

## HOW TO SPEED UP ANY DESKTOP OR LAPTOP COMPUTER

When you start using a new computer it's fast and may impresses you as a big change from before. On the other hand you may be disappointed at the relatively small increase in speed. Even if fast, over time your machine may get bogged down. After a few months you may wonder if it is worth computing at all, considering how long it takes to do anything.

The truth is by default when your computer arrives it has many services and unneeded programs that can be turned off or deleted without harm. Also with a machine that has slowed over time, many things can be done to improve the speed. In fact, after a treatment like here's, you'll be amazed what a tiger was under hood. If you were considering it, you may decide to postpone the purchase of a new one. The various procedures and habits you can perform and change are as follows

### **Make Sure You Have Enough Memory**

Choose Start Button -> Start Menu ->  
Settings -> Control Panel -> System -> General Tab

Before You Buy Computer Memory Upgrades, you can find out how much you have by clicking on the System Icon in the Control Panel. The amount is on the first tab that comes up, the General Tab.

With Windows 2000 or XP, you really should have at least 1 GB of memory and 2 GB is a more comfortable amount. With Vista be sure to have 2 GB of memory you'll be much happier.

## **Be Sure To Clean Up Your Desktop**

Windows puts everything on your Desktop into memory, for rapid loading purposes. If you have a lot of big files there, that means trouble. Apparently folders are not loaded. Shortcuts apparently are loaded, but it stops there. The applications the shortcuts point to are not loaded. Maybe downloaded exe files are though.

## **Make Sure You Have a Fast Enough CPU Chip**



Only Windows XP and Vista, in the System Applet again, will show you how fast your processor is. 1 GHz Processor is really the minimum these days. If you have less than this, spare yourself some frustration and buy a cheap new computer for \$250-\$400 from Dell, HP, Compaq, E-machines, or Gateway. You'll be much happier.

## **Uninstall Those Unneeded Applications To Free Up Memory**

One last suggestion of the about.com article that sounds useful, is to uninstall unneeded programs. The reason for this is apparently the registry settings made by installed programs can eventually slow down your machine. A smaller cleaner registry is therefore useful. A registry cleaner might be a good tool to use too after removing the unneeded programs. It will be discussed again below.

## **[DO YOU KNOW THE TYPES OF RAM? ITS HERE](#)**

### **Get And Keep Your BIOS Fine Tuned**

In the BIOS (or "Setup") stop floppy seek, stop memory check (Fast Boot), and put the disk on best performance setting instead of silent if you have it.

For a faster boot up enter your Bios, by clicking the Delete, F2, or F12 key or whatever flashes on the screen when you turn on the computer. Next choose boot order, and remove all entries except the first one which you should set to your hard drive. This will stop the most of the time useless seeking of a floppy disk at boot time.

If you need to reinstall Windows or some other operation, you can always go back and change this entry to floppy or CD. Also there should be a setting in your BIOS to make the boot, quick.

## **Patch Your Computer To Keep It Updated**

Go to Windows update on the top of your start menu and download all the patches for your operating system, whether they are optional or critical.

Better yet, go into the Control Panel, choose Automatic Updates, Choose Automatic (your screen might look different with a different version of Windows). Make it Every Day at a time when you are not using your computer (say 2 AM). Make sure your PC's other major programs are up to date with Secunia: [http://secunia.com/vulnerability\\_scanning/](http://secunia.com/vulnerability_scanning/).

Generally if you have cable or DSL, despite the risk of infection, computers should be kept on and attached to the Internet. This is to allow antivirus and security patches downloading at off-peak hours.

## **Keep Your Antivirus Up to Date and Scan Your Disks**

Bring your antivirus program up to date and regularly do a full virus scan of your computer. Check your antivirus program as it will tell you when the last full scan was done. You may be surprised to see it is not what you thought, but was done months ago.

If you don't have an up to date antivirus program, and don't want to pay for a new one, there are several high quality free ones available to the private consumer. They are: AVG, Antivr, avast, PC Tools antivirus, Comodo antivirus and the open source ClamAV.

Also look into a new different kind of antivirus program ThreatFire which you can use to supplement your other antivirus. ThreatFire doesn't look for the fingerprints or DNA of known viruses. Instead it looks for suspicious behavior like key logging.

Also try the no longer free WinHki Anti-Virus, which acts as a supplement to normal Anti-virus program like above. WinHki calculates the checksums ( a mathematical calculation extremely difficult to fool) of your files on initialization. After that, whenever a virus changes a file it will be flagged by WinHki because the checksum will change.

## **Make Sure Your Antivirus/Internet Security Programs Run at Night**

If you are noticing slowness in your PC and you hear your hard drive churning, it may be because the antivirus is doing a scan during the middle of the day. Reschedule it for the night. Also check to make sure it updates at night. While your at it, look in Windows update settings in your System app in the Control Panel in XP or by itself as an app in the Control panel in Vista. Perhaps it is updating during the day too instead of the default 3 AM. That could be a real slower in performance.

## **[COMPARE THE BEST ANTI-VIRUS PROGRAMS HERE](#)**

## **Make Sure You Have no Spyware**

Run at least a couple different antispymware programs. Perhaps most people these days are buying full computer suites to use with their computers, which should include antispymware programs, but it doesn't hurt to independently run stand alone ant-spyware programs.

The free ones are, SuperAntiSpyware (maybe the best of the free ones now), Spybot, LavaSoft's Ad-Aware, Yahoo Toolbar with Anti-Spy, and "Bazooka Adware and Spyware Scanner".

Note it's also a good idea to use the free spyware prevention tool, Spyware Blaster.

The commercial anti-spyware programs SpySweeper, SpywareDoctor and CA Anti-Spyware (formerly Pest Patrol) are excellent. They cost \$30-40.

## Stop Unneeded Startup Programs

New installation of software often adds unneeded startup entries in any of several different hidden locations. These programs will start when Windows starts and take up resources.

The best free program to deal with this problem, is in my opinion, Startup Inspector for Windows. If you use this program, be sure to select the "Consult" Button in the upper left of GUI.

This will make the program search through its database of startup programs and tell you whether the software is necessary or can be safely removed from the bootup sequence. Windows Defender is Microsoft's similar program. It's standard in Vista and can be reached through the Control Panel. Click on Tools -> Software Explorer, to see all the programs that begin at startup.

Another good choice is Codestuff Starter. This free program has the additional advantage of having a sort of Power Task Manager which will tell you all the programs that are currently running and all their dll dependencies. Additionally there is a new section on Services, so you can look through these semi-programs that are running in the background and see if there are any you don't need. More on services in a later step.

Unfortunately you will manually have to look up your entries in other resources to see whether the software is necessary for normal functioning. You can also sometimes get info about the manufacturer of the running program by double clicking on its entry in the Startup list. The best database for checking whether programs are necessary is <http://www.castlecops.com/StartupList.html>.

To get a real expert list of Start-Up programs running on your machine, including browser helper objects try Hijack this, now owned by Trend Micro. HijackThis lists of starting objects can be posted to newsgroups where experts for free, will examine them for irregularities.



## **Defragment Your Hard Drive Regularly**

Vista now includes an automatic defragment system that is enabled by default. With XP or Vista (if you want to set it off outside the schedule) defragment your hard drive by choosing Start -> Programs -> Accessories -> System Tools -> Disk Defragmenter.

This should be done every week if possible and can take several hours, so again do it at night or while you are at work. There are some free disk defragmenter scheduler solutions, so you can "set it and forget it." They are startdefrag, autodefrag and Lexun Freeware Drivecare. There is also a Microsoft article that tells you how to use Scheduler to schedule defragmentation.

## **Remove Those Unneeded Files**

Hard disks begin to fragment files noticeably and slow down after passing the 50% full mark. For this reason, it is said that the single most important investment one can make to improve the performance of a PC is to purchase the largest hard drive possible.

This situation will change with the advent of solid state hard drives as the files don't fragment meaningfully in these sort of devices. At any rate if you have a hard drive and it's over 50% full, use a program like CCleaner or Microsoft's disk utility to get rid of unneeded files.

Also uninstalling unneeded software can improve performance for disk space reasons and because programs often install right click options which disappear after uninstallation. This is valuable because menus are often built on the fly and take time to rebuild each time you open them. With less options there's faster performance.

### **Move the Page File to Another Partition**

The page file is your virtual memory. Windows uses your hard drive as a secondary source of memory in addition to your RAM memory. If you move this file to another partition then the one where Windows is installed this can increase performance.

You can change this setting here: Control Panel->System Applet->Advanced Properties->Performance Settings Button->Advanced Tab->Virtual Memory Settings Button->Click on the C drive and change the setting to no virtual memory and hit the "set" button->move the selection to another partition and set it to 150% of the amount of RAM memory you have in both the minimum and maximum amounts. Then click the "set" button.

### **Stop File Indexing**

By default, in order to speed file searches in XP and Vista, Windows indexes the entire drive. However most people do not search very often and find that the overhead that the process represents in terms of memory and CPU cycle does not justify the short time lost looking for files that have not been indexed once in awhile.

It is true that this indexing is only supposed to take place during times when the machine is not in use, but the system doesn't work perfectly and makes for continual noise from the hard drive through out the time the PC is on. At any rate to stop indexing is a bit of an involved process.

To start it, right click on your C: drive in My Computer or Explorer and choose "Properties". Simply uncheck the checkbox "Allow the Indexing Service index this disk for fast file searching" -> In the next Window that comes up, choose the radio button next to "apply changes to C:\, subfolders and files. That's the easy part.

Because it's applying the changes to all the folders, this process takes up a lot resources and time. As a shortcut to all this you could stop the indexing service in XP by typing type "net stop CiSvc" without the quotes. For a long time stop of the Indexing Service you would need to disable it.

Type services.msc in the Run box -> right click on the Indexing Service -> choose disabled from the Startup type drop down box. In Vista, do the same thing with the command "net stop WSearch" and disabling the Windows Search Service.

A third way to do this in XP and Vista is to go to Add/Remove Programs in the Control Panel (Programs and Features in Vista) and choose Add/Remove Windows Components (in Vista "Turn Windows features on and off"). There you'll find the Indexing Service which you can uninstall. If I remember correctly with Vista, there is some Indexing that goes on even if you have done all three of these things. This might be related to Vista's Prefetch and Superfetch systems.

### **Turn Off Animations**

In XP and Vista, some visual effects have been added to the basic Windows 2000 appearance. These can be removed to improve PC speed. You can do this here: Control Panel->System Applet->Advanced System Settings (in Vista) or Advanced tab (In XP)->Performance Settings Button->Visual Effects->Adjust for best performance. You may want to restore the use of smooth edges for screen fonts and the showing of thumbnails instead of icons (In Vista only).

## **Clean the Registry**

Over time the registry gets clogged up with useless registry settings that slow a PC. Freeware to fix this issue include PC Fixer, CCleaner and Toni Arts EasyCleaner among others.

## **Stop Unneeded Services**

Services are again programs that Windows starts up automatically at startup and run in the background (some of them at least others are started when needed). Many of these are not needed and stopping them can help speed up you considerably.

To get to services, click on the Start Menu and in the Run dialogue box add "services.msc" and hit return. Now, consult one of the lists on the net, which list which services are necessary and which are not.

Black Viper provides one (<http://www.blackviper.com/WinXP/servicecfg.htm>), another one is ClanKiller's

(<http://www.clankiller.com/technical/tweaks/winxp/servicestweaks.php>).

Also look at a program called WinServices. If you download the mini setup of version 2.1.4.0, and choose Tools->"Program Settings"->Columns Tab >Select Activate Recommendations->check "Suggested Settings" and "Safely disable", the program will show which services you can disable. Use a little common sense here, for instance Task Scheduler might be better left on. Check with the other sites.

## **Turn off fancy desktop backgrounds, and screensavers**

Elaborate background pictures and fancy screensavers can take up an enormous amount of RAM memory and Hard disk space. For instance with hibernation activated, a file easily 1 GB in size is created in the root of the C: drive.

If you are low on hard disk space, this can be vital. These operations can be done by right clicking on a blank part of your Desktop and choosing "Properties." Go to the Desktop Tab and set the Background to "None." On the screensaver Tab, set the Screensaver to "None."

To turn off the Hibernation feature in XP only: Right Click on your Desktop -> choose Properties -> Click on the Screen Saver Tab -> Click on the Power Button in the lower right corner -> Click on the Hibernate Tab -> Uncheck "Enable hibernation". For Vista see this article in regards to hibernation: <http://support.microsoft.com/kb/929658>.

### **[LEARN ALL ABOUT READYBOOST RIGHT HERE](#)**

#### **ReadyBoost for Vista Speeds Boot Times and Other Operations**

With Vista, if you plug in USB or other flash memory, you will be given a choice to use the device with machine as ReadyBoost agent. It's a little complicated and I don't understand it, but, the PC uses the drive then for SuperFetch routines as cache memory, whatever that means.

All you seem to have to know is that using USB memory as ReadyBoost can speed boot times as well as other memory intensive activities that the PC would normally use the hard drive virtual memory for. Your free memory can be 256 MB to 4 GB usable by the machine.

You must tell the machine to set aside this amount and you will not be able to use that memory while the card is plugged in the machine. Apparently also the machine learns during each boot up so the boot up times gradually get faster. A Wikipedia article is here and at the end of the Live Links/Additional Resources list: <http://en.wikipedia.org/wiki/ReadyBoost>. Note some flash memory is not fast enough to serve as ReadyBoost material.

## **Change Your PC use Habits**

Things that can speed the Windows experience is to rely more heavily on keyboard shortcuts. Print out a cheat sheet for yourself for reference. Two links are listed below. Another thing to do is to use Windows Quick Launch Toolbar. You display this right clicking on the Start Button -> choosing Properties -> Choosing the Toolbars tab -> check the Quick Launch Toolbar display option box.

If you hold down the control button you can drag shortcuts from the Start Menu or desktop and keep copies in their original locations. Another speed tip is when surfing and downloading start many at the same time, you don't have to wait for one download to finish before starting another.

Also you might try to download the free Opera Internet browser or Apple's Safari for Windows. It is the fastest but will not display some of the pages IE and Firefox can display. I use all three browsers about equally. Another thing to try is to set up category folders in your Startup menu.

You can then drag the programs folders into the folders. This speed things because it takes Windows some time to rebuild its menus each time you click on them. You can get to the Start menu folders by right clicking on the Start Button and choosing "Explore".

There is a complication that not all the Start Menus are stored under your user name. However if you work at it you can categorize most of your folders by dragging them around and placing them in new folders. You can also right click on the folder and choose cut, then paste them in your new folders. Additionally if your right click on the Start Menu Folder and it does not give you the cut option, it's probably installed in the Default or All user folders. Choose the "Open all users" option instead to manipulate those folders

## **Have Your PC health Assessed for Free at PC Pitstop**

PC Pitstop will give you a wealth of information about whether you have enough disk space, how fragmented your drives, whether you have enough memory and many other things discussed below. This is an unbelievable free service and can be done anonymously.

**[VISIT PC PITSTOP.COM BY CLICKING HERE](http://PCPITSTOP.COM)**

