



## IT Tips and Tricks #14 - Making boot-up faster

This article mainly applies to the Windows XP operating system.

We all expect our PC's to run quickly and start up immediately. However, after a while the time taken to start up can seem to drag on. Here are a few tips that we've come across that might help...

### RAM

Make sure you have enough RAM installed. Windows 95 and Windows 98 (and SE) need at least 32MB all for themselves, while Windows Me needs 64MB. Both Windows 2000 and Windows XP need 128MB. These are minimum figures, and are required purely to load the operating system.

Applications will require more than this – so, for Windows 95 and Windows 98 aim for a minimum of 64MB – indeed, double up the minimum figures for each operating system, or bite the bullet and go for 512MB as a base line.

### Hard Disk Speed

A slow hard disk is no help. Check it regularly using Defrag, and keep it as defragmented as possible. Windows NT family users (NT, 2000 and XP) should opt for the NTFS filing system, which is faster than FAT or FAT32. It may be worth considering investing in a new, super-fast hard disk, especially if your current one is on the small and slow side.

### Hard Disk Space

Not a lot of people know this, but Windows likes to have a swap file always to hand. If there's not enough space on your hard disk to create the right size of file, it can take ages for boot-up to happen. As it happens, you need at least 3MB of space for each Megabyte of RAM in your machine – so that's one and a half Gigabytes for 512MB of RAM. Still sure you want to keep that 6GB hard disk as your C: drive?

### Fonts

How many fonts have you got installed? Windows, silly thing that it is, just **has** to plough through each and every one, enumerating it and adding it to the font list every time it starts up. So go and have a look at the FONTS icon in Control Panel, to see whether you can get rid of any. There are some you'll definitely need to keep, some you've probably never used, and never will. Slim them down as far as you can. It's not big, and it's not clever (and its very s-l-o-w) to have 1346 fonts on your PC, all active. It slows down applications, too.

### Programs loading at Startup

Far too many applications and utilities drop themselves into the Startup Folder at install time. Have a look and see just how many you have. You can take FindFast out of there, for a start – it just gets in the way – and make sure that you have the very minimum number of programs loading as part of your boot sequence. I'd stick with your Anti-Virus and your Firewall, and very little else (and if you use Broadband, consider a hardware firewall such as a router instead of a software one).

### Screen Furniture

Do you need that wallpaper image loaded? It takes time. Also consider the number of desktop icons you have – the more, the slower.

### Exit cleanly

Make sure you follow the proper shutdown procedure for your version of Windows – if you just switch off, the next time you boot, it'll go through a full hard disk check. If you've got a half full 80GB drive, you can take the dog for a walk before it will finish.

Get all those points right and you'll have a system that boots as quickly as is possible.