## TECH SHEETS



# Quick definition

#### **Fragmentation**

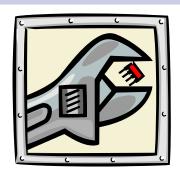
Fragmentation is the breaking up of files into many smaller sections on different parts of the disk. The computer operating system stores files this way so that maximum use can be made of disc space.

## Defragmenting your hard drive

Every time you save a file to your computer, it's not a perfectly clean operation on the inside: bits and pieces of the file are left floating on the hard drive. While you can't see or access these bits and pieces, your computer can, and every time you open a file, it has to scan through them.

This process slows down the computer, sometimes slightly, sometimes significantly; in extreme cases, cause programs to not open.

Defragmentation is a



clean-up tool found on PCs and Macs alike that will rearrange all these bits and bytes to allow your computer to run more quickly. Think of defragmentation as a kind of clean-up of your hard drive!

Defragment your hard drive once a month. It'll take a long time, possibly several hours, so try doing this one overnight. Get the defragmentation started before you go to bed, and in the morning the it will be complete. It won't harm your computer to be on all night.

If you've never done this to your computer, it's really going to take some time!

#### Here's how to do it

① Close all the programs on your computer. All of them. If you're in doubt that anything is open, restart your computer.

At this point, you should just see your desktop.



② Open up Windows Explorer. Windows Explorer is a different program than Internet Explorer; you may have to search for Windows Explorer under "Start", then "Accessories".



In Windows Explorer, click on "My Computer: to find your C: drive (hard drive). At this point you should see something like the image above.

### Here's how to do it (con't.)

#### A shortcut

You can call up defragmentation very quickly by going to "Start," then "Run" and typing in DEFRAG. ③ Right (not left!) click on the icon that says Local Disk C: drive with your mouse. Choose "Properties" — it's one of the options towards the bottom.

At this point, you should see a new screen that says "Local Disc C: Properties" like in the illustration below.



① Choose
"Defragment now".
Once you're at this box, click "Analyze". In a few minutes, it'll return a



message that will tell you whether or not you actually need to defragment your hard drive.

⑤ If you receive a message that tell you that you should defragment your disk, choose "Defragment now".

© It's essential that you allow the defragmentation to continue without using your computer for any other function; the defragmentation will continue for several minutes or hours until it's completed.

Special note:

If the defragmentation takes a very long time, you may need to turn off your screen saver. Do this by going to:
Start > Settings > Control Panel > Display, and select "none" under "Screen saver."

#### Further resources

#### CONTACT US

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About.com

http://www.about.com/compute/

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Hutchinson Dictionary of Computers http://www.tiscali.co.uk/reference/dictionaries/computers/

An online dictionary of computer terms. The dictionary originates in England, so the spelling of computer terms may be a little different than American usage.