5 easy ways to tune up your PC

If you have noticed that your PC isn't running as fast as it did when you first brought it home, the following 5 suggestions may help you regain some of that performance. Follow the steps outlined below at least once a month to keep your PC in tip-top shape.

- 1. Spyware and Adware Removal remove unwanted and possibly harmful programs
- 2. Virus Removal detect and remove viruses
- 3. Startup Programs stop unnecessary programs from running
- 4. Run Defrag and Scandisk simple tools to keep your hard drive running smoothly
- 5. Update Windows and Drivers keep your operating system up to date

1. Spyware and Adware Removal

What is Spyware and/or Adware?

Spyware is any technology that aids in gathering information about a person or organization without their knowledge or explicit permission. Spyware silently transmits user information via the Internet to advertisers. In addition, Spyware will very often cause your PC to perform **very poorly** (slow browsing and downloads, program crashes etc).

Spyware may be found:

- Bundled inside of shareware or freeware applications
- · In free versions of otherwise licensed applications
- In peer-to-peer (P2P) and other file sharing programs

Some applications that include Spyware, are: Xupiter, Gator, SaveNow, NewDotNet, BDE Projector, HotBar, Bonzai Buddy, Comet Cursor, Morpheus, WebHancer, WinMX, Kazaa and Wild Tangent.

To remove Spyware from your computer, Comcast recommends that you download and install the <u>Security</u> <u>Manager</u>. Once you have the Security Manager installed, follow the steps outlined in the FAQ titled <u>How do I use</u> the <u>Security Manager to remove Spyware from my computer</u>?. There are other Spyware and Adware removal programs available online, however you should exercise caution when selecting a program, as many of them claim to remove Spyware but in fact install Spyware themselves. The Comcast <u>Security Forums</u> are a great place to ask the experts for advice.

2. Virus Removal

A virus can cause many problems, the least harmful (but most noticeable) of which may be decreasing the performance of your PC. Comcast has partnered with McAfee Inc. to offer all of our customers a 25% discount on McAfee VirusScan.

There are also free online anti-virus scanners, such as HouseCall by Trend Micro.

3. Startup Programs

Many of the programs installed on your PC may have, by default, set themselves to run each time your PC starts. These programs will take up system resources (memory, processor cycles etc) even though you're not using them. Check your system tray right after your PC starts and see how many icons are showing - this can be a good (but not definitive) indication of what's starting each time you turn on your computer.



For each of these programs, check the settings or configuration screen for a box labeled "Run at Windows Startup" (or similar). By manually starting programs as you need them, rather than having them start automatically when you turn your PC on, your start time will decrease and your system will run much faster.

It is important to note that not all programs that start on their own will have an icon in the system tray. Stopping these programs from running at start up can be a bit more difficult. Microsoft has built a program into Windows 98, 98SE, ME and XP called **msconfig**. This program allows you to change which programs will run when your PC starts. It is very important to note that using msconfig can cause serious problems with your PC if the wrong things are changed. It is strongly recommended that only users who are very comfortable using some of the more advanced aspects of their PC should attempt to alter settings via the msconfig utility. Some sites that will guide you in using msconfig have been provided below.

Microsoft Windows XP resource NetSquirrel

4. Run Defrag and Scandisk

Defrag and Scandisk are important utilities that come with Microsoft Windows to help you tune up your filesystem and make sure that it's running properly. Scandisk checks your hard drive to make sure there aren't any problems with it, and Defrag (short for Disk Defragmenter) organizes your filesystem to help Windows read files faster. It's a good idea to run these two utilities about once a month. Depending on your system, these utilities can take several hours to run, and may slow your system down considerably while running. It's a good idea to start them prior to going to sleep at night, or in the morning before your leave for work.

To run Scandisk in Windows XP, follow the instructions outlined below.

1. Double-click the **My Computer** icon on your desktop. Right-click on the drive you wish to defragment (if you have more than one hard drive, start with the C:\ drive) and select **Properties**

31/2 Floppy (A:)	Open Explore
CD-RW Drive (D:)	Search
	Sharing and Security
Charad Decuments	\sim
	Format
	Сору
	Create Shortcut
	Rename
	Properties

2. Select the **Tools** tab and then click the **Check Now...** button.

Local Disk (C:) Properties	2×
General Tools Hardware Sharing Security Quota Error-checking This option will check the volume for errors.	
Defragmentation This option will defragment files on the volume. Defragment Now	
Backup This option will back up files on the volume. Backup Now	
OK Cancel Appl	y

3. Click the **Start** button.

Check Disk Local Disk (C:)
Check disk options Automatically fix file system errors Scan for and attempt recovery of bad sectors
Start Cancel

4. This process can take some time depending on the size of your hard disk, and any errors that may be found.

Checking Disk Local Disk (C:)
Check disk options Automatically fix file system errors Scan for and attempt recovery of bad sectors
Phase 1
Start Cancel

5. A confirmation window will appear once the scan has been completed. At this point, if any errors are found they will be displayed and you will be prompted to repair or fix them. Click **OK** to finish.

Checking Disk Local Disk (C:) 🚺		
٩	Disk Check Complete.	
	ОК	

To run Defrag in Windows XP, follow the instructions outlined below.

1. Double-click the **My Computer** icon on your desktop. Right-click on the drive you wish to defragment (if you have more than one hard drive, start with the C:\ drive) and select **Properties**

31/2 Floppy (A:)		Open Explore
CD-RW Drive (D:)		Search
		Sharing and Security
Shared Documents		Format
	-	Сору
		Create Shortcut Rename
		Properties

2. Select the **Tools** tab and then click the **Defragment Now...** button.

Local Disk (C:) Properties	? 🗙
General Tools Hardware Sharing Security Quota	
This option will check the volume for errors.	וו
Defragmentation	51
This option will defragment files on the volume.	
Defragment Now	
This option will back up files on the volume.	
Backup Now	וו
OK Cancel App	oly

3. Click the **Analyze** button to determine if your drive needs to be defragmented.

😵 Disk Defragmenter 📃 🗖 🔀					
File Action View	Help				
+ + 🖬 😫					
Volume	Session Status	File System	Capacity	Free Space	% Free Space
(C:)		NTFS	100 GB	10.43 GB	10 %
Estimated disk usage	e before defragmentatio	n:			
Estimated disk usage	after defragmentation:				
Analume Deframment Dature Stop Miew Depart					
Framented files Continuous files Unmovable files Free space					

Click to enlarge

4. After the analysis is complete, select **Defragment** if windows determines your drive needs to be defragmented.



5. If you have less than 15% free disk space, windows will suggest that you uninstall some of your larger programs or delete any unneeded files. After you have created enough free disk space for defrag to run effectively, click **Yes**.

Disk D	efragmenter 🛛 🕅
⚠	Volume (C:) has 10% free space, but only 9% is available for use by Disk Defragmenter (due to reserved system space). To run effectively, Disk Defragmenter requires at least 15% usable free space. There is not enough disk space to properly complete the operation. Delete some unneeded files on your hard disk, and then try again. Do you want to run Disk Defragmenter now anyway?
	Yes No

Click to enlarge

6. As defrag runs, you will see a status bar in the bottom left corner.

(C:) Defragmenting 18% Compact	ting Files
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7. Once complete, you will be given an opportunity to review a report. Click **View Report** if you wish to read it, or **Close** to finish.

Disk Defragmenter	? 🗙
Defragmentation is complete for: (C:)	
View Report Close	

5. Update Windows and Drivers

Windows Update

Keeping Windows up to date is not only easy, but helps ensure your PC runs securly and efficiently. Microsoft has created a site that will scan your PC and install any required updates. To set your PC to download and install

these updates automatically, see this FAQ. To run Windows Update manually, follow the instructions outlined below.

1. Find and launch Windows Update. Depending on how you have your PC set up, Windows Update may be found in your start menu or control panel.



- 2. If you're unable to locate Windows Update, simply point your browser to http://windowsupdate.microsoft.com
- 3. The first time you visit <u>http://windowsupdate.microsoft.com</u>, you may be prompted to download and install a security certificate. Click **Yes** when prompted.

Security Warning	
	Do you want to install and run " <u>Windows Update</u> " signed on 8/3/2004 6:47 PM and distributed by:
	Microsoft Windows Publisher
	Publisher authenticity verified by Microsoft Windows Verification Intermediate PCA
	Caution: Microsoft Windows Publisher asserts that this content is safe. You should only install/view this content if you trust Microsoft Windows Publisher to make that assertion.
	Always trust content from Microsoft Windows Publisher
	Yes No More Info

4. Follow the instructions provided by Microsoft to finish updating your PC. If you do not set Windows to automatically download and install updates for you, you should use Windows Update at least once a week.

Driver Updates

Using the latest drivers for your hardware can often give your PC a very nice boost in performance. Check with your hardware vendor to make sure that you're using the latest drivers. Comcast has provided a list of common hardware vendor web sites for video cards, sound cards, hard drives and networking equipment.

Video Cards:

ATI: <u>http://www.ati.com/support/</u> Nvidia: <u>http://www.nvidia.com/content/drivers/drivers.asp</u>

Hard Drives:

Maxtor: <u>http://www.maxtor.com/portal/site/Maxtor/</u> Western Digital: <u>http://support.wdc.com/</u>

Sound Cards:

Creative Labs: http://us.creative.com/support/

Networking Hardware:

3com: http://www.3com.com/products/en_US/downloadsindex.jsp Linksys: http://www.linksys.com/support/default.asp Netgear: http://kbserver.netgear.com/main.asp