

Defragmentation

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What is Defragmentation?

As you start to create and delete files and applications on your computer the hard drive will become fragmented. This means that your data is split into chunks and stored in different areas of the hard disk. The more fragmented your drive is, the less efficient your computer operates. Defragmentation consolidates the separate chunks, frees up disk space and speeds up your computer.

In simple terms imagine your hard drive as a bunch of little containers (with empty space being empty containers). An unfragmented hard drive would have all of the containers for programs or files next to each other like this:



Now what happens when you delete a program or file? An empty space will result and your hard drive will look like this:



Next time a file is written to the drive it will be placed in the first empty space. If the file is larger than the empty space it will be split up with part being written to the empty space and the next part be written to the next free space and so on.



Eventually files will be split up into multiple sections, causing files to be located in various containers throughout the entire drive. The result is a hard drive looking something like this:



To defragment is to take all of the fragmented pieces and put them back in order. Windows comes with a defragmenting program. You can also get third party software such as Norton Utilities which comes with a defragmenting program.

How To Defragment Your Harddrive?

The following steps list how to defragment your hard drive. You should defragment your hard drive every few months, if you often add and/or remove programs and files you should defragment more often. If you have any problems please contact DP Computing.

Note:

1. You should stop using your computer while you are defragmenting the drive. It is possible to continue to use your computer but your computer will operate slower and the defragmentation process restarts if the contents of the harddrive changes.
2. You should stop all programs running including your screen saver.
3. The defragmentation program can take a long time to run. It is recommended that you run this program overnight or when you do not need to use the computer for a few hours.

Windows 95/98/98SE/Millennium

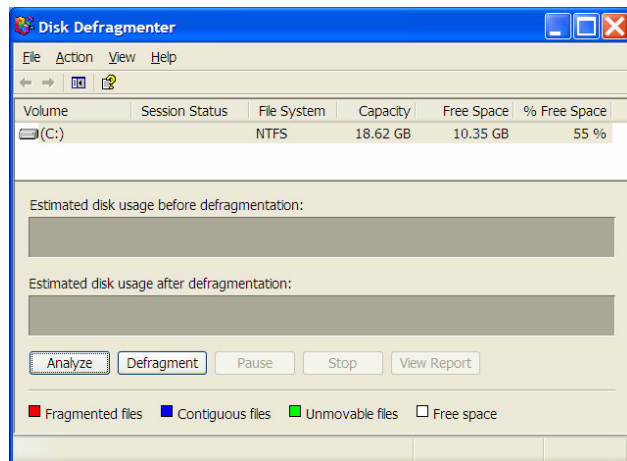
To start the Disk Defragmenter program in MS Windows 95/98/98SE or Me, use the following steps:

1. Click on the **Start** button, then move to the **Programs**, select **Accessories**, then **System Tools**, and then click on the **Disk Defragmenter**.
2. Select the drive you wish to defragment (usually Drive c), click **OK**, and then click **Yes**. Wait for the defragmentation tool to finish (this may take a long time).



Windows 2000/XP

1. To open Disk Defragmenter, click **Start**, point to **All Programs**, point to **Accessories** then **System Tools**, and click **Disk Defragmenter**.
2. Click the drive you want to defragment, click the **Defragment** button and then wait for the defragmentation tool to finish (this may take a long time).
3. If you have any problems running the defragmenter you may need to be logged on as an administrator or a member of the Administrators group.



Windows NT

Windows NT does not have a built in defragmentation tool. Third party defragmentation tools are available. Please contact DP Computing for details.

Further Help and Assistance

If you need further help or assistance on this or any other computer problem please contact DP Computing at the address below.

This article is part of a series of articles by David Perkovic of DP Computing aimed at helping users gain effective use from their computers. Other articles in the series can be found at: <http://www.dpcomputing.com.au/articles>

DISCLAIMER: *We will not be held responsible for any damage or data loss to your system. If you are in doubt over something or if the steps are different than what you see on your computer contact a professional.*

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