Troubleshooting Guide #1

My computer will not turn on, or boot - what could be wrong?

There is a difference between "turning on" and "booting". Before we continue, you should know what your system is and is not doing.

Not "turning on"means:
No power is getting to the system.
When I push the PC's power button, NOTHING happens.

Not "booting" means:
Power is getting to the system but it's not working properly. When I turn on the Computer, I can hear the system running, or it lights up or beeps, but I do not see anything on the screen, or a window does not come up at all.

My system will not "turn on"
This problem can stem from many causes. So even though these tasks may be mundane, try EVERY step in this guide.

Check Power Source
If your PC is plugged into a power strip or surge protector check to make sure it is on and other items plugged into it work as expected. If your PC still does not turn on you may want to try plugging into another working socket before continuing.

Check Cords and Switches
Follow your power cord to the back of the PC, and make sure it is firmly plugged into its correct port. Check to see if there is a switch near or around the power port. If there is, rock the switch back and forth and attempt to power up your system again. A common occurrence, when maneuvering your system around, is that the power switch may be manipulated to its off position by cables and other items behind the PC.

When the system turns on there should be a fan that clicks on, or other signs of life.

If there are no signs of it "turning on" you may have to get your PC serviced, as we have just checked everything on the exterior of your computer. Anything inside your PC should be looked at and worked on by an experienced and knowledgeable technician.

My system is not "booting"
If there are many problems that could cause a system to not power up (turn on), there are a phenomenal number that could cause a system not to "boot".

Here are a few things to check before doing anything major to fix your non-booting system.

Symptom	Assumable Cause	Suggestion
I hear the system turn on, but I have no picture on my screen.	Loose Cable Monitor not "turned on"	Check your monitor cable is connected firmly at the back of your PC and Monitor
During boot-up my system reboots endlessly	New hardware/software may not be installed correctly	Verify power to your monitor.
My system worked fine but one day windows started acting up, and I don't know what to do	Your system may have many little problems adding up to a major defective or unusable system	During boot process tap the "F8" key on your key board to boot into "Safe Mode"
		While in safe mode uninstall any software you might have installed last time your system worked.
		Boot your system into "Safe Mode" by tapping "F8" during the boot process. While in safe mode go to Start "Programs", "Accessories", "System Tools" System Restore
		Follow screen prompts to restore your system to a date when you know the system work correctly

Troubleshooting Guide #2

My PC is running (slow, sluggish, at a snails pace) what can I do?

There is a difference between "turning on" and "booting". Before we continue, you should know what your system is and is not doing.

Perform a defragmentation of your hard drive.
This reorganizes your computer s files in order, which the system can read its files more quickly and accurately. The faster they are read, the faster your system will respond to your next command.

Disk Defragmenter is found on your Start Menu:
Start -Programs - Accessories -System Tools -Disk Defragmenter

Uninstall Old "Non-Used" Software
It is also recommended to uninstall programs you no longer use but which are starting up when your machine is booted up, such as chat clients, MSN, Yahoo, AIM, ICQ Messengers.

You may also want to uninstall programs you no longer use, like coupon printer software installed from internet sites and games you have not played in over a year. Even though you may not use a program, your system may still run the files during its booting sequence.

Run a full virus and malware scan.
Sluggishness is a VERY common clue to being infected by malware and viruses.

However, it should not be your first thought when noticing a system slow-down.

Check Cords and Switches
Even if you do not have an always on Virus scanner and Firewall, you can still get free versions of anti-virus to scan your system for unwanted items: viruses, malware, spyware, and many other problematic files.

A recommended first attempt in finding any Virus or Malware would be to download "Microsoft Security Essentials" from www. Microsoft.com

I may have a virus!

Run a full virus and malware scan.

Even if you do not have an always on Virus scanner and Firewall, you can still get free versions of anti-virus to scan your system for unwanted items: viruses, malware, spyware, and many other problematic files.

A recommended first attempt in finding any Virus or Malware would be to download Microsoft Security Essentials from www. Microsoft.com

 DO NOT DOWNLOAD AND/OR INSTALL ANTIVIRUS SOFTWARE WITHOUT RESEARCHING THE COMPANY THAT PRODUCED IT!

There are many "Anti-Virus" Programs on the internet that are actually viruses themselves and they look legit but are wolves in sheep's clothing.

If you have a High speed internet connection you may be eligible for free anti-virus and firewall software from your internet service provider, please contact your service provider to see if they offer this service.

Here are a few more web addresses for reputable companies that offer free services, or have free trial versions.

- www.usa.kaspersky.com
- www.superantispyware.com
- www.malwarebytes.org

Troubleshooting Guide #3

My computer is not old but I want to upgrade it. Where should I start?

The highest performance per dollar in upgrades is adding more ram to your system. Optimal performance in ram in each operating system is as follows:

- Windows XP - 3GB
- Windows Vista 32-bit - 3GB 64bit - 6GB
- Windows 7 32-bit - 3GB 4bit - 12GB

The maximum Ram size for any 32bit OS is 3.75GB this is a fault of using any 32-bit OS, not the hardware.

If you find your system is less than half the optimum value, A Ram Upgrade should be your first attempt.

 A second upgrade with a low dollar vs. performance upgrade would be your hard drive.

Your hard drive is where ALL permanent data is stored IE. OS, Programs, Personal data.

Whenever you boot up your system you must read from your hard drive, slower the hard drive slower the system will be due to having to wait for the hard drive to deliver the files to Ram for processing.

The third item is most important to your system but the price to upgrade will most likely be the highest all together, the CPU would have some performance boost; I leave it for number three due to the facts stated above. Without a lot of ram to store temporary files for fast retrieval and a fast hard drive to get your files into ram ASAP, then the CPU would be held up waiting for the data to get to it, which would make the upgrade in the first place just a waste.

As with any alteration to your system, you should have a skilled technician install/upgrade your hardware.

There are many types, speeds, sizes, and configurations of Ram, Hard Drives, And CPU s; You should consult your pc supplier such as dell, Compaq, hp, and so on before purchasing your upgrades, to make sure you purchase the upgrades that are compatible with your system.