

## Minimizing Risks:

### General:

Keep your computer parts cool. – Heat Kills Electronics

- Don't enclose the computer case in tight spaces
- Don't pile papers, disks, manual, etc. on or around it.
- Don't put in on a carpeted floor.
- Don't let pets around it.
- Don't let direct sun light shine on it.
- Be aware of changes in the fan sounds.

Treat your hardware like eggs. Rough handling kills spinning parts.

- Don't remove disks until the light goes out.
- Don't push on the CD drawer, use the push button.
- Don't kick the computer case.
- Don't twist connector when removing
- Don't eat, drink or smoke at a computer.

Learn your computer specification and limits.

- Know your Operating System (OS)  
(Right-mouse click on "My Computer" and choose "properties" from the menu read the "general" page. Note there is a difference between Windows 98 and 98 Second Edition)
- Know your CPU (Central Processor Unit) speed & amount of operating memory (RAM)  
**(Windows All Versions)** Go to START, choose RUN, type in "dxdiag" and press the ENTER key. Read the opening page.
- Know your Hard Drive capacity and the % used.  
**(Windows All Versions)** Open up "My Computer" and locate the main hard drive. It will be marked (C:). Right-mouse click on that icon and choose "properties" from the resulting menu.
- Learn where your computer stores "temporary use files"  
**(Windows 98 and ME)** Temporary files are stored in a folder called TEMP. This folder is found inside the WINDOWS folder on the C: drive.  
**(Windows 2000 and XP)** Temporary files are stored in a folder also called TEMP. But this folder is stored inside a folder LOCAL SETTINGS. Local Settings is found in a folder with the "Users Name". The Users Name folder is found in a folder called DOCUMENTS AND SETTINGS. The Documents and Settings folder is found on the C: drive.

### Software:

Make sure the software you want to add fits within your computer specification:

- Read the box label.
- Ask a computer club expert if you are not sure.

Install and maintain an antivirus program

- Update the virus reference (data) files on a regular basis.
- Scan the drive on a regular basis and scan any files that may be suspect before using.

Install and maintain Microsoft Updates.

Don't install borrowed software.

- You won't be able to repair it and may not be able to remove it.
- It may not be compatible with your system.

Don't install every "CUTE" piece of software recommended by a friend or an **internet ad**.

- It may not fit with your system specifications.
- Other software installed on your computer, but not on the friend's, may conflict with it.
- It could contain hidden spy-ware, mal-ware or parasite software.
- Check it out through the computer club first.

Make backup copies of all files that you create, or data your software creates, to separate disks that you can store away from your computer.

- CD burners make the best backup copies.  
They are permanent, inexpensive and hold a lot of data.
- ZIP disk are the next best choice, they are reliable and hold a reasonable amount of data.
- Floppy disks are your last choice. They are convenient, but easily damaged and don't hold much data.

Keep all of your program disks and disks provided by the computer manufacturer in a safe – logical place.

- If you have **Windows 98 or ME**, make a START-UP floppy disk.  
**Go to START – SETTINGS- CONTROL PANEL and open the ADD/REMOVE PROGRAMS icon. Click on the STARTUP DISK tab and follow the instructions.**
- If you have **Windows 2000 or XP** you will need to use the INSTALLATION disk or the RESTORE disk from the manufacturer in place of a Start-Up floppy disk.

## Disk Maintenance

Once a week Tasks

Clean out the Trash:

- Empty the Recycle Bin.
- Empty the TEMP folder(s)

Update your Antivirus program data reference file

Every other week Tasks (More often if you generate and delete files frequently)

Run Scan Disk (**Windows 98 & ME**)

Run Defrag (**Windows all versions**)

Before you add a new program or new hardware:

Make a backup of the Registry Files (Windows 98 and Windows ME)

- Go to START – RUN and type in "scanreg" (without the quotes) and press ENTER
- Answer YES when asked to make another backup.

Make System Restore Point (Windows ME and Windows XP)

- Go to START – ALL PROGRAMS – ACCESSORIES – SYSTEM TOOLS – SYSTEM RESTORE
- Choose the "make restore point", give it a logical name and follow instructions.

**This will provide a backup to just before your changes.**

## Disaster Recovery

All computers are going to have problems. But not all of them have to be disasters to you.

**1 A given program stops working.**

- First try the three finger salute: Press and hold both the Ctrl & Alt keys down and then tap the Delete Key once (this is called Ctrl +Alt +Delete or CAD). If just one program is frozen, a window will appear with the non-working program listed. Click on the program listing and then click on the button that is marked end task.

**2 The mouse and keyboard both stop responding.**

- There is little you can do here but turn the computer off and restart the computer. Wait a few moments to give the hard drive time to stop spinning before restarting.
- Most modern computers now have a time delay built into the on-switch to prevent accidental turn-offs. You may have to hold the **ON** button in for 5 to 10 seconds to turn the computer off.
- Luckily, the Windows operating system will repair itself after the shutdown and restart in most cases.

**3 You added a new program, or a new piece of hardware and now Windows won't complete the startup procedure, or it gives an error message and quits each time it starts.**

- Here you need to get the computer to restart in the SAFE MODE
- **Restart the computer, and before the Windows Logo comes up, start tapping the F8 key repeatedly until a menu comes up. Then use the arrow keys to select SAFE MODE from the menu.**
- When the Safe Mode finishes loading, go to the Control Panel's ADD/REMOVE SOFTWARE icon and remove the offending software, or go to the SYSTEM icon and choose DEVICE MANAGER and remove the offending hardware.
- Restart the computer using the START – SHUTDOWN –RESTART options.

**4 You did not install any new hardware, or software, but the computer will not complete the normal startup.**

Here the problem is most likely due to corruption of a critical file called the REGISTRY. You will need to restore a copy of the Registry created before the problem started.

**Windows 98 and ME**

- The computer keeps a copy of the last 5 good Registry files that were created on the first start of any new day.
- To access these copies you will need your START-UP floppy disk.
- Insert the START-UP disk in the computer and then turn the computer on (or restart the computer)
- When the computer is ready, you will have black screen with some writing on it that ends with what is called the DOS prompt for the floppy (A drive). It should look like **A:\>\_**
- Now you need to type in the following line:  
**c:\windows\command\scanreg /restore**  
(note: there is only one space in this line and it is right after "scanreg".
- Press the ENTER Key and a window will display the available good registry dates. Use the up-down arrow keys to pick a date just before your problems started and then press the ENTER Key and follow the instructions.  
When the computer restarts, your problems should be solved.

**Windows XP**

- Windows XP does not use a START-UP floppy disk for problem solutions. It uses the Installation, or Restore, CD for startup problem solutions.
- Insert the appropriate CD in the drive and startup, or restart, the computer.

- When the computer starts, you will be presented a screen with the options to Install or Repair.
- Choose Repair and follow the instructions. (Instructions vary with manufacturers.)
- When instructed, remove the CD disk and restart the computer and your problems should be solved.

5 Your computer starts, but you get poor performance or problems when you try to access some programs. This is most often caused by a corrupted file related to the program or to Windows itself. To fix this problem, you have to restore a copy of the original file to your computer.

**Windows 98**

- Go to START – RUN and type in the following “SFC” (without the quotes)
- Select the option “scan for altered files” and click on the START button (see figure)

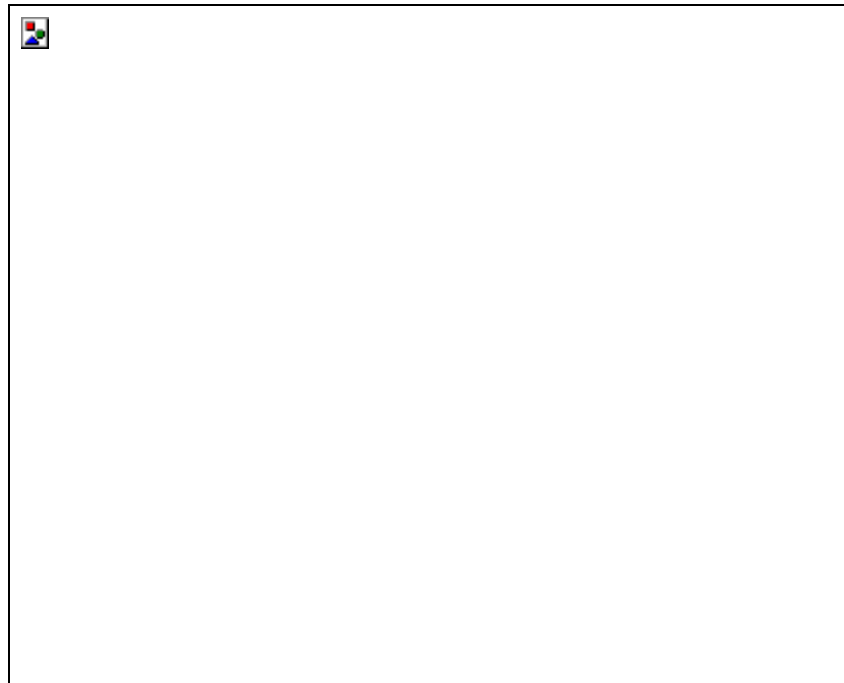


Figure for checking files in Windows 98

### **Windows ME, 2000, and XP**

- These versions of Windows do not provide the System File Checker that is used in 98.
- Here you use program called System Restore.
- Go to START – PROGRAMS –ACCESSORIES – SYSTEM TOOLS and choose “System Restore”.
- You will be presented with a choice of Restore to an earlier date, Make a Restore point, or Undo the last Restore point.
- Choose Restore to an earlier date and you will be presented a calendar with dates in bold type that have valid restore information.
- Choose a date prior to your problem. (If more than one time in that day is available, use an appropriate time)
- Follow the screen instructions.
- The computer will then restore all of the system files to exactly as they were at that restore point.
  - (Note: Your personal data is not affected by this change.)

If none of the above work, then you need to call a technician. But most of the time these little steps will bring your computer back to working condition. The Windows Operating System is quite good at repairing itself. Windows XP is better at this task than Windows ME and ME is better at it than Windows 98.