Windows 2000 Professional and Windows XP Performance Tips

Improve Windows PC performance by Hard Drive File System optimisation.

Introduction

This article explains, in simple terms how to improve the efficiency and power of a computer's Hard Disk Drive File System by using a more powerful file system, NTFS.

Choosing a file system type

A computer, either a Windows 2000 Professional or XP based Desktop or Laptop, may have it's HDD's (Hard Disk Drives) set to the older FAT32 file system. This is far less efficient and stable than the newer NTFS. NTFS is also far more secure than FAT32.

FAT32 is an acronym for File Allocation Table 32 bit.
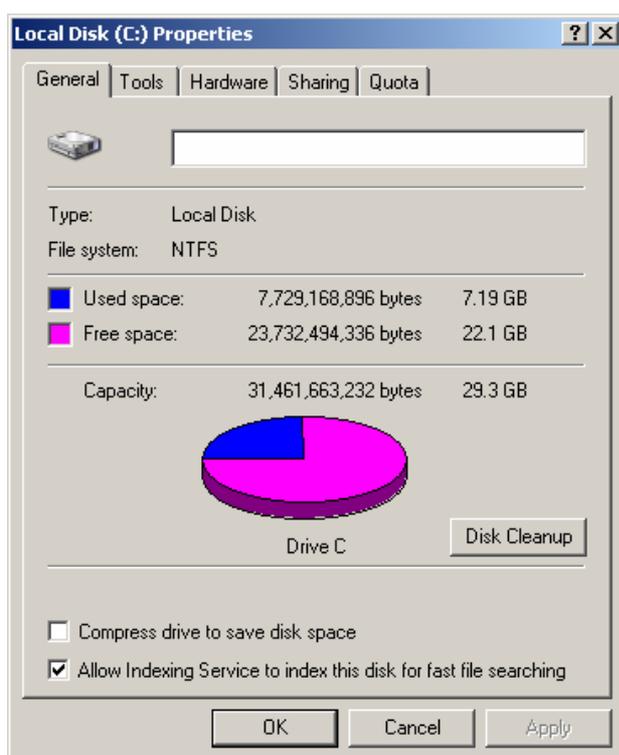*NTFS is an acronym for New Technology File System.*

If the computer was purchased with Windows 2000 or XP pre loaded, for example, from PC-World or other computer retailer like Dell, then the chances are it will come with the hard drive pre-formatted as FAT 32 file system. It is best to check which type of file system the computer has before continuing.

How to check the Hard Drive's File System type

1. Open 'My Computer', or 'Windows Explorer' (Windows key + E)
2. Right click the hard disk icon that needs checking (the standard Windows hard drive letter is 'Local Disk (C:)').
3. A 'Properties' Window should appear with the 'General' Tab already selected. It should say as indicated in the screen shot below:

Type: Local Disk
File System: FAT32 or NTFS (depending on what you have, in this case it is NTFS already)

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If the drive is already formatted to NTFS then the following procedure is not necessary.

How to convert from FAT32 to NTFS

This can be easily achieved without the need for additional software. Windows 2000 Professional and Windows XP (both Home and Professional versions) come equipped with a Command Line utility called *Convert*. This little known utility was designed especially for converting drives from FAT32 to NTFS. Rest assured that any precious data will not be lost while convert does its stuff. It is what's known as 'non-destructive' drive formatting.

Executing the 'Convert' command

To execute this command, it needs to be run from a Command Prompt. On older Windows PC's this was accessible via MS-DOS mode. However, Windows 2000 Pro and XP Home/Pro operating systems no longer use real mode MS-DOS, they use basic Command prompt functionality. This is also the reason that older MS-DOS games or programs will not work under the newer breed of Windows Operating Systems.
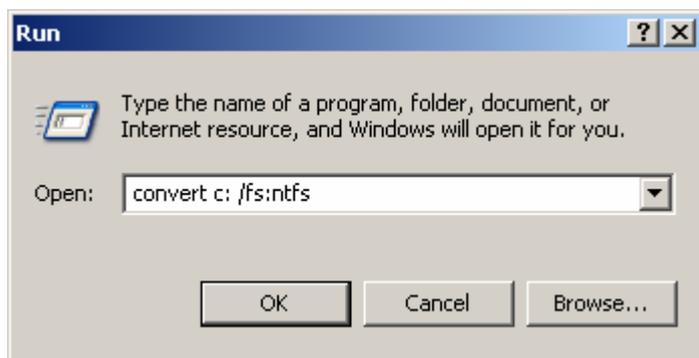
Either run it from the Run command in *Start > Run* or open the Command Prompt window and type it in there. This can be found in *Start > Accessories > Command Prompt.*

The format of the convert command is as given below. The statement 'drive_letter' is replaced by the letter of the drive to be converted.

convert *drive_letter:* **/fs:ntfs**

If the drive to be converted to NTFS is the C: drive, simply type:

convert c /fs:ntfs

Warning: This operation is not reversible and cannot be un-done via the Windows command set (but can with other proprietary software such as Partition Magic). Only perform this action if it is absolutely certain FAT32 will no longer be required.

Another point is that the computer will most likely have to be re-started to perform the convert task and convert will start when the computer re-boots. This is quite normal.

More information on the convert program can be found at Microsoft's web site at the address below:

http://www.microsoft.com/windowsxp/pro/using/itpro/managing/convertfat.asp