



# Keeping your PC Virus free & clean

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**Introduction:** Computers are expensive, and you probably want to protect your investment. Over time, it's impossible to prevent unsavory apps and other files from infiltrating a Windows PC. There are simply too many ways for junk to seep its way in.



Viruses, Trojan horses, worms, and spyware are all threats that can damage your computer. With regular maintenance and a bit of effort, however, it's possible to keep a Windows system relatively clean and performing at its peak.

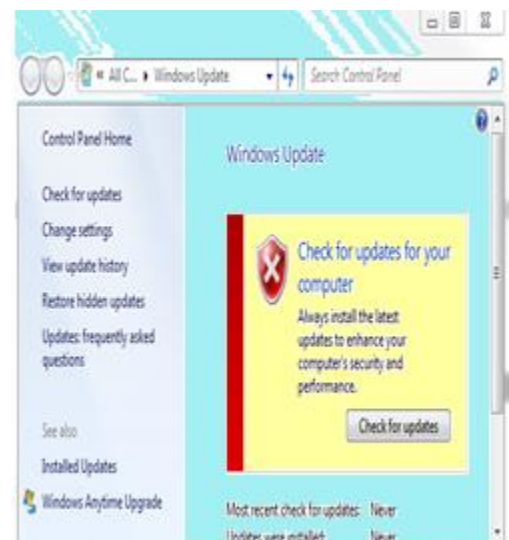
Computer maintenance involves:

- Windows Updates
- Clear Internet Data
- Check for adware and malware
- Check for viruses and other threats
- Run maintenance on your hard drive
- Remove unwanted programs
- Backing up your computer
- Create a System image (Recovery disk)
- Physical Cleaning

## Windows Updates:

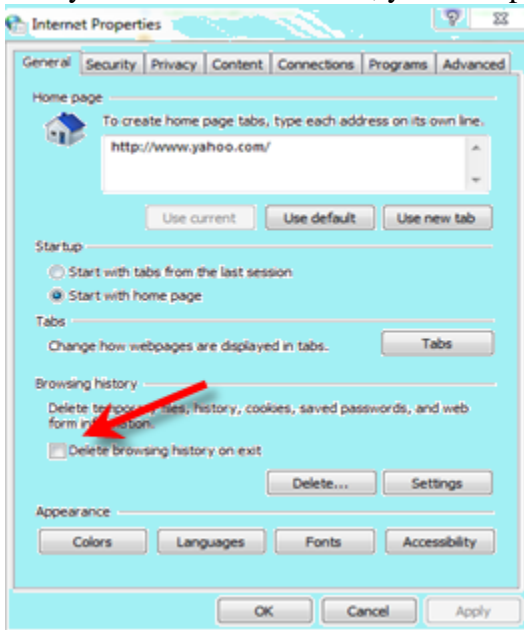
Keeping your software updated can help plug security holes and ensure optimal performance. If you haven't already set Windows to automatically update, do so now. Updates obtained through these channels are always official and can be trusted.

For Windows users, **Start** → search for **Windows updates**. You can set your computer to download and install updates itself.



## Clear Internet data:

As you browse the Internet, your computer collects bits and pieces of information that can eventually build up to the point that they cause performance issue, especially on older and slower machines. The most basic way to do this is by using the tools that came with your Internet browser of choice. Internet Explorer users can clear all temporary data by going to **Control Panel → Internet Options → Browsing History**.



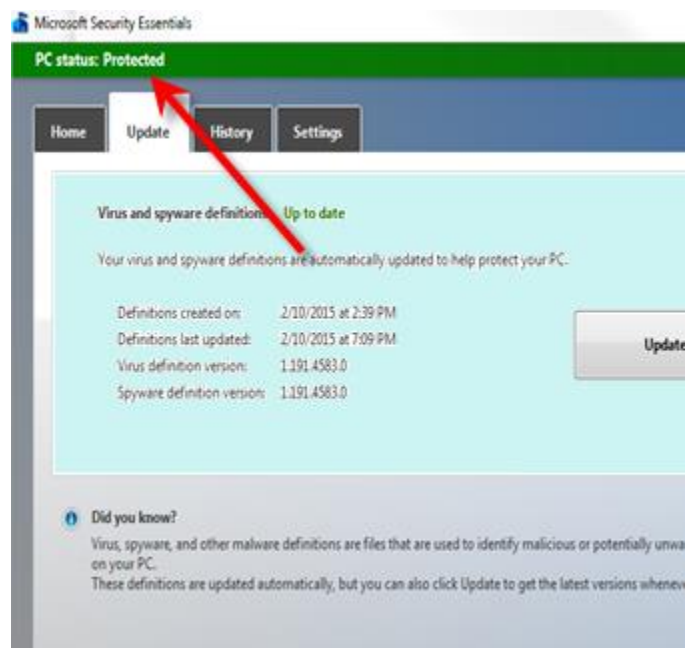
This will delete temporary Internet files, cookies and website data, history, download history, form data, passwords, and tracking protections.

## Check for Adware & Malware:

Adware and malware are types of programs that can compromise your computer's performance and create security weaknesses. There are specialized free programs designed to find and erase adware and spyware.

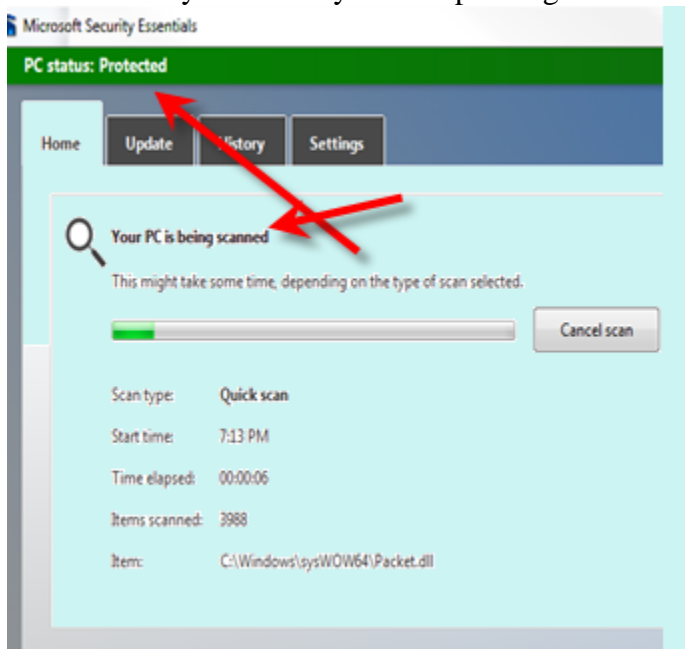
Microsoft provides “**Microsoft Security Essentials**” & “**Windows defender**” against any virus threat.

The best way to avoid adware and malware is to never download anything you're not sure of, never agree to install anything extra that comes packaged with software you choose to install.



## Check for Viruses and other immediate threats:

The best way to defend your computer against malicious threats is with a powerful antivirus program. Windows users have access to good free options that work at least as well as paid brands. Install them and allow them to run in the background at all times. Since new viruses are always being designed and released, it's very important that you allow your antivirus program to update as often as possible.



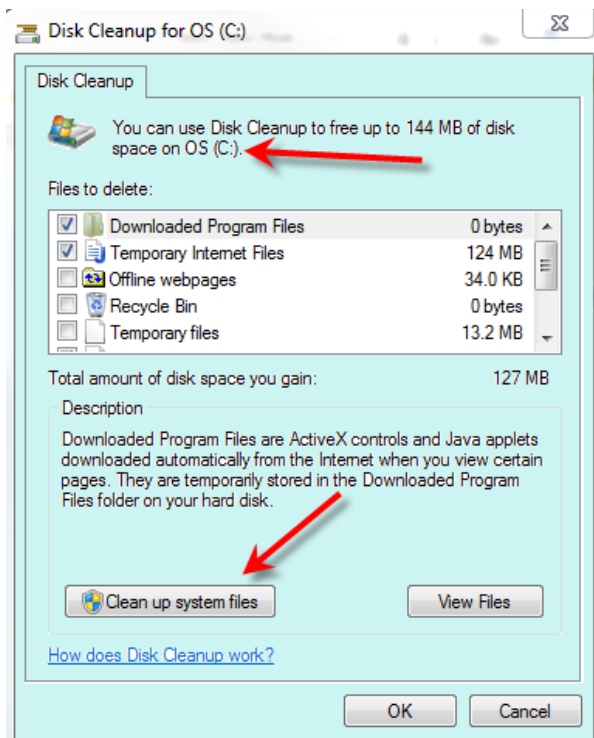
## Run maintenance on your hard drive:


Hard drive is the most important element in a personal computer. Microsoft provides several tools to keep your hard drive in a good health. Out of several tools, 3 commonly used utilities are **Disk cleanup**, **Disk Defragmenter**, and **System Restore**.



## Disk Cleanup:


If you want to reduce the number of unnecessary files on your hard disk to free up disk space and help your computer faster, use disk cleanup. It removes temporary files, empties the Recycle Bin, and removes a variety of System files and other items that you no longer need.

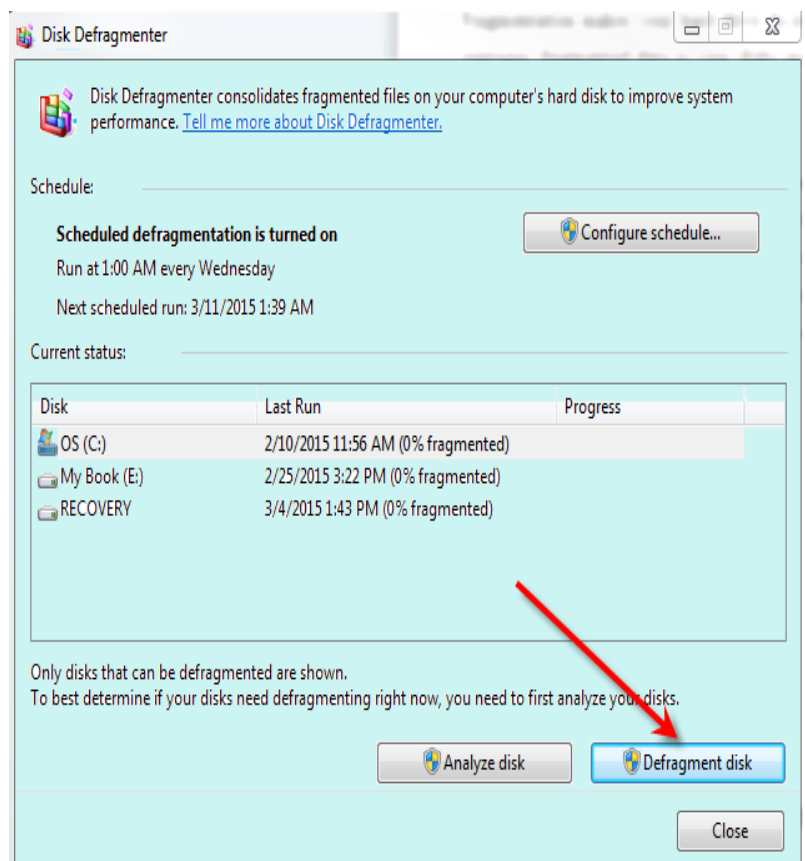


Launch Disk Cleanup by clicking **Start** button  → in search box, type **Disk cleanup** → select **OS(C:)** → select files to be deleted. Depending on the selection, it will take few minutes to complete this process.

## Disk Defragmenter:

Fragmentation makes your hard drive do extra work that can slow down your computer. Disk Defragmenter rearranges fragmented data so your disks and drives can work more efficiently.

Launch Disk defragmenter by clicking **Start**  → in search box, type **Disk Defragmenter** → Select the drive you want to defragment. Disk Defragmenter might take several minutes to a few hours to finish, depending on the size and degree of fragmentation of your hard drive.



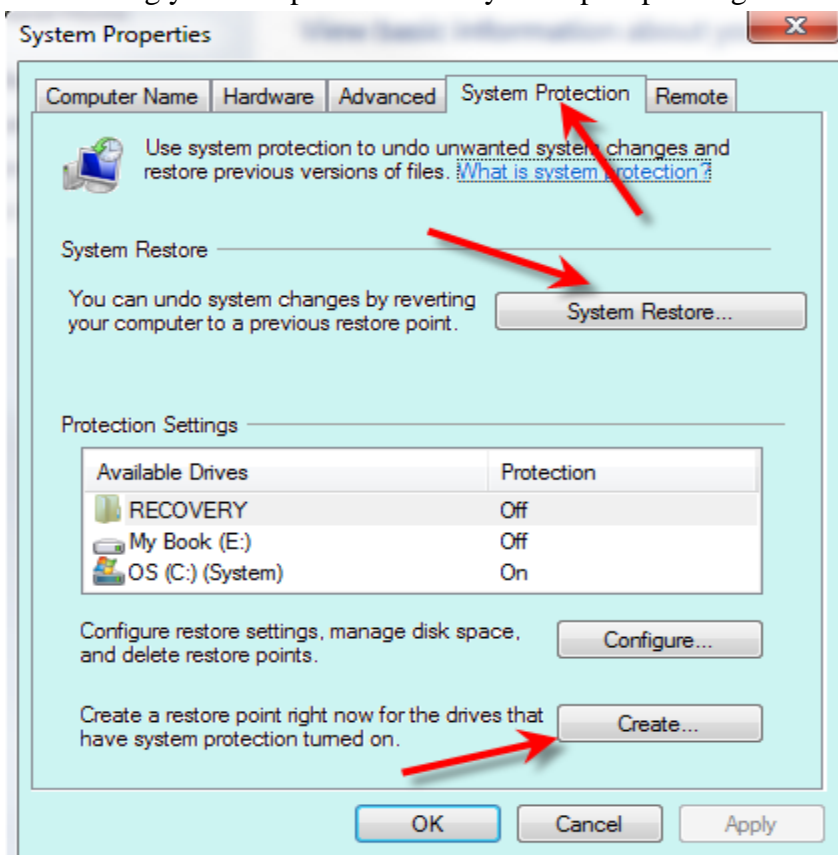
## System Restore:

System restore can help fix problems that might be making your computer run slowly or stop responding.

System restore does not affect any of your documents, pictures, or other personal data.

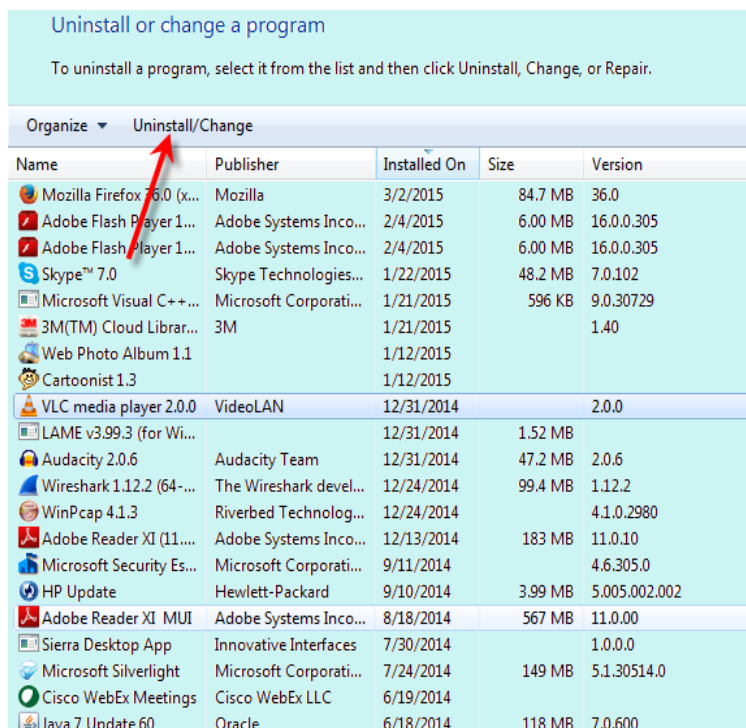
Recently installed programs and drives might be uninstalled.


System Restore uses Restore Points to return your system files and settings to an earlier point in time without affecting personal files. Restore points are created just before significant system events, such as the installation of a program or device driver. You can also create restore point manually.



## Remove Unwanted Programs:

Even if you are extremely careful about which websites you visit and the applications you installed on your PC, unwanted apps or program will inevitably creep their way in. Over time, numerous unwanted programs tend to appear on Windows-based systems. Removing these unwanted programs will free systems resources for other things, which will ultimately improve the responsiveness and performance of your PC.




To uninstall a program click **Start** button  → **Control Panel** → **Programs and Features**, select a program and then click on **Uninstall**

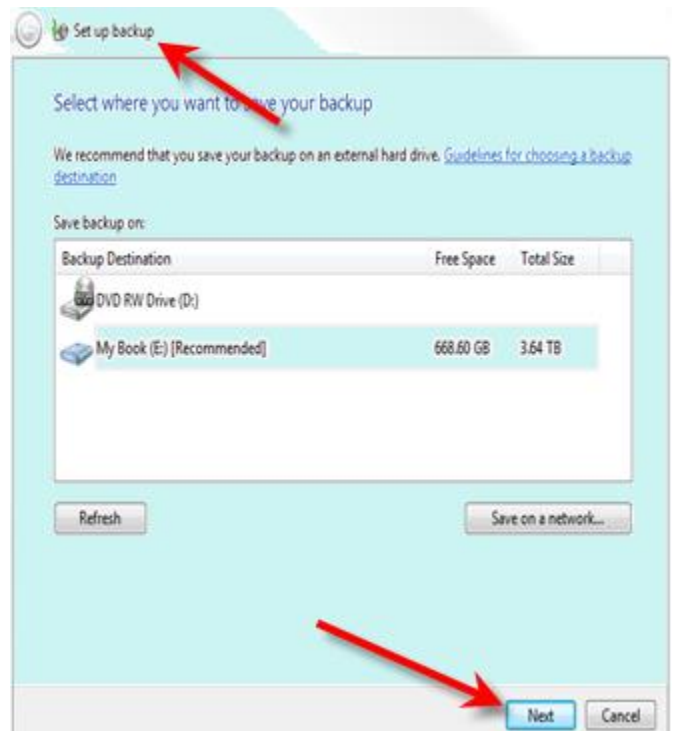
## Back up Your Computer:

Once you've cleaned up your computer, it's time to preserve it. This could be done by creating a restore point, which the computer can be rolled back to in the event of a disaster.

You should also backup your personal data using Windows "Backup and Restore" utility. It is recommended to backing up your computer on external drive daily.

To backup, click on **Start** button  → type, **Backup and Restore** → click **Set up backup**

If you want your data accessing from every where, try backing up on the cloud.



Microsoft, Google, Carboneite, CrashPlan, Backblaze, and SOS backup offer cloud backup.



## Common Sense Using Internet:

The Internet is a staple in many people's everyday lives. It is a great place full of wonderful information, but it is also full of many dangers. To stay safe on the internet, use the following strategies.

- 1 Choose strong passwords
- 2 Be mindful when installing programs or agreeing to terms
- 3 Do not give out personal information to strangers
- 4 Don't fall prey to phishing scams, like claim your prize, etc
- 5 Keep your eyes peeled for online scams
- 6 Limit the information you share on social media
- 7 Use an anti-virus, anti-spyware, and a firewall
- 8 Secure your wireless router
- 9 Turn off file sharing and network discovery when using a public wireless network
- 10 Always check for secure transaction info, like <https://>
- 11 Download files from trusted sources. Don't download or use any software about which you aren't 100% certain of its source and appropriate use. Be aware of "free download" and "free scan", they will not work until you register and buy that software.
- 12 Do not download illegal copyrighted material without paying for it



## Common Sense using Email:

- If you get an email from someone you don't know, DELETE IT!
- If you get an email from unknown sender with a file attachment, DELETE IT!
- If a bank or credit card company emails you and to tell you your account was hacked, DELETE IT!
- If you get an email that tells you to send money somewhere, DELETE IT!
- If you get an email that tells you that you've WON money..... DELETE IT!
- If you get an email with an attachment that's compressed and password protected, DELETE IT!
- Be wary of poorly written broken English emails. For one, it's not worth reading and two; it's probably a scam or a virus.
- Be very wary of Greeting cards and Evites. Most of them want you to click on a link.
- If you get an email from your mother in-law telling you about a new virus on the internet DELETE IT (*sorry, couldn't resist*).



## Physical Cleaning:

Cleaning your computer, component, and peripherals helps keep your computer in good working condition. In this example, it is obvious that all the dust and dirt is going to prevent proper air flow and may even prevent the fan from working.

### General Cleaning Tips:

- Never spray or squirt any liquid onto any computer component. If a spray is needed, spray the liquid onto a cloth.
- You can use a vacuum to suck up dirt, dust, or hair around the computer. However, **do not** use a vacuum inside your computer as it generates static electricity that can damage your computer. If you need to use a vacuum inside your computer, use a portable battery powered vacuum or try compressed air.
- When cleaning a component or the computer, turn it off before cleaning.
- Be cautious when using any cleaning solvents; some people have allergic reactions to chemicals in cleaning solvents and some solvents can even damage the case. Try always to use water or a highly diluted solvent.
- When cleaning, be careful to not accidentally adjust any knobs or controls. Also, when cleaning the back of the computer, if anything is connected make sure not to disconnect the plugs.
- When cleaning fans, especially smaller fans, hold the fan or place something in-between the fan blades to prevent it from spinning. Spraying compressed air into a fan or cleaning a fan with a vacuum may cause damage or generate back voltage.
- Never eat or drink around the computer.
- Limit smoking around the computer.



*So stay safe, be smart and don't be an Internet victim. Following these tips should help with keeping your computer virus free MOST of the time.*