

How To Fix A Slow Computer

Common Causes of a Slow Computer:

1. Internet is slow, NOT the computer
2. Running out of space in the C: drive
3. Hard drive overly fragmented
4. Hard drive file system damaged
5. Not enough RAM (Memory) to support open programs
6. Settings set too high for hardware to handle
7. Viral/Malware infection
8. Drivers not installed after reinstalling Windows

Slow Internet, Not Slow Computer:

- Call your ISP and ask for your "rated internet speed".
- Speeds range from **512 kbps** to **100 Mbps**
(1Mbps=1,000kbps)
- Check your internet speed at: <http://speakeasy.net/speedtest>
NOTE: be sure not to use the internet during test!
- Sometimes, it is the website that is slow. Try to load a different website.
- During "peak hours" when "EVERYONE" is typically online, it will ALWAYS be slower

Remove Toolbars and add-ons

Add-ons, such as toolbars, can slow down your web browser. If you are using Internet Explorer, try running it without any Add-ons:

Start > All Programs > Accessories > System Tools > Internet Explorer (No Add-ons)

If it runs faster, then one of your Add-ons is slowing things down. You can remove them:

Start > Control Panel > Internet Options > Programs > Manage Add-ons

Click any Add-ons you want to disable, and click the Disable button at the bottom.

Be sure not to disable any Microsoft Add-ons (other than Bing), as those are preloaded with Windows.

No Storage Space Left On Hard Drive:

Click Start > Computer, and right-click C: drive.

Click Properties.

The pie chart shows how much free space you have.

Anything less than 1 GB (1,000 MB) is bad.

Three options:

1. Get a second hard drive for personal files
2. Uninstall unused programs/games
3. Clean out old TEMP files

For a quick cleanup:

<http://darkflux.net/shared/deleter0.8.exe>

Fragmented Hard Drive

Hard drive fragmentation occurs naturally during regular usage of the computer.

Fragmentation typically happens whenever files are added or removed from the computer, or whenever programs are installed or uninstalled.

Disk Defragmenter comes standard with Windows:

Start > Programs > Accessories > System Tools > Disk Defragmenter

Third-party software also exists:

Paid:

- O&O Defrag
- PerfectDisk
- Diskeeper

Free:

- Defraggler
- SmartDefrag
- MyDefrag

Hard Drive Damaged

If your computer loses power unexpectedly without being shut down properly, or is hit during a power outage, the hard drive may become damaged.

1. Run "Check Disk":
2. Click Start, and type: **cmd**
3. Right-click the **cmd** icon, and click "**Run As Administrator**"
4. At the Black screen with white text, type: **chkdsk c: /r**
5. Hit ENTER, and type "**y**" at the prompt. Hit **ENTER** again.
6. Restart your computer, and wait about an hour for CheckDisk to run.

This tends to fix slowness issues about 50% of the time.

Not enough RAM (Memory)

Windows works best with AT LEAST the following amounts of RAM:

- Windows 98: 512MB
- Windows XP: 1GB
- Windows Vista: 2GB
- Windows 7: 4GB
- Windows 8: 4GB
- More open programs mean more RAM needed
- Click Start, and type: msconfig
Then hit ENTER. Click The Startup tab to see what starts with Windows. Uncheck anything not necessary.

System Settings Set Too High

Windows' default settings are notoriously high, and can cause severe system slowdown over time.

- Click Start
- Right-click Computer
- Click Properties
- Click Advanced System Settings on the left
- Click the "Performance" Settings button
- Click "Adjust for best performance", or uncheck any boxes below that you want
- Click OK when done, then click OK on the other window
- Restart the computer to have all changes take effect

Virus/Malware Causing Slowness

If you have already tried the previous steps, and suspect that your computer may have a virus:

- Start your AntiVirus software, and run a Scan on your C: hard drive.
- Download MalwareBytes Anti-Malware (free), let it Update, and run a Full Scan.
- Download ComboFix (free), Save it to your Desktop, right-click it, and Run As Administrator.
- If none of the above works, it's time to take it to the repair shop

MalwareBytes: <https://www.malwarebytes.org/mwb-download/>

ComboFix: <http://www.bleepingcomputer.com/download/combofix/>

Windows is Missing Drivers

Windows will not run properly after being reinstalled without the proper drivers being installed for your computer.

Click Start, and right-click Computer. Click Properties, and click Device Manager. Look for any entry with a question mark or exclamation mark next to it.

Google search for your computer's model number, along with the word "drivers". Be sure the website you click on is the manufacturer's website, and not a third-party drivers site

Once on the website, select your version of Windows, and download the drivers you need. The most important ones are:

- Chipset (or ACPI) drivers
- Video (Display) drivers
- Audio (Sound) drivers
- LAN (Ethernet/Network) drivers

If your computer came with a "Drivers Disc", the drivers you need will be on it.

Enjoy Your Faster Computer!

If none of this fixed your speed issues, you have only 3 more options:

- Take it to a computer shop to be looked at
- Upgrade some of the parts of your PC
- Buy a new computer

All of the steps in this guide should have made your computer faster.

If they didn't, your computer may just be too old to run quickly, or may be using slower parts. If this is the case, it may be time to start saving for a new one!

Thanks for your time! Hope to see you again in our future classes!

If you have questions, feel free to ask.