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# BE Faster

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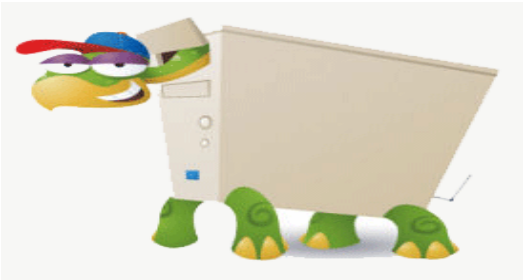
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To defrag, or not to defrag?



Go from this



to this

The following tips can help improve your computer's performance and help make your computer run faster. The examples we will take you through are for Windows 7, Windows Vista, and Windows XP. However, these procedures work for all versions of the Windows operating system

These tasks use utilities provided within Windows, so you can run them, free, as often as you'd like to help you achieve the best system performance and to help improve computer speed.



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The general idea behind the tweaking of a PC is not too different to that of a car and it is a lot easier than you might think.

### *Pure power*

The more powerful the engine (CPU/Processor), the faster the car will go.

### *Engine Size*

The bigger the engine (Memory/Ram), the faster the same car will go.

### *Lower Weight*

More weight in the car will decrease its speed, so in a PC the fewer background programs running, the faster it will go.

### *Maintenance*

A car that's regular maintained will inevitably perform better. On a PC, unnecessary programs and spyware should be removed. It should be defragged and the registries should also be cleaned. In addition, it's worth regularly cleaning dust out of the PC with *canned (dry)* compressed air.

There are a number of free products that can speed up your machine, for example:

- CC Cleaner
- AVG
- SpyBots

Built in utilities that will also help include:

- Disk defragmentation
- Remove items from start up
- Turn off the paging file



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## Hardware Tweaks

### *Pure power*

The CPU or Central Processing Unit is the main processor of your PC. Everything that goes on in your PC at some point goes through your CPU. If you like, the CPU is brain of the PC.

The CPU's speed is measured in MHz (megahertz) or, more recently, GHz (gigahertz). A chip with a megahertz rating of 900 MHz would be able to complete 900 Million cycles every second.

A multi-core processor is a single computing component with two or more independent central processing units or cores which are the units that read and execute program instructions such as add, move data, and branch. Multiple cores can run multiple instructions at the same time, increasing overall programme speed.

### *Engine Size*

Imagine your computer as a desk. Someone sits at the desk, thinking (the CPU). There is a filing cabinet beside the desk for long term storage (the hard drive). The desk surface area, where you can find stuff you're working on, pens and other tools is the RAM or Random Access Memory.

If you have a small desk, work can slow down while you shuffle papers in and out of the filing cabinet. Also, if you have stuff on your desk you don't really need, it's just clutter and can also slow down your work. However, there are things you can do to speed up your working when it comes to RAM:

- Be more efficient with your space (close programs you're not immediately using)
- Tidy your desk (run cleaning programs to reduce the amount of programs that open)
- Buy a bigger desk (install more RAM)

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This table is a guide to the appropriate RAM for a number of different users.

User	Too little	Enough	Overkill
Average user	512MB	1GB	4GB
Multi-tasker	1GB	2-4GB	12GB
Video editor	1GB	8GB	None
Enthusiast	512MB	2-4GB	8GB

BabyBalla's ideal RAM amount chart

## Software Tweaks

### *Clean up disk errors*

If a programme crashes or you experience a power outage, your computer may create errors on its hard disk (hard drive). Over time, these can result in a slow PC. Fortunately, Windows includes several tools, including a Check Disk program, to identify and clean any errors and keep your computer running smoothly.

### *Windows 7 and Windows Vista users*

1. Click start, then computer
2. Right-click the hard disk drive that you want to check, then click properties



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3. Click the tools tab then, under error-checking, click check now

- To automatically repair problems choose *automatically fix file system errors* otherwise the check will report problems but not fix them
- To perform a thorough disk check, choose *scan for and attempt recovery of bad sectors*. This programme attempts to find and repair physical errors on the hard disk and you should note that this can take time to complete
- To check for both file and physical errors choose both *automatically fix file system errors* and *scan for and attempt recovery of bad sectors*

4. Click Start

#### *Windows XP Users*

1. In the start menu, click my computer
2. In the dialog box, right-click the drive you wish to check for errors. For most of us, this is the C: drive, but you may have multiple drives on your computer. Next, click properties
3. In the properties dialog box, click tools and then in the error-checking section, click check now. A check disk dialog box will appear
4. In this box, tick all the check boxes then click start
5. You will see a message box that says you can schedule the disk check for the next time you restart your computer. Click yes and your computer will run a disk check before displaying your login screen when you next restart. When the disk check finishes, Windows will bring you to your login screen



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### *Remove temporary files*

Your computer can pick up and store temporary files when you're looking at webpages or even when you're working in programmes like Microsoft Word. Over time, these files slow your computer's performance and the Windows disk clean-up tool is there to remove them.

### *Windows 7 and Windows Vista users*

1. In the start menu, click *all programs, accessories, system tools* and then click disk clean-up. Disk clean-up will automatically scan your for files you can delete
2. If the drive selection dialog box appears, choose the drive you want to clean, then click ok
3. Click the disk clean-up tab, then tick the check boxes for the files you want to delete
4. Choose the files you want to delete, click OK then, to confirm the operation, click delete files

Disk Clean-up then removes all unnecessary files from your computer.

### *Windows XP users*

1. In the start menu, click my computer
2. In the dialog box, right-click the drive you wish to check for errors. For most of us, this is the C: drive, but you may have multiple drives on your computer. Next, click properties
3. in the properties dialog box, click disk clean-up
4. Disk clean-up calculates how much space you can clear on your hard drive. After the scan the dialog box shows the files you can remove. This may take a while depending on how many files you have on your computer



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5. After the scan is complete, in the disk clean-up dialog box click view files, choose the files you want to delete select, the click OK.
6. You can also select the *more options* tab in the disk clean-up screen to look for programmes you don't use much anymore and remove them

### *Disk defragmentation*

Disk defragmentation is the process of consolidating fragmented files on your computer's hard disk.

Fragmentation happens over time as you save, change or delete files. The changes that you save to a file are often stored at a location on the hard disk that's different from the original file. Additional changes are saved to even more locations. Over time, both the file and the hard disk itself become fragmented, and your computer slows down as it has to look in many different places to open a file.

Disk defragmenter reunites fragmented files so your computer can run more efficiently. In Windows 7 it runs on a schedule so you don't have to remember to run it, although you can still run it manually or change the schedule to suit.

To run the disk defragmenter manually:

### *Windows 7 and Windows Vista users*

1. Click start, all programs, accessories, system tools, then disk defragmenter You may be prompted for a password or confirmation
2. Choose the drive you want to defragment then click analyse disk. Disk defragmenter will evaluate the disk then make a recommendation as to whether it needs defragmentation
3. If defragmentation is recommended, click defragment disk. The defragmenter reorganizes files by placing them together and sorting them by program and size



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To adjust the schedule:

1. Click start, all programs, accessories, system tools, and then disk defragmenter. You may be prompted for a password or confirmation
2. Click configure schedule
3. In the disk defragmenter: modify schedule dialog box, choose how often, which day, what time of day you want defragmentation to occur, and on which disks, and then click ok
4. Click ok again

*Windows XP users*

1. In the start menu, click my computer
2. In the my computer dialog box, right-click the drive you wish to check for errors (for most of us this is the C: drive, unless you have multiple drives on your computer) and then click properties
3. In the properties dialog box, click tools then, in the defragmentation section, click defragment now
4. In the disk defragmenter dialog box, choose the volume (most likely your Local Disk C :) at the top of the screen, and then click analyse
5. After analysing your computer the defragmenter displays a message stating whether you should defragment your computer. Press defragment if required. The defragmenter reorganizes files by placing them together and sorting them by program and size



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### *Remove spyware and protect your computer from viruses*

When you surf the web, spyware and other types of malicious software, also known as malware, collect personal information about you.

The result is that your personal information could be compromised. At the same time, spyware and malware can slow down your computer. Download AVG for free to help guard your system from viruses, spyware, adware, and other malware. AVG acts as a spyware removal tool and provides updates to help keep your system running efficiently and protect it from emerging threats.

Other protective software includes CC Cleaner and SpyBots

### *Automate Windows Update*

Microsoft frequently releases updates for Windows and other Microsoft products. Using Windows update you can find and install these updates which will often improve your computer's performance.

You can make life easier by automating Windows update so that your computer downloads and installs all the updates without you having to worry about them.

### *Windows 7 and Vista users*

1. Click star, all Programs then Windows update
2. In the left pane, click change settings
3. Under important updates, choose install updates automatically
4. Under recommended updates, choose *give me updates the same way I receive important updates* then click ok

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### *Windows XP users*

1. In the start menu, click control panel
2. In the automatic updates dialog box choose *automatic*. You can define the time of day that your computer should check for updates. If the computer finds any updates, it will download and install them automatically for you
3. Click ok