

# Basic PC Maintenance

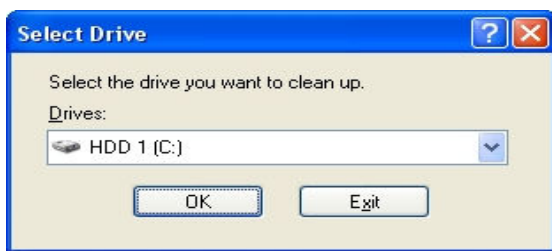
\* This guide was created for Windows XP, but Windows Vista uses a similar procedure \*

To allow your computer to operate much more effectively, some maintenance is required. This guide will explain some of the basic things you can do to keep your PC running smoothly. There is some advanced maintenance you can undertake to further improve performance, but this will not be covered here because it can be troublesome for inexperienced PC users.

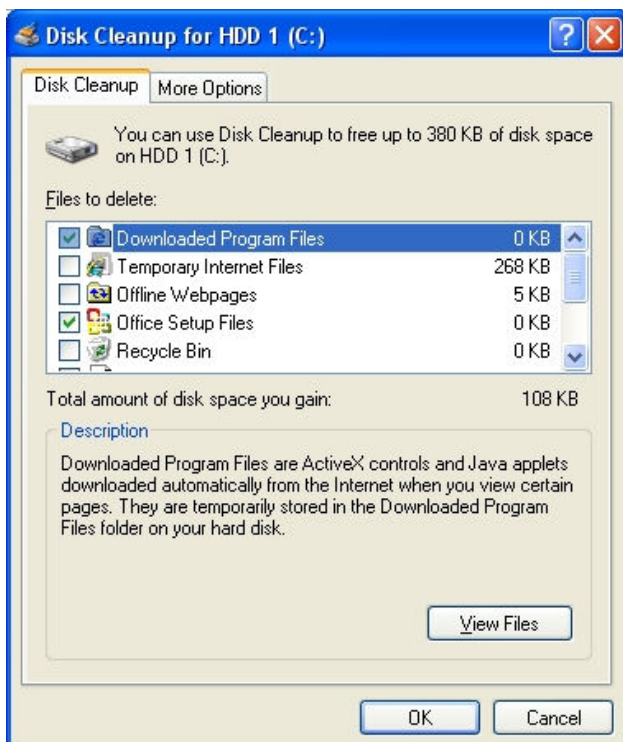
## 1. Disk Cleanup

Disk cleanup will allow you to clean out your **Recycle Bin**, remove **Temporary Internet Files**, and **Compress Old Files** (to save space), along with a few other options. This can improve performance by a significant amount.

To run Disk Cleanup, go to **Start > Run > type cleanmgr** and press **Enter**. If you have more than one Hard Drive, you will see this dialog box (you will not see this if you only have 1 Hard Drive):



Select the drive you wish to clean, then click **Ok**. You will now see a progress bar that's checking your Hard Drive, then after a few moments you will see this box:

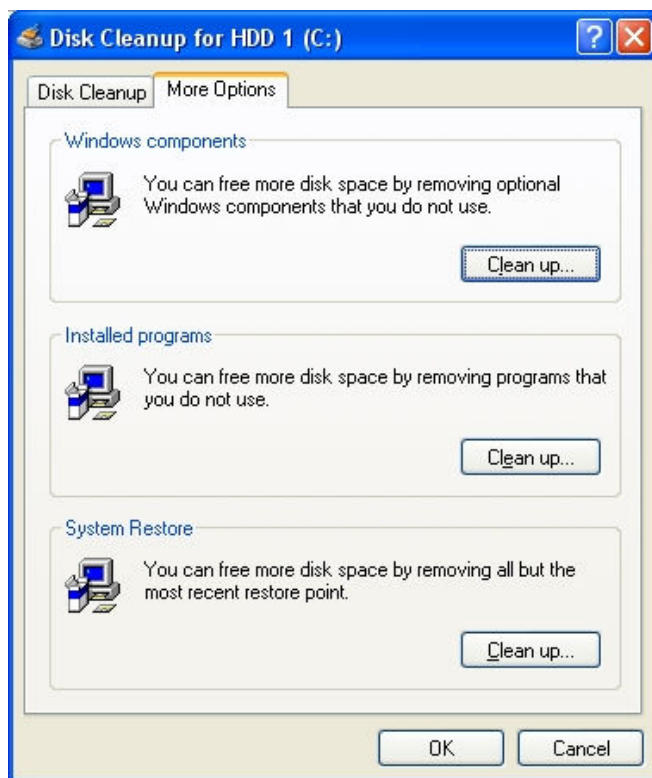


As you choose items from the list, you will see how much space you will save on your drive. Once you've chosen every item you wish to clean, click **Ok**. You will see the progress bar once again, and this may take a few minutes to complete as your files are cleaned.

If you have other Hard Drives you wish to clean, run **Disk Cleanup** again.

## **More Options**

On the main Disk Cleanup page, you will see a tab labelled **More Options**. Click this and you will see the following screen:



Here you can remove **Windows Components**, remove **Installed Programs**, or cleanup **System Restore** files. The first two can also be achieved by the usual procedure in **Add or Remove Programs** from the **Control Panel**. We will only concentrate on the **System Restore** cleanup option here.

Clicking this button will remove all system restore points, except the most recent one, so please be aware of this before clicking this option. The best advice here is to **manually** create a system restore point first, you can do this from your **Control Panel**.

That's the basics covered for Disk Cleanup, if you need further assistance on this, please check Windows **Help and Support** from your **Start** menu.

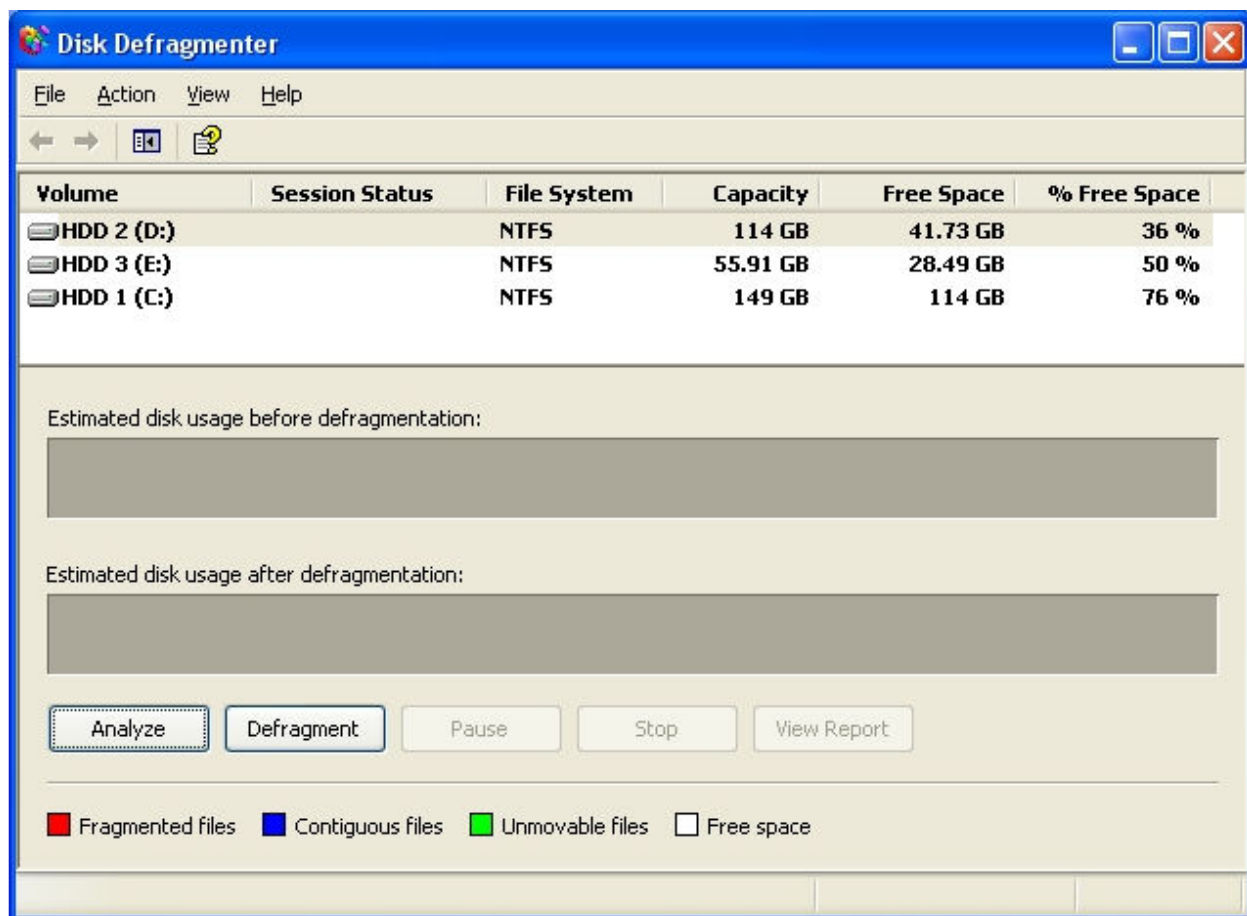
## 2. Disk Defragmenter

The **Disk Defragmenter** is a tool for reorganising file fragments on your drive, placing them in the correct location. This can improve performance on your PC in every area, especially big applications like games.

File fragmentation will occur with everyday use of your PC. As you move files around, install applications, or even surf the internet, your files become fragmented. These fragments cause Windows to work that little bit harder to locate the files it requires, defragmenting your drives restores these files, making reading from and writing to the drive, much more efficient. This will allow your applications to run faster and smoother.

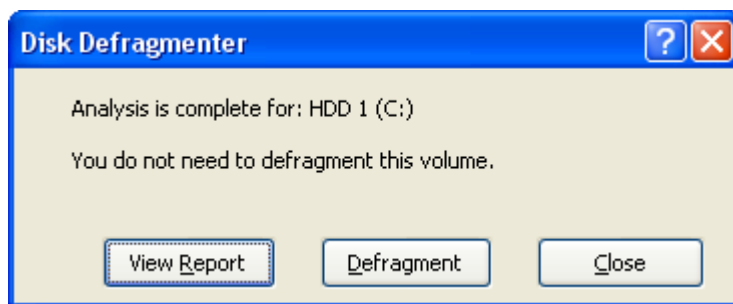
To allow Disk Defragmenter to perform correctly, you will need at least **15% free space** on your hard drive. If you have less than this, defragmentation may take a long time, and it may not work correctly at all.

To run Disk Defragmenter go to **Start > Run > type dfrg.msc** and press **Enter**. You will see a dialog box similar to this one:



In this example, there are 3 hard drives. If you have more than this, they will be listed here.

The best way to proceed from here is to **Analyze** your drive first, it may not need defragmenting. Click the drive you want to check, then click **Analyze**, you will receive a notification on this result, similar to the one below:



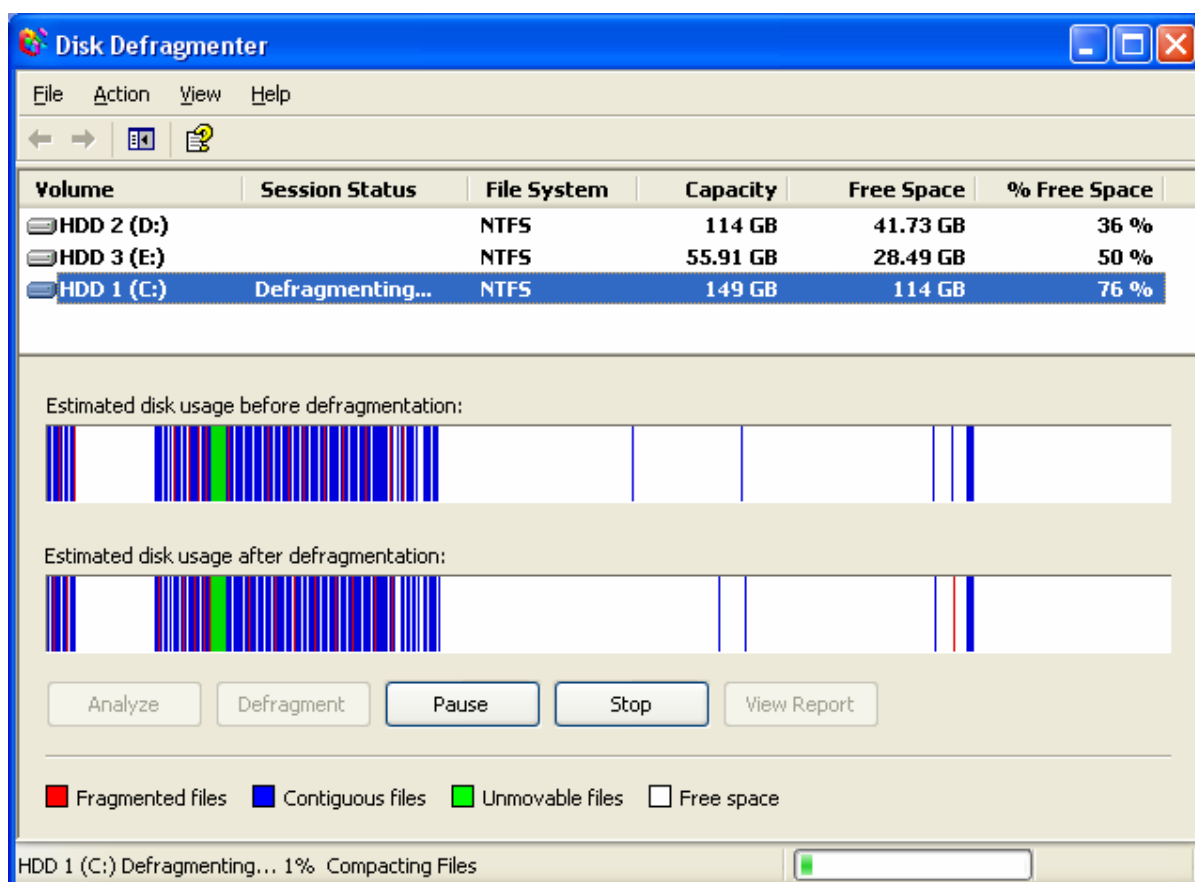
You now have 3 choices (as listed).

**View Report** – This will give you a more-detailed explanation of the analysis, including which files are fragmented, and how many fragments there are of these files.

**Defragment** – Just as it says, this will perform the defragmentation of the drive.

**Close** – This will close this dialog box, and return you to the main Disk Defragmenter screen. From there you can analyze another drive if necessary.

If you choose to **Defragment** the drive, you will see a screen similar to this:

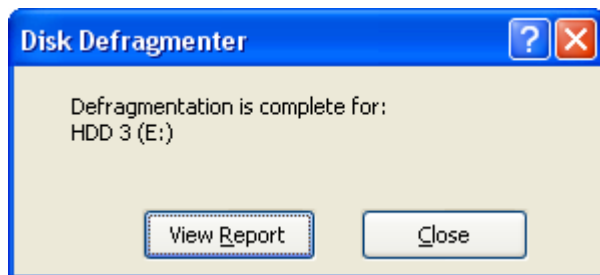


You will now notice two main areas of interest, where the coloured bars are located. The top area is how your drive looks now, the bottom area you will see change over time, this is defragmentation actually working on your drive.

At the bottom of this page, you will see the status of the defragmenter, this tells you what is being done to your drive (basic information). You can also stop the defragmentation, or pause it from here.

- It is always a good idea to leave this process to complete fully, and not access your PC whilst this is working.

Once this process is complete, you will see a screen similar to this:



Check the **Report** if necessary, otherwise click **Close**.

You can then perform Defragmentation on another drive, or close the Disk Defragmenter.

These two Disk Management tools can also be accessed here:

**Start > All Programs > Accessories > System Tools**

\* In Windows Vista, the interface is slightly different to Windows XP, but the process is essentially the same.

## **Viruses and Spyware**

Two words that strike fear into the hearts of most PC users, but they aren't as bad as they first appear, so long as you're careful. Viruses are basically software programs, written to interfere with your PC in many different ways.

Spyware (Malware) are little programs designed to send information back to the place they came from, but they can also interfere with the control of your PC. The information that may be collected can include your surfing habits, this allows the creator's of these programs to **target** users with specific 'goods for sale' or 'special offers of interest to you'.

Viruses and Spyware can be removed easily with the aid of an Anti-Virus program, and/or an Anti-Spyware program.

It's always a good idea to have up-to-date security software installed, this will usually prevent problems occurring, thereby reducing the need for **Emergency Maintenance** to remove these annoying little programs. There are a number of **free** Anti-Virus programs available from various manufacturers, one of the most popular is **AVG-FREE**.

A free Anti-Spyware program created by Microsoft called **Windows Defender**, is very easy to use and works with your Operating System to provide effective cover.

If you have problems with programs, or your PC seems to be acting strangely, it may be an idea to check for Viruses and Spyware. You can get a free check on your PC here:

<http://housecall.trendmicro.com/>

You may need to install software onto your PC to allow the site to check for malicious programs. Always read any instructions thoroughly before proceeding.