

How to Keep Your Computer Running Efficiently

By Dave Hoffman

A computer is a machine like any other. It needs proper maintenance to continue to run smoothly. While each computer operating system (for example, Windows '98, Windows XP, Mac) has a different procedure to activate maintenance functions, those functions are the same from computer to computer.

Most computers are capable of storing great amounts of information and performing numerous functions at once – many that are not obvious to simple observation. As you create files and surf the Internet, your PC picks up bits of information that can slow your computer down and cause nuisances in running programs.

Your computer picks up clutter from the Internet

Be careful what you download onto your computer – especially in the area of free games and other programs. Some companies offer free downloads on the condition that they can fill your computer with adware and spyware. Adware is the name for files buried on your hard drive that cause advertisements to popup while using your computer. They are a nuisance at best, and often slow down your computer's other functions. Spyware collects information about what websites you visit and other personal information that might be stored on your computer so that advertisers can target your interests more directly. These invasive programs also slow down your computer.

There are certain programs such as ad-aware and spysweeper which are designed to remove these programs from your computer. In addition, your computer may have what is called a firewall that can be activated to keep unwanted tidbits from entering your computer.

Many Internet sites will download temporary Internet files, or cookies, just for visiting their site. When a site remembers your password, or knows your screen name upon sign on, it is because of cookies. While cookies like these may be convenient, others are used by advertisers to record your habits so they can show you ads based on your online habits. These also can slow your computer down. However most browsers have an "Internet Options" menu bar where you can select "delete cookies" or "delete temporary Internet files." Deleting the files periodically will clean out your drive and make the computer run more smoothly.

As you browse the web, your computer will often store a version of the websites that you have visited, creating a cached file. Since the cached file is on your hard drive, the computer can access the site more quickly since it has most of the information on hand, as opposed to having to download it each time from the site. That is why it is often quicker and easier to click around a website you're already looking at than it was when you first signed onto the site. However, since many sites update frequently, old caches become unnecessary and take up hard drive space, so deleting temporary files can be useful.

Occasionally, your software will send you a message that there are updates available. You should click to update the software, especially for your anti-virus software, as new viruses can circumvent old programming. Beware of vague messages, however, such as pop-up or banner ads that say your machine isn't optimized, because these are simply ads. Legitimate software update messages are very specific and can usually be obtained from the company's website. Also check for updates to your operating system and web browser.

Keep your hard drive in order

Files take up physical space on your hard drive. When you delete a file, it leaves a section of free space on your computer. If you delete a small file, the section it leaves behind is small. When you then save a larger file, the computer breaks it up to fit into these smaller sections. The file is still retrievable, but it takes the computer longer because it has to scan different parts of the disk. This is called a fragmented file.

Your computer has a defragment function that moves files adjacent to one another so the space is minimized, and stores the larger files in a continuous format, making retrieval a much simpler process. Imagine how long it would take to prepare a meal if the utensils were all in different rooms of the house. Defragmenting takes the utensils and puts them in the same drawer, in the order that you need them.

Keep hardware in working order the same way you would any other piece of equipment. Avoid extreme temperatures and keep it free of food, dirt, or drinks. Occasionally you will have to replace cables.