

HeroTechs



COMPUTER PERFORMANCE

Five Reasons Your Computer Is SLOW!

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Having a slow computer is potentially worse than having no computer at all. The stress and frustration of an impending deadline with a slow computer creates tension in human beings and many times this is not required. [HeroTechs Inc.](#), a Long Island Computer Service company hears it all the time, “Help, my computer is running slow!” Well we have decided to write this article to educate our user community about what we see as the five most significant reasons your computer runs slow and we suggest what you can do to relieve the pain and become productive again.

Below are the five reasons your computer may not be up to speed:

1. You Don't Have Enough Memory
2. Your Computer Is Infected
3. Too Many Programs Load When Your Computer Boots:
4. Your Hard Drive Is Fragmented:
5. Your Hard Drive is Too Full:

1. You Don't Have Enough Memory:

All too often we see computers with an insufficient amount of Memory for what the end user is trying to accomplish. Too many times people have said to me, “This software only needs 32 MB of memory and I have 512MB, shouldn't I be OK?” The answer is No! People do not realize that the memory specification from the side of a software products packaging is cumulative to everything else you are running on your computer. For the [Operating System](#) (OS) and typical security related items such as [Real-Time Antivirus Security Suite](#), [Microsoft Auto Updates](#), [Firewall](#) etc. you should have at least 512 MB of [Random Access Memory](#) (RAM). This means that before you place anything else on your computer you are already using approximately 512 MB of Memory and if this is currently all you have in your system you are already saturated and will have bottlenecks with substantial performance degradation. With this in mind [HeroTechs](#) always suggests that the minimum amount of memory for Microsoft OS's as the following; [Windows XP](#) should be 1GB and [Windows Vista](#) be 2GB. If you have these memory amounts then you should be able to process most typical residential uses with relative ease and without computer slowdowns due to memory. For more business critical applications which use [SQL](#) or [CRM](#) search type functionalities it is suggested to double the minimums listed above.

2. Your Computer Is Infected:

There are literally millions of different types of computer infections. [Viruses](#), [Malware](#), [Worms](#), [Trojans](#), and [RootKits](#) are just to name a few categories of infections each having millions of instances. Infections can be used for many purposes such as collecting personal data through the use of a [keystroke logging](#) program which records your input from items you type. Imagine you visit your bank online at [www.bank.com](#) and then type your username and password. If you have a computer infection which placed a keystroke logging program on your computer this information will be recorded and then sent to the criminal who wants your personal information. It should be noted that most infections are just a nuisance however there is no real way to tell so you should have your [computer Tuned Up](#) regularly to ensure that all of its security is working as it should. [Regular PC Tune Ups](#) ensure that your security is working correctly and will ensure cyber criminals do not get your personal data from your computer. Keeping your computer infection free is good for performance as well as your personal identity. Should you be infected then a [Virus Removal Service](#) with a Security Overhaul by [HeroTechs](#) is suggested immediately.

3. Too Many Programs Load When Your Computer Boots:

The day you get your computer there are already too many [startup items](#) loading when your computer boots. There are many reasons why the computers which used to cost over \$1000 are now as little as \$350. One of these reasons is because the big computer company's such as [Dell](#), [Compaq](#), [Lenovo](#), [Toshiba](#), etc., all realized that they can gain from virtual space on each computer they sell. It could be a 90 trial of Antivirus software, a trial of an Internet Data Backup Solution, or any other [trialware](#). In addition there are many legitimate application vendors such as [adobe](#), [java](#), or even [Microsoft](#) which install call home software to check each time your computer runs for a newer version of itself. Many of these startup items are hidden from the user or buried in the [Terminate Stay Resident](#) (TSR) section of the start menu in the lower right corner. These items slow a machine down because each one of them launches which takes up precious memory resources and then calls home. The problem is that each TSR stays in memory even after the call home completes. Furthermore your trial applications will also stay in memory regardless of your accepting or rejecting any trial agreements. In fact if the product has a 90 day trial it will still launch and stay in memory years after the trial expired simply because the item was never removed from the startup items for your machine. [HeroTechs](#) makes sure that all non-critical items are removed from startup with each [PC Tune-Up](#) we complete.

4. Your Hard Drive Is Fragmented:

Imagine your computer Hard Disk as nothing more than a Library with many shelves housing books (Your Data). Have you ever had a librarian tell you that the book you want is in, yet you cannot find it because it is not in the correct spot. If you're like me you will look in other spots within the library to see if you can find your book but this is not an efficient use of your time. When your hard drive is used regularly your data winds up all over the hard drive much like the books of a library find themselves all over the library on a busy day. [Fragmentation](#) is a computer phenomenon by which your computer files are split into many smaller fragmented pieces and are no longer in any logical order. Instead your files are scattered all over your hard disk. When this happens your computer will have just as much trouble finding the data it is looking for, as you do looking for a book in a messy library, and will slow your machine down significantly. Just like the Librarian needs to take all of the books not in their rightful place and reorganize them by section, author, and title; your computer too needs to take all of the fragmented data pieces and reorder them by type, size, usage frequency etc. A fully de-fragmented hard drive is much like a library which has all of the books in proper order after hours when the Librarian does his/her job. While Microsoft bundles a defrag utility within the OS it has some significant limitations. The first is that you cannot schedule it to run regularly during non-computing time such as the middle of the night. Second you cannot select the files or order in which you wish to defrag. [HeroTechs](#) suggests that you install a 3rd party defrag utility such as [Defraggler](#) by Piriform Ltd. Then just Set it & Forget it.

5. Your Hard Drive is Too Full:

The rule of thumb is that you should never use more than 90% of your hard disk. Too many people keep their system files and their data files within the same hard disk. In fact the Microsoft OS's are setup to have you do this by default. This is because your data is store by default within the "Users", or "Document and Settings" folders on the local C:\Drive. If your computer is a newer model then you will have sufficient amounts of disk drive space for this however, most people have computers which are slightly older models and the hard disks are smaller in size. [HeroTechs](#) recommends that you purchase an external [USB](#) Hard Drive and move all of your data to it leaving the internal hard drive for just systems usage. By separating your data to a drive outside your computer you free up required hard drive space, speed up your defrag time, and reduce your exposure to data loss should the computer suddenly have a fatal aneurism.

There are many reasons why a computer may be slow and you have just read about the five most common. There is no reason to use a slow computer as many times these 5 simple fixes will solve the problem. Should you need assistance with making your computer faster feel free to **call us today at 1-888-443-7683 X2**. And remember, "**Why Call A Geek? When You Can Call A Hero!**"

Regards,
-TKM

