10 SIMPLE STEPS TO SPEED UP YOUR COMPUTER

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PREFACE

Have you found that over the months or years of using your computer that it has slowed down considerably from the day when you first purchased your computer or laptop. This may be because no housekeeping tasks have been performed on your computer system. In this guide, I will be demonstrating step-by-step how you can speed up your computer with just a few simple tweaks.

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1. Deleting Temporary Internet Files

The most basic form of housekeeping is to delete all temporary internet files. These files are accrued when you use your browser to surf the internet. They can also take up huge amounts of disk space. This can thus slow down the computer. Once these files are deleted, your internet browsing experience should be much improved. Use the following to delete your temporary internet files:

- Open Internet Explorer, go to the **Tools** menu and select **Internet Options**
- Now select the **General** tab, then click on **Delete** button. (See Fig. 1)
- The Delete browsing history window will open (Fig. 2). Ensure that **Temporary Internet Files option** is selected (you can also select for deletion the other options, such as cookies), then click **Delete** button.
- Now click **OK** to close all of the dialog boxes.

You should now enjoy a quicker internet experience. This process must be repeated for each user account that you have on your computer or laptop.
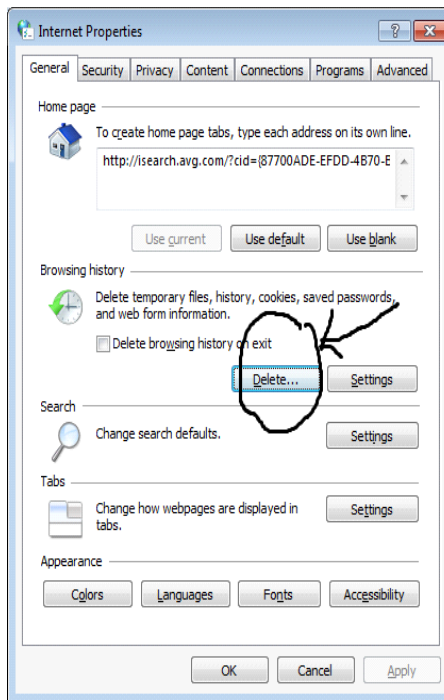
Fig 1. Internet Explorer - Internet Options

Fig. 2 Internet Explorer Options To Delete

2. Disk Defragmentation

A second and very powerful housekeeping tool is the "Defrag" utility. This used to rearrange data blocks normally stored randomly or your computer hard drive. By rearranging the data blocks into a more contiguous order, the time taken to access files stored on the hard drive will be dramatically reduced. Therefore generally opening and closing files and applications will be much quicker than before running the tool. In fact, the more data blocks defragged, the faster your computer will generally be. To execute the defrag utility, use the following:

- Open-up **My Computer**.
- Choose the volume or disk you want to defrag and then Right-click the local disk volume or disk, and then select **Properties**.
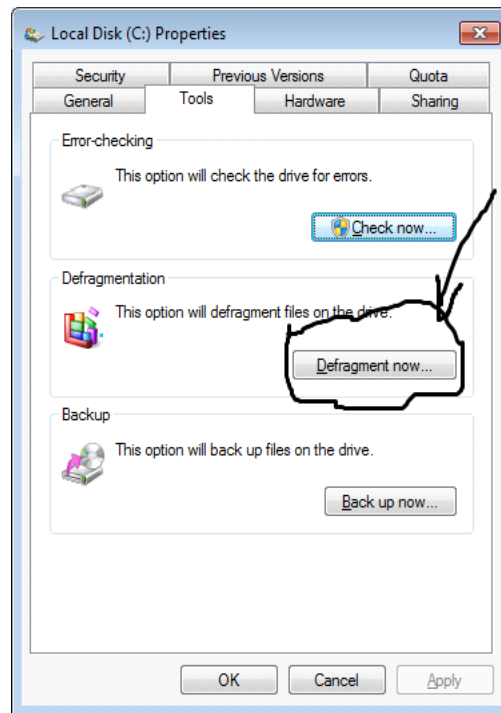- On the **Tools** tab, click **Defragment Now**. (See Fig 3)
- Click **Defragment**.

Fig 3. Disk Defragmentation

3. Perform a CHKDSK

This is a seldom used but one of the most essential steps to making your computer run faster. The CHKDSK (or CHecK DiSK) utility will detect any physical errors on the hard drive and then attempt to repair them.

To perform an integrity check of the computer's hard drive(s) use the following steps:

- Double-click **My Computer**, and then right-click the hard disk drive you want to check.
- Click **Properties**, and then click Tools menu and then the **Check Now** button (Fig 4)
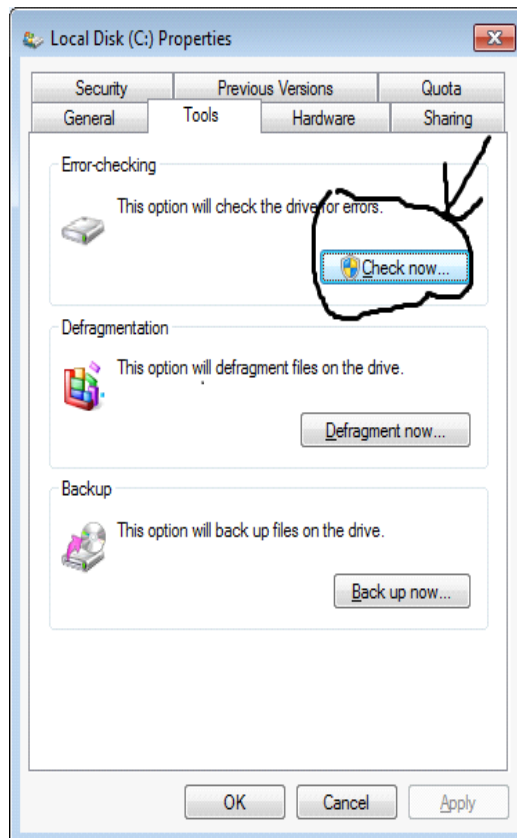- Now select the option to scan and attempt recovery of bad sectors (Fig 5)
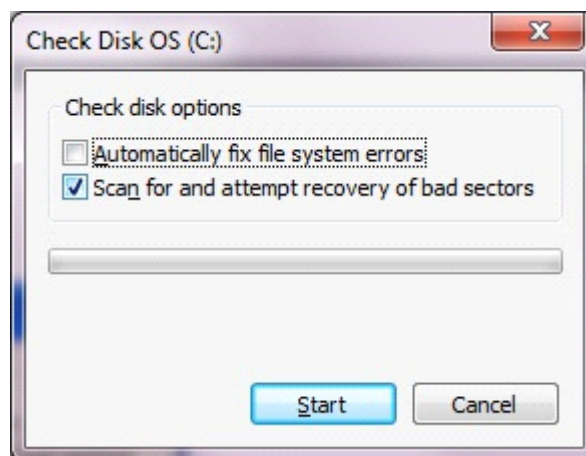

Fig 4. Selecting CHKDSK

Fig 5. Selecting CHKDSK Options

4. Perform a Disk Cleanup

The disk cleanup utility is the Windows utility that removes temporary files and other unnecessary files from your computer. This utility is able to identify those non-essential files which simply take up unnecessary disk space. It will then be your choice to remove the files identified.

Some of the types of files which can be removed by this utility include the following: temporary Internet files, downloaded program files, ActiveX controls and Java applets that are downloaded from the Internet, contents of the Recycle Bin, Windows temporary files.

To Perform a Disk Cleanup, use the following steps:

- Open-up **My Computer**.
- Choose the volume or disk you want to defrag and then Right-click the local disk volume or disk, and then selects **Properties**.
- On the **General** tab, click **Disk Clean-up**. (See Fig 6)
- You will then see the window to select all options that will clean up your computer (See Fig. 7)
- After you have picked the required options, click **OK**
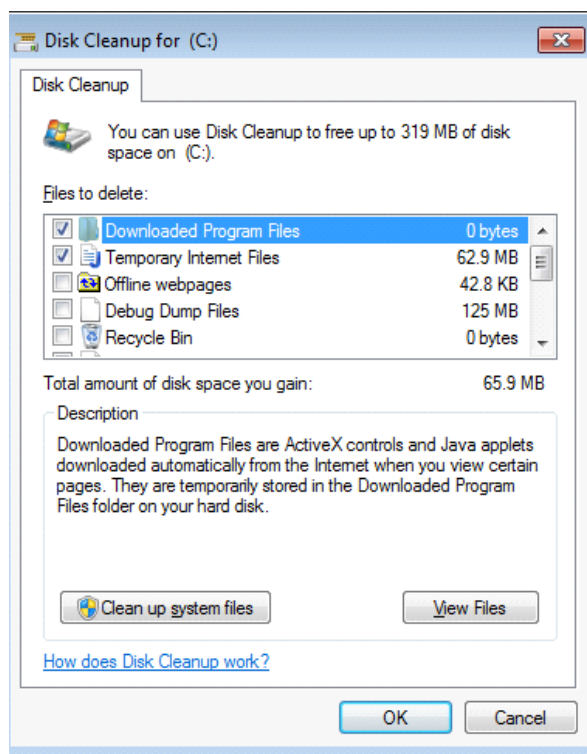
Fig 6. Disk Cleanup Utility

Fig 7. Options to Cleanup Disk Space

5. Registry Cleaner

Another housekeeping tool would be to use a Windows registry cleaner program. The Windows registry is essentially a hierarchical database that stores settings for the Windows operating system and all related applications. A general registry cleaning application will be able to analyse the Windows registry database for any issues causing it to be slower than normal.

Most registry cleaner programs are simple to use. You should not really need any kind of training to use them. Most registry cleaners have a graphical display to show you step-by-step what the utility is doing to make your slow computer run faster. Some advanced house-keeping tasks included in some registry cleaners are deleting temporary files, removing unwanted processes, erasing your activity history, blocking dangerous ActiveX controls.

6. Antivirus Software

A computer virus is a kind of program that is able to reproduce itself. This can be achieved by embedding itself within an ".exe" (or executable file) which may be a legitimate part of the computer's operating system or application suite.

The type of virus attaching itself to an executable file is known as a non-resident virus, i.e. it does not load itself into computer memory to infect computer files. A resident virus, however, is loaded into memory and will infect each program or application that the operating system calls to execute.

A suitable business-grade antivirus program should be able to detect and remove both a non-resident or a resident types of virus from your computer. It should also be able to protect your computer from becoming infected in the first place.

7. Anti-Malware Software

Another reason why your computer may be running slowly is that it may be infected with malware (or malicious software). These types of software do not usually replicate themselves. They usually just interfere with the everyday operation of your computer system. Malware can perform tasks such as collecting user passwords or logging keystrokes of users. They do this by operating in a stealth-mode. A common way for malware to run undetected is by using a "Trojan horse" technique; the naming is synonymous with the Greek Trojan horse legend. A Trojan will look like it may be performing a legitimate task such as a screen saver but may in fact be secretly collecting credit card details.

To ensure that you have protection against malware, then you should also use a suitable anti-malware program. Some antivirus programs also include basic abilities to deal with malware.

8. Increase Virtual Memory

Virtual memory is a memory management technique used by multi-tasking computer processors. This works by combing both computer memory with hard disk space (contiguous blocks of data). When a particular application requires access it will use virtual "page files". A page file is process (or element of an application). The computer will try to swap idle "pages" stored on disk with active pages stored in memory.

Just by increasing the virtual memory, can have a significant affect on your computer's performance. Typically the virtual memory should be set to at least 1.5 times the actual physical memory of your computer. To find out the actual amount of physical memory of your computer, use the following: Click Start button, click Control Panel, select **System** (See Fig. 8)
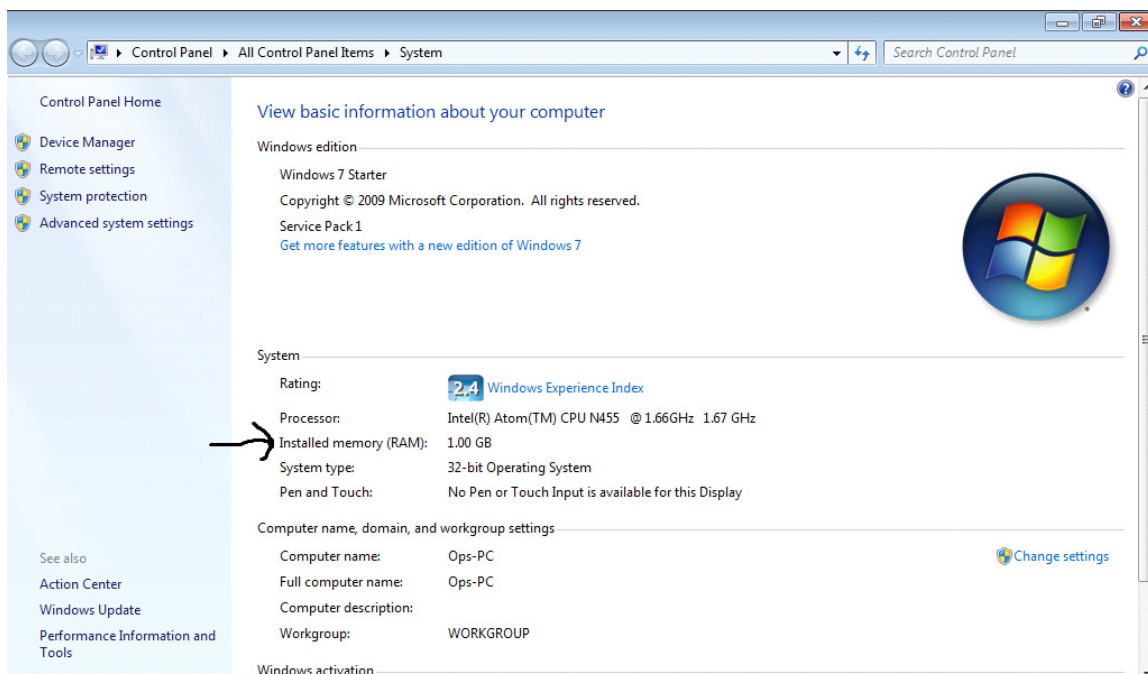

Fig. 8 Checking Physical Memory

You can then set the virtual memory by the following:

- Click Start button, click Control Panel, select **System**
- In the left pane, click **Advanced system settings**.
- On the Advanced tab, under Performance, click **Settings**.
- Click the Advanced tab, and then, under Virtual memory, click **Change**.
- Clear the Automatically manage paging file size for all drives check box.
- Under Drive [Volume Label], click the drive that contains the paging file you want to change.
- Click **Custom size**, type a new size in megabytes in the Initial size (MB) or Maximum size (MB) box, click Set, and then click OK.

9. Uninstall Unused Programs

You can then uninstall unnecessary programs by using the following:

- Click Start button, click Control Panel, select **Programs and Features**
- Now select a program that you wish to uninstall
- Subsequent to selecting a program, you will notice an **Uninstall** button at the top of the program list (See Fig. 9)
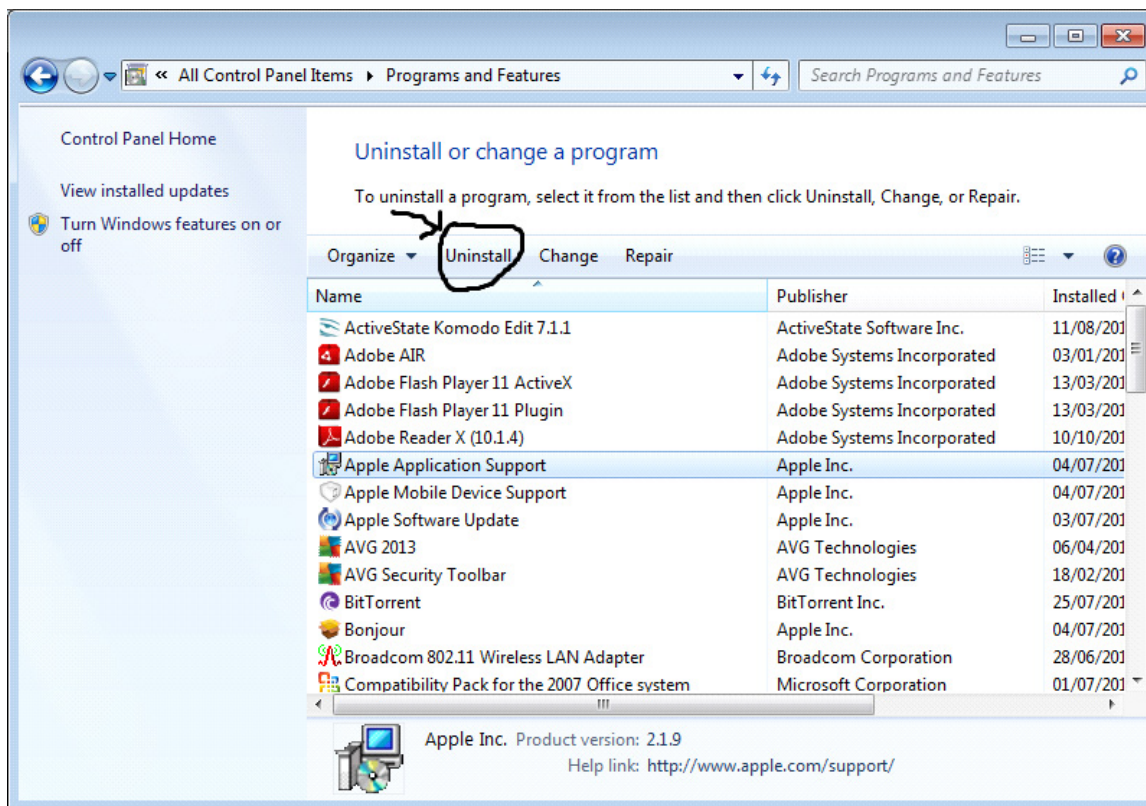- Now click on **uninstall** to remove the undesired program.

Fig. 9 Uninstalling Programs

10. Add More Memory (RAM)

The final way we recommend to speeding up your computer is just by adding more physical computer memory. You may need to refer to your computer manufacturer to advise you on the type of computer memory you will need to upgrade. They will let you know the maximum amount of memory to which you can upgrade.

Note that Microsoft Windows also has a maximum memory capacity. This is dependent on the processor and Windows version. For instance Windows 7 Starter (x86 editions) has a maximum memory capacity of 2GB RAM (Random Access Memory).

CONCLUSION

Subsequent to performing these housekeeping tasks, your computer should be in a state similar to when you first purchased your computer. You should not just leave it there though. Tasks 1 - 4 should perhaps be performed at least on a weekly basis.