Windows Hard Disk Defragmenting Information

- Pinnacle Legacy

This article contains basic instructions for running the Scan Disk, and Disk Defragmenting utilities which come as part of the Windows operating systems.

1: Open a Windows Explorer(my computer).

2: On the disk that is going to be defragmented right mouse click, and select Properties.

3: Now select the Tools tab.

The first item is the Error checking module. Click on the Check Now... button, and another smaller dialog will appear. Put check marks on both "Automatically fix file system errors", and "Scan for and attempt recovery of bad sectors". Click the start button to begin the test.

The next module of interest is the Defragmentation tool. The bottom item for Windows 2000, and middle for Windows XP, when the Defragment Now... button is pressed, the Disk Defragmenting interface will appear. First select the drive that is to be defraged. The Analyze button should be clicked next. It will take a few moments for the utility to scan the drive. After the initial analysis, the Disk Defragmenting utility will report as to weather the drive needs to be defragged, or if it does not. Simply click on the appropriate button to begin the process.

What is file fragmentation?

All data as it is stored on a disk, is actually stored as a chain of smaller parts. When a file is to be written to the hard disk, the operating system uses a file system to keep track of the start of the file, and where all of it's respective pieces are. Sometimes when you install a program or create a data file, the file ends up chopped up into chunks and stored in multiple locations all over the disk. This is called fragmentation.

When you first install your operating system and programs on your hard disk, they are written to the disk, for the most part, in one contiguous block without any gaps. The exceptions are certain system files that must be stored in specific locations. Over time, as you create and then delete documents or uninstall programs, once-filled locations are left empty and you end up with files dotted all over the disk.

As the fragments begin to get smaller and smaller, and files become a tangled mess all about the drive, system performance begins to suffer as it is taking considerably more time to access data from the disk. The Disk Defragmenting utility untangles the mess, reorganizing the physical location of files on the disk making them much easier to access.
