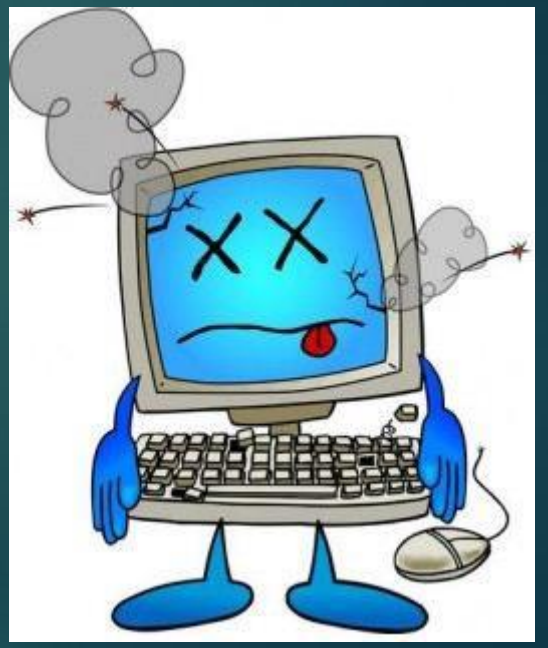
Troubleshooting Your Computer

PCBUG – The Naples Technology User Group
November 19, 2020

- This presentation is brought to you by APCUG's Speakers Bureau
- It is a benefit of PCBUG's membership in APCUG

Troubleshooting Your Computer

- It may look like your computer has crashed and all your data is lost forever
- There are a lot of problems that keep you from reaching your data that can be fixed, sometimes in a matter of minutes



Troubleshooting Your Computer

- Many computer problems appear more serious than they really are
- ….hard drives do fail – but not very often

Troubleshooting Your Computer

Don't panic!

- Don’t get frustrated & buy a new computer
- Relax
- Take a breath
- Pour yourself a glass or cup of your favorite beverage…..

Troubleshooting Your Computer

- Once you start troubleshooting, you will want to remember what you have done, so you don't repeat yourself
- Remember the steps you've taken --write them down
- If you end up asking someone for help, it will be much easier if they know exactly which steps you've taken

First Step!!

Restart

- Sometimes this is the first thing tech support asks you
- It's best to be able to say, yes

Restart

- You and your operating system leave behind a kind of footprint, usually in the form of background processes you don't really need running anymore, or programs that didn't quite close all the way.
- When you restart your computer, every program and process ends..

Put Your Thinking Cap On

- Did you install a new program?
- Download something from the Internet?
- New hardware?
- Power Outage?
  - Yes to any of the above gives you a head start

Make Sure There Really is a Problem

Can't start your computer? Check the basics

- Check all the cables, connectors, and power cords to make sure they're plugged in securely

Make Sure There Really is a Problem

Wireless Keyboard / Mouse

- Are the switches in the On position?
- Try another USB port
- Replace the batteries

Make Sure There Really is a Problem

Surge Protector

- If you're using a surge protector, make sure it's on and that it works
- A surge protector may not be working because it is designed to self-destruct
- When an electric jolt is too much, your surge protector takes the hit, saving your more expensive hardware from the surge

Make Sure There Really is a Problem

- Plug something else into the surge protector to make sure there isn't a power problem.

Make Sure There Really is a Problem

- Circuit Breaker?

No Internet Access

Check with ISP re outage

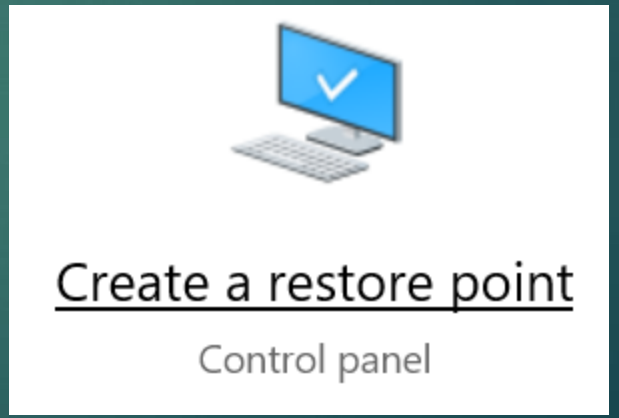
- Plug computer directly into your router
  - Ethernet cable
- Unplug router
  - Wait for 30 seconds
  - Turn back on

No Internet Access

- Still no Internet access
  - How old is your router?
  - Don’t forget to change log-in / password

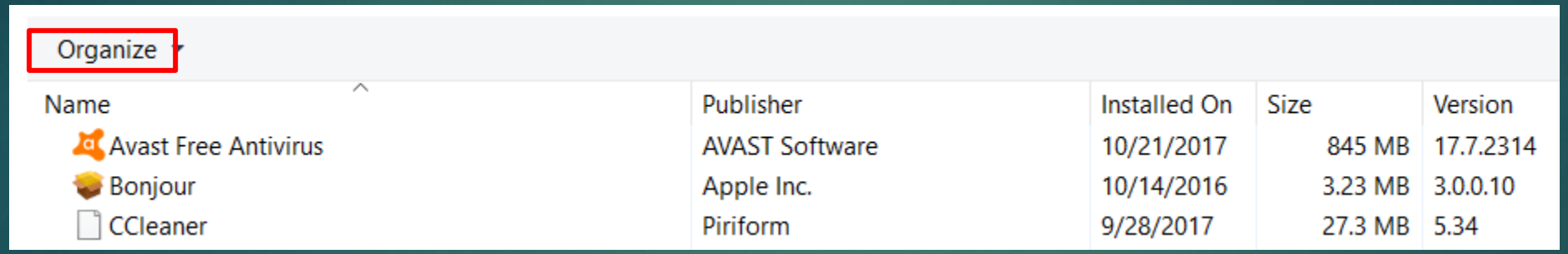
Important Step!!

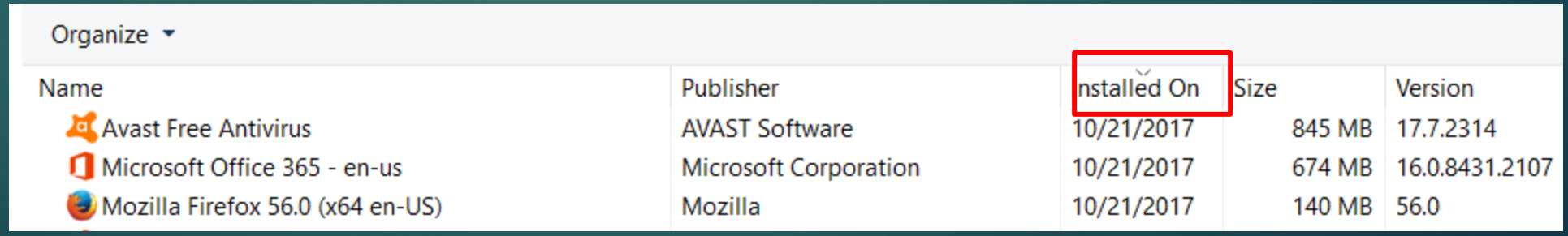
- Before you start your troubleshooting, create a Restore Point – just in case
- In Search Box, type Create a Restore Point or Ask Cortana
- Create a Restore Point



No More Bloat

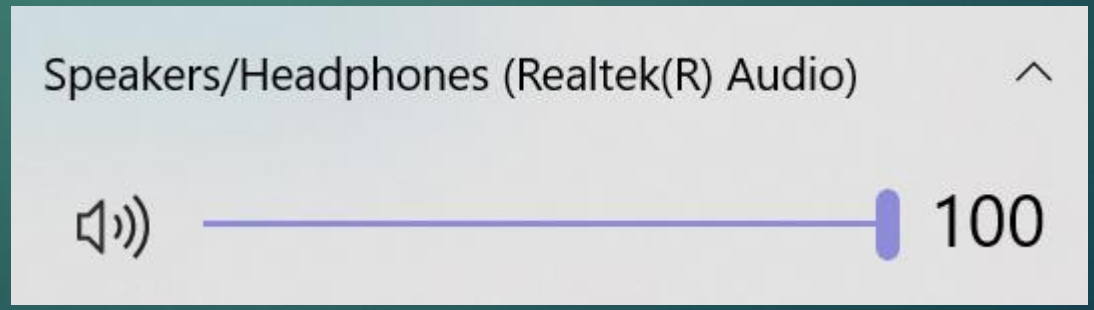
- Uninstall programs you no longer use
- Sort by date to see if you have downloaded unwanted programs





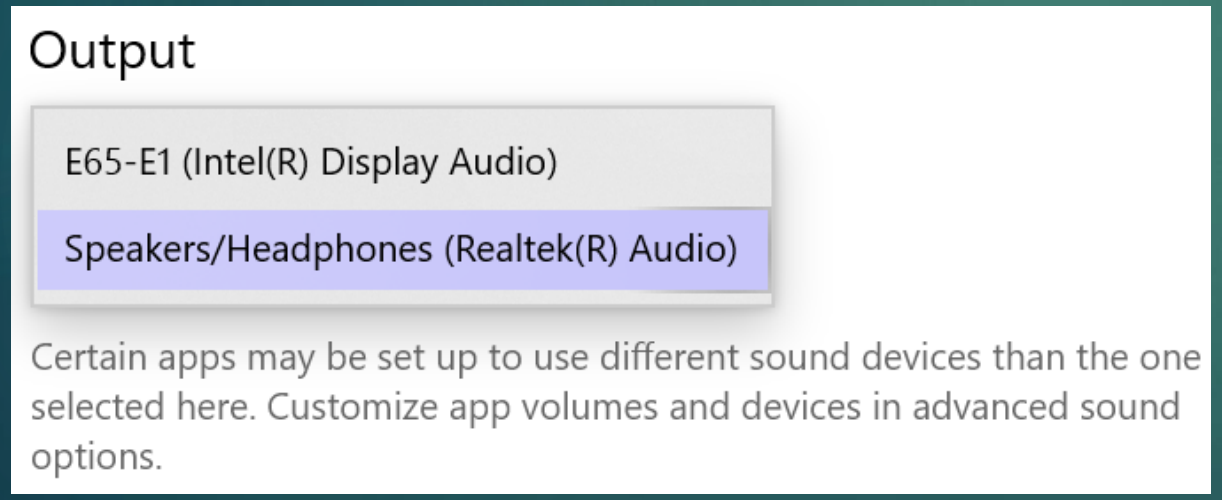
No Sound

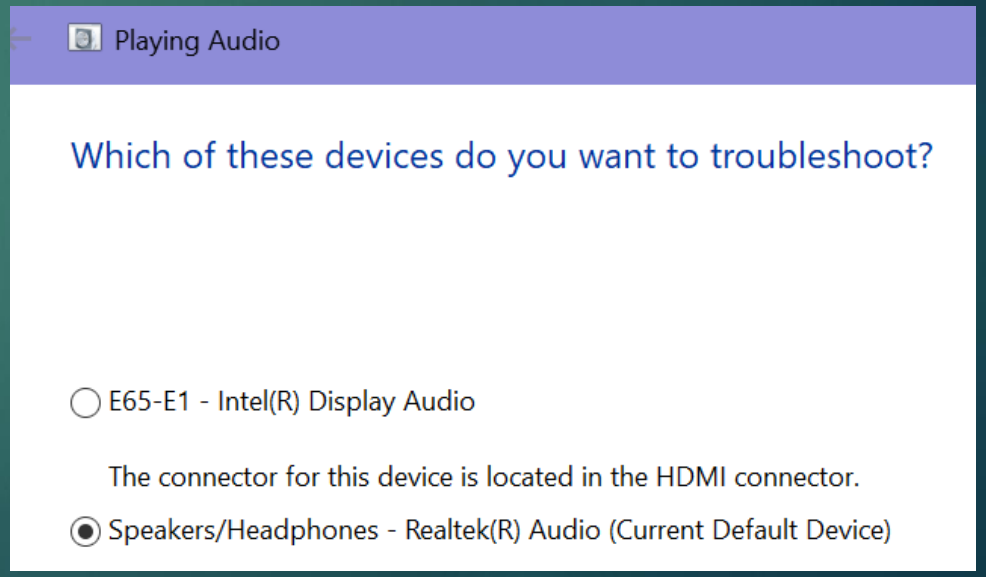
- Is there a speaker icon left of the clock on the taskbar?
- Click the speaker icon
- Is the bar at 100%?



No Sound

- Settings > System > Sound
- Is the correct speaker selected?
- Troubleshoot your speakers



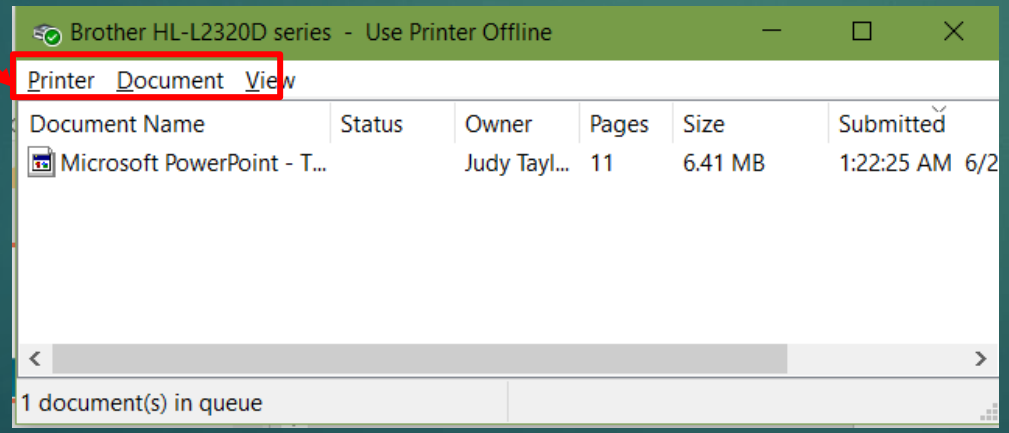


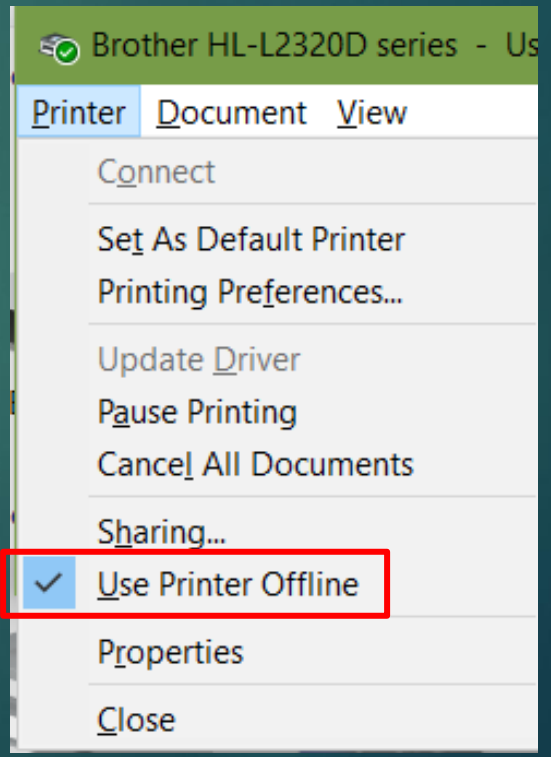
Printer Doesn't Work

- Turn it off and on
- Control Panel / Devices and Printers
- Click on the Default printer

Printer Doesn't Work

- Check if the printer is Offline
- Sometimes it just happens
- Click on the printer
- Click on Printer

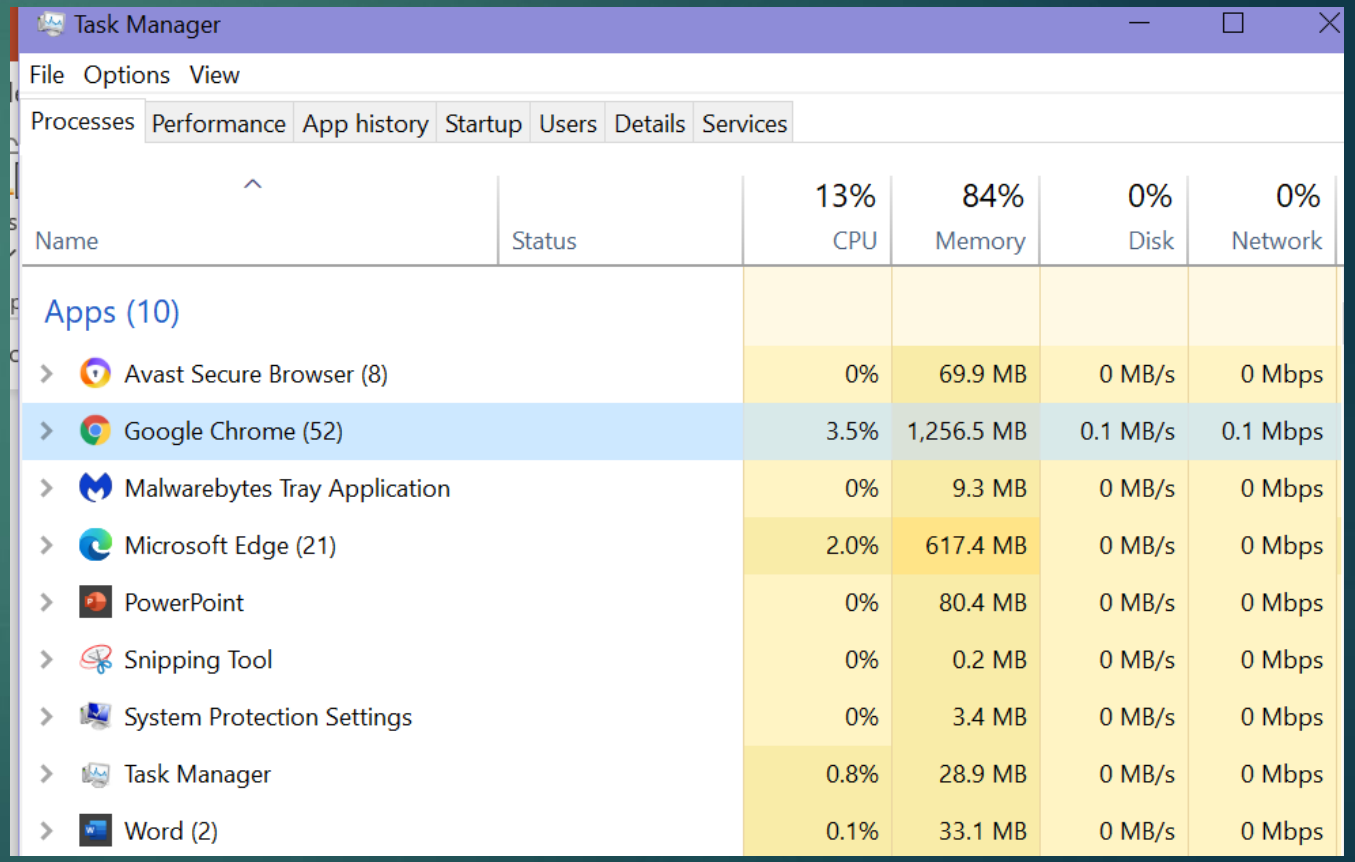




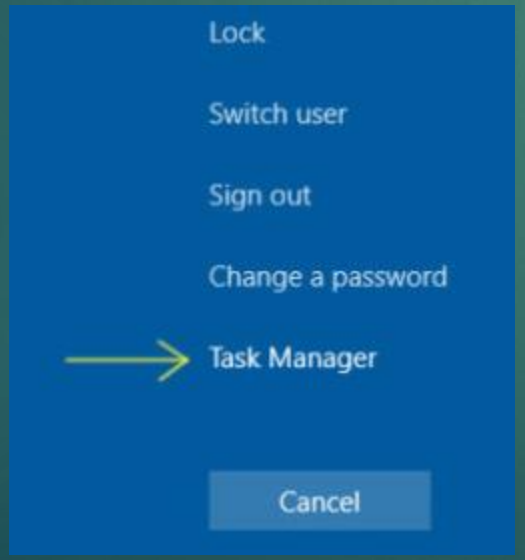
Task Manager

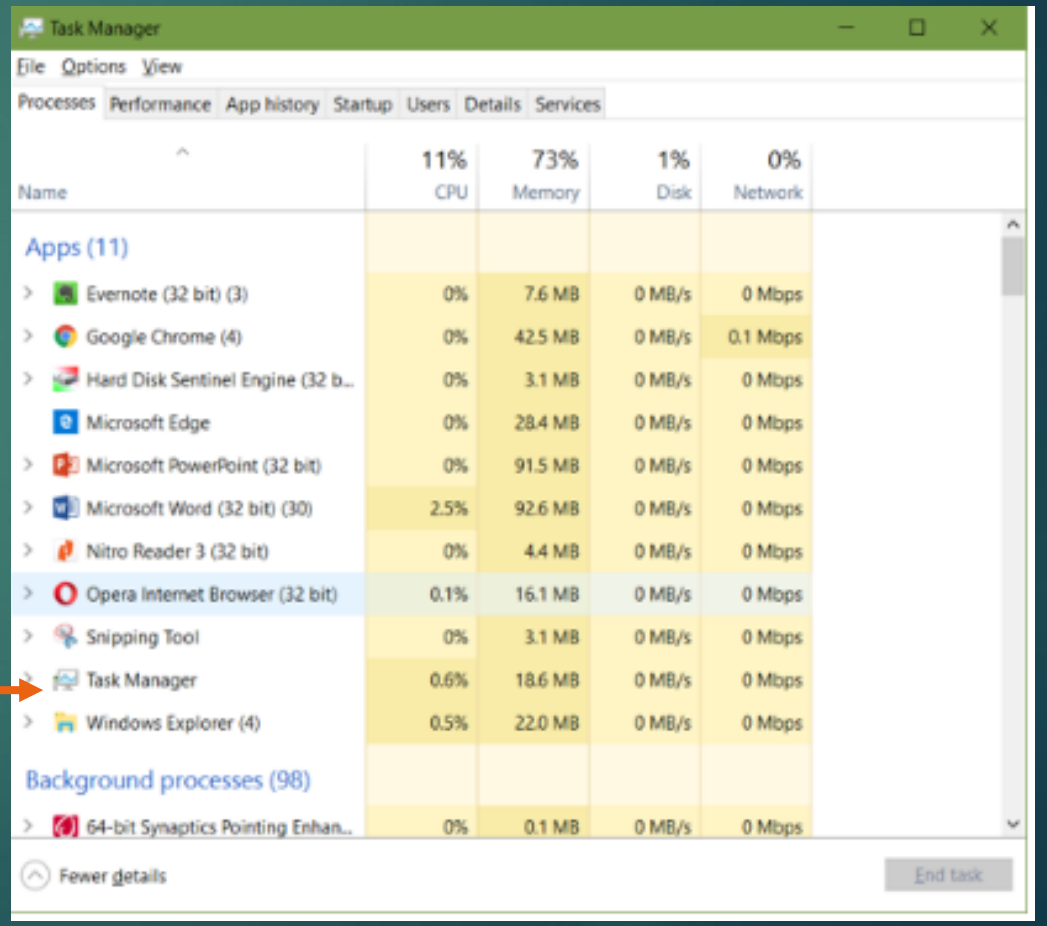
Unresponsive Programs

- Open Task Manager
- Select one at a time
- Press Delete key or
- End Task
- Open program
- Working OK?
- No, reboot



CTRL ALT DELETE

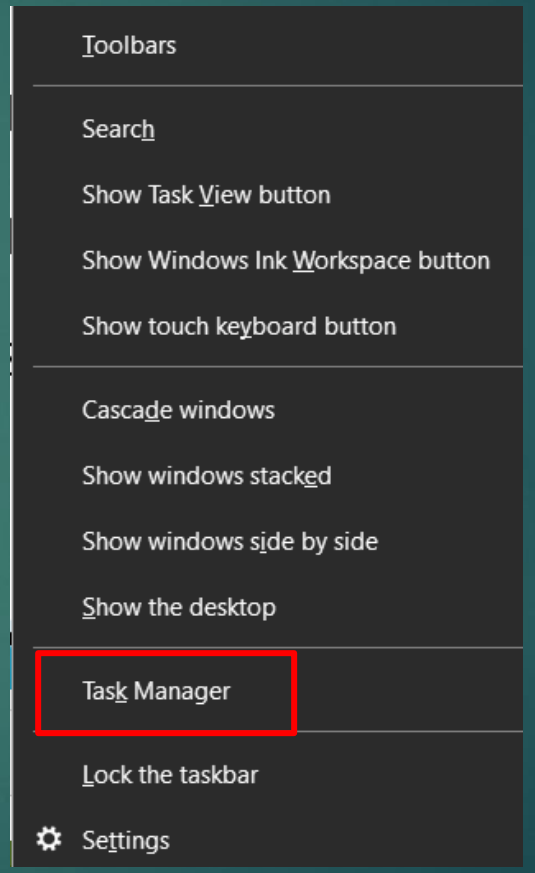




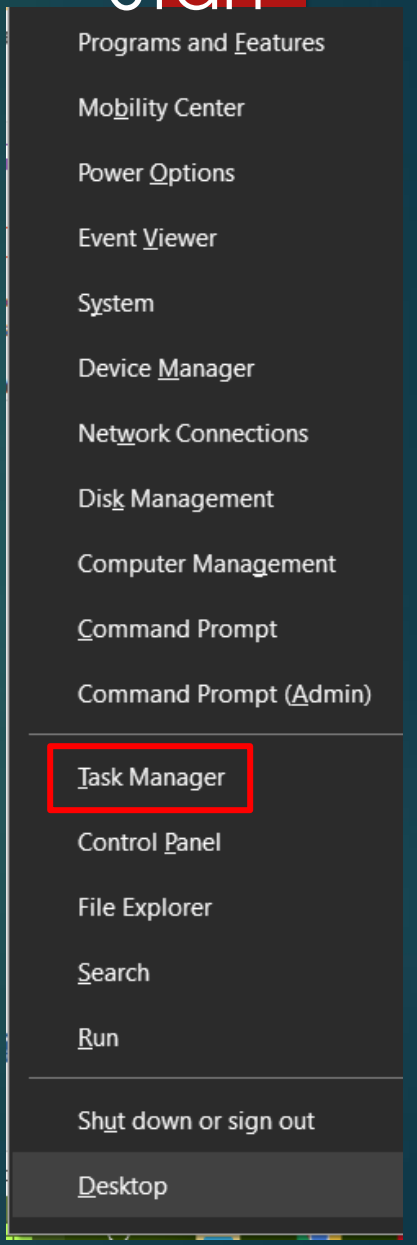
Open Task Manager

- Right click on Taskbar
  - Select Task Manager
- Right click on Start
  - Select Task Manager

Taskbar

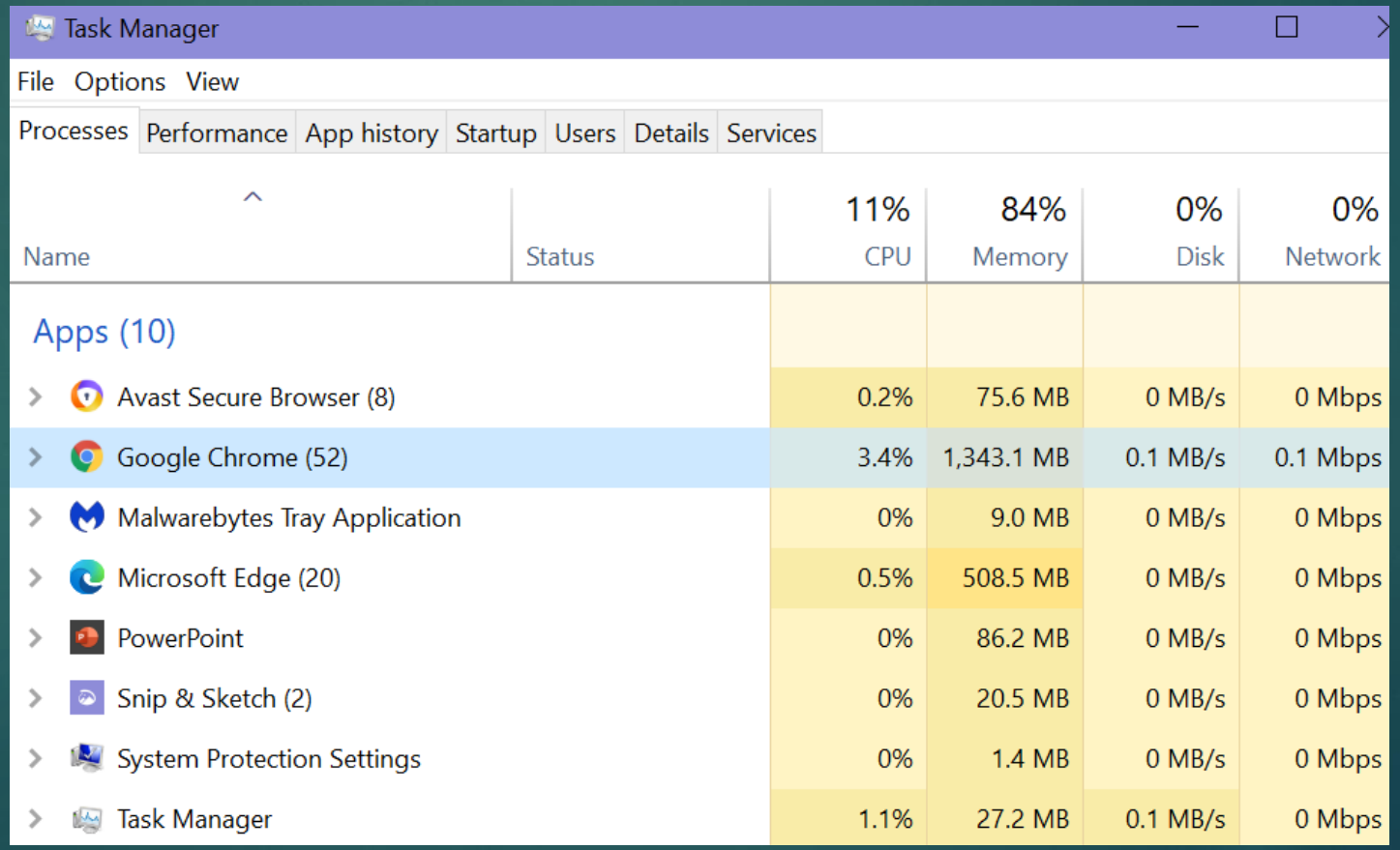


Start



Open Task Manager

- Ctrl + Shift + Esc opens Task Manager dialog box



Sometimes You Have to Pull the Plug

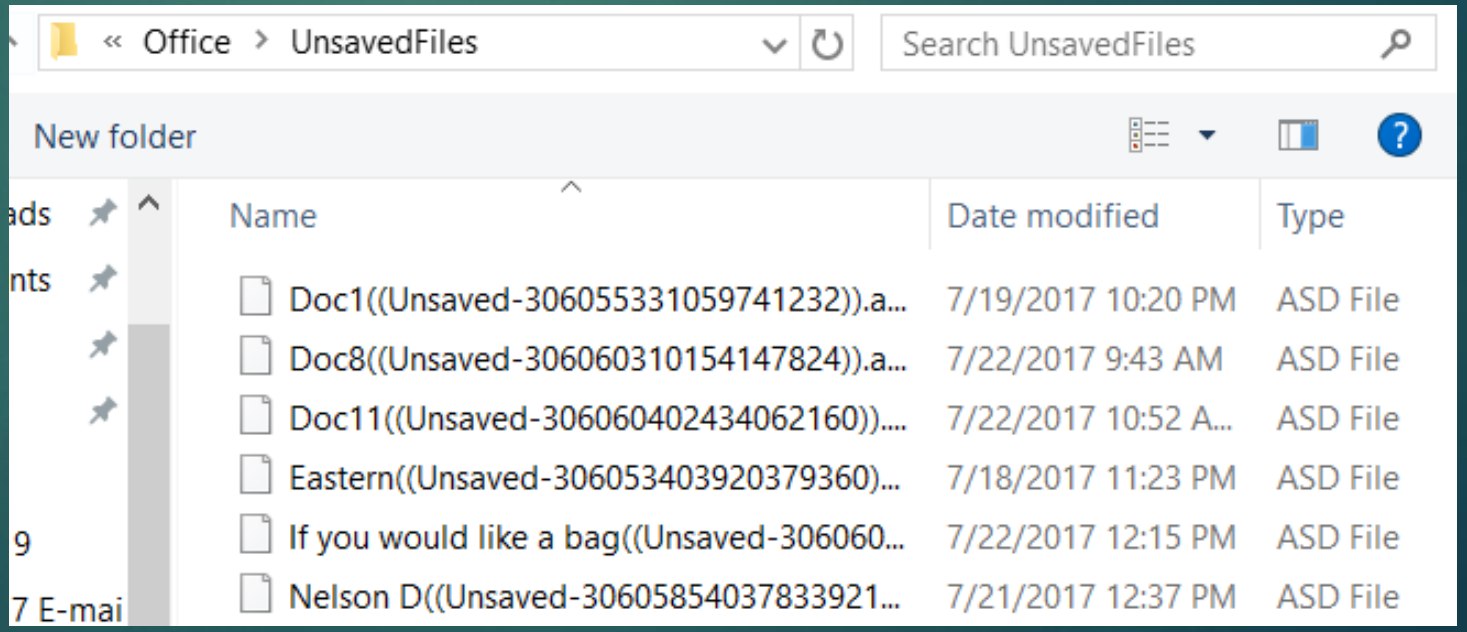
- Pull the plug
- Wait at least 20-30 seconds for the hard drive to stop spinning and then restart the machine

After Your Computer Boots Up

- If the computer starts up, open the applications you were using
- Some programs, like the Microsoft Office, make timed backups and may bring up recovered files
- If you have a "recovered document" save it under a different name and compare it to your previously saved files

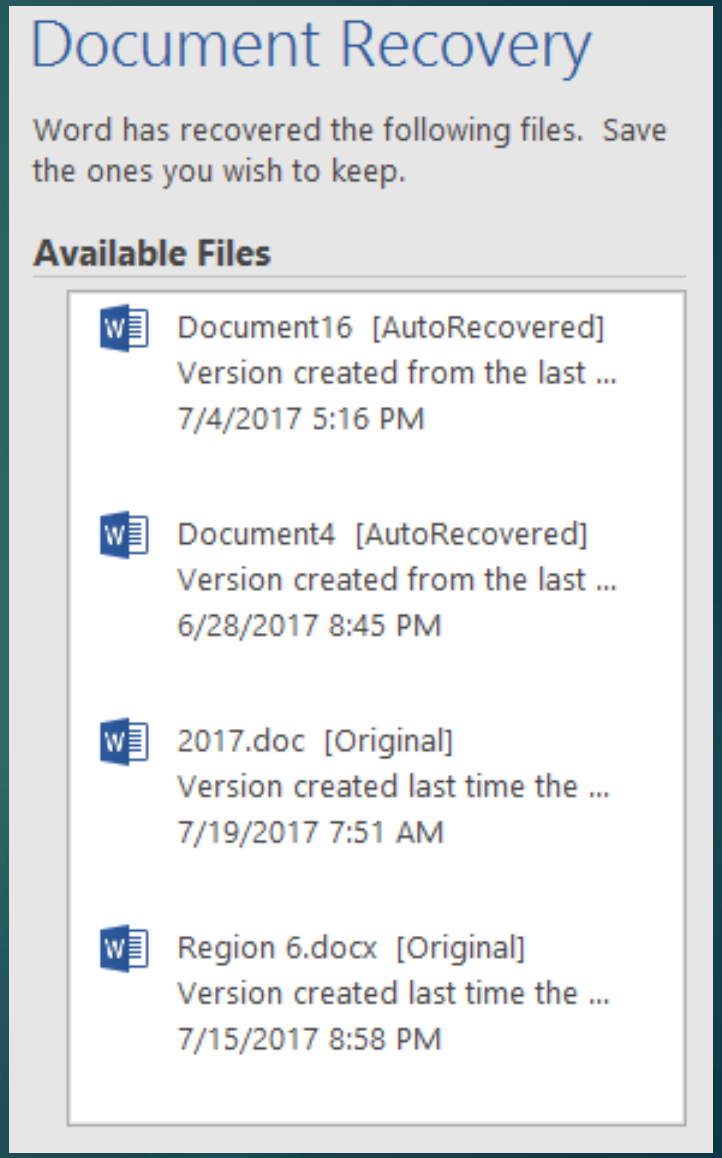
After Your Computer Boots Up

- Recover Unsaved Documents
- File / Open
- Click on



After Your Computer Boots Up

- You may also find unsaved files



OK, None of That Worked

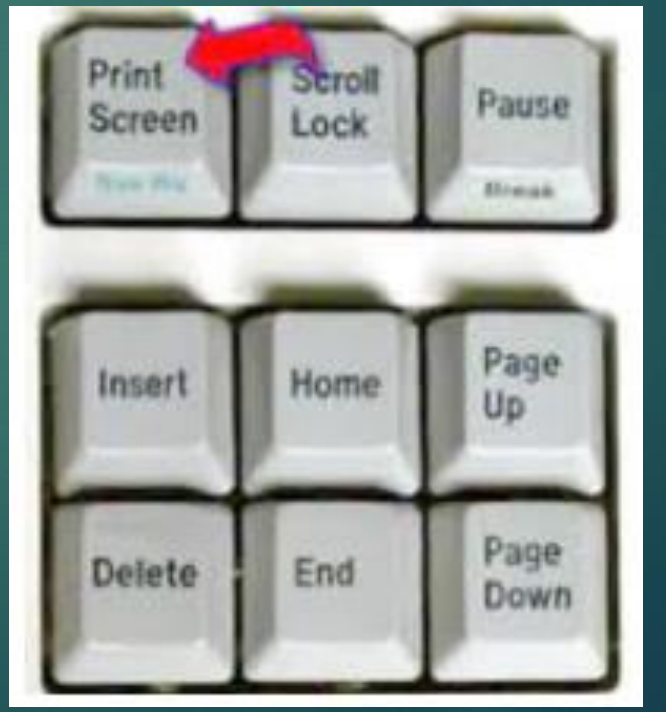
Error Messages

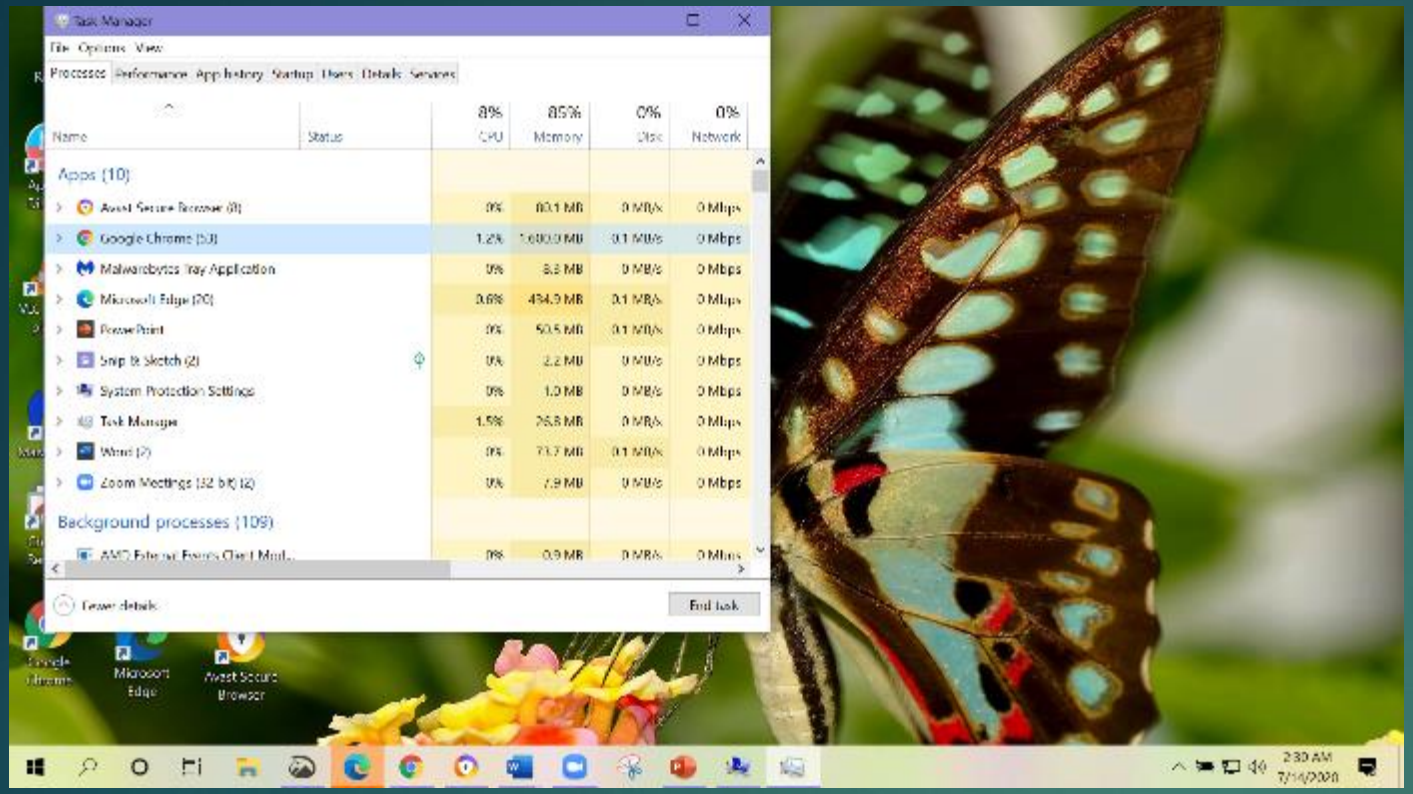
- You can write it down but….

```
Object reference not set to an instance of an object.   at
Microsoft.SharePoint.SPSite.get_IISAllowsAnonymous()
   at Microsoft.SharePoint.ApplicationPages.UserRoles.InitPage()
   at Microsoft.SharePoint.ApplicationPages.CBaseAclPage.OnLoad(EventArgs e)
   at System.Web.UI.Control.LoadRecursive()
   at System.Web.UI.Page.ProcessRequestMain(Boolean
includeStagesBeforeAsyncPoint, Boolean includeStagesAfterAsyncPoint)
```

Print Screen

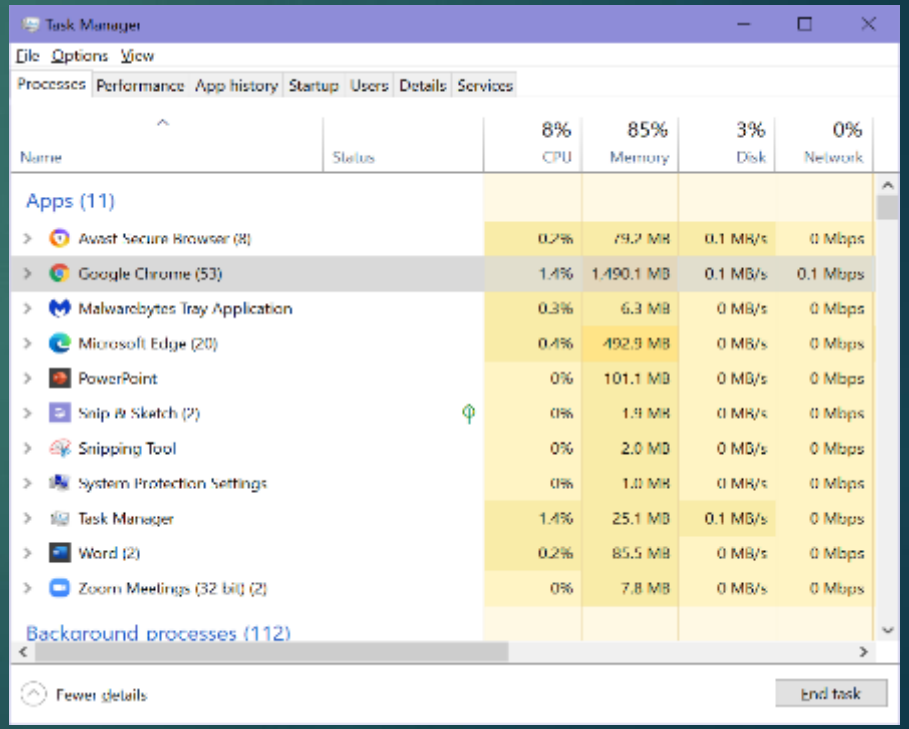
- The PrtScr (Print Screen) key copies the entire screen into RAM (memory) / Clipboard
- Alt + PrtScr copies only the active window





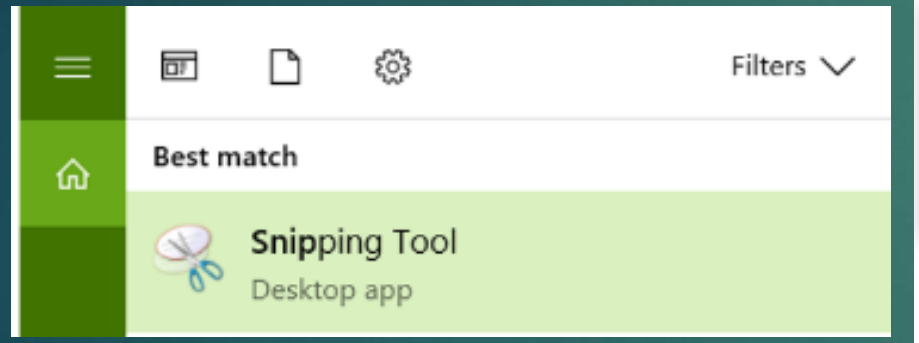
Windows Key+Print Screen

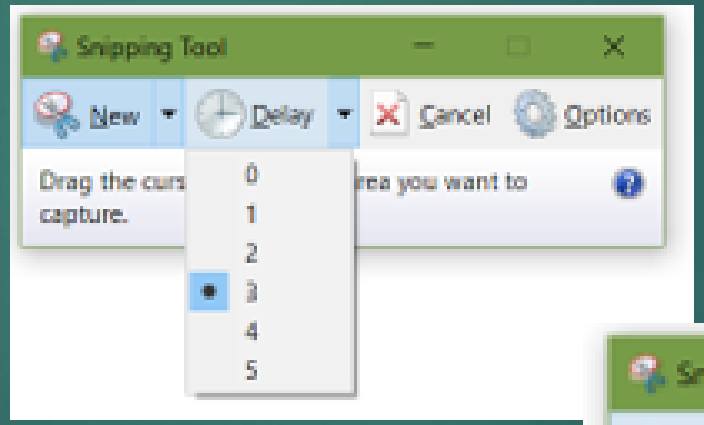
Alt + PrtScr

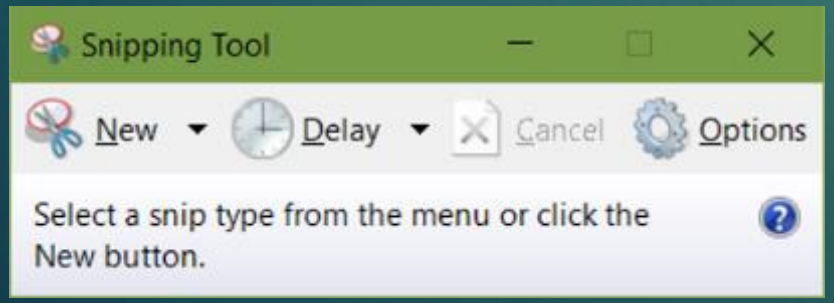


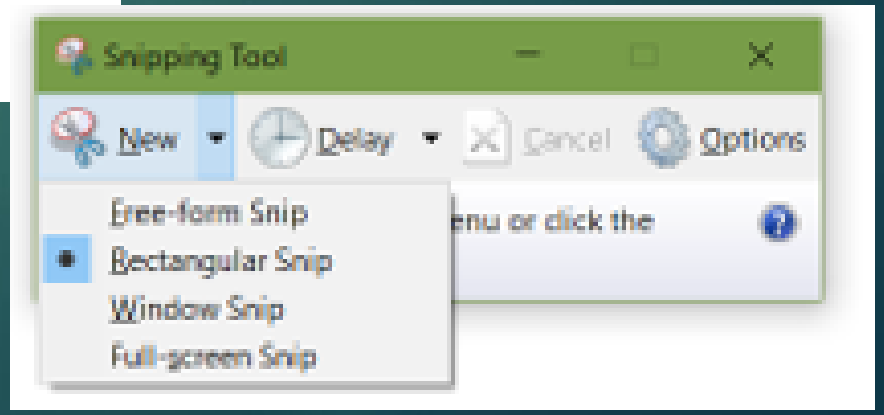
Snipping Tool

- Captures all or part of a window
- Type snip in Search Box / click on Snipping tool







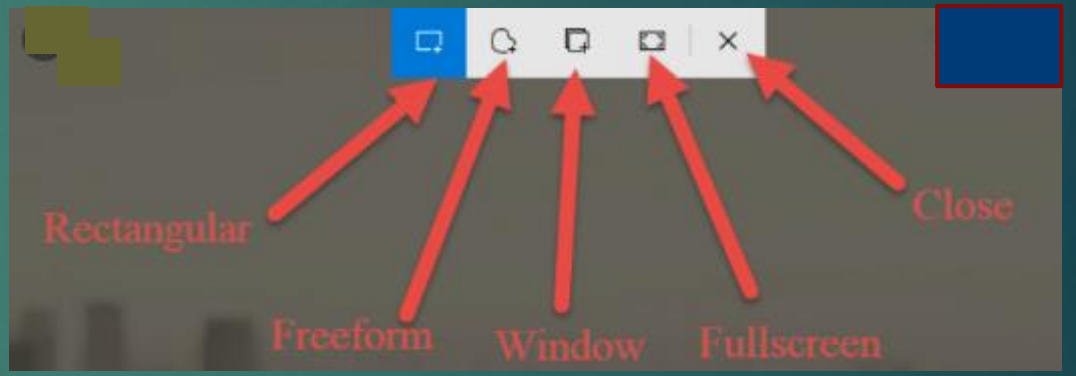


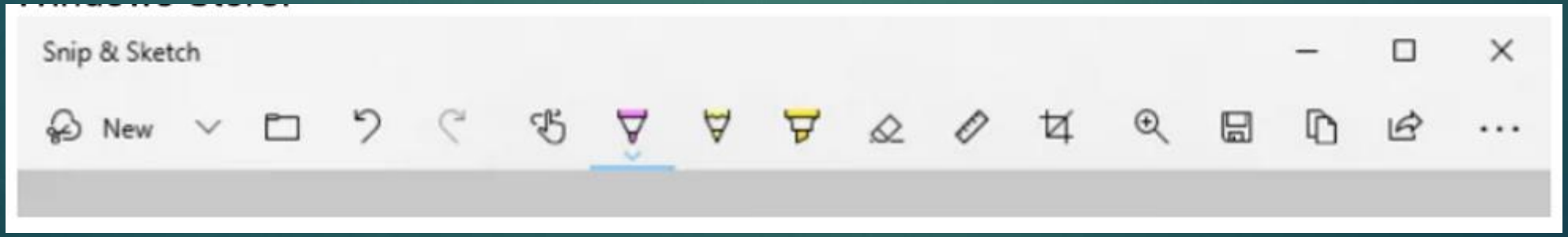
Print Screen / Snip

- Paste into…
  - WordPad
  - Word
- Save in Error Messages folder

Snip and Sketch

- Search for Snip and Sketch
- Right-click > Taskbar or Start
- Click on New
- Choose type of Snip





Hard Drive Makes Grinding Noises

- Early sign your drive is dying
- Five minutes or 5 weeks
- Back up your files ASAP OR
- Create an image of your HD
- Buy new HD / copy image from external hard drive
- OR
- Buy new computer / install programs / copy files from external storage

Beep Codes

- The beeping sequence is a coded message (beep code) designed to tell the user (really your tech) what is wrong with the computer

BIOS Beep Codes List

Beep Codes for the two most used brands **AMI systems** and **Phoenix systems**

AMI Beep Codes

- **1 beep** - DRAM refresh failure. There is a problem in the system memory or the motherboard.
- **2 beeps** - Memory parity error. The parity circuit is not working properly.
- **3 beeps** - Base 64K RAM failure. There is a problem with the first 64K of system memory.
- **4 beeps** - System timer not operational. There is problem with the timer(s) that control functions on the motherboard.
- **5 beeps** - Processor failure. The system CPU has failed.
- **6 beeps** - Gate A20/keyboard controller failure. The keyboard IC controller has failed, preventing gate A20 from switching the processor to protect mode.
- **7 beeps** - Virtual mode exception error.
- **8 beeps** - Video memory error. The BIOS cannot write to the frame buffer memory on the video card.
- **9 beeps** - ROM checksum error. The BIOS ROM chip on the motherboard is likely faulty.
- **10 beeps** - CMOS checksum error. Something on the motherboard is causing an error when trying to interact with the CMOS.
- **11 beeps** - Bad cache memory. An error in the level 2 cache memory.
- **1 long beep, 2 short** - Failure in the video system.
- **1 long beep, 3 short** - A failure has been detected in memory above 64K.
- **1 long beep, 8 short** - Display test failure.
- **Continuous beeping** - A problem with the memory or video.

Computer Keeps Restarting

- Components within your system may be overheating
- Make sure the vents in the case are not blocked
- Confirm there is good air flow around the computer
- Clean your fan(s) OR
- It could be your Power Supply is dying
- Time for a tech

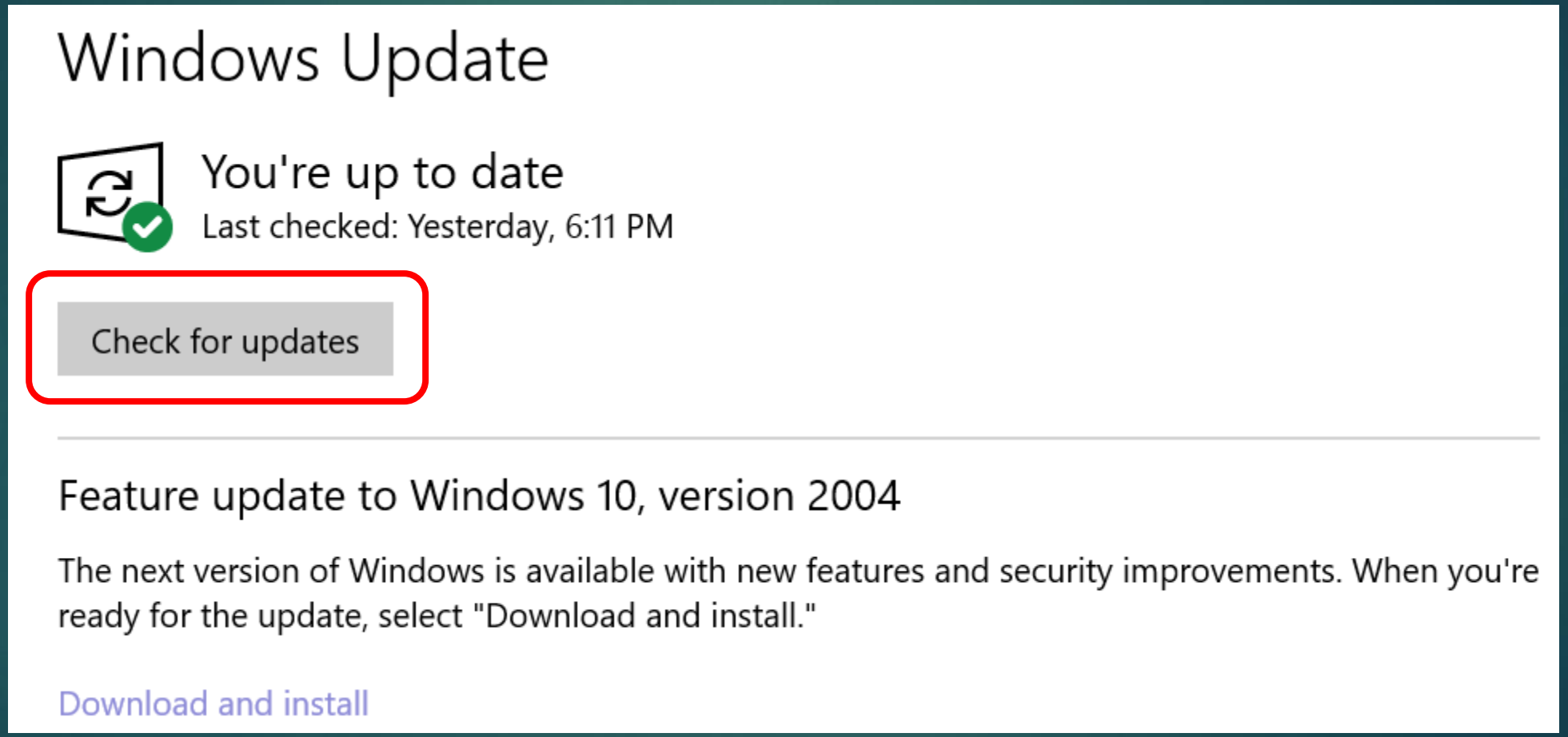
Computer Keeps Restarting

- Must have to clean vents

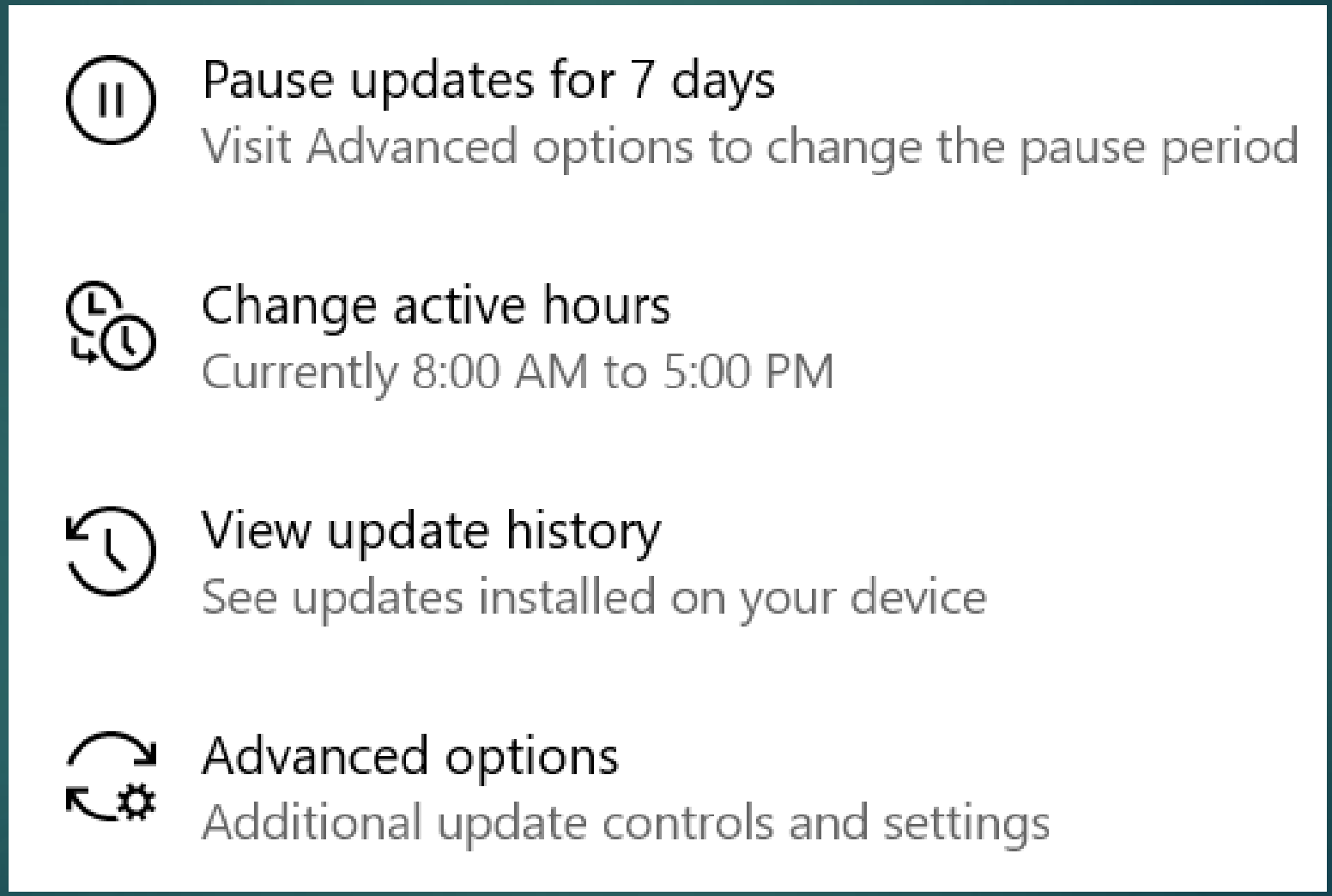
Computer is Running Slow

- Make sure you have all the latest Windows updates installed
- Install pending updates
- Win 10 - Set time for update restart
  - Settings
  - Update & Security
  - Windows Update
  - Set Active Hours

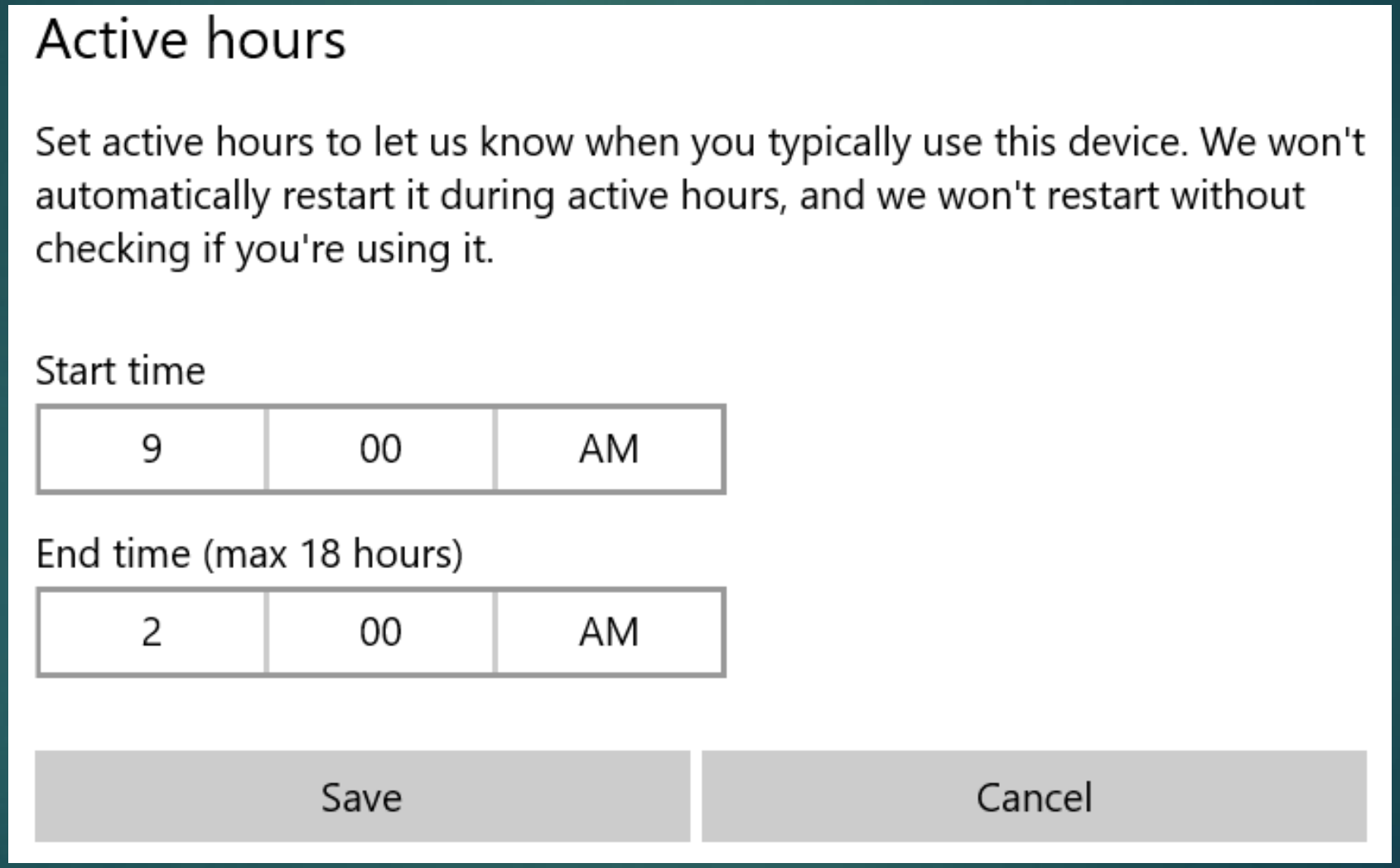
Computer is Running Slow



Computer is Running Slow



Computer is Running Slow



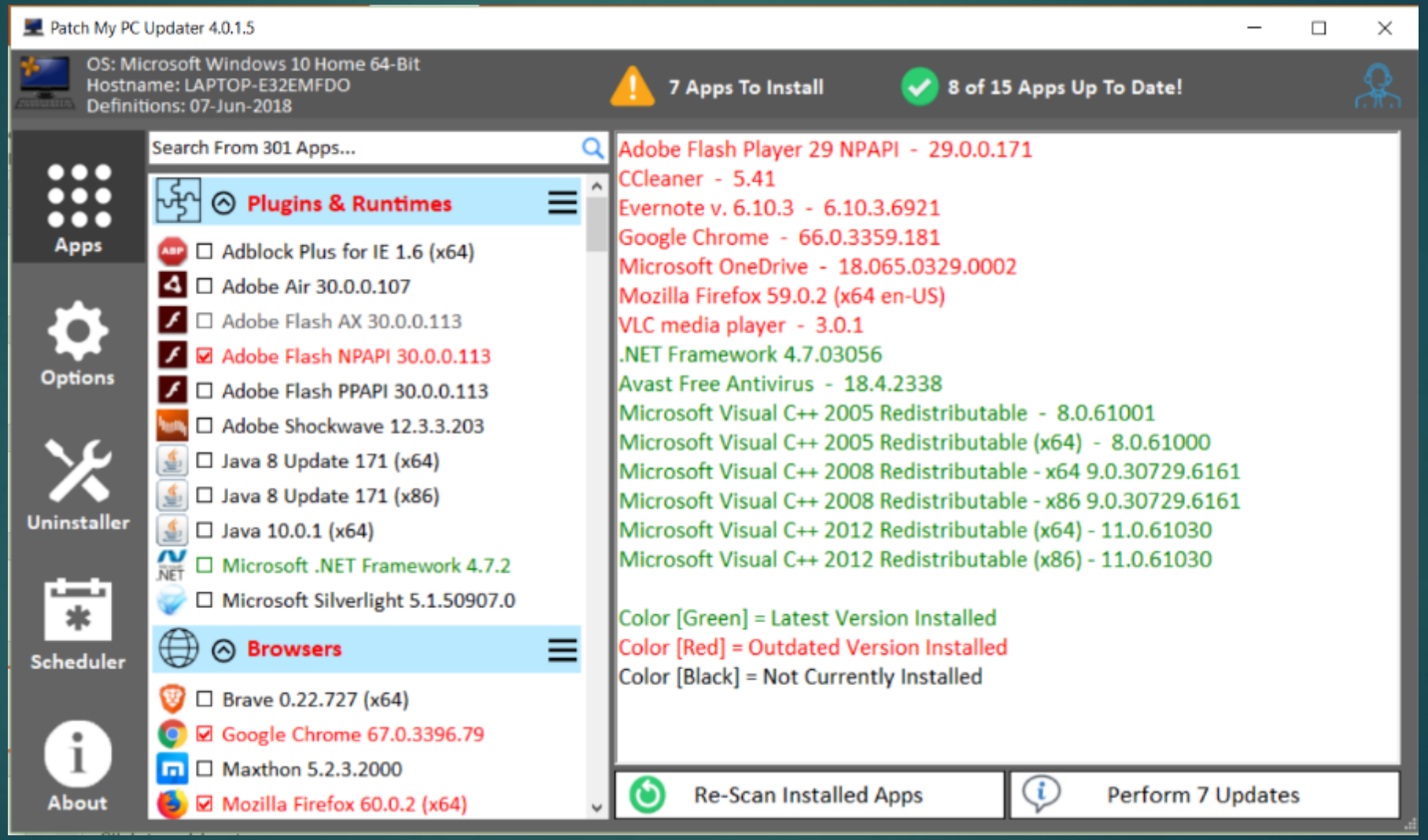
Computer is Running Slow

Update your software

- Many updates are automatic
- Check to make sure you have the latest

- FileHippo
- Ninite
- PatchMyPC

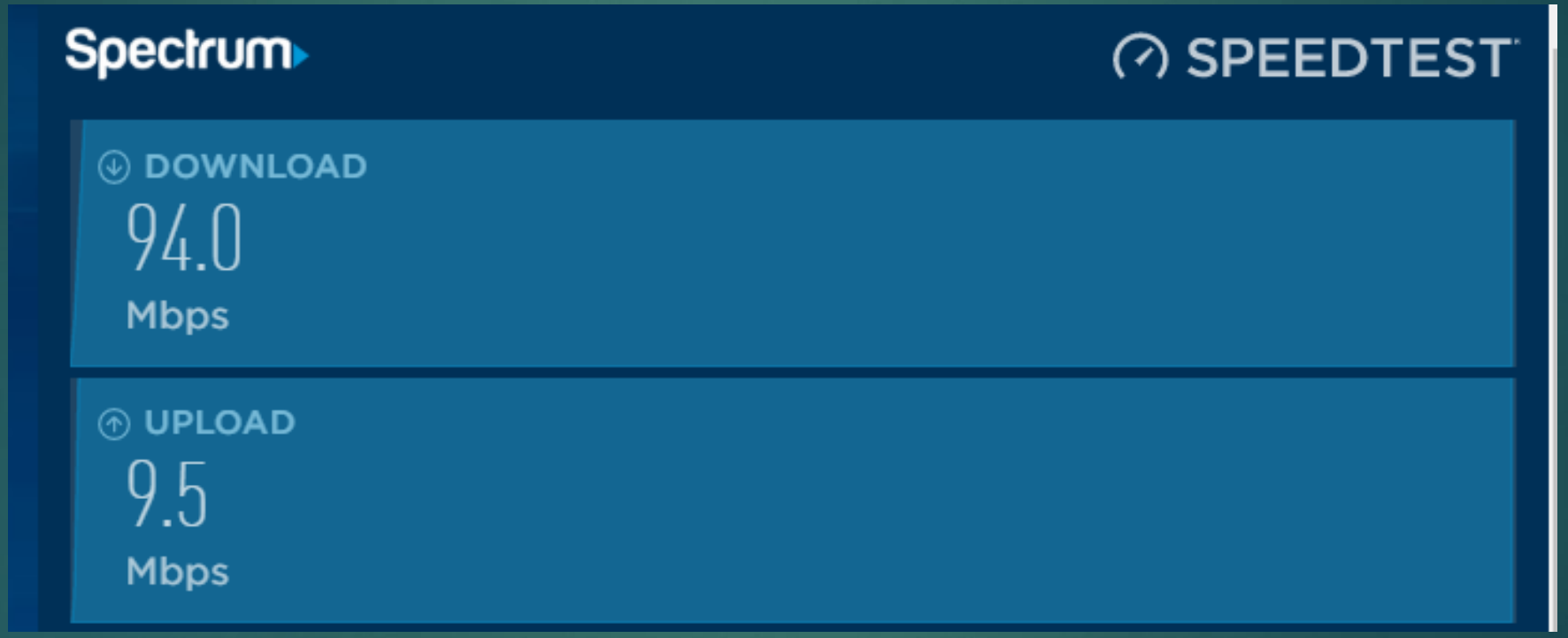
Computer is Running Slow



Computer is Running Slow

- If you are on the Internet when your computer is slow, make sure browser plugins are up-to-date
- Use your ISP's app to check your upload / download speed
- Call your ISP to find out what speeds you are paying for

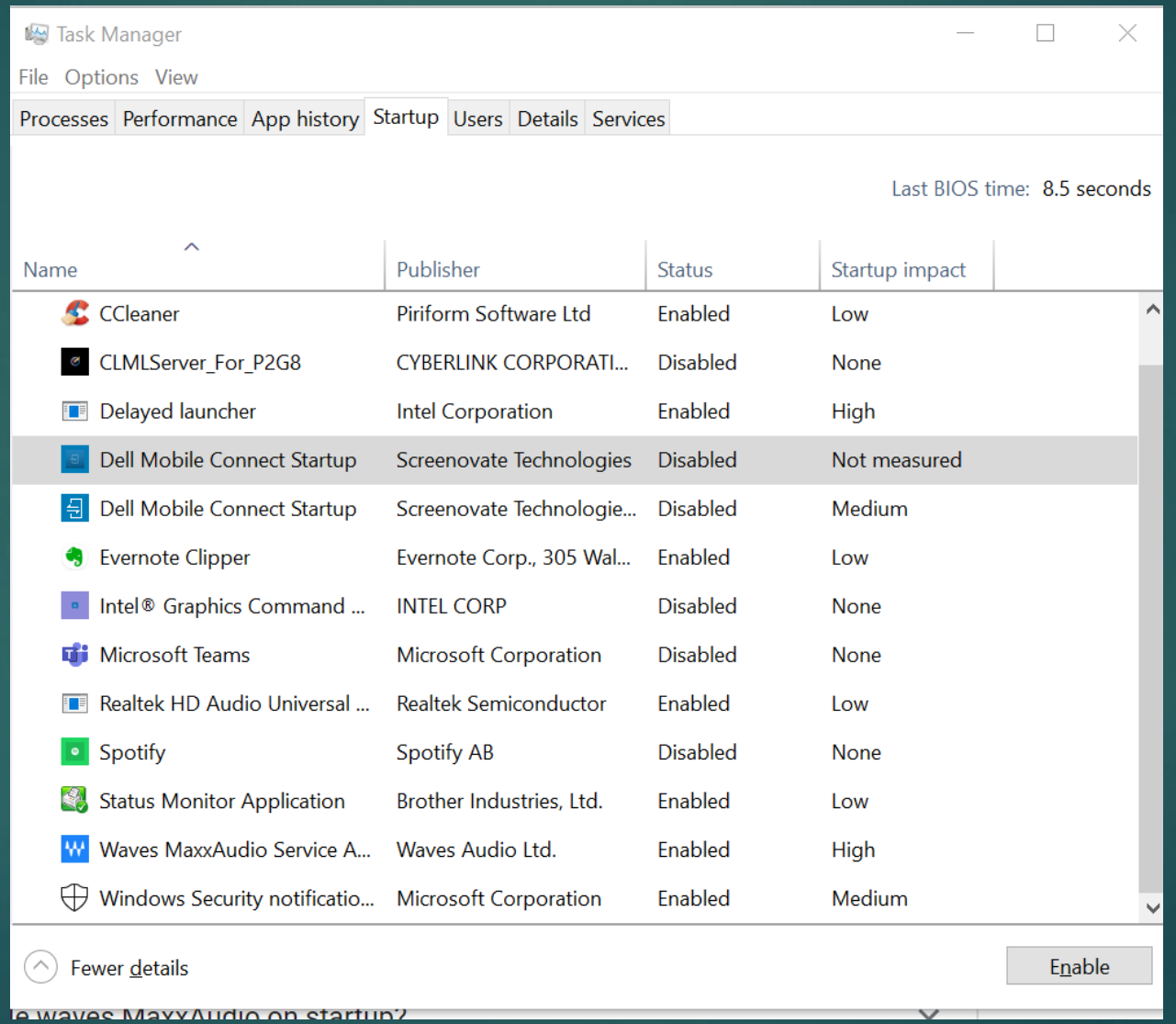
Computer is Running Slow



Computer is Running Slow

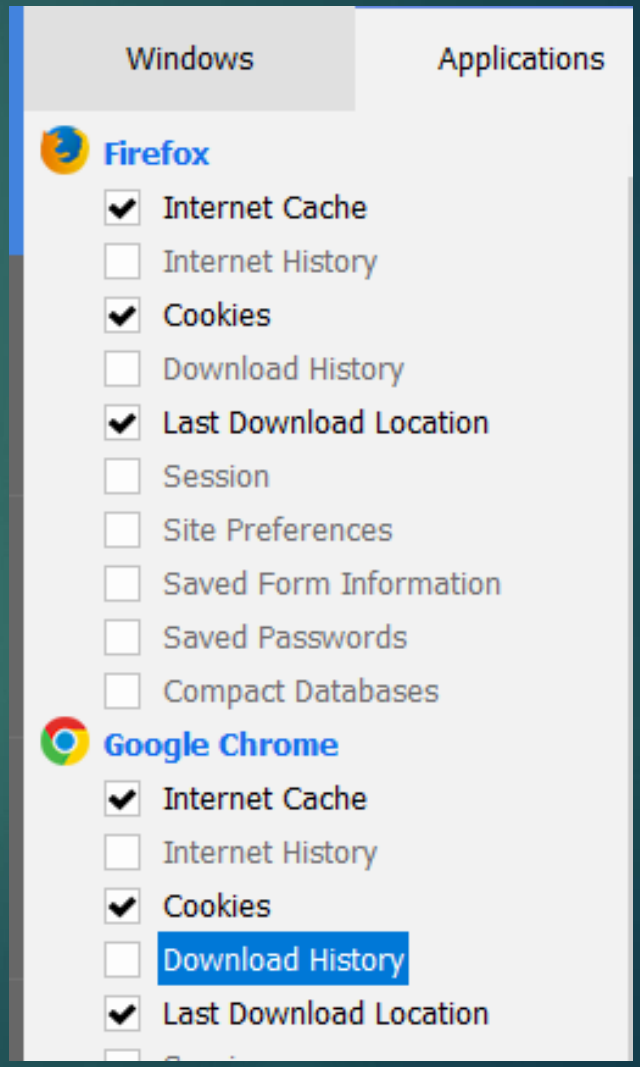
- How many programs are running in the background?
- Does is take forever for your computer to start?
- Disable any you don't use on a daily basis
- Task Manager / Startup

Computer is Running Slow



Time to Clean Your HD

- I use CCleaner
- Update to latest version
- Install it
- Customize it before you run it
- Click Analyze & Run

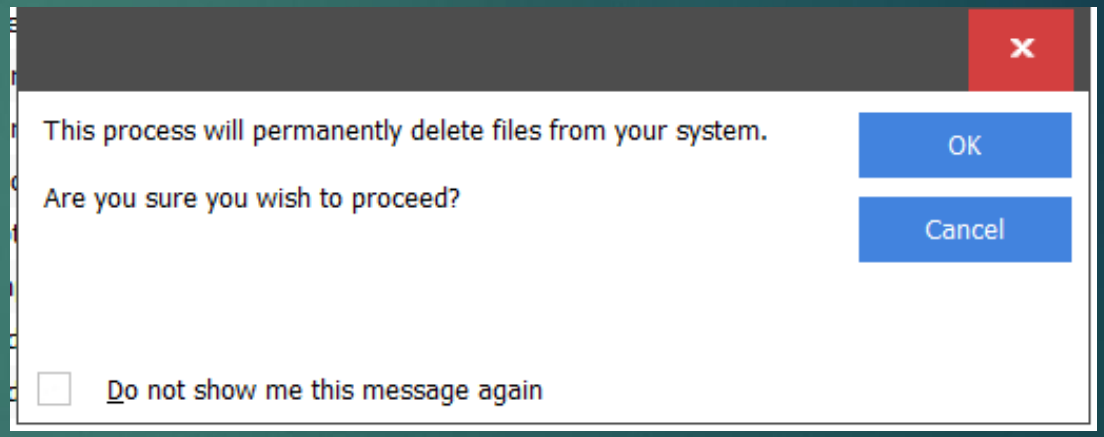


Time to Clean Your HD

Analysis Complete - (18.213 secs)
3,577 MB to be removed. (Approximate size)

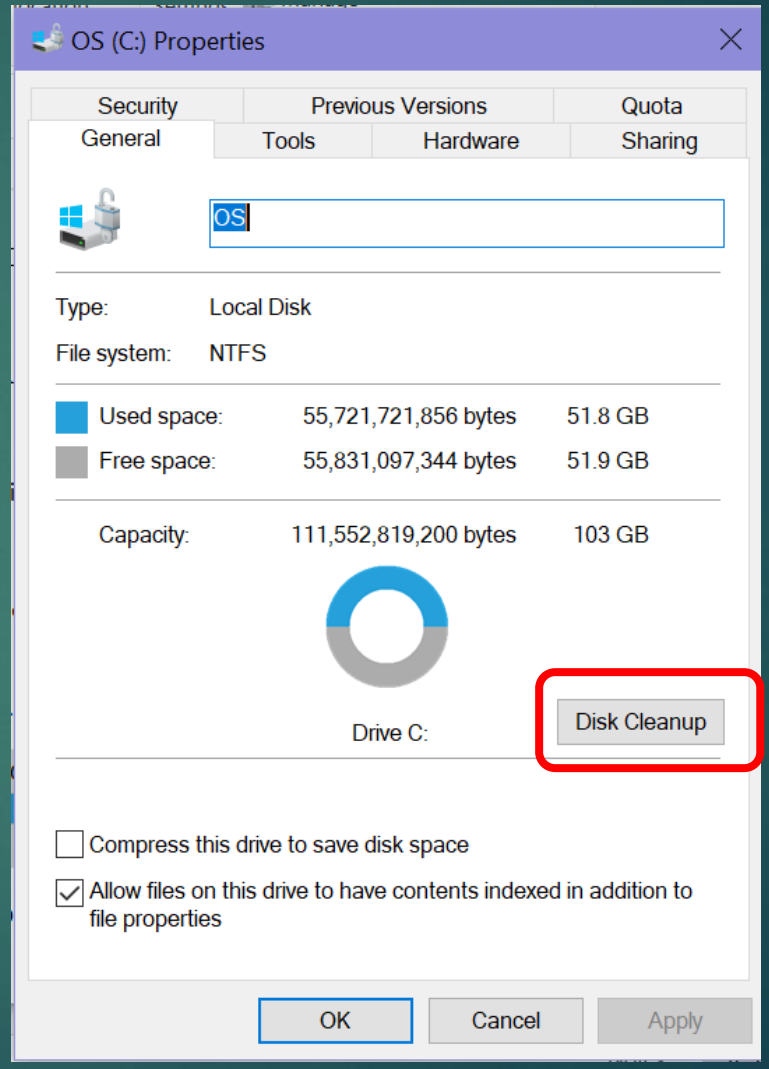
Details of files to be deleted (Note: No files have been deleted yet)

Microsoft Edge - Internet Cache	9,766 KB	141 files
Microsoft Edge - Internet History	0 KB	3 files
Microsoft Edge - Cookies	1 KB	1 files
Microsoft Edge - Download History	0 KB	1 files
Internet Explorer - Temporary Internet Files	26,221 KB	346 files
Internet Explorer - Cookies	4 KB	20 files
Windows Explorer - Thumbnail Cache	1,025 KB	7 files
System - Empty Recycle Bin	97,569 KB	46 files
System - Temporary Files	1,952,686 KB	767 files
System - Memory Dumps	1,566,416 KB	2 files
System - Windows Log Files	4,536 KB	80 files
Firefox - Internet Cache	Skipped	
Firefox - Cookies	Skipped	
Google Chrome - Internet Cache	Skipped	
Google Chrome - Cookies	Skipped	
Utilities - Avast! Antivirus	5,013 KB	21 files

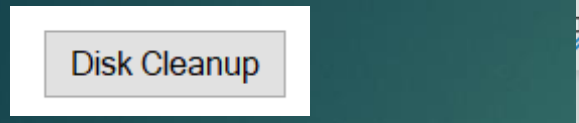


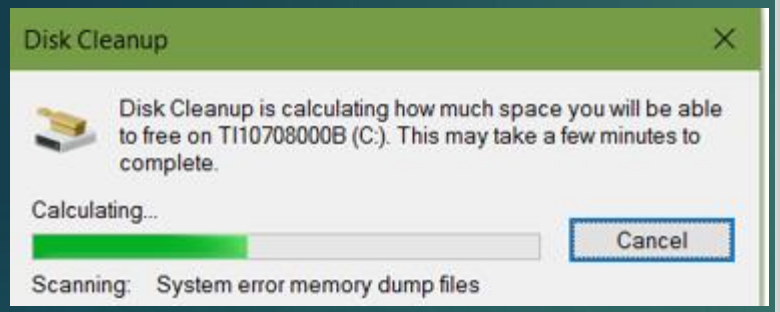
Time to Clean Your HD

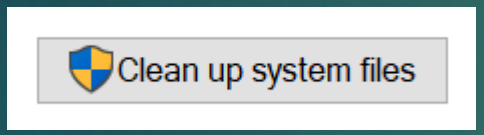
- This PC
- Right click C:\
- Click Properties
- Click Disk Cleanup



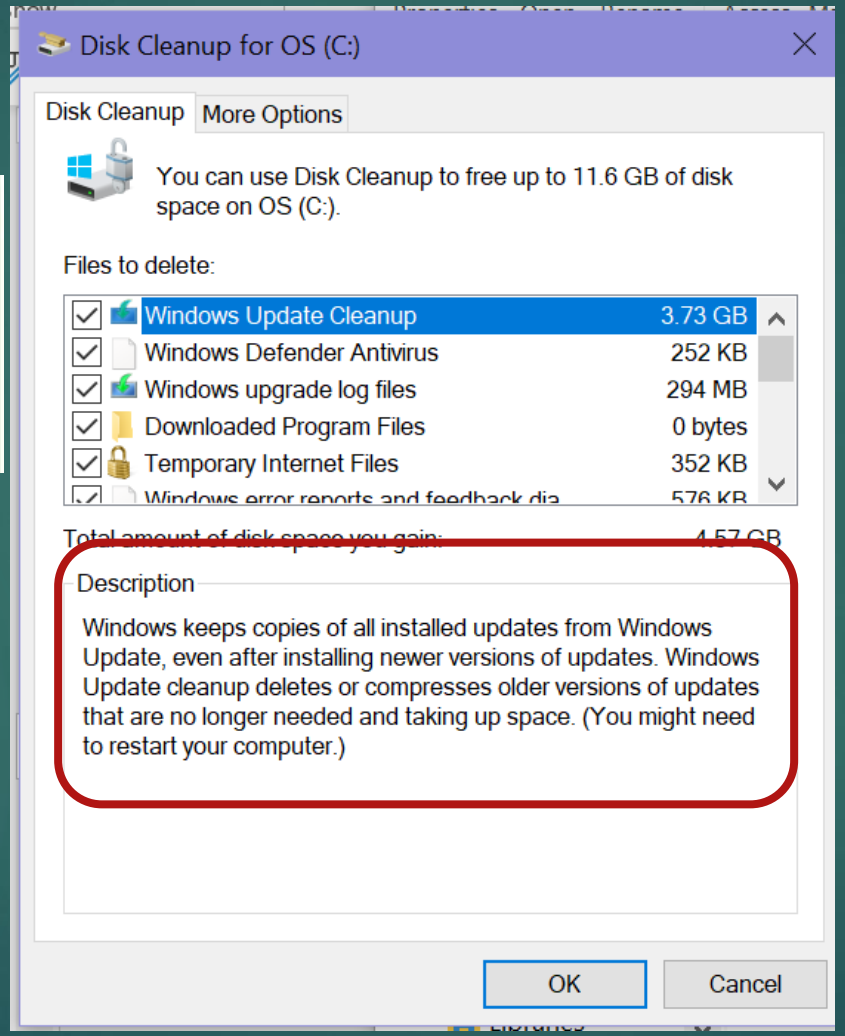
Time to Clean Your HD

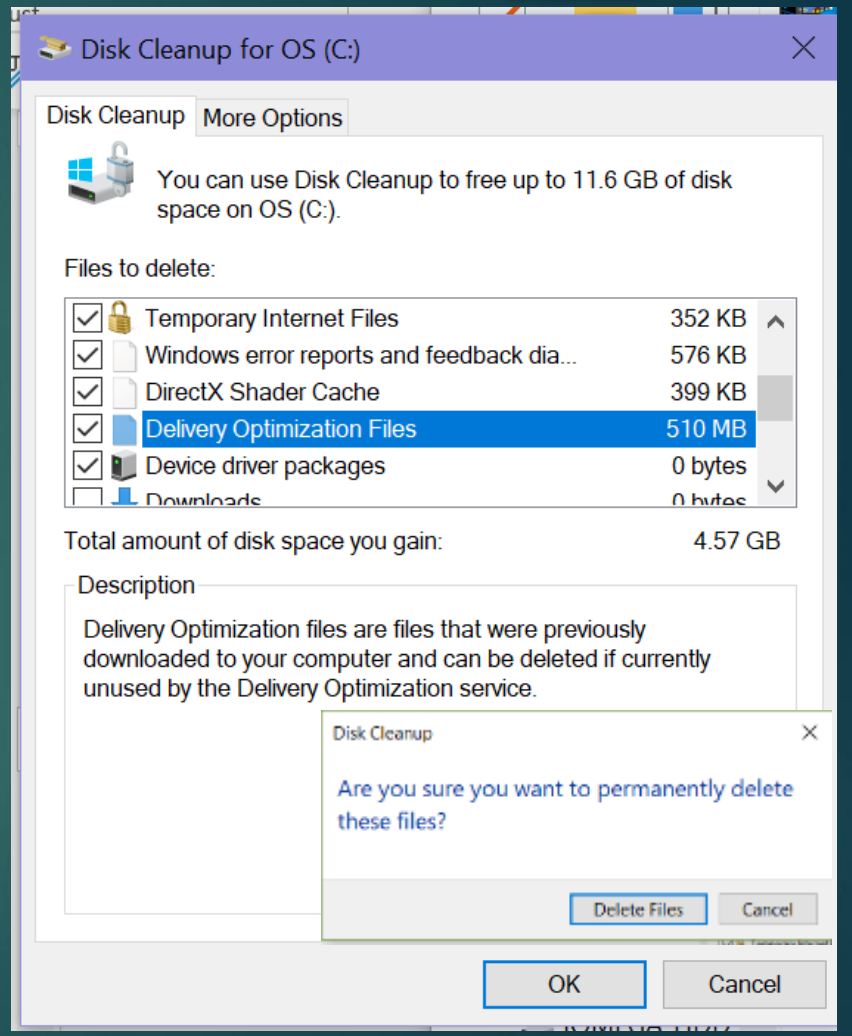






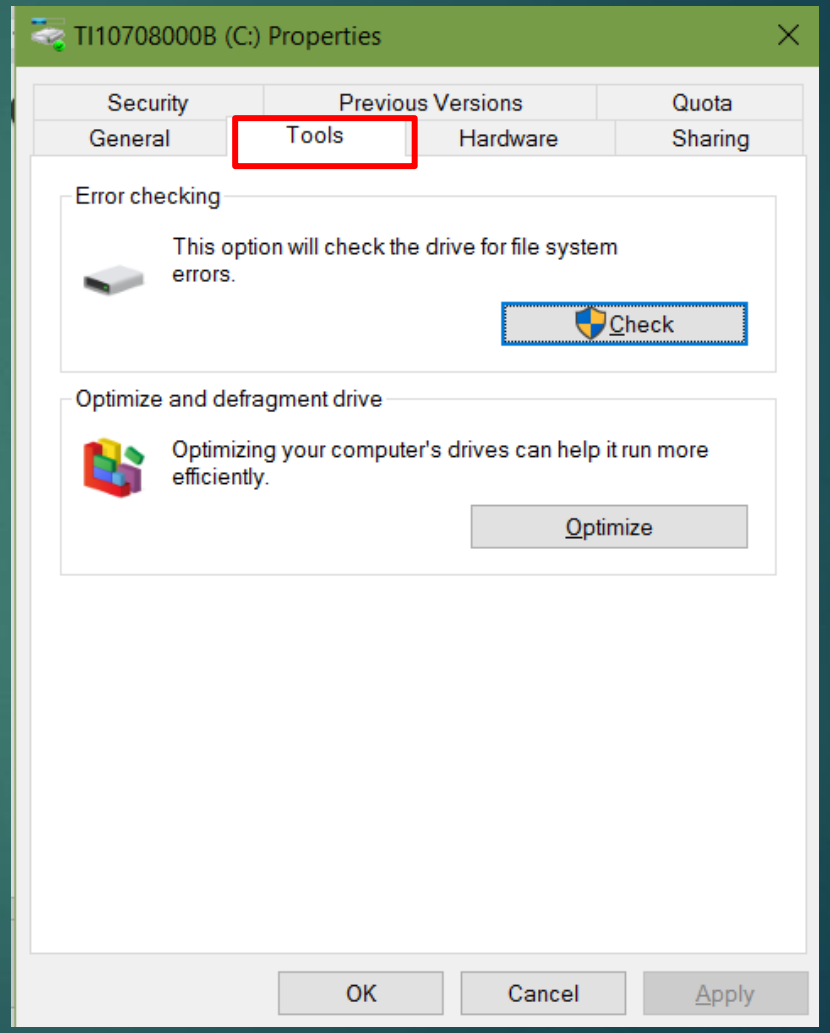
If you have Windows ESD installation files, DO NOT delete them. ESD Files are used for "resetting your PC" to its factory settings.





Time to Clean Your HD

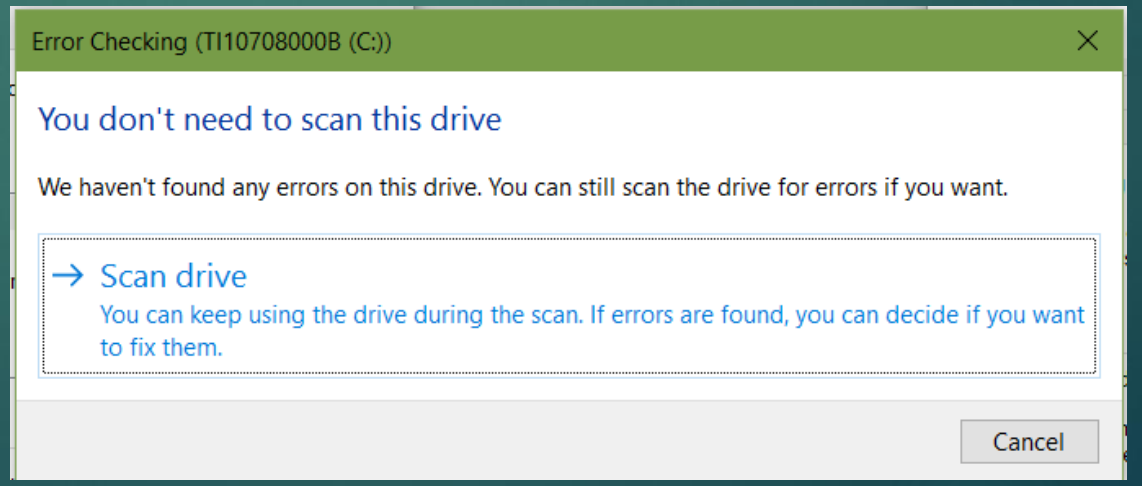
- Click Tools tab
- Error checking
- Defrag



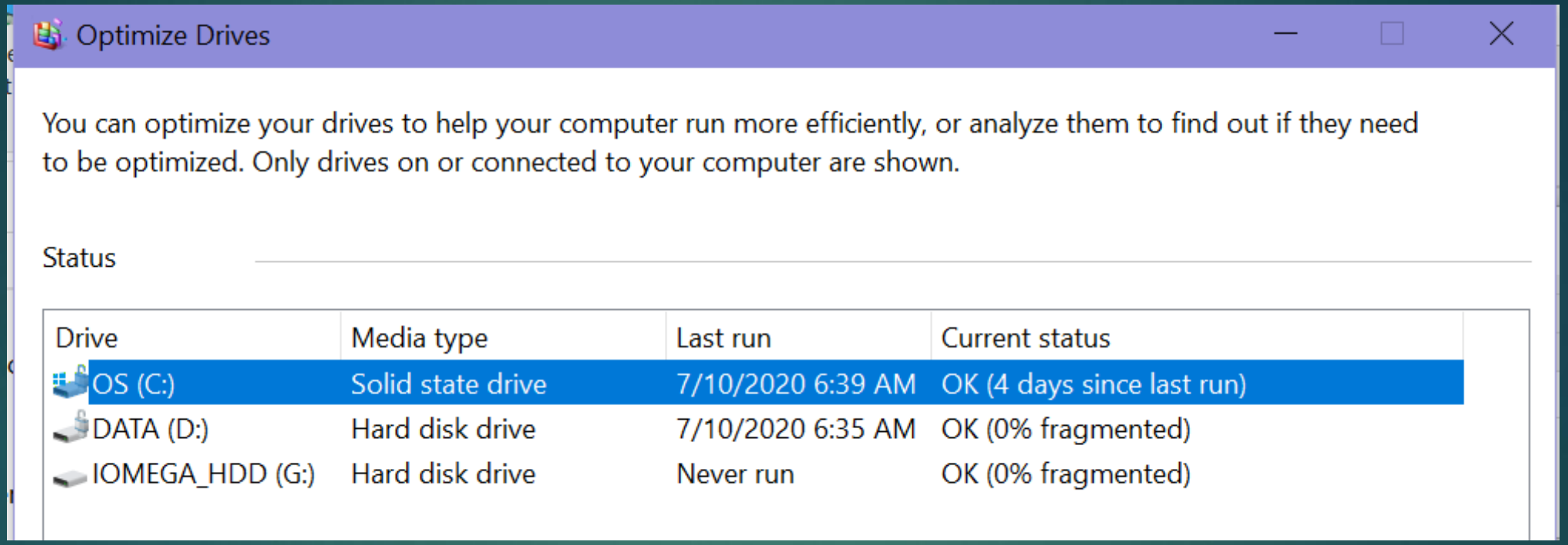
Time to Clean Your HD

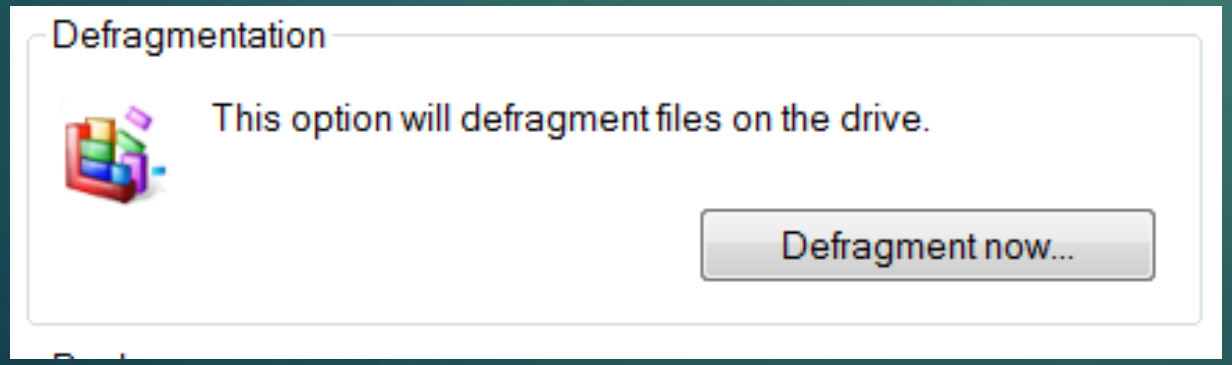
Check Hard Drive for errors

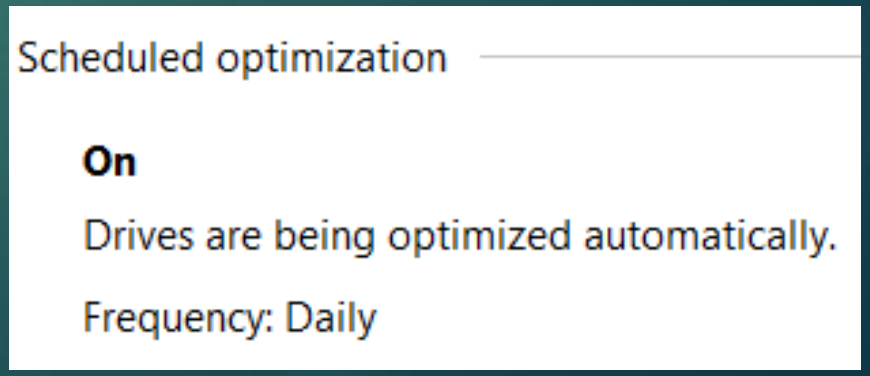
- Check Disk is Windows Error-checking tool used to look for file system errors and bad sectors on your hard drive and repair them automatically



Time to Clean Your HD





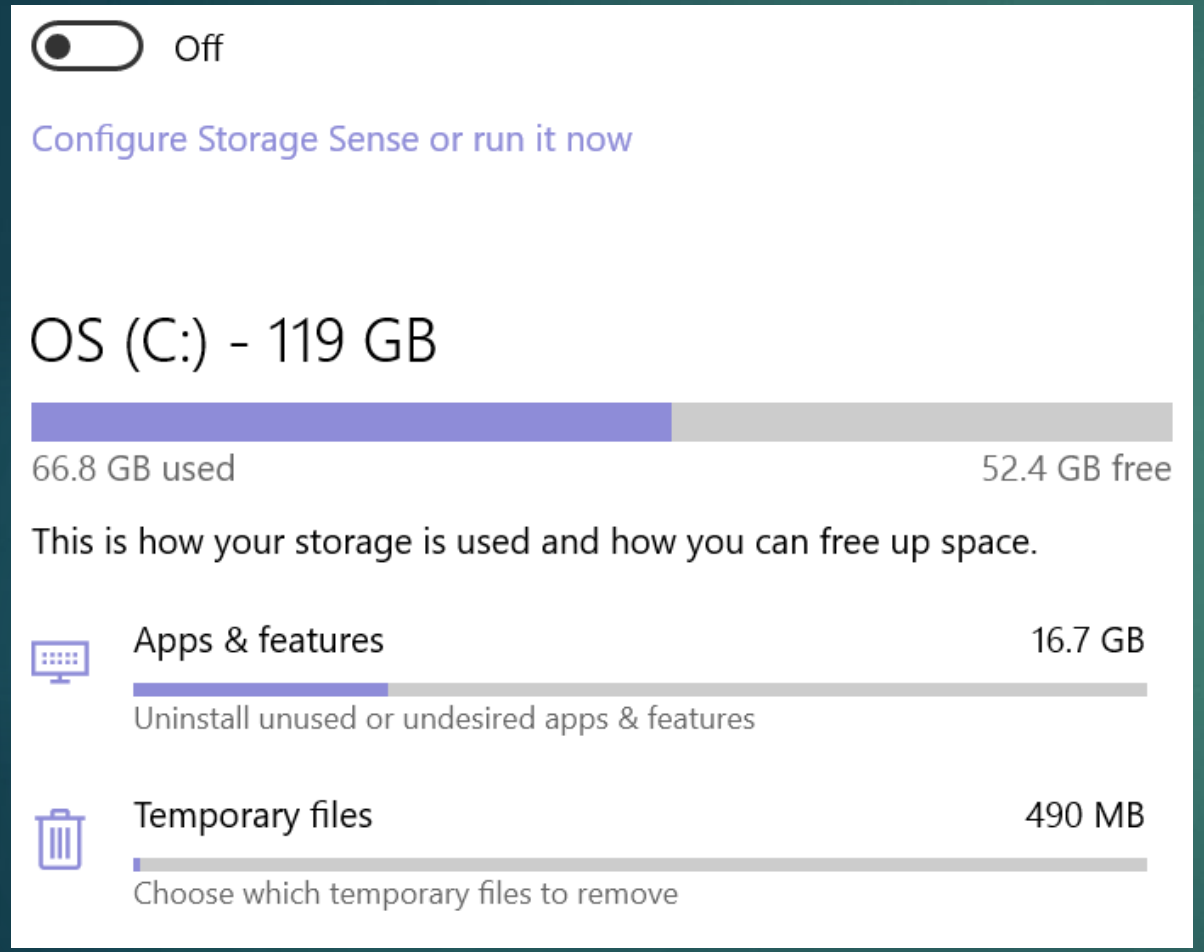


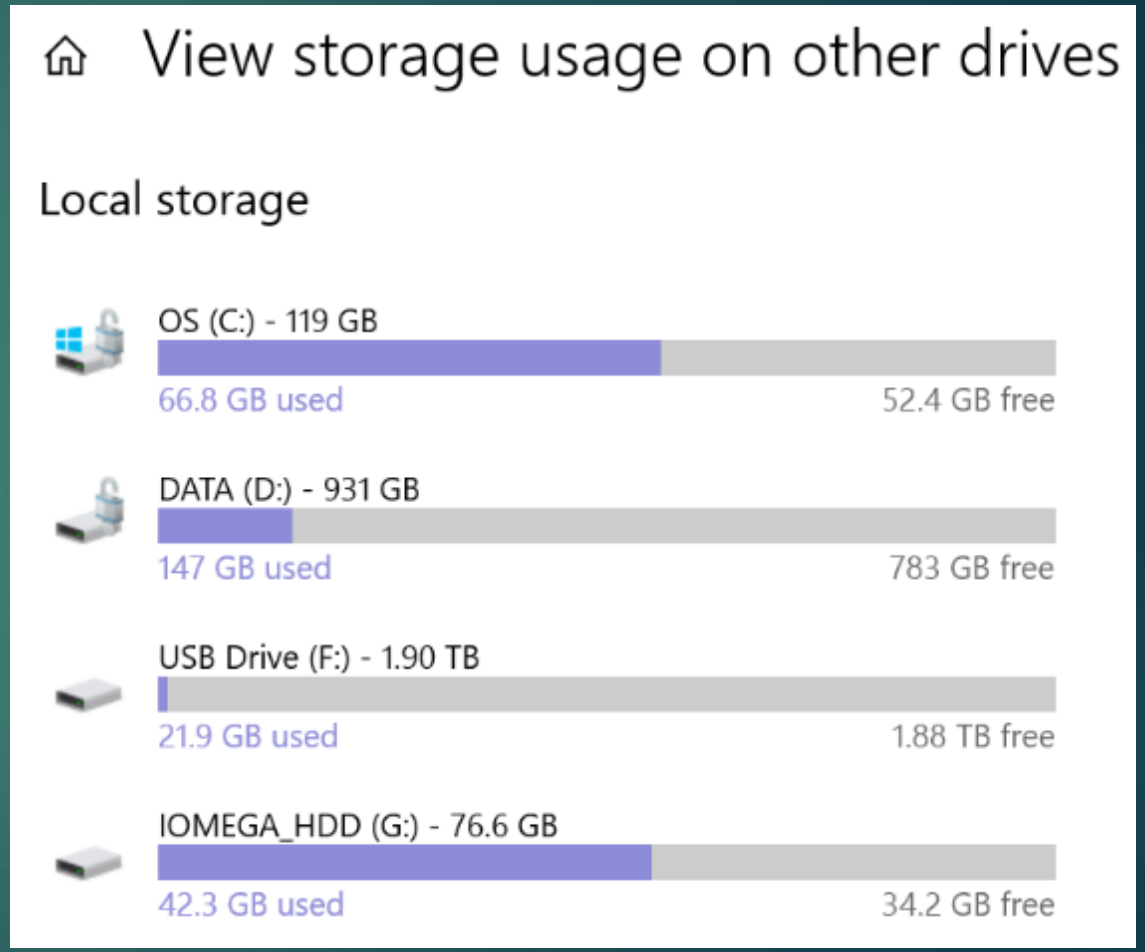
Time to Clean Your HD

Windows 10 Storage Sense

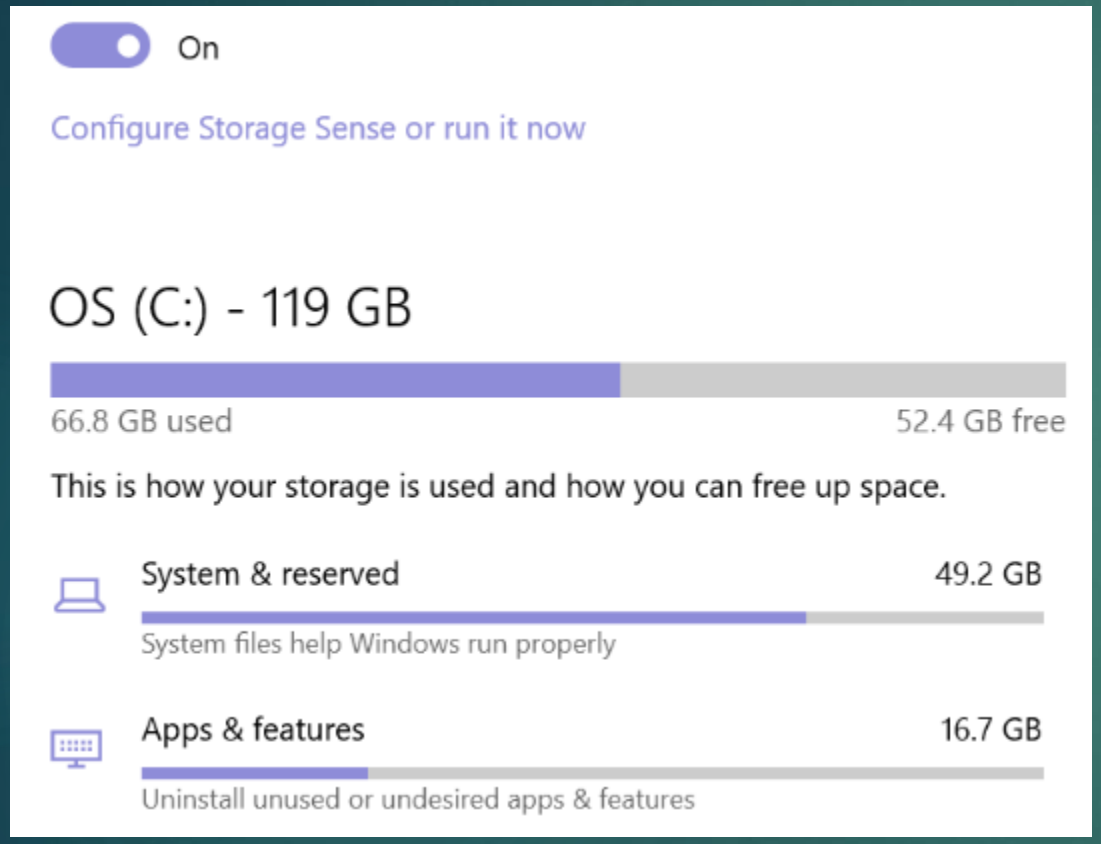
- Storage Sense can automatically free up space by getting rid of files you don't need
  - Temporary files
  - Content in the recycle bin….
- Settings > System > Storage

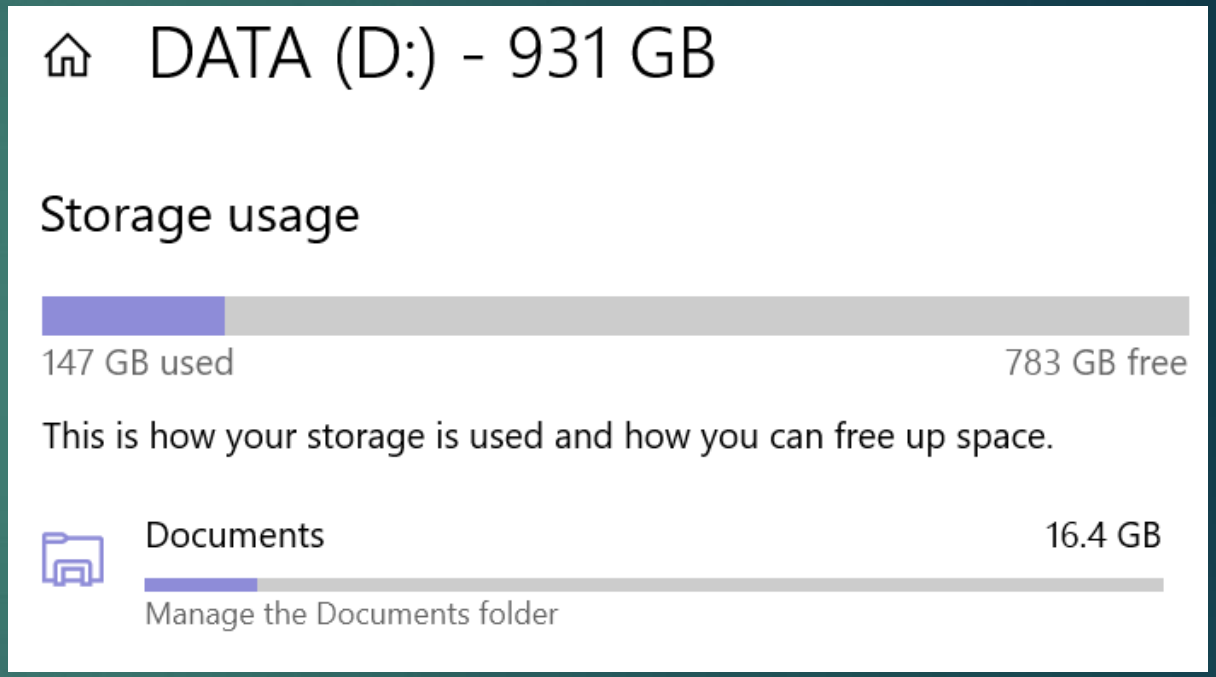
Time to Clean Your HD



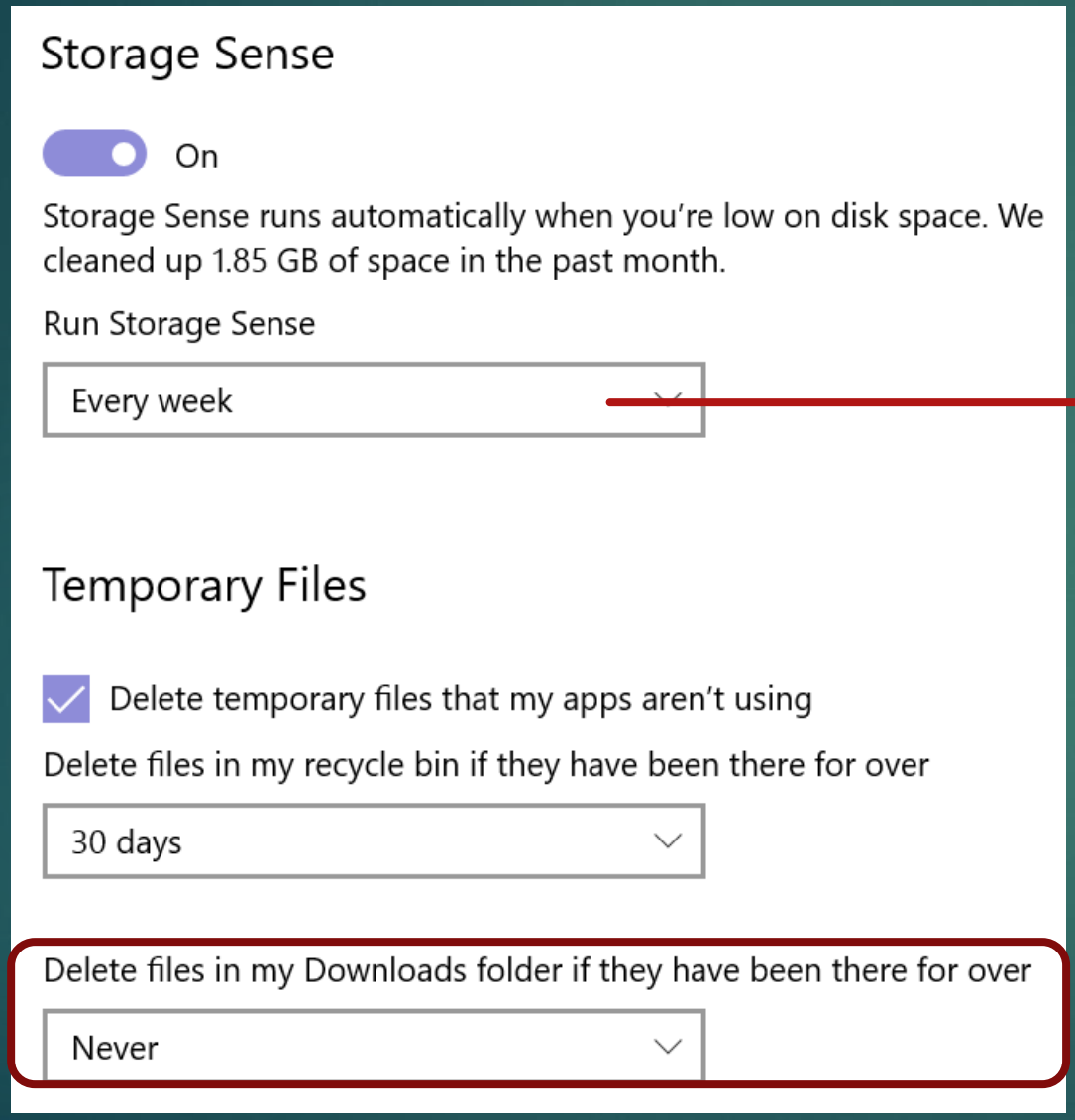


Time to Clean Your HD





Time to Clean Your HD



Should I Defrag my SSD

- When you defrag a drive, the computer reshuffles all its data, using the free space on the drive as sorting space.
- Two main reasons why you should not:
  - Lack of performance benefits, which is the entire point of defragging
  - Defragging an SSD can shorten its life

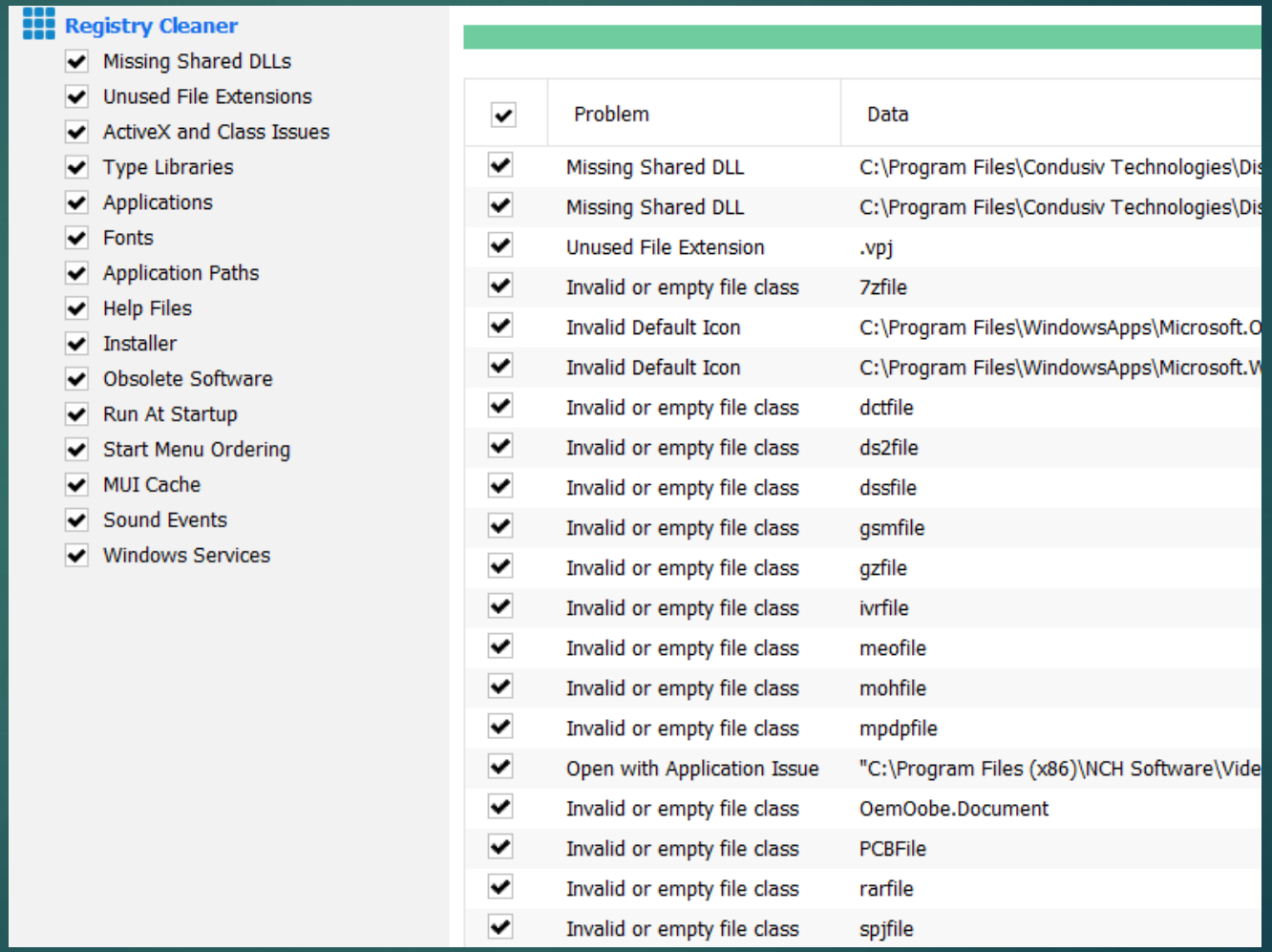
Computer is Running Slow

Clean your Registry

- If you have followed all of the HD cleaning steps and your computer is still slow try running a registry cleaner
- I use CCleaner's Registry cleaner

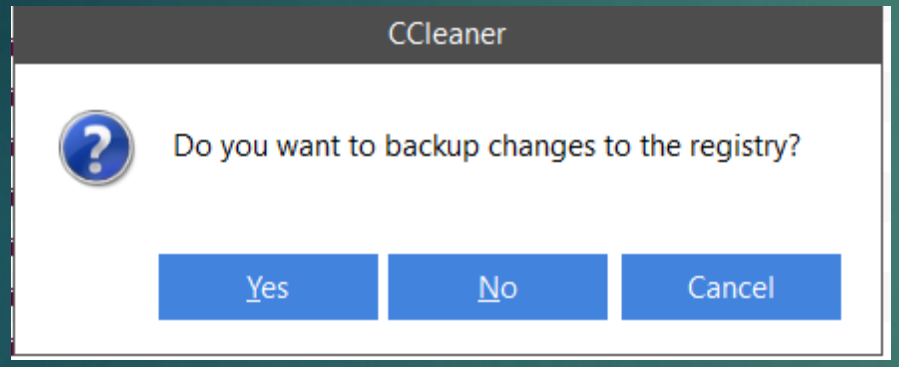
Computer is Running Slow

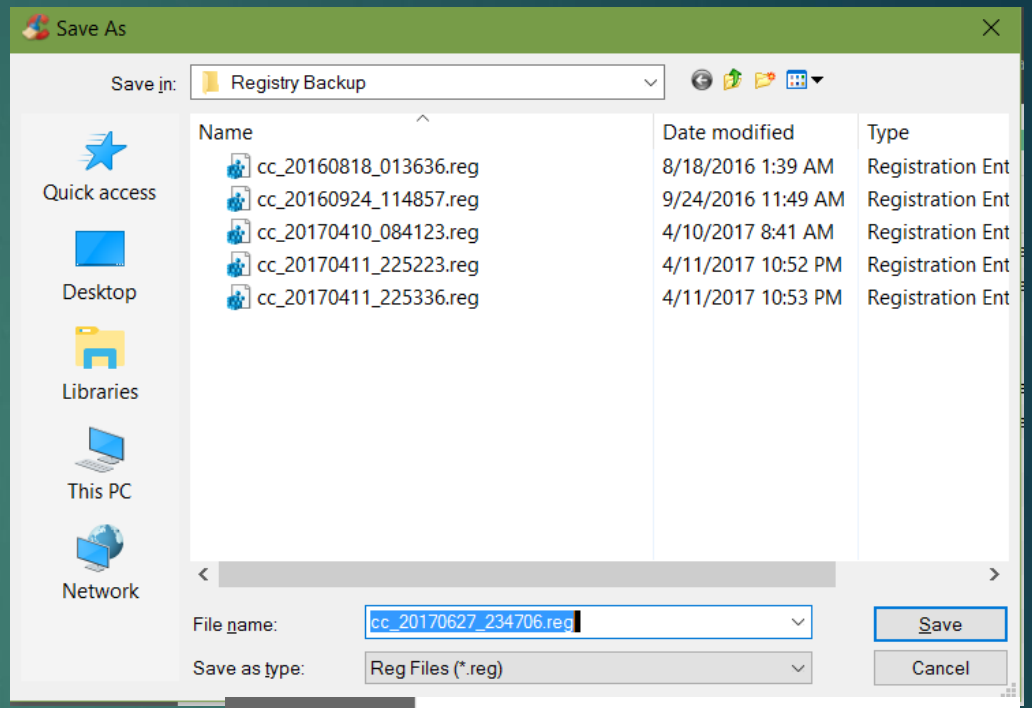
58 issues

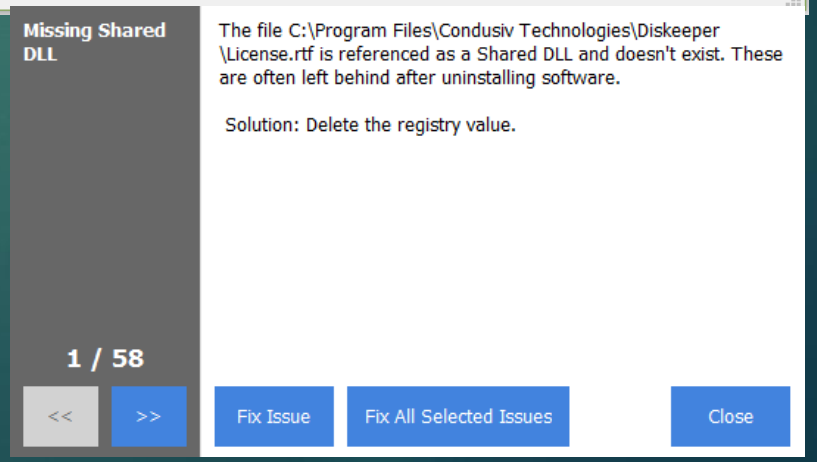


Computer is Running Slow

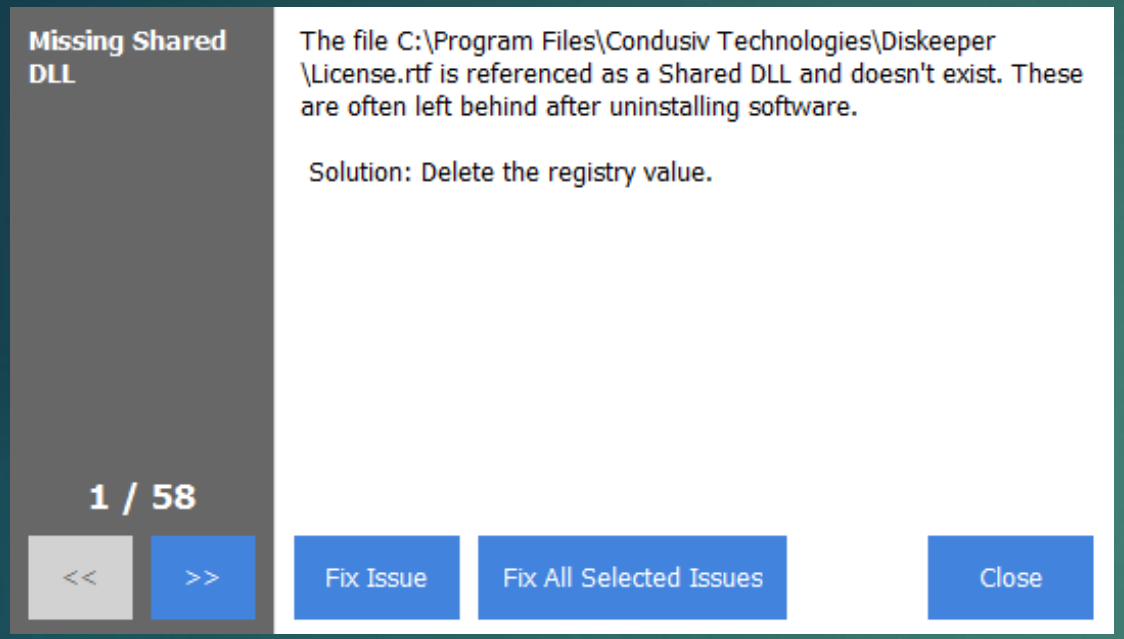
Created Registry Cleaner Folder

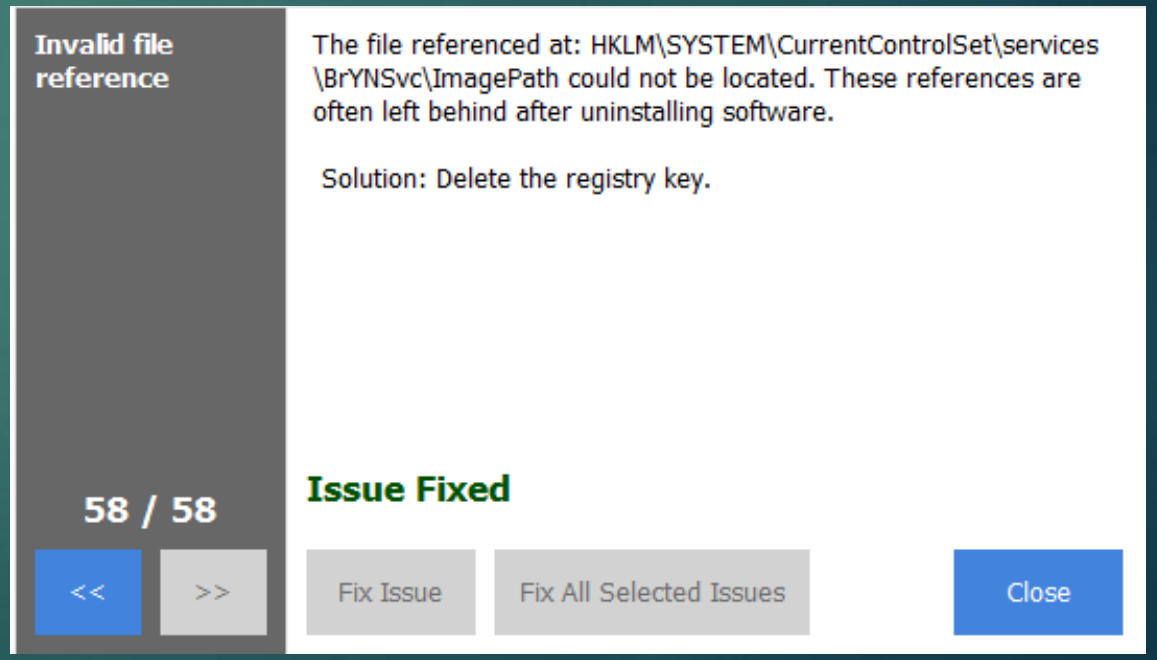






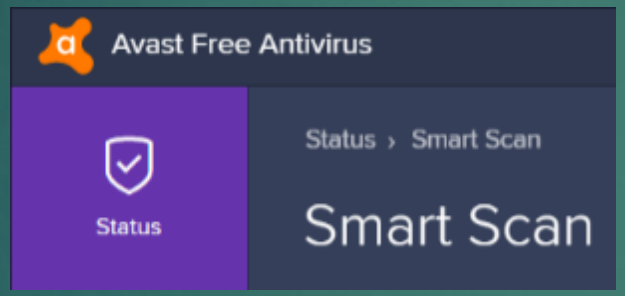
Computer is Running Slow

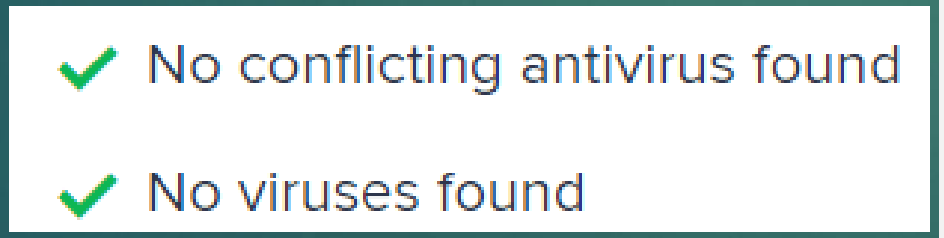


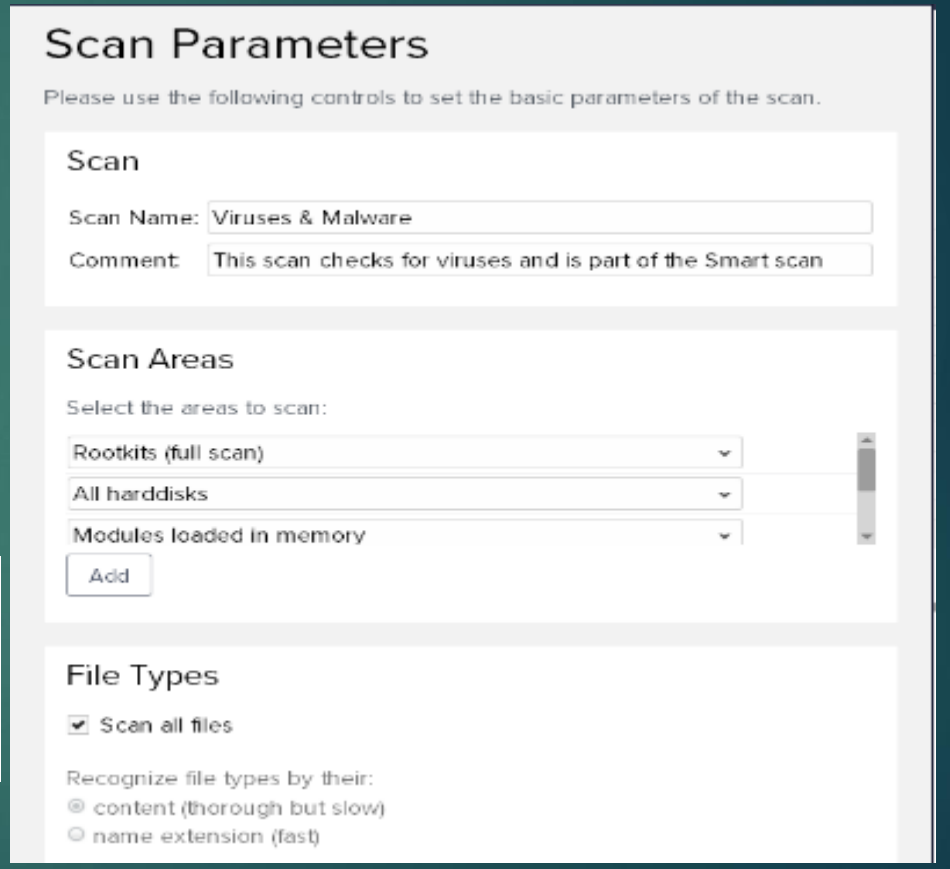


Scan for Malware

- Security program
- Run a deep (full) scan

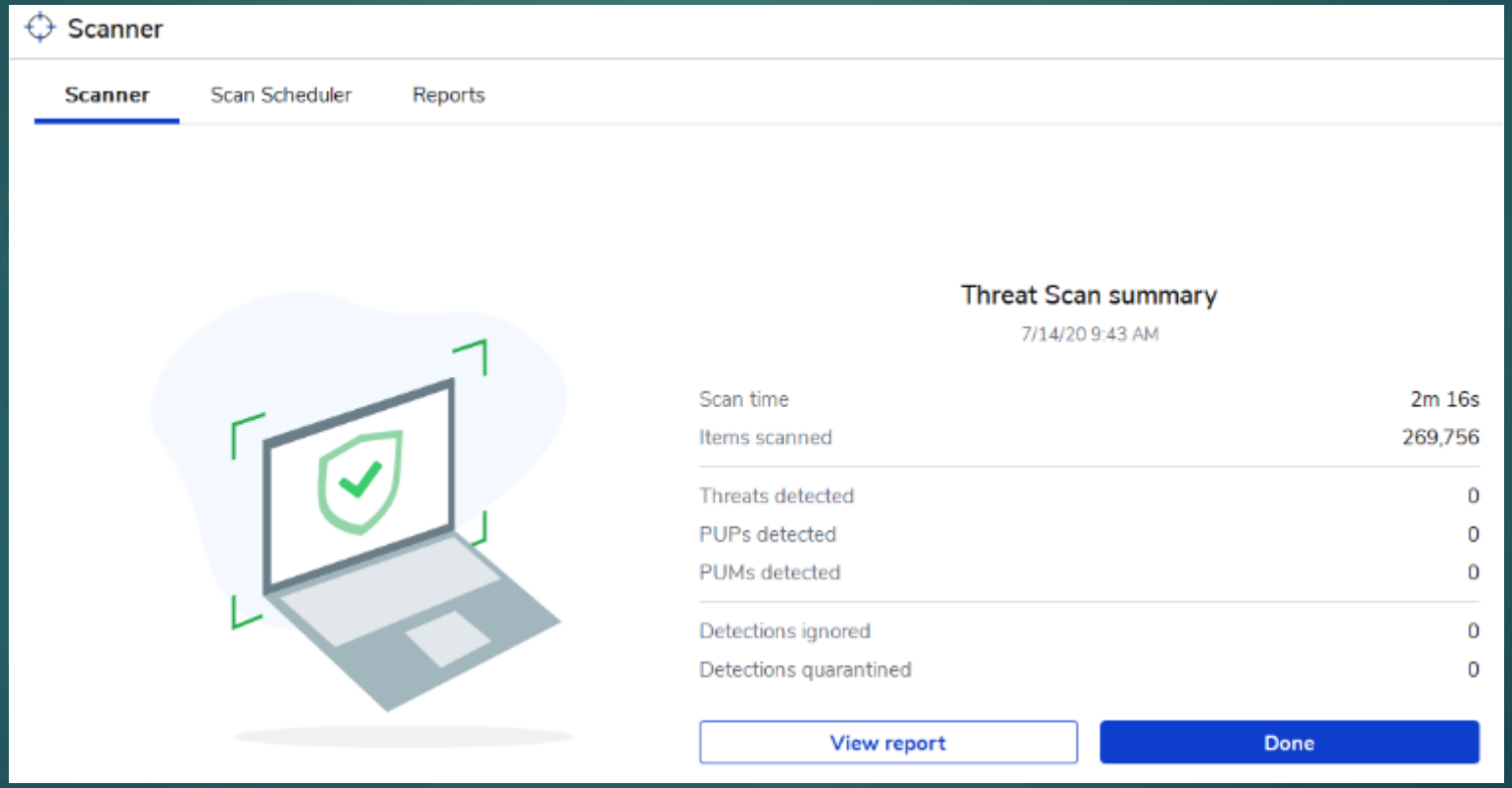






Scan for Malware

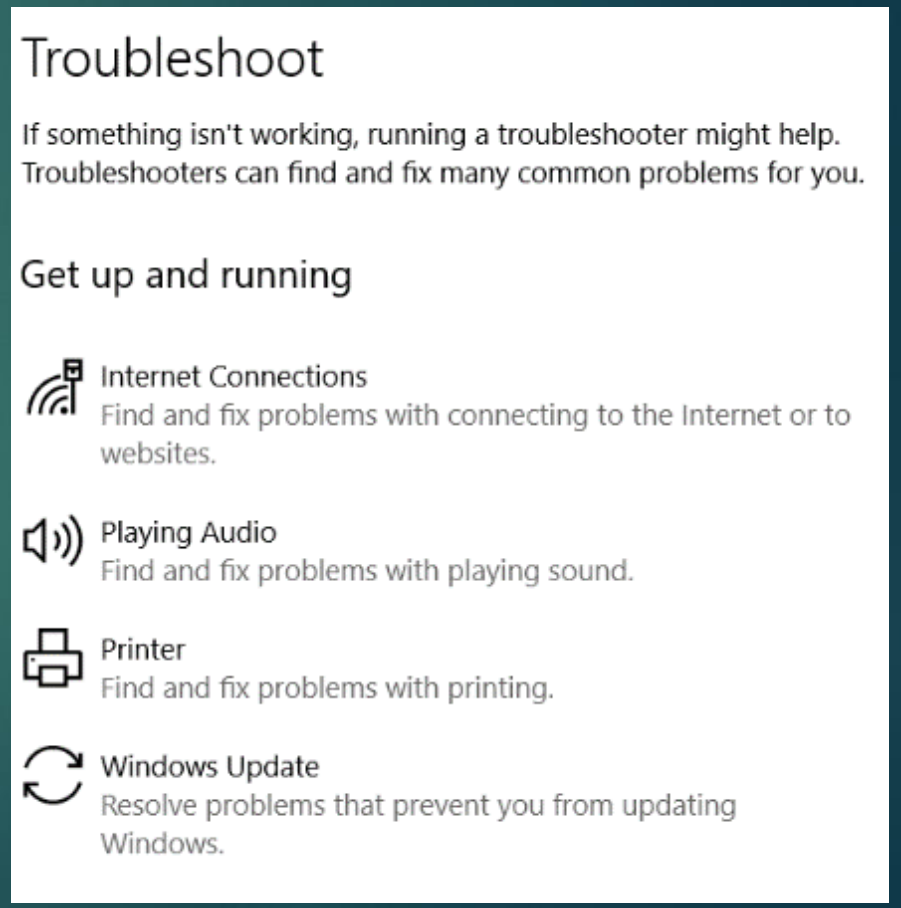
- Run Malwarebytes



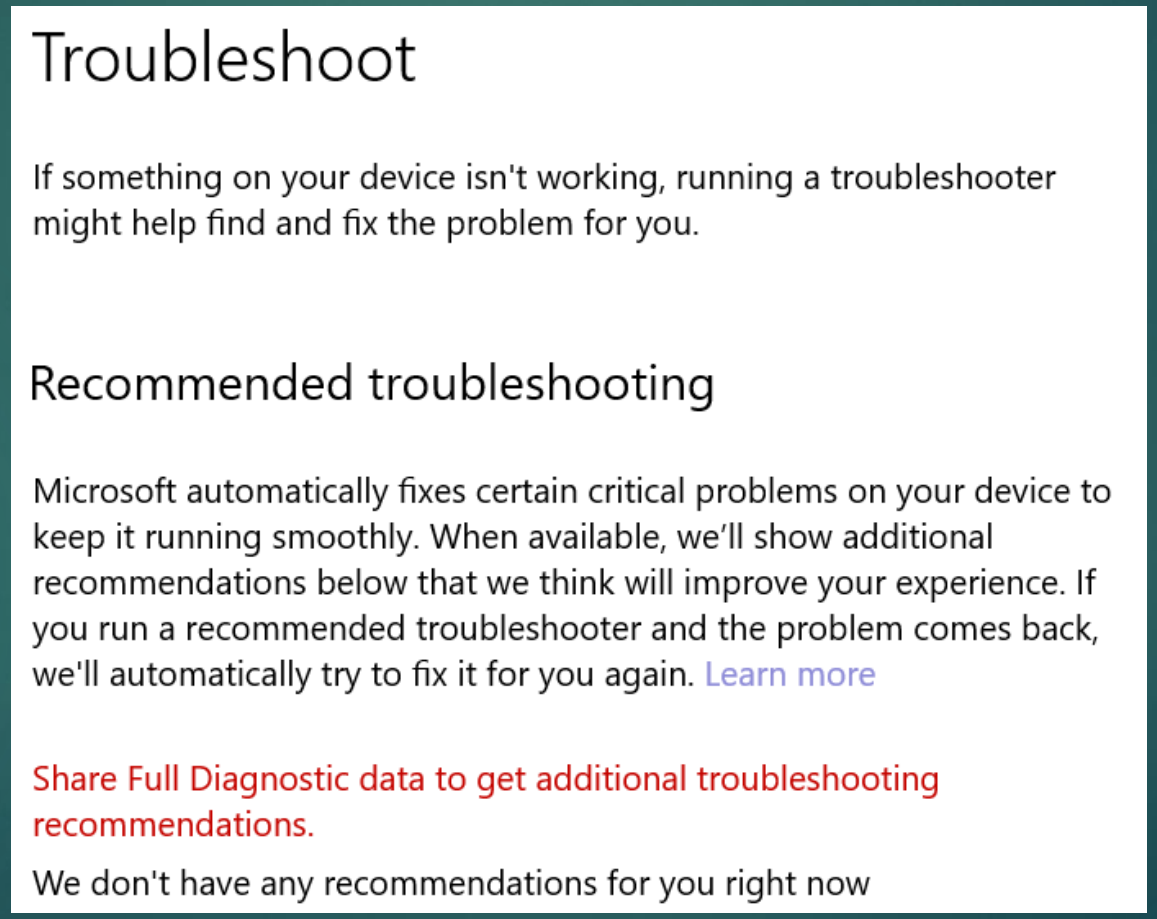
Windows 10 Troubleshooting Toolkit

Get to know your Win 10 toolkit

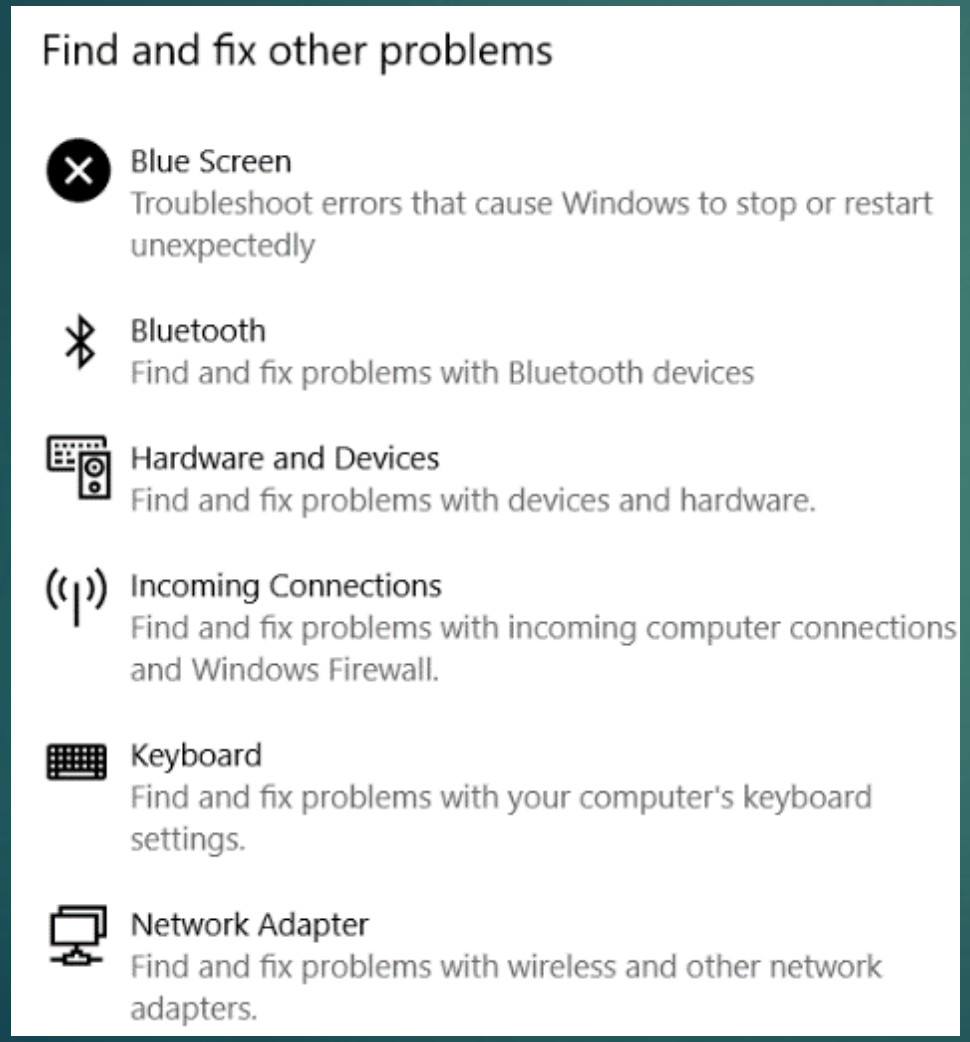
- Settings
- Update/Security

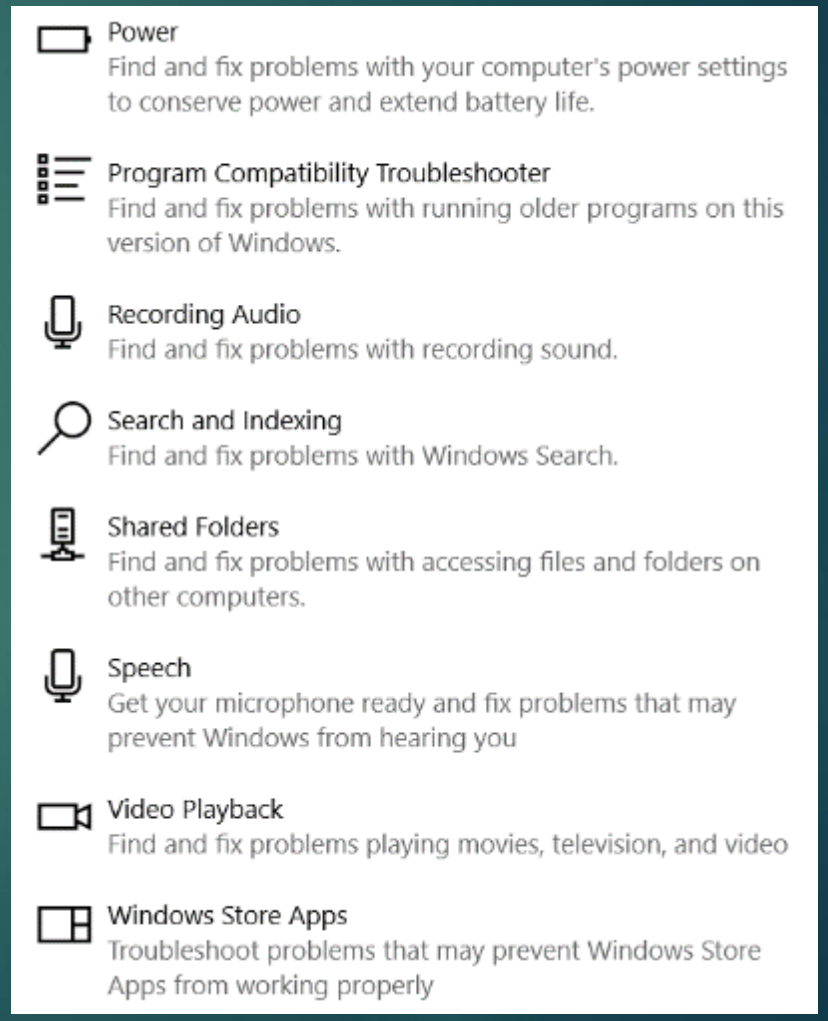


Windows 10 Troubleshooting Toolkit



Windows 10 Troubleshooting Toolkit



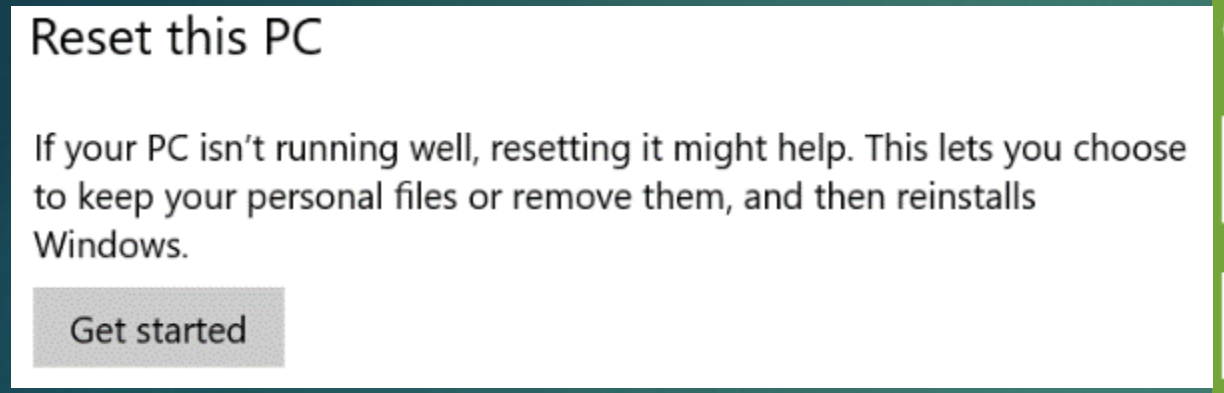


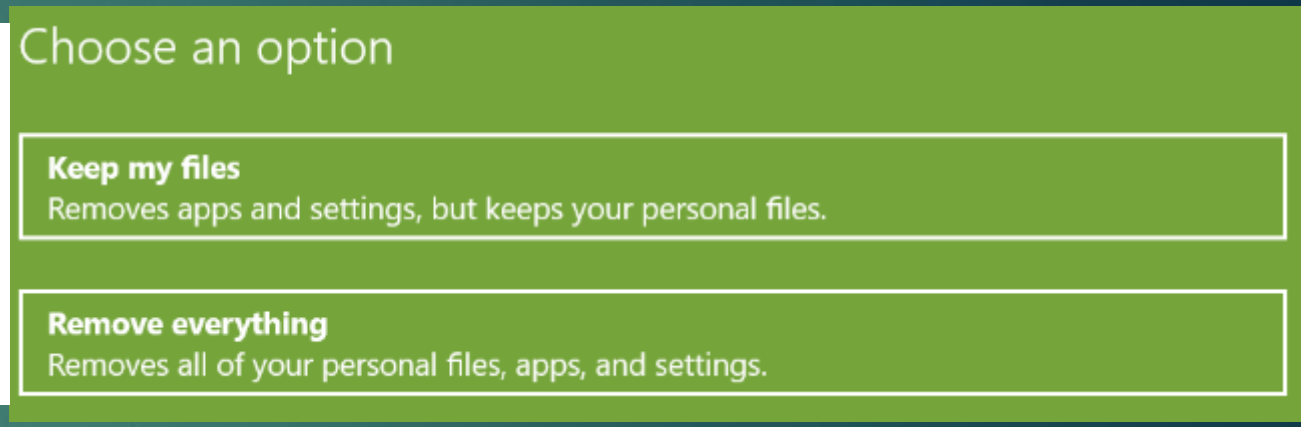
Sometimes You Have to Refresh Your Computer

- Refresh your PC to reinstall Windows and keep your personal files and settings.
- Refresh also keeps the apps that came with your PC and the apps you installed from the Microsoft Store.
- You will need to reinstall all of apps you downloaded
- Back up your data!!

Sometimes You Have to Refresh Your Computer

- Settings > Update and Security > Recovery





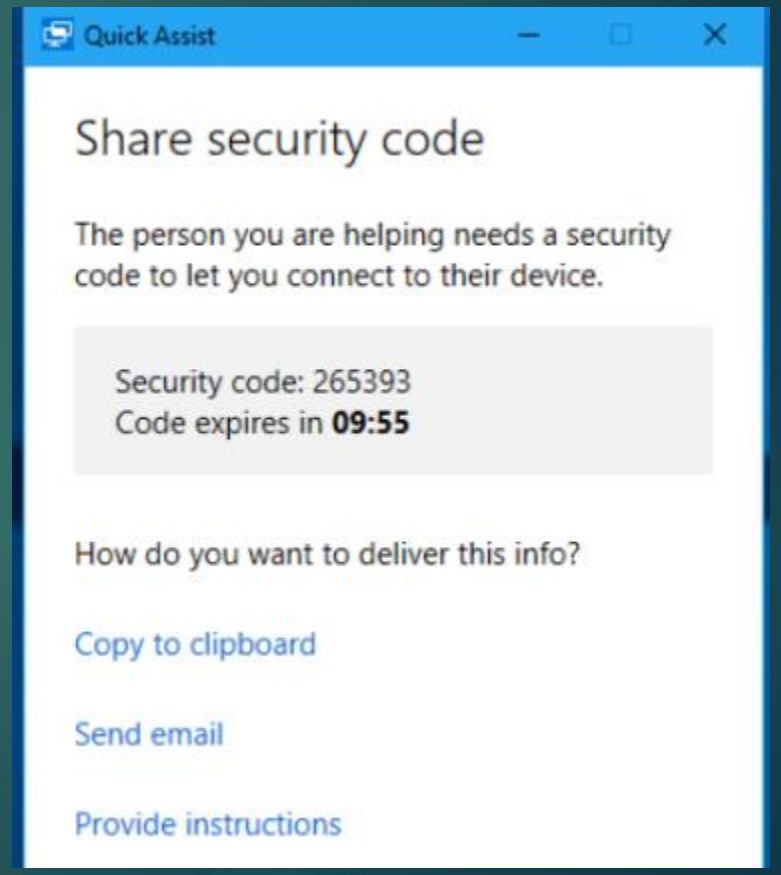
- Click Get Started
- Follow the instructions

Using Windows' Quick Assist

- Enables two people to work together over a remote connection
- Allow someone you trust to assist you by taking control of your computer
- Or, for you to assist another person

Using Windows' Quick Assist

- Sign in with your Microsoft account
- You'll receive a security code
- 10 minutes before it expires

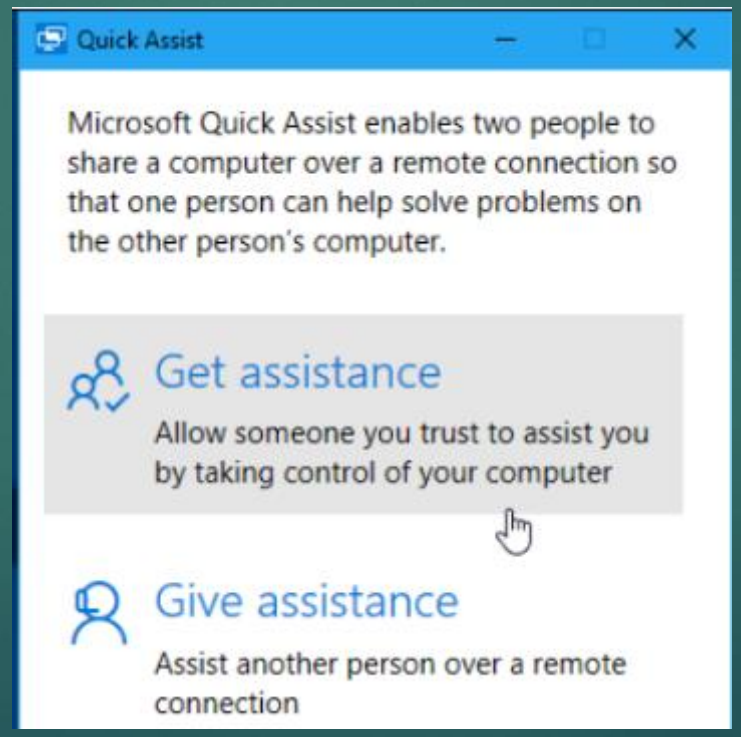


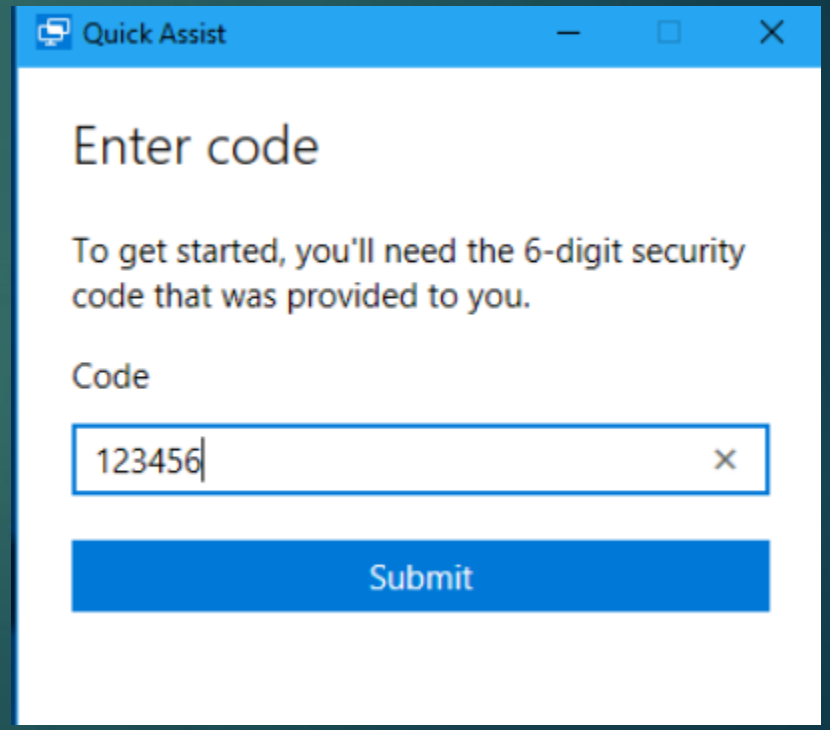
Using Windows' Quick Assist

- Need to talk other person through opening the Quick Assist app
  - E-mail
  - Text message
  - Phone
- Other person types "Quick Assist' into the Win 10 search box
- Quick Assist app launches

Using Windows' Quick Assist

- Click on Get assistance
- Enter security code
- Click Submit



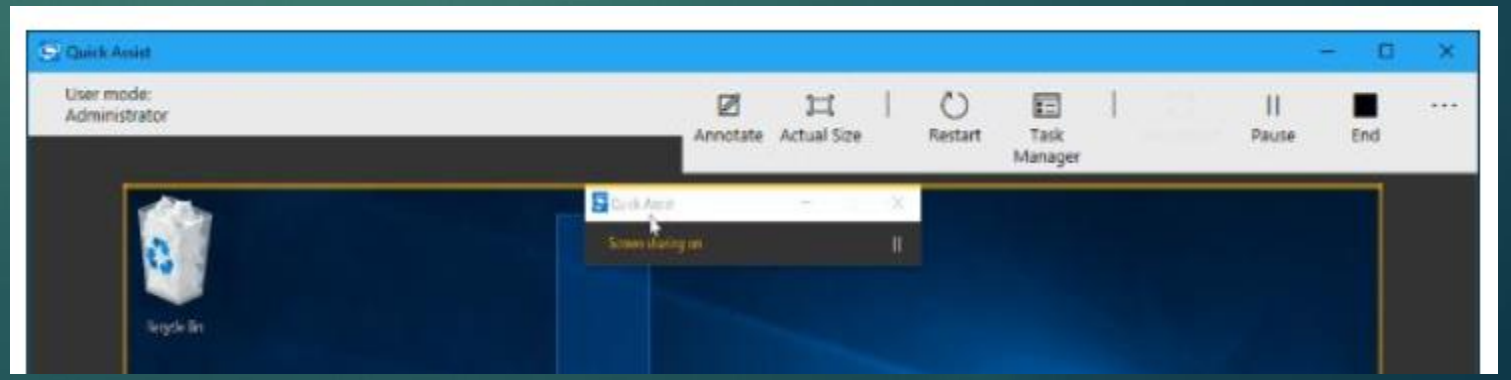


Using Windows' Quick Assist

- Connection established
- Might take a while for devices to connect
- Be patient
- You'll see other person's desktop in a window on your computer

Using Windows' Quick Assist

- Icons are in the top right corner
  - Draw on the screen
  - Change size of window
  - Remotely restart computer
  - Open task manager
  - Pause or end QA connection



Using TeamViewer

- Download and install TeamViewer software on your computer
- Person needing help also downloads the program
- It's Free
- Send the TeamViewer QuickSupport link to person you are helping

Using TeamViewer

Using TeamViewer

- Enter their TeamViewer ID in the "Control Remote Partner ID" field
- Connect to their computer by entering their password
- Once you're connected, you can see their remote desktop screens, take control of their mouse and keyboard, and fix computer issues on the spot.

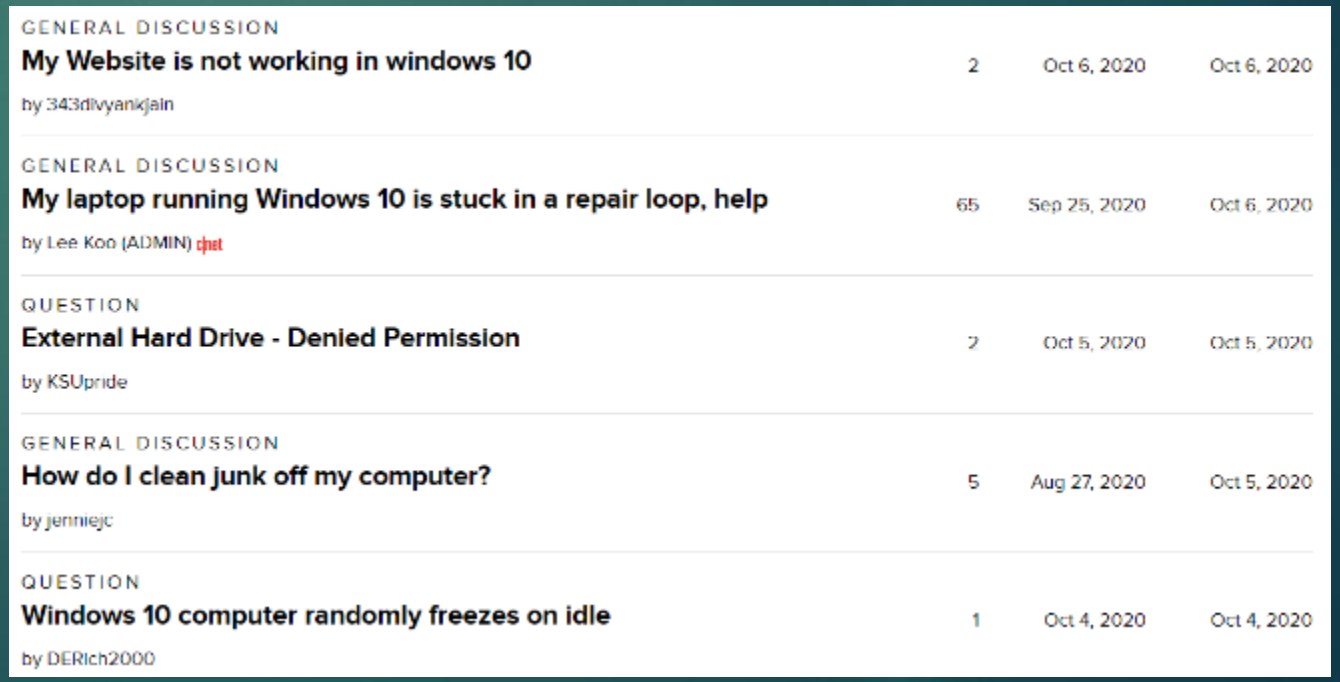
Browse for Help aka Google is your friend

Be specific

- Include:
  - Operating system
  - Program name and version
  - Problem you encountered
  - Circumstances when the problem occurred
- OR copy/paste/type Error Code or message in the search box

Browse for Help

- If other people are having the same problem, you'll be able to see if they have a solution - https://www.cnet.com/forums/windows-10/
- c|net Forum



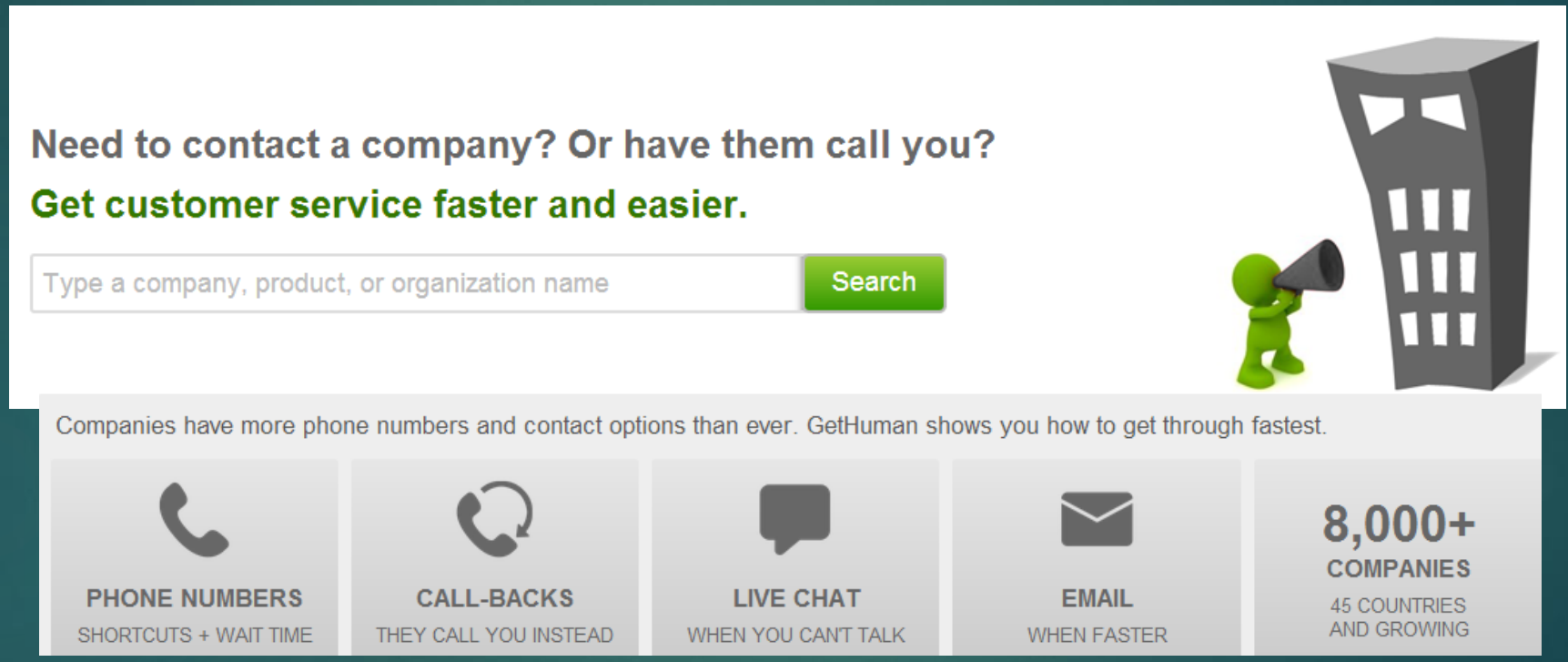
Browse for Help

Check the vendor's website

- Look for FAQ's page (Frequently Asked Questions)
- Product documentation
- Is there a user discussion forum?

Find a Real Person to Talk With

www.gethuman.com



Find a Real Person to Talk With

- If you talk with a representative at a company, please don't mention another company's application you are having problems with
- Don't skip automated voice or you will need to be prepared to be transferred
- Know your information, and give what is asked

Find a Real Person to Talk With

- Be patient and try not to ramble
- Long periods of silence
- “I am just running some tests”
- Leave honest feedback, good or bad

Find a Real Person to Talk With

- FYI – Microsoft's Assure Software plan
  - https://bit.ly/335kIWz
  - $99.99/year 5 devices (11/19/20 'sale')
  - Chat/Phone
- MS Tech Support = 866 425 8809
- If there is a long wait time, they will call you back

Judy Taylour
Jtaylour (at) apcug.org

An International Association of Technology & Computer User Groups