Computer Tips

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Michael's Computer Services

Maintaining Your Hard Drive - 1

Those of our readers who have moved house will know the scene. Boxes of stuff scattered throughout the old house, furniture moved about but always in the way, and piles of belongings yet to be packed. Finding something you need in the middle of the move always takes twice as long—you are not sure which box it is in. Then there is the great unload at the other end, with all its attended sorting and organizing things into new places.

You may be surprised, but a similar scenario already occurs in your home on a daily basis. When you use your computer, your files are regularly moved about on the hard drive. This constant moving of files creates a situation on your hard drive known as 'fragmentation'.

Fragmentation occurs something like this. Suppose you are typing a letter, and partway through you save it to your hard drive. Next day, you open up the letter, type a few more sentences, and then save it again. When you save your letter the second time, it will not be saved in the same physical location on your hard drive. The space used the first time you saved it, is now left as a gap, which the computer must skip over when it searches for something on the hard drive.

This moving and saving of files on your hard drive, over time, greatly increases the time required for your PC to find a document you have asked it to open. Multiply this process by the number of files on your computer, and you will see how significantly slower your PC will be. Thankfully, your Windows operating system has several hard drive maintenance programs built-in which we can use to correct this problem.

The first of these programs, known as Scandisk, should always be run first before any other maintenance program. Scandisk checks your hard drive for file errors that might interfere with the running of your PC. If Scandisk finds errors, it will let you know the results, and give you the opportunity to correct them. Finding Scandisk on your PC varies depending on your version of Windows. For Windows 95, 98, and ME, go to Start, Programs, Accessories, System Tools, and you will see the Scandisk link. For Windows 2000, XP, and Vista, you can find Scandisk (called Error Checking) by going to My Computer, and right-clicking on C: drive. Then click Properties, then Tools.

The next program to actually address the fragmentation on your hard drive, is called Disk Defragmenter. This handy program searches your hard drive from the beginning, looking for gaps in the file structure. Any gaps are filled with files taken from the end of the hard drive, thus keeping all the files together. This streamlines your hard drive's file structure, preventing errors and increasing PC speed. You can find Disk Defragmenter in the same locations in Windows as is Scandisk.

Stay tuned. We will discuss how to best use Disk Defragmenter in our next column.

If you would like us to answer your questions or fix a problem with your PC, you can contact us on 4171 0981 during business hours, or email us at info@mcsit.com.au.