



# BUG-BYTES

THE MONTHLY ONLINE NEWSLETTER OF *COMPUTER BUGS*

VOL. 5, ISSUE 11

NOVEMBER 2006

## REPAIR OR REINSTALL BROKEN SOFTWARE?



THERE IS MORE THAN ONE WAY TO GET THE JOB DONE

What do you do when a file turns up missing, or files needed by one of your favorite programs are corrupted? Perhaps you inadvertently deleted a program file, or a registry entry was damaged.

One way to fix the problem is to uninstall the software, reboot your computer, and then reinstall the software.

That always works, but it is more time consuming than the second method. Repair.

Many software vendors include a repair option as part of their installation software. For example, see the screen shot below from Adobe Photo Elements. The repair options shows up after you start to reinstall the software.

The Adobe installation program recognizes that *Adobe Photoshop Elements* has been already installed on this computer. Therefore, it offers to either repair the existing installation, or to completely remove the program.

First, try the repair option to see if it fixes your problem. If it does, it will save you time and get you back to work much faster than uninstalling and then reinstalling the software from scratch.

Click on Start, Programs (All Programs) and Add Remove software. Click on the link for your program, and look for Change/Remove button. Click the change button. Alternatively, insert the program CD for your application in your CD Rom drive. Let windows automatically detect the CD.

If Windows doesn't automatically detect the CD, use Window's Explore to find the setup.exe or install.exe file to start the installation. If a repair option exists, the software should

recognize that the software is already installed on your computer. It will then offer to repair or remove the software.

## WHICH COMES FIRST?

THE CHICKEN OR THE EGG?  
HARDWARE OR SOFTWARE?



Does hardware come first influencing software design, or is hardware trying to keep up with what the latest operating system offers?

I believe that the latest operating system software is mainly keeping up with the available hardware, but it also provides for new hardware just coming out of development labs and soon to be offered to the public.

I'm sure that operating system developers are attempting to anticipate where the newest innovations in hardware

will want to go, and to provide software that will enable that to happen.

It does hardware manufacturers absolutely no good if they come up with the latest and greatest products and there is no OS software to recog-

nize and support their hardware.

A huge amount of new hardware is created between operating system releases, along with new software that makes use of the new hardware.

Microsoft created a library of signed drivers that have been tested in their lab and that work with their operating system. These drivers are available as part of the device manager when you click on the Update Driver button. Remember that the drivers that were released with Windows XP are now five years old.

## WHAT EACH NEW OPERATING SYSTEM OFFERS



THERE'S MUCH MORE THAN A NEW FACE

Microsoft's Windows operating system continues to evolve just as Apples operating system continues to change. Software developers apply new techniques to make their operating systems better, more reliable, and more secure. They also add functionality that was not present in the earlier incarnations of their products.

Windows 98 was a vast improvement over Windows 95 (as it was over Windows 3.0), and Windows XP was even more improved than Windows 98, and ME. In fact Windows XP was based on a new NT software kernel— a kernel which first saw light as Windows 2000 used mainly by businesses.

With XP, blue screens became a rarity and the OS was much more stable than Windows 98 or Windows 98 SE (second edition).

### WHAT DO YOU GET WITH A NEW OPERATING SYSTEM?

**Each new operating system includes an updated library of the latest hardware drivers.** Drivers are software programs that enable the OS to recognize specific hardware items and to interact correctly with them. For the most part, the driver library is frozen at the time the OS is released. That is to say, if you have Windows 98, then your library is eight years old. Think of all of the hardware that is available now that was not even a glimmer in the developers eyes.

Microsoft works with hardware developers to certify that the manufacturer's products will play nice with the OS and with the hardware of other vendors. That is why, it is best to use **signed drivers** wherever possible. In XP, right-click on My Computer, select System Properties, Hardware, Signed Drivers. Review the options and select the way you want to handle drivers.

Windows XP makes it easy to automatically search for better drivers, or to update a driver from the vendor's CD. XP searches Microsoft's driver library via the Internet. If it doesn't find the driver, it then gives you the option of where to look for the driver.

**Each version is more stable and more reliable then earlier versions.** There is no reason to believe that Vista will not provide similar improvements.

Each version adds new functionality and features. Some of the new functionality has to do with new types and kinds of hardware. For instance, new CPU's, including multiple

CPUs on the same die, lower power consuming CPUs, new types of memory, larger and faster hard drives, more powerful graphic processors, improved monitors and flat panel displays, new broadband, graphic capture boards for video editing and TV watching, CD and DVDs (including dual layer DVDs), and improvements in sound and other peripherals. All of these capabilities come with lower costs with a wider range of capabilities.

**Each new OS version is more secure.** While vendors attempt to exploit the OS for good purposes, so do ne'er-do-wells that want to find chinks in its armor. Success seems to attract attackers bent on proving that they are smarter and more clever than the software developers. Such attacks are not restricted against Microsoft. You just don't hear as much about them. Apple and Linux have their share of attacks. However, because their market share is small, attacker are not as attracted to those products just has car thief are not attracted to certain makes and models.

**Each new OS version adds useful features** such as better search engines, improved indexing, faster startup and shutdown times, better memory usage, and better monitoring and maintenance tools.

**Each new OS version includes an improved user experience** with an easier to use graphical interface, better help sources, and faster response times. You also get a new cleaner looking desktop.

New OS versions so a better job of preventing problems in the first place, and provide better problem resolution when problems do occur. For instance, a hardware conflict in Win 98 would bring down the system. In XP, the conflict would be isolated and the computer would keep on running.

**The operating system determines, in large measure, the overall experiences of computer users, all other factors being equal.** Just as I expect Windows XP users to be happier than Windows 98 users (given that their computer meets the requirements for both OS versions), I anticipate that Vista users will be more pleased with their overall computer experience than either XP or 98 users.

The normal life cycle for Microsoft operating systems is five years. However, due to its complexity, and the desire to get things just right, Vista has taken longer to reach completion than was planned by Microsoft. As a result, support for Windows 98 and Windows ME (Millinium) was extended. However, extended support for both products ended officially on July 11, 2006. That is, no further work will be done on those products including any new bug fixes or critical security patches.

**ARE YOU READY FOR VISTA?****CAN YOUR COMPUTER HANDLE VISTA?**

A 1985 state-of-the-art computer that cost \$2,400 would cost \$4,259 in 2005 dollars. However, direct dollar comparisons are meaningless given the changes in hardware and software in the intervening years.

In 1985 that \$2,400 investment bought an IBM AT computer, or similar clone with a 4.7MHz to 10MHz processor and a 10 or 20 megabyte hard drive. The monitor was a grainy CGA color monitor (highest resolution 640x200), and the modem operated at 300 Baud (300 bits per second vs 56,000 for a V92 modem today).

Hardware that we take for granted today was unheard of in 1985. Things like ATA and SATA hard drives, CD/DVD drives, high resolution monitors and flat panel displays, working with digital cameras, vastly improved CPUs and graphic cards, better sound, improved pointing devices, and new ways to connect peripherals to your computer, without having to open the case or to set dip switches on plug-in cards (USB). Communicating by modem was painfully slow. Okay. That hasn't changed as much, except for broadband cable and DSL.

Prices plummeted. Now you can buy a new and more capable computer for a fraction of the price you might have paid just a few years ago.

Vista requires more horsepower than previous operating systems. The basic specification calls for a minimum of an 800MHz processor, 512 MB of RAM, and a graphic card capable of running Direct X 9. That specification requirement is upped if you want to run the Premium version of Vista. See the following link for more information.

<http://www.microsoft.com/windowsvista/getready/capable.msp>

I don't believe you can even buy an 800MHz processor any more, and old style memory is either not available or sells for a premium price because it is so scarce.

Test your computer at [www.pcpitstop.com](http://www.pcpitstop.com) to determine whether or not your computer is vista ready.

**WHY DO THE SPECIFICATIONS FOR NEWER VERSIONS OF THE OPERATING SYSTEM KEEP CREEPING UP?**

The operating system follows the upward propagation curve of available hardware. The pool of obsolete hardware decreases as older machines are replaced with newer and faster machines, and new users join in the computer revolu-

tion. Faster processors, more and faster memory (at a lower cost per megabyte or gigabyte), and new types of devices are the rule of the day. Energy Star™ energy saving hardware is in. New ways of using your computer evolve, such as home media players, digital cameras, movie editing, wireless networking, etc. Who knows what will crop up in the next year or two? Computers will provide the means to do those kinds of things.

Remember, when you buy an operating system, or you are upgrading one, you are positioning yourself for the life of the operating system. Plan for the long run rather than for the short term. Make sure the OS is compatible with your present hardware, but be thinking about what you may want to do in the future. You may be able do cross country skiing on snow shoes, but that is sure the hard way to get there, and it is not any fun either.

**WHEN WILL VISTA BE AVAILABLE?**

It is anticipated that Vista will be released for home users at the first of next year. January is the target date, but that date could slip. Watch for hardware and software discount offers this month in anticipation of the release of Vista.

**WHAT IS A GOOD STRATEGY FOR BUYING A NEW OPERATING SYSTEM?**

**In a word, wait! Be patient.** My advice is to wait until the new operating system has been out for two or three months. That gives time for little glitches to surface and for Microsoft to produce and distribute patches for those problems. By waiting a little bit, you avoid facing those particular problems and experiencing possible frustrations.

**WHY SHOULD THERE BE ANY PROBLEMS AT ALL?**

It is the goal of Microsoft, and every other reputable software developer, to release bug-free software. But every release involves some trade-offs. They engage in a process of alpha and beta testing to do just that.

Alpha testing is in-house testing by the software developers using the computer systems that their company's buying policies allow.

Beta testing usually involves very large scale tests with outside volunteers testing on different computer system combinations. In my experience as a beta tester for many firms, beta testing often catches problems that were not seen by the alpha testers. The beta testers have access to more hardware and software combinations than is possible for the firms alpha testers.

Similarly, the release of the final release candidate (RC) software to the world, uncovers minor problems that were

not encountered before. That should not come as a surprise to anyone given the many permutations and combinations of computers brands, clones, hardware choices, and the variety and kinds of installed software, including the age of the software.

#### ARE YOU IN THE MARKET FOR A NEW OPERATING SYSTEM?

If you are buying a new computer, be sure it comes with Vista. It will save you money in the long run and will come already installed on your new computer.

Otherwise, if you buy a new OS for your existing home computer, pick from the basic, premium (media center), or ultimate versions (media and business). There are different business versions as well.

If we use a new automobile as a metaphor, you can buy a standard stripped down model, a more plush model, or a model that offers every available option as standard equipment. For some users, the stripped down model is all they will ever want or need. Thus, they don't have to pay for stuff they will never use. Other users want advanced features and options included so they will have them if and when they need them. You decide which is best for you and for your pocket book, and which version your computer will support.

Vista users will discover that many of the functions formerly provided by third-party vendors are already built into their new operating system. That will save them money in future, and will provide useful utilities right out of the box. Bon appetit!

### ARE YOU READY FOR A NEW COMPUTER?

#### USEFUL TIPS



You know you are ready for a new computer if . . .

- You continue to run into compatibility problems between your hardware and the new software that you want to run.
- You can't add some new hardware that you want because it is not compatible with your old computer.
- Your computer is not ready for Vista.
- Your computer is problem prone due to its age.
- Your computer is slower and less responsive than you want it to be.

- You can't add the functionality that you would like because of the age of your computer.
- It will cost more to upgrade your existing computer to do what you want than it will to buy a new one.
- Your old computer starts needing replacement parts, such as a new BIOS, a larger hard drive, a bigger power supply, a new monitor, a new mouse and keyboard, and maybe a new motherboard.
- Your old computer won't provide sufficient cooling for the hardware you want to add.
- You want the features and power a new computer can give and which your old computer cannot provide, or cannot provide at a reasonable cost.

#### WHY NOT UPGRADE INSTEAD OF BUYING NEW?

The cheapest and most effective upgrade is to add memory. That is a viable option if you already have a fast processor (one that fully meets your needs) and you already have the peripherals that you want and need, and they are compatible with your software . . . and with Vista.

However, if you have a laundry list of items that need upgrading, buying a new computer will save you big bucks and give you a much better computer in the bargain. The reasons for that are that your computer will use the latest components and circuitry. For instance, it will use USB 2.0 ports instead of slower USB 1.0 ports to connect a digital film reader, digital camera, and other devices. You will also get the latest BIOS.

The BIOS contains the routines that enable your operating system to communicate with various devices used by your computer, such as your keyboard, mouse, disk drives, printer, monitor, and communications ports.

A new computer will come with the latest kind of memory and components, and may be bundled with popular software at discount prices. Think reliability and responsiveness. It may also come with the latest operating system pre-installed on your computer.

Run Microsoft's Vista Advisor. It will let you know whether your computer is Vista Ready and will provide a report. The report will identify any software issues that may exist between the new Vista and your old software.

<http://www.microsoft.com/windowsvista/getready/upgradeadvisor/default.aspx>