Computer Performance Essentials

Computer Maintenance is the practice of keeping computers in a good state of repair. A properly maintained computer can live well beyond its "life expectancy". Many people don’t realize it, but computers are just like cars: you either maintain them regularly, or they can break down in the most inopportune times. Computers are complex electrical systems, and therefore require specialized care.
Physical vs Virtual

Computer Maintenance can come in two forms. The first is by physically cleaning the computer itself and the second is by cleaning the "virtual computer." The Virtual computer is everything inside your computer, system files, documents, programs, etc. Here is a good list of tips and tools you can use to maintain your computer.

1. **Clear Temp and other unnecessary files.**

When you use the Internet a copy of every web page you visit is stored. This is helpful as it allows for faster viewing later on down the road. Say I visit Facebook every day, in theory the first day I go there it may be slow to load, but every subsequent day it’s going to be faster than the original day. While this works great in doing what it does it does become a resource hog when you have visited 10000 websites in the past month. Since this is space taken up at least once a month you should consider clearing the temporary internet files, internet history, and cookies off of your system.

The following steps show you how to delete this information on the three most used browsers.
Internet Explorer

- Search and open Control Panel from Windows search, click Network and Internet, and then click Internet Options.

- Click the General tab, and then click Delete under Browsing history.

- Click Delete all, click yes to confirm that you want to delete this information, and then click OK.
Google Chrome

- In the top-right corner of Chrome, click the Chrome menu.
- Select **More tools > Clear browsing data**.
- Click **Clear browsing data**.

![Clear Browsing Data dialog box with 'Clear browsing history' selected.](image)
Mozilla Firefox

- Click the menu button ☰ and choose Options.
- Select the Advanced panel.
- Click on the Network tab.
- In the Cached Web Content section, click Clear Now.
2. **Empty Recycle Bin**

When you delete something it’s not gone forever it goes to a recycle bin and stays there for a while before it auto deletes or you tell it to remove it forever. Generally this is a really good safe fall. You never know when you may accidentally delete something that you really need and you find it there. Once a month though you should consider reviewing everything that is in there and deleting everything that you will never need again.
3. Antivirus Scans

Even if you have an antivirus program installed, it needs to run a ‘Full Scan’ at least once in a while to be fully effective. Most commercial antivirus applications come pre-configured for scheduled scans, but it doesn’t hurt to check anyway. Remember, your computer can’t run a virus scan if it’s turned off. In other words, if your weekly virus scan is set for 3 AM Monday mornings, and you turn your computer off every night, chances are those scans simply aren’t taking place.
4. **Use the Windows “Disk Cleanup” feature to remove “junk” files.**

   The amount of free space remaining on the C drive can have a dramatic effect on a computer's performance. The Disk Cleanup feature automatically scans a computer hard drive to locate and remove temporary files and other files no longer in use. Removing these unneeded files increases the amount of free space available, which improves system performance.

   - Open My Computer from the Start menu. Right-click on the icon labeled "C Drive" or whichever hard drive contains your operating system files and select "Properties".

   - Click "Disk Cleanup", the Disk Cleanup dialog box will open on the desktop. The total amount of space gained will be displayed in the dialog box above the feature description.

   - Place a check inside each check box located in the "Files to delete:" menu box and click "OK." The process may take a few moments. You will receive a prompt when the cleaning process has completed.
Extras

5. Clean Peripherals

Everything you connect to your computer is a peripheral. Keyboards, your mouse, printers, etc. are all peripherals. Disconnect your mouse and keyboard and clean them. The keyboard can be sprayed out with a can of compressed air and given a gentle wipe down with a cloth. If you have a mouse with a roller ball on the bottom of it meaning it’s not optical then the roller ball should be cleaned. Pop off the plate and remove the ball clean with some isopropyl alcohol and remove any caked on grease, oil or dust.

6. Clean Monitors and Tower

The monitor can be dusted off with a cloth and screens cleaned with a glass cleaner and cloth. The shell or tower of the computer will also need to be cleaned. When you get to the back of the computer examine the air vents these may need special attention as dust will build up and need to be removed.

7. Inspect Your Cables

While you have the computer open inspect your cables any loose connections should be firmly reconnected.

A computer maintenance routine is only as good as its implementation and certainly helps preserve the efficiency levels for a computer for a longer time.