

## Tips to Help Keep Your Computer Running Smoothly

**Never, never, turn your computer off with the power switch until Windows has shut down.**

The one exception to this rule is when your computer locks up and your hard drive is not running (**hard drive light is not blinking**). In this situation, you can turn the power off without harmful effects to the hard drive. **As cutting the power can also result in lost data or Windows files, you should only do this when you have to.**

Following this rule will prevent permanent hard drive defects caused by the hard drive heads contacting the surface of the drive disc, and it will prevent a host of Windows problems. Whenever possible, recover from crashes by pressing the Ctrl + Alt + Delete keys at the same time. Press them again to reboot your computer.

**Backup, backup, backup, any data you cannot afford to lose to at least two separate physical drives.**

So backup data to floppies, Zip disks, CD-RWs etc. The time to backup is when you create something you can't afford to lose. Don't wait until tomorrow. While it is true that our server is backed up on a daily basis, it is not a great idea to use the network drives as permanent storage of your files. Archive your old files onto CD's, etc. on a regular basis.

**Always take the time to install Windows updates.**

Your computer should prompt you that there are updates to install and ask if you're ready to install them. You can set-up your computer to automatically install them. You might pick a time that you can leave your computer on, like maybe lunch time, and it will automatically install them while you are away from your desk. It doesn't really do any good to have it set-up to automatically update at night when you leave work for the evening and turn off your computer. You will often have the message first thing in the morning when you boot up your computer... and usually then we're so busy checking email and/or getting to work, that we say no to install updates. Always find a way to take the time to install Windows updates.

**Run Scandisk (Disk Cleanup in Windows 2003/XP) and Defragment at least once a month.**

### Defragmenting your Disk Drive

Your computer hard drive will eventually accumulate fragmented files, that is, file save fragments will no longer be arranged on your hard disk drive in a contiguous order. This can severely impair your program running performance, in particular to vast majority of software programs that rely upon stored datafiles or databases. It is therefore essential that you conduct a regular weekly periodic disk defragmentation on a minimal basis.

### First—essential ScanDisk/Disk Cleanup before defragmentation

Close down all running programs. From lower windows taskbar:

1. Click on **Start** menu command button.
2. Click on **Programs** menu.
3. Click on **Accessories** menu.
4. Click on **System tools** menu.
5. Click on the **ScanDisk** or **Disk Cleanup** program item.
6. Click on the **Standard** radio button.
7. Click on the **Automatically fix errors** check box (for ticked symbol).
8. Click on the **Start** command button.

Wait until ScanDisk or Disk Cleanup is fully completed its task, and should it prompt you to repair any corrupt files it has found, to do so.

## Second—Disk Defragmenter

**Warning:** never run disk defragmenter without running ScanDisk or Disk Cleanup beforehand.

1. Close down all running programs. From lower windows taskbar:
2. Click on **Start** menu command button.
3. Click on **Programs** menu.
4. Click on **Accessories** menu.
5. Click on **System tools** menu.
6. Click on the **Disk Defragmenter** program item.
7. Select your hard drive (usual C:) from the combo menu of the Select Drive dialogue box at start up.
8. Click on the **OK** command button to proceed.
9. Click on the **Start** command button, even though it purports it not necessary to defragmentise disk at present time.

Wait until Disk Defragmenter has fully completed its task, and should it prompt you to repair any corrupt files it has found, to do so.

## Clear Up Your Hard drive

There are six simple steps to clearing up your hard drive:

### **1. Uninstall unused programs.**

Many times a new program will come along that looks fun to have or play with, but after a week or two you simply stop using it. These programs clutter up your drive and take up valuable space. You might be tempted to delete these programs from your drive, but doing so will cause problems. You must use the uninstall function of Windows for the program to be removed safely and completely.

### **2. Clean out temporary files. (Note: If you ran Disk Cleanup, you will have the opportunity to remove these files then.)**

When your computer is not shut down properly, it will pass information from memory into fragmented files. Also, while you are running programs, your computer will write information that it does not immediately need into temporary files. Installation files will also expand themselves into the temporary folder and will not always clean up after themselves. **You can delete these temporary files safely by using the Disk Cleanup option in your System Tools.**

### **3. Empty your internet cache.**

As you surf the internet your computer stores web pages and images into a temporary internet cache so that it can quickly recall and access information when you move back and forth between pages. This backup information can quickly add up and eat hard drive space.

Whether you use Internet Explorer, Netscape, or one of the many other browsers available, emptying out your cache is quick and easy. Simply follow the instructions in the Help files located within those programs. You may also wish to set a specific maximum file size for your cache folder, so that it is not allowed to run rampant.

### **4. Empty your mail programs of clutter.**

It's easy to browse through your email and leave old messages there, promising yourself you'll sort them out later. One or two messages don't take up much space, but hundreds certainly do. Take the time to sort through these old emails now and delete what is not important. Create folders and organize what is left. Make it a habit that when new emails come in, they are either filed immediately or thrown away. Set your email program to empty your deleted items folder each time you close your mail program.

### **5. Empty your recycle bin.**

Once you've emptied your drive of cluttering, unnecessary programs; empty your recycle bin to remove what has been placed there in the process.

### **Never unplug peripherals from the computer when it is powered up.**

Unplugging with the power on can short out the connector socket or the motherboard.

There is a procedure you can go through to unplug peripherals. There is a shortcut usually found at the bottom of your monitor screen that looks like this:



The one in the middle with the green arrow is the one you click on. It says "Safely remove hardware." You click there and a screen pops up and you will go find the peripheral you want to remove and highlight it and select STOP and you will receive a prompt that says it's okay to unplug the hardware now. This might be an iPod, memory card reader, or other device that you occasionally plug into your USB ports.

### **Do not let a lot of programs load up when you start your computer.**

They use valuable memory and Windows Resources (Windows internal workspace). All programs in your Windows System Tray (in the lower left of your screen) are running on your computer. **Close them if you don't need them or run them and configure them not to load when you boot up.**

Other programs running in the background can be found by pressing Ctrl + Alt + Delete at the same time.

### **Do use a virus checker regularly.**

Everyone should use a virus checker. The best type of protection is continuous monitoring from a dedicated anti-virus program like Norton Antivirus. That is what we have loaded on our server and on each individual PC.

### **If you have a high speed Internet connection, you need a firewall program.**

A firewall program keeps those who want to hijack your computer from gaining access to your system. You really do not want someone else running your computer. Our server has a firewall program that should help to keep out hackers, etc.

### **Keep track of the software disks you receive with your computer and new peripherals.**

These disks contain valuable software drivers and programs for Windows and are needed when Windows must be reloaded. Keep these disks and your Windows software disks in a safe, dry, place -- you never know when you will need them.

### **Web Maintenance**

Clear Disk Cache: (should do once every month, or if you notice slowdown while online)

If you use Internet Explorer: Open your IE browser. Go to Tools + Internet Options.

Under the "Temporary Internet Files" section, click on the "Delete Files" button. Do not check the box to "Delete all offline content." Click the "ok" button.

Under the "History" section, click on the "Clear History" button.

## Clearing Temp Folders\*

***\*Make sure that all applications are closed before starting this section.***

Any files that exist within your computer's "Temp" or "Cookies" folder are files that may slow down your computer (because these are files that are potentially running on your computer at all times).

Temp Folders:

Find all temp FOLDERS on your computer by opening the Find feature: Start button + Find + Files and Folders.

Type the word "temp" in the "Named:" box. Select "C:" from the "Look in:" box. Click the "Find Now" button.

A list of folders and files with similar names will appear in the window. Double click ONLY on each FOLDER named specifically "Temp" and do the following to the contents within each of these such named folders:

Highlight all files (not folders) that exist and hit your delete key. If a file won't delete, then skip that file.

Empty your recycle bin (see below)

### **Cookies Folder:**

Find the "Cookies" FOLDER on your computer by opening the Find feature: Start button + Find + Files and Folders.

Type the word "Cookies" in the "Named:" box. Select "C:" from the "Look in:" box. Click the "Find Now" button.

A list of folders and files with similar names will appear in the window. Double click ONLY on the FOLDER named specifically "Cookies" and do the following to the contents within the Cookies folder:

Go to the Edit pulldown and select "Select All". Now hit your delete key. All contents should delete. If a file won't delete, then skip that file.

Empty your recycle bin (see below).

## Cleaning Your Mouse

Aside from extending the life of and preventing damage to the mouse, properly cleaning a mouse will make it easier to use and prevent the cursor from "jumping around" on the screen due to dirty rollers.

Before cleaning, shut down your PC and remove the mouse from the computer. If you're using a wireless mouse, simply powering off the PC will be sufficient.

### **Now some physical tips about your work station.**

The first thing to check is the ventilation around your system. Many of the standard computer desks force you to place your computer in an enclosed cabinet. **If your system is in an enclosed space, cut a hole in the back of the cabinet behind your cooling fan.** This will allow it to draw cool air into the system. Your system should have at least four inches of space to the rear, with no clutter, loose paper, etc., to block the flow of air into the computer.

Make sure the top and rear of your monitor are also kept clean and clear of debris. **Do not put paper, books, boxes, etc. on top of your monitor.** You will notice ventilation slots in the top of the monitor case. This allows the excess heat to escape. If that heat is not released, you can cause excess wear to

your monitor's internal electronics. This can create color shifting, screen flicker, and failure.

The second thing you can do, is to clean the dust from the inside surfaces of your system. Do this at least twice a year and your monitor once every 2 years.

Think of dust as a blanket, which keeps the chips of your components nice and hot. The more dust, the hotter they get. How much dust is too much? How about .005 millimeters, or enough to barely see! That small an amount can raise the internal temperature of your components by 5%. Doesn't sound like much? It is enough to shorten the life of your system by years.

The easiest way to clean the inside of your system is to use a vacuum cleaner hose. After you get all the dust you can that way, use a can of compressed air. You can pick that up from any Radio Shack. Spray all the nooks and cranny's. Then blow the area around the system as well, to get rid of the flying dust. Then wait 5 minutes for the dust to settle and do it again, briefly.

Make sure that you clean the blades of the cooling fans. Clean the power supply fan, the CPU's cooling fan and the case fan (if you have one) as well. If you don't have a CPU cooling fan (some early Pentium's didn't come with them) then get one. They cost \$5-\$10, and plug into the power cords for your floppy drives.

That can of air will come in handy cleaning the keyboard as well. Vacuum first, and then blow the remainder out. Be careful to never spill any liquids into your keyboard, and with regular cleaning, you will add years to the life of your keyboard as well. If your children use your computer, consider going to the office supply and getting a keyboard cover. You can take it off for yourself, but it will keep any accidents from banning your children from your computer.