot for better performance <p>Rating: VERY GOOD</p>	SOFTWARE
PRICE AND PERFORMANCE	<ul style="list-style-type: none"> Performs fine with slower processors and limited RAM and disk space, allowing you to minimise expenditures on new hardware or put them off indefinitely Until Vista drivers improve, XP will remain the preferred choice for gamers and others concerned with performance <p>Rating: EXCELLENT</p>	<ul style="list-style-type: none"> Requires more memory and disk space, but runs slower than XP on the same hardware Minimum system requirements are an 800MHz processor, 512MB of memory and 15GB of free hard drive space A difficult upgrade process means you'd be better off buying a PC with Vista preinstalled <p>Rating: FAIR</p>	<ul style="list-style-type: none"> Gorgeous design all around Budget Windows PCs are less expensive than Mac minis Low-end MacBook laptops don't cost much more than similar Windows models Attractive but pricey Mac Pro and MacBook Pros compare well with high-end PCs <p>Rating: GOOD</p>	<ul style="list-style-type: none"> Specialised distributions and kernel customisation allow Linux to perform well on older and inexpensive PCs Support for newer hardware often lags behind that of Windows and OS X <p>Rating: GOOD</p>	PRICE AND PERFORMANCE
VIRTUALISATION	<ul style="list-style-type: none"> Linux boot managers allow easy multiboot setups Can host most x86-compatible OSes (except Mac OS) via third-party virtualisation tools such as the free VMware Server or Microsoft's free Virtual Server 2005 R2 Runs in virtual systems hosted on Intel-based Macs and PCs <p>Rating: GOOD</p>	<ul style="list-style-type: none"> Same capabilities as XP, but higher memory requirements could reduce performance or prevent Vista from serving as a host or guest operating system on PCs where RAM is tight Licence prohibits running anything but the expensive Enterprise or Ultimate Editions under virtualisation software such as Parallels or VMware <p>Rating: GOOD</p>	<ul style="list-style-type: none"> Boot Camp allows Windows or Linux to be dual-booted on Intel-based Macs Parallels and VMware utilities permit Mac OS to run virtual Windows and Linux versions Apple prevents OS X from running on non-Mac hardware, so a Mac is the only way to run all three OSes on one PC <p>Rating: EXCELLENT</p>	<ul style="list-style-type: none"> Runs as a guest or host with other operating systems through VMware or other virtualisation software Distributions compiled with support for the Xen virtualisation specification can serve as a guest or host operating system without additional software (Windows doesn't support Xen virtualisation) <p>Rating: VERY GOOD</p>	VIRTUALISATION
VERDICT	<ul style="list-style-type: none"> By now, you know it and you either love it or hate it. If you're okay with XP, there's no pressing need for you to switch Five years of updates have made XP as secure as it's going to get, although not as safe as Vista, OS X or Linux Minimal hardware requirements will make it the top gaming platform until DirectX 10.0 takes over. XP will be a fine operating system for at least another year or two 	<ul style="list-style-type: none"> Get it if you're buying a new PC; XP users, though, have few urgent reasons to upgrade Windows Vista's interface is alive compared with XP's, which could get you more excited about your daily tasks Vista includes some useful new tools and is safer to take for a spin around the internet. Does that justify the hefty upgrade price? Probably not, but if it's time to buy a new PC anyway, you won't be tempted to reinstall Windows XP 	<ul style="list-style-type: none"> If Apple's hardware fits your price range, you'll get a nicely designed system running a beautiful OS, plus you'll be able to switch to any other environment at the drop of a hat While early versions of OS X were buggy and incomplete, Mac OS X 10.4 is much more solid. Version 10.5 promises additional polish and a few yet-to-be-announced features All current Mac models will run Windows and Linux, too While malware authors focus on Windows, OS X is secure 	<ul style="list-style-type: none"> If you're tired of fighting Windows malware and viruses, it's simple to find out whether Linux will meet your needs - just grab a bootable CD and give it a shot Easy-to-install, free and feature-rich Linux distributions are great options for tech-savvy users The Gnome and KDE interfaces evolve gradually. While Linux lacks the polish of its rivals, its improved ease of use, functionality, and security make it a viable alternative 	VERDICT
OVERALL	VERY GOOD	GOOD	EXCELLENT	VERY GOOD	OVERALL