1. Clean your Hard Drive & Registry   Twice a month
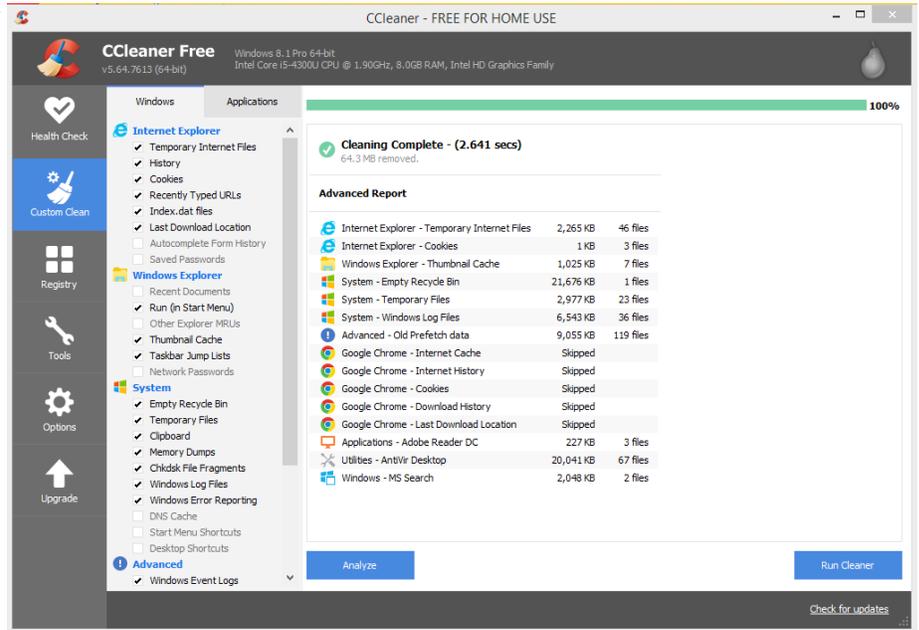
Windows creates files for many reasons and stores them in folders all over your hard drive! You MUST clean out these junk files. Hard drives fail due to lack of maintenance! Regularly use **CCleaner** on each user. Run this program 1st. All other steps will run faster!

Double Click the **CCleaner** icon.

1. When it starts, CCleaner has the default settings checked. Click the **Run Cleaner** button.

2. It will then delete all unneeded files. If you have never done this it could take quite a while. I have seen more than 29,000 megabytes of wasted space on a drive!

3. Next you should click the **Registry** button. This is a Registry file cleaner.

4. Click the **Scan for Issues** button.

5. When it is done scanning click the **Fix selected issues ..** button.

6. Then click the **Fix All Selected Issues** button. **Close** all Windows.

2. Defragment your Hard Drive   Twice a month

NOTE: Solid State Drives (SSD) should not be defragmented. Skip this step if you have a SSD.

As you use your spinning hard drive to store files it becomes fragmented. Fragmentation is the scattering of file parts all over the disk. Fragmentation occurs as files on a disk are deleted and new files are added. It dramatically slows disk performance. Defragmentation is the process of rewriting the parts of a file to adjacent sectors on a hard disk to increase the speed of access and retrieval. As files are enlarged, your PC saves the additional information on new empty spaces on the hard disk. When files are thus fragmented, the computer must search the hard disk each time the file is opened to find all of the file's parts, which slows down response time. Defragmenting reorganizes your computer's hard disk. **You should defrag your hard drive right after CCleaner**. All scans will be faster after defragging.

Click on the **Defraggler** icon. Then click on the **Defrag** button.

3 Optimize & 4 Backup your Registry　　　　　Twice a month

The Registry is the most important set of files (hives) on your PC. Nothing happens on your PC without the Registry being consulted. The Registry contains instructions, settings, parameters, lists of programs, history, startups and more. After a while your Registry becomes bloated and slow. <mark>Running these programs will make all other steps faster.</mark>

NTREGOPT is a free program that optimizes these critical files (Hives). It works on every version of Windows. It can keep your registry files compact and efficient!

1. Click on the Icon to start it then click the **OK** button**.**
   Click **YES** if you get a pop-up "**Error optimizing registry hive**".

2. **Use ERUNT first then reboot.**

ERUNT (Emergency Registry Utility NT) is a free program to back up the Registry.
1. After NTREGOPT: Click on the Icon to start it
2. Check all the boxes and agree to every screen. Let it store the backup where it wants. It will create a folder with the current date as the name.

Using this backup PC Bits can easily recover your Registry if it becomes corrupt. We can also fix hacker encryption of registry files!

AVIRA your Anti-virus Program

Your Anti-virus program is Avira. Its logo is the red umbrella. When you see it down by the clock in the right hand corner of the Taskbar it is protecting your PC from viruses. It will scan any file as it is read or written before you can use it.

New viruses come out hourly! Avira has an automatic update feature. Avira automatically updates every two hours. If you don't see this happening, call me. Updates go through several distinct steps. Avira must download one or more files then stop the program in order to install new versions. Often downloads can take quite a while. When Avira has a major update, their servers become backed up and can't meet the demand. Be patient, it may have to try several times before it will connect and update.

The advertisement or "Notification" pop-up is your notice that the update has happened. Close all advertisements by clicking on the **X**. <mark>**NEVER buy or Upgrade Avira. Don't install any other Avira product(s).**</mark>

Scan with Avira   Twice a Month

The automatic update of Avira is not enough. You should scan your hard drive(s) for viruses twice a month or if you suspect you might be infected.
1. Double Click on the **Scan for Viruses** Icon on your Desktop.
- Your scan properties are set to maximum strength. It may take a while based on the speed of your computer, hard drive, and the number of files you have on your hard drive. Be patient.
- Viruses detected will be automatically deleted. If the scan finds viruses and the deleted and quarantined counts don't match, email me the Report.   Click on the Report button, copy and paste the text into an email. Send it to me and I will read it. service@pcbitsweb.com
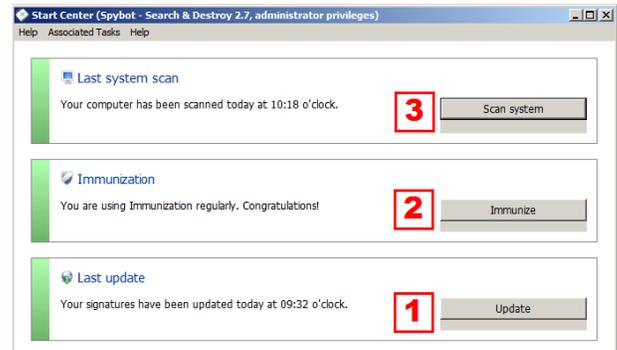
Update your Manual Programs

AVIRA is not enough. If you do not immunize your PC regularly (**At least twice a month**) it **WILL** get infected. Spyware, browsers, hijacking, and file sharing software are used by "hackers" as doors into your PC. Poorly written software can allow viruses to enter. The most important thing is to NEVER download file-sharing software (Bit-Torrent), Driver updaters, toolbars, Search engines, "Optimizers" and other free programs. Free games are often bait to attract the unwary.

Update Spybot Search & Destroy   – Twice a month

1. Double Click on the **Spybot-S&D Start Center** Icon
2. When the main screen opens click on the **Update** button.
3. Spybot opens the **Update** window. Click the **Update** button.
4. Close the **Update** window after all updates install.
5. Next you should **Immunize** your PC. Click the **Immunize** button.
6. Spybot opens the **Immunization** window. Click the **Check System** button.
7. Next click the **Apply Immunization** button.
8. After All entries are immunized, close the **Immunization** window.
9. Click the **Scan system** button. Click on the **Start a Scan** button when the window opens. The scan will take a while. When the scan finds results click the **Fix selected** button. You should then see a green check mark next to each result and the **Fix selected** button will be gray.
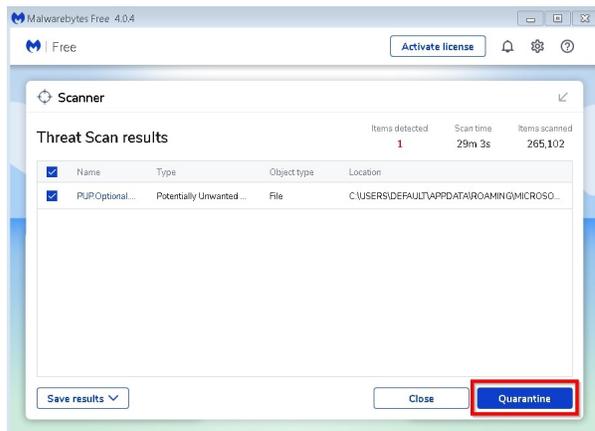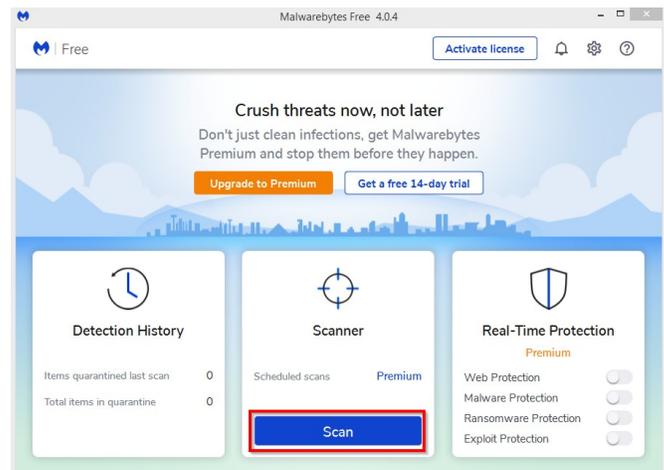10. Close all Spybot windows.

Scan your PC with Malwarebytes   – Twice a month

You should also scan if you suspect a virus.

1. Click on the **Malwarebytes** Icon.
2. Click the large blue **Scan** button.
3. Malwarebytes will do the rest!
4. When the scan is finished and/if Malwarebytes finds threats, click the **Quarantine** button. If it wants to reboot, reboot immediately.
5. Click the **Done** button if it finds nothing.

Update SpywareBlaster   Twice a Month

SpywareBlaster is a product by Java Cool Software. It will teach your PC to never run dangerous "programs".

1. Click on the **SpywareBlaster** Icon.
2. After the main screen opens click on the **Download Latest Protection Updates** link.
3. Click on the **Check for Updates** button.
4. After the updates are downloaded click on the **Enable Protection for all unprotected items** link.
5. Close SpywareBlaster

Update Windows   Monthly, on 2nd Thursday of the month

Note: Although Microsoft Windows 10 claims updates are fully automatic, they often have issues that prevent them from installing! You must make sure they are installed. Take control and do it yourself.

Microsoft Windows (All versions) has a LOT of programs that use the Internet. During a day you may have 25 or more "programs" sending and receiving data over the Internet. Many of these programs are found to have "vulnerabilities," weak places in their computer code that will allow a hacker to break into the program and infect your PC! As Microsoft writes or updates programs, new vulnerabilities are discovered. **These are not viruses and therefore Avira does NOT protect you from them!** Microsoft has software that provides updates. **You MUST** update Windows monthly.

Note: Microsoft updates Windows on the 2nd Tuesday of each month. We wait 2 days!

1. On the Thursday after the 2nd Tuesday, click the **Start** button.
2. Next click on the **Update & Security** icon.
3. Click the **Check for updates** button if no updates are showing.
4. Click **Restart now** if / when you see the button.

Windows 10 will begin installing only the updates they need to install (Important). There is no way to skip ones you don't want. Optional updates will be labeled and should not automatically install. I do NOT recommend installing Optional Updates.

Microsoft Windows 10 Feature updates are released twice a year. Each feature update is given a 4-digit number. For example: 1903. The 19 stands for the year and 03 stands for the month it was released. Microsoft will service Feature updates with monthly quality updates for 18 months after the date of the release. This means NO Updates after 18-months if you don't download and install Feature releases.

Note: You must also update Adobe Reader, Flash player, iTunes, QuickBooks, Quicken and all other programs you have downloaded and/or purchased. Hackers break into all of them. If the manufacturer of the program notifies you of an update please put it in. Look in my blog www.pcbitsnews.com for news and instructions on these updates.