2.14 Slow PC

What's one of the most common complaints about computers? Well, you guessed it – poor performance and slowness.

I can't remember how many questions have been directed at me (as an owner of a website about building computers) regarding this topic.

The truth is, computer slowness can be attributable to a host of factors – we will just run through the most significant ones here.

Factor 1: Amount of RAM. The amount of RAM you have in your PC is often touted as the number one reason why the PC is slow. My advice to you is to go for as much RAM as you can afford. The typical amount of RAM in a desktop computer these days is at least 1 GB. But if you really want your Windows Vista to run smoothly, go for at least 2 GB of RAM. Serious computer gamers load up to 4 GB of RAM In their machines.

Factor 2: The CPU. The CPU is another contributing factor to computer slowness. If you can, try to upgrade your PC to the fastest CPU the motherboard can accommodate – check your motherboard manual for instructions. The CPU is such a central piece of hardware in your PC that upgrading it will definitely bring about the speed increases you need.

However, dollar for dollar, it is less cost effective to upgrade the CPU as compared to upgrading RAM. This means that the increase in speed you get for each dollar spent on RAM is more than the increase in speed you get for each dollar spent on a new CPU.

Factor 3: Fragmentation in the hard drive. And here's another factor that causes your PC to be slow – fragmentation in the hard drive. Over time, as you store more and more data in the hard disk drive, the data gets messy. You need to run a disk defragmenting program (the default one in Windows is fine) to make sure that your hard disk organizes that data properly.

If you don't defragment regularly, I'd recommend you do it at least once a week. If you fail to defragment hard disks over a long time, they will slowly begin to deteriorate and will fail on you one day.

Factor 4: The video card. The video card is very important but ONLY if you've into 3D games and applications. If you find that your PC is very slow when running such applications but generally fast when doing non-3D stuff, then a good investment to make is to buy a new video card.

Typically the cards from nVidia and ATI are the best (although I'd lean more towards nVidia these days). If you don't really get into 3D games and applications, then don't waste your money with a new video card -spent it on something like RAM.

Factor 5: Multitasking too many programs. Well, yes, I know that computers are meant to multi-task. But if you're running World of Warcraft, Adobe Premiere and Microsoft Visual C++ all at the same time, don't expect that your average home PC will run very quickly. My suggestion is to keep the number of applications open to a minimum - if you open up too many applications it will sap away precious RAM and begin to slow down your PC.

Some other thoughts before we leave this section about slow PCs. Notice that I didn't mention the motherboard, optical drive, or other peripherals. Not that these components don't matter – it's just that relatively speaking, I believe the above 5 factors will affect your PC's performance more.

The other thing to take note of here is that there are many, many other tweaks you can make in your PC to make it run faster. Refer to this page to find out more.

2.15 Internet Connection Problems

If you run into Internet connection problems, it can be incredibly frustrating.

These days, an internet connection is almost a MUST in any PC. I find that if I don't have an Internet connection, I begin to feel very inadequate very quickly. How, for example, would I connect to YouTube, FaceBook and the like? How do I check my emails and chat with my friends on MSN Messenger?

So an Internet connection is extremely important - and here's how you can troubleshoot the most common problems surrounding this topic.

Problem: *My router is on but some of the lights are red.*

This is not a good sign. A router should usually display green lights if everything is functioning well. What you need to do is to check the cable connections, make sure they are secure, then power off the router. Then try and see if the same problem persists. If the red lights continue to persist, then you need to call your Internet Service Provider to help you troubleshoot it.