



## Upgrading your Windows 98/ME Operating System to Windows 2000/XP

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### Now Is The Time To Consider Upgrading Your Operating System

Statistics reveal that 46% of web browsers are surfing the Internet powered by personal computers using the Windows 98 operating system. This author agrees that making changes to an operating system that is relatively stable and that has served well for a number of years is, frankly, a change that is not to be taken lightly. However, the word is out that Microsoft will be phasing out support for Windows 98 in the next year which means security issues will no longer be patched. If you are thinking about upgrading to a more modern operating system, this article is for you. For this article Windows 95, 98, and ME are similar enough to be treated collectively as "Windows 98/ME".

### Your Choices

When considering an operating system upgrade, your first choice is to keep your present PC or purchase a new one. If you decide to upgrade your present PC, a more modern operating system may be an attractive and cost-effective alternative. Most Pentium II (or equivalent) and later computers are still quite useful as long as they meet the recommended hardware requirements for the upgrade. From personal experience, an upgrade to Windows 2000 or XP is practical for processors running at 300 MHz or higher.

### Cost Versus Benefit

I'll get to the details later so let's go first to the bottom line: Cost vs benefit. An upgrade version of Windows 2000 Professional sells for about \$130 from e-tailers on the Internet. XP Home sells for about \$100 and XP Professional sells for about \$180. Each system meets the needs of a particular market so research carefully; an operating system is a personal choice. From personal experience with each of these operating systems, Windows 2000 is my all-time favorite.

Benefits. Windows 98 and ME both suffer to varying degrees of jumpy mouse tracks and stuttering sounds especially when loaded with office software suites and antivirus software. Over the years, the system registry gets choked with remnants of software installs causing the system to run slower and to crash more often. If you've ever transferred multi-megabyte files to another computer via a network then you've experienced the dramatic slow-down in Windows Explorer that usually requires a reboot for recovery. Windows 2000 resolves all of these issues. Its graphics are very stable, sounds and mouse movements are silky-smooth, and network operations solid as a rock. Best of all, Windows 2000 has excellent data security features.

### Upgrade Options

Operating System upgrade options include: (1) installing Windows 2000/XP over your existing Windows 98/ME system; (2) formatting your hard disk drive and installing Windows 2000/XP on a "clean" drive; and (3) adding a new hard disk drive and installing Windows 2000/XP on it. Option (3) gives you the choice of operating systems when you boot up. That is, you keep your existing Windows 98 operating system as is and get the new operating system as well. Both systems work fully and independently from each other. At boot-up time you get a screen prompt to select Windows (95/98/ME) or Windows 2000 Professional (XP does this as well). This dual boot option is included with Windows 2000/XP and is prompted during the install process.

Option (3) was installed on our Pentium III 933 MHz PC with Windows 98SE on one partition and Windows 2000 Professional on another. Both systems were loaded with software of their respective eras: Office 97 on the 98 system and Office 2000 on the 2000 system. Device drivers, anti-virus software, Internet access, and firewall software applications were installed, and critical updates were downloaded from Microsoft Windows Update service. The result: you get the choice of either operating system, each of which retains its individual identity, remains stable, and does not interfere with the other. One note of interest: Windows 98 boot time clocked in at 60 seconds and Windows 2000 boot time clocked in at 75 seconds.

#### File Structure Choices: FAT Versus NTFS

When you install Windows 2000/XP, the installer gives you the choice of using the old File Allocation Table file structure (FAT) or the New Technology File System (NTFS). NTFS is recommended because it provides better data security and is more stable. Better security because your account name and password are encrypted into the NTFS access process. Should your hard disk fall into the wrong hands, it would be very difficult for them to access your data. With FAT, anyone can gain access to your files. As for stability, Windows 98/ME users are all too familiar with the shut down process stopped at the "Windows 98 is shutting down" screen. Then at the next boot up, Windows Scan Disk is initiated because Windows was not properly shut down. This is a FAT stability issue that goes away with NTFS. For Option (3) (dual boot system) Windows 98/ME will recognize files on a Windows 2000/XP FAT partition but not on a Windows 2000/XP NTFS partition. However, Windows 2000/XP will always access files on the Windows 98/ME FAT partition.

#### Device Drivers

Windows 2000 contains many of the device drivers required by your hardware, including motherboard resources, sound board drivers, some network cards, some modem cards, many video cards, printers, and gaming devices. I've done installations on many Pentium II- and III-class computers (both desktop and laptop) where no device drivers were required. However, it is recommended that you inventory your hardware devices and download drivers for Windows 2000/XP before starting the upgrade process, especially if you don't have another computer that can access the Internet. Software you should have on hand includes network card, SCSI card (including Promise disk controller), modem, and Internet service. Check for BIOS updates from your computer manufacturer. For most Pentium II-class and later computers, the process for flash updates is highly automated, takes about five minutes, continues to work fine under Windows 98/ME, and will ensure compatibility with Windows 2000/XP.

#### Conclusion

Finally, make a full image backup! Should something go horribly wrong, you don't want to lose your data. Use your DVD/CD burner to make archive disk(s), copy to another computer on your network, copy to another hard disk drive (or partition) on your computer, or copy to a USB or Firewire hard disk drive. The \$100 or so investment in backup hardware is cheap compared to the value of your data!

Upgrading your operating system is not that difficult. Take your time, read the directions carefully, and you'll do fine. Assistance is readily available via search engine requests on the Internet and, if all else fails, chances are good you've got a local computer store with a guru that can assist you. When you're up and running with Windows 2000/XP I'm certain you'll agree it was one of the best moves you made since purchasing the computer.