



Penrith Valley Seniors Computer Club Inc. Club Newsletter

P.O. Box 4063
Penrith
N.S.W. 2751
Tel. 47210609

Editor:
Tom Lehane

Penrith Valley Seniors Centre
86 Station Street Penrith N.S.W.2750

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Email pvsc@internode.on.net

President: George Bell	Tel: 4721 3681	Member: Norm Cobban	Tel: 4736 3513
Vice-President: Alan Lees	Tel: 4736 5541	Member: Anne Roddick	Tel: 4721 4343
Secretary: John Windle	Tel: 4731 2149	Member: Zillah Warner	Tel: 4729 3096
Treasurer: Bert Foster	Tel: 4754 3008	Member: Jim Tiberi	Tel: 4735 1981
Social Committee: Zillah Warner, Anne Roddick		Webmaster: Tom Lehane	Tel: 4721 5375

Visit the clubs' web page for training courses www.users.on.net/pvsc/training.htm

Visit the clubs' web site www.users.on.net/~pvsc/index.html

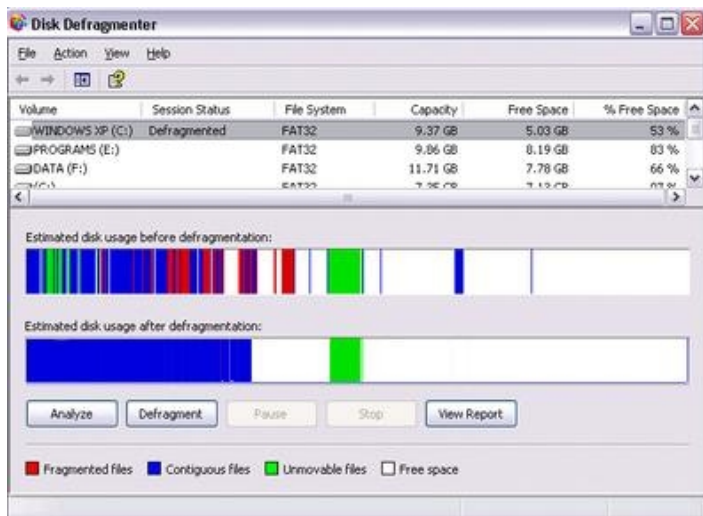
Weekly Schedule for Computer Courses

Mondays 9.30am to 11am Beginners & Do your own thing. Tutor: Zillah Warner 11.00 am to 12.30 pm Graphics. Tutor: Zillah Warner	Tuesdays 9.30am to 11am Beginners & Do your own thing Tutor Bert Foster
Wednesdays 9.30am to 11am Using the Software Tutor Tom Lehane	Thursdays: 9.30am to 11am Card Making , Beginners and Do your own thing. Tutors Clare Dixon & Zillah Warner
Fridays: 9.30am to 11am Memories to TV . Tutors John Windle, Norm Cobban: Beginners & Do your own thing. Tutor Alan Lees	Using Microsoft Office suite Fridays Tutor Jim Tiberi Class time 11.00 am to 12.30 pm

Defrag XP hard drive

Defragging, or more properly, defragmenting, is the process of taking all the parts or "fragments" of a file on your hard disk and making sure that they are physically next to each other, and in order. Files don't need to be that way ... the first part of your file could be on the outer rim of the hard disk, the next part somewhere on the inner portion, and other parts scattered in between. The "problem" that defragging solves is when all those pieces are next to each other and in order, the hard disk has to do a less work to access the file so your file loads faster.

The attached 'Coffee Break' explains how to defrag your hard drive.



The image shows before and after defragging. The top window with the red lines are the files that are fragmented. The blue colour are the files that are physically next to each other. A member asked, "The green section can't be moved, why"? The colour legends indicate what each colour

represents and GREEN are 'Unmovable Files'. The green section is know as **Virtual memory**. When you first installed Windows (XP, Vista or Windows 7) virtual memory is created during installation. It is 1.5 times the physical RAM (**Random-Access Memory**) on your computer. Therefore, a computer that has 1GB (**GigaByte**) of installed RAM will have 1.5GB of virtual memory.

So how does it work? Example, if you load the operating system (Windows) then a E-mail program, a Web browser and word processor into RAM simultaneously with a large document in the word processor, 1GB may not be enough to hold it all. If there were no such thing as **virtual memory**, then once you filled up the available RAM your computer would have to say, "**Please close an application to load a new one.**" With virtual memory, what the computer can do is look at RAM for areas that have not been used recently and copy them onto the hard disk (in the Virtual memory reserved space on your hard drive (Green section). This frees up space in RAM to load the new application. It is normally allocated to the centre of the hard drive.

To Shut Down Your Computer.

Shutting down Windows properly before turning your computer off is important. Windows often keeps things in memory (RAM) Memory) that you really want to have written to disk, and shutting down Windows gives it the opportunity to flush all that information out to the hard drive. In addition, if you happen to turn off the power while Windows is writing something to the disk you run the risk of corrupting files; in the simplest case you may never notice. In the worse case your system might become unbootable.



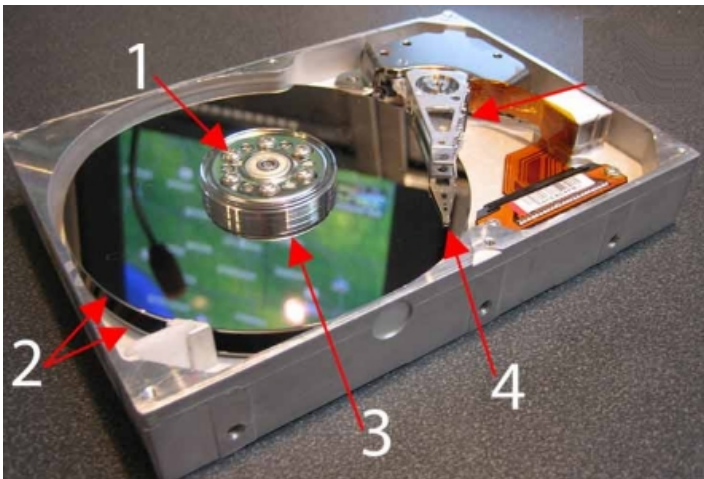
**Tuesday
18 May
at 1pm**

Many of you will be in the future either up-grading from Vista or purchasing a new computer with **Windows 7**.

This is your chance to learn what's new in this operating system and become acquainted with

Microsoft's new office suite. This is a ten week class and will be commenced on Tuesday 18 May at 1pm for those wishing to attend regarding the basics of Windows 7; Microsoft Word 2007 and Excel 2007. Names to be submitted on sheet at sign in table.

Computer Hard Drives



Another important reason to shut down Windows properly before turning your computer off.

Hard drives are so named because the platters (No 2) are usually made from aluminum, glass, or ceramic material and covered in a microscopic magnetic coating. Not like the floppy drives where the material was flexible and the read/write heads actually touched the surface. The hard drives' heads (No 4) ride on a cushion of air that is created by the drive's electric motor (No 1) that spins at 15000 RPM (rotations per minute). Some laptop drives are currently available in 4200, 5400, and 7200RPM speeds mainly to conserve operating battery time.

When you shut down your computer the read/write heads move to the landing zone (No 3) and come to rest on part of the platters that does not have any

magnetic material. This prevents the read/write heads from damage and the surface of the hard drive platters from scratches which would damage the surface.

If you just switch off the power then everything just stops and that includes the hard drive. The read/write heads may be in the centre of the platters and would land in that area.

When you turn your computer back on the hard drive motor spins the platters up to speed and draws air with them through friction. This moving air actually causes the head to "fly" over the platter like an airplane wing and is called an air bearing. Just like an airplane the read/write head needs a take off zone and if it's sitting in the centre of the platters then it will scratch the surface.

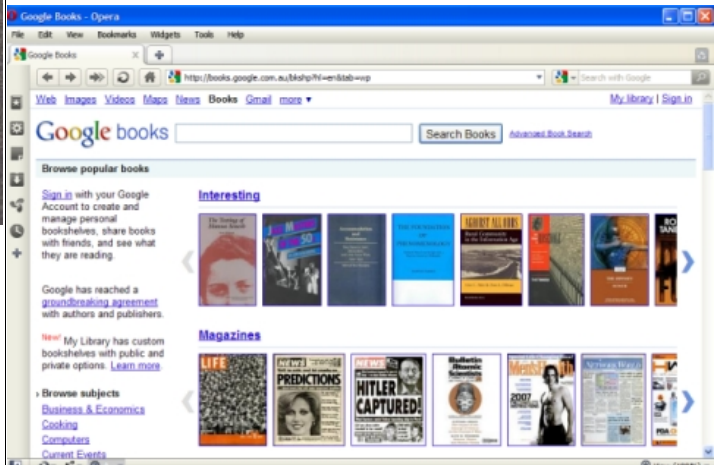
If you don't shut down your computer correctly, this will eventually cause your drive to fail.

Information on drive speeds and surface material obtained from the internet. (Editor)

Web Watch

Google announced a partnership with several major libraries to make digital copies of their collections and permit the text of the literature to be searched online by the Google search engine.

This is now available on Google books. On Google's search page at the top left you will find a link named **Books**. Click this link and you are presented with an array of books and magazines that you can click on and read.



There is also a search option where millions of books from libraries and publishers worldwide are in Google Book Search. Discover a new favorite or unearth an old classic.

The articles and comments on disk drives and Google Books are not associated with The Penrith Valley Seniors Computing Club Inc. Articles are intended as opinions and items of debate only.

Information obtained over the Internet from many web sites.



Coffee Break

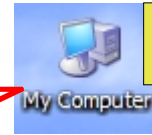
Question on Software or Operating system.

Defrag XP hard drive.

A few new members have ask 'How to defrag their Hard-Drive'?
There are a few ways to navigate to the Defrag file.

(1) By clicking [Start] [Programs] [Accessories] [System Tools] [Disk Defragmenter].

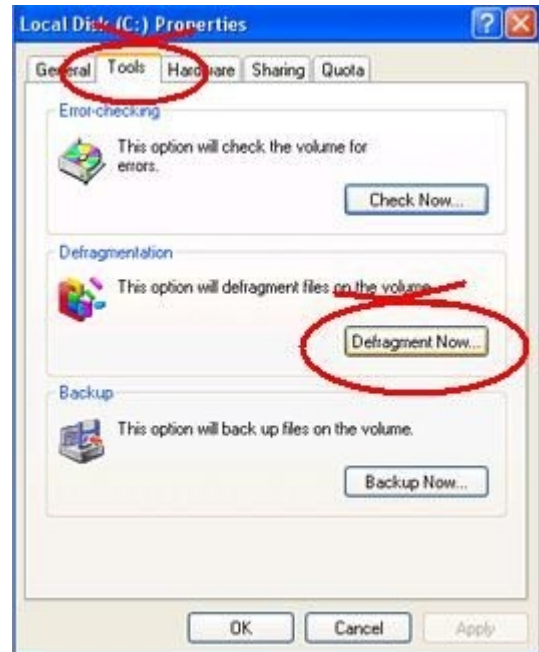
(2) The other way is by clicking on 'My Computer'



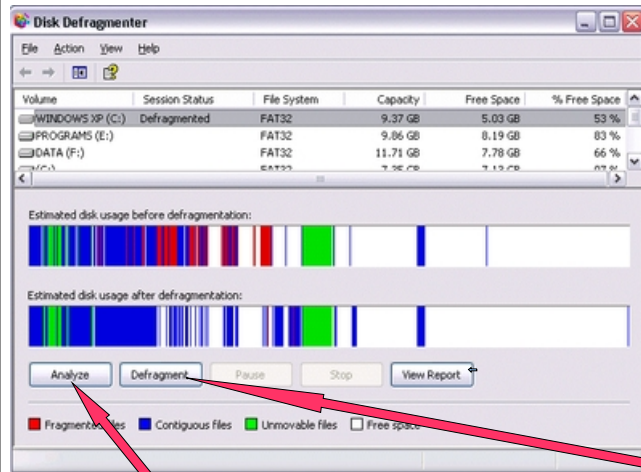
Desktop Icon



Right Click the mouse on Local Disk (C:) From the dialog box choose Properties.



The above properties menu will appear.
Click **Tools** Tab then **Defragment Now** button.



Left click the [Analyze] button to show the defragmented files. Then left click [Defragment] button.
Sometimes it can take a while to defrag scattered files, (red bars).

Factors Affecting the Time Required to Defragment a Hard Drive

1. The size of the hard drive
2. The speed of the hard drive, seek time and data transfer rate
3. How badly fragmented the hard drive is.

You can safely stop defrag at anytime by clicking the stop button. **(Only use the programs STOP button).**