

Tommy's Basic Windows Optimizations

1. BENCHMARK, BACKUP, UPDATE

Benchmark

- Benchmark software for CPU/GPU performance: Cpu-z , cinebench, geekbench5
- Benchmark Software for System Responsiveness/Latency: latencymon
- Benchmark website for Network: [Speedtest by Ookla - The Global Broadband Speed Test](#)

Backup

- Back up Options:
 - * *System Restore is my recommendation for these optimizations **
 - **System restore** -> create a restore point (quick and useful if anything breaks your comp)
 - Drag important folders to a usb drive (this is good to do but not necessary)
 - Windows Backup -> create an image (takes the longest but covers the most bases)

Update

- Settings -> System -> **Windows update**
- After updating windows, turn pause updates for 1 week so its not constantly scanning for more in the background

2. BEGIN GENERAL OPTIMIZATIONS (nothing in this section will break your computer)

● **Uninstall Unnecessary Apps/Bloatware**

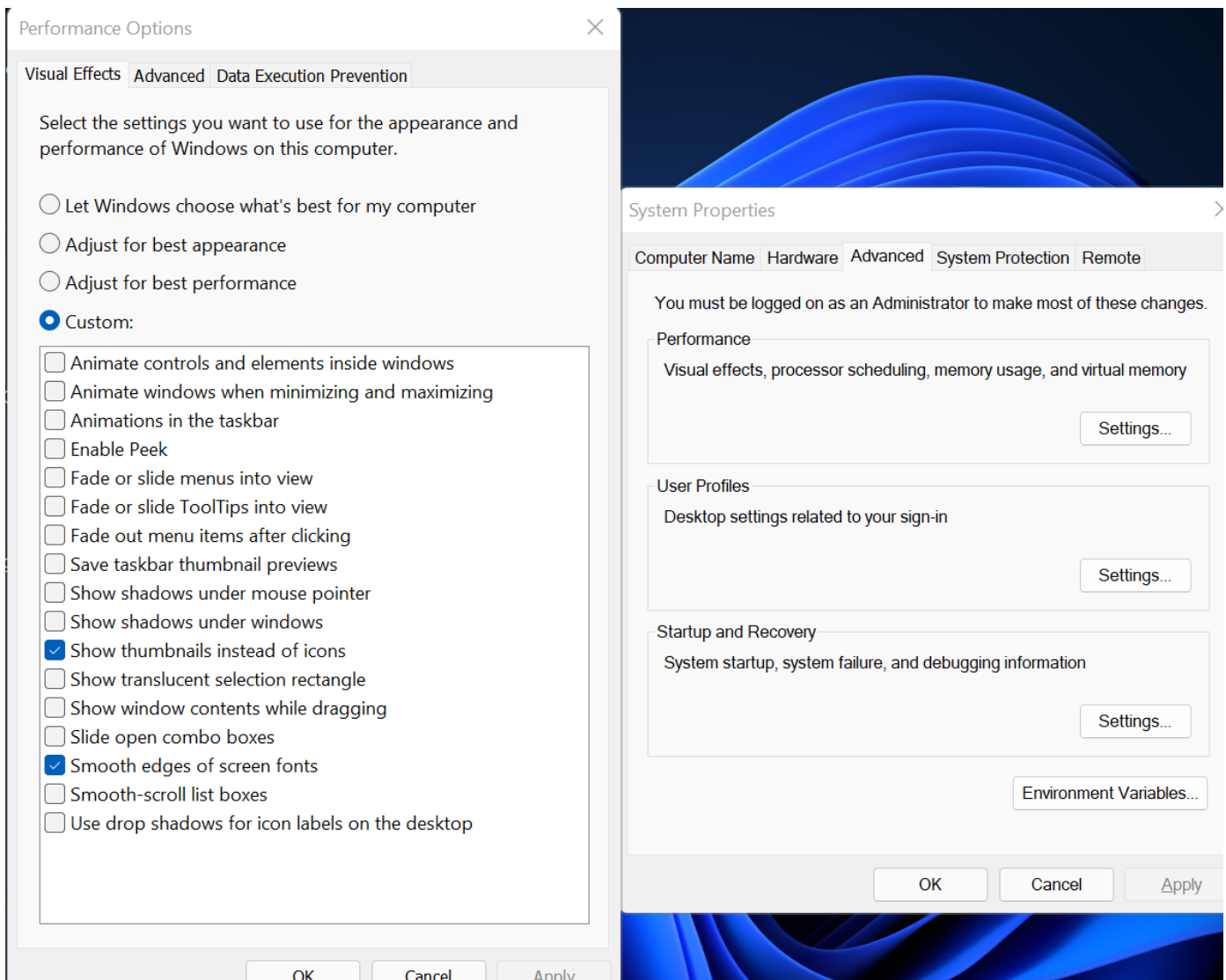
Apps can be located in the following places:

- control panel -> uninstall programs
- settings -> apps -> installed apps
- remove mcafee and other bloatware applications (TIW11 is a good app for this, if you have windows 11. However, only use this if you know what you are doing)

● **Disable any Unnecessary Features**

- Settings -> System
- * *Note: These are suggestions. Disabling some windows features has the potential to reduce system latency, because if not disabled, these are constantly forcing your computer to sync with remote servers. However, you may want to keep some things on depending on your computing needs **
(e.g., If you work for a company, you may want to keep email notifications on)
- notifications off
- multitasking off
- focus assist off
- remote desktop off
- apps for websites off
- offline maps off
- xbox game bar off
- gaming captures off
- settings -> privacy

- **Reduce startup apps** (the more things that startup with your computer, the longer it will take to start)
 - task manager -> startup
 - winkey + R: shell:startup
 - winkey + R: shell:common startup
- **Disable audio input output devices you are not using**, and can even lower the quality
 - Settings -> System -> Sound -> More sound settings -> right click device -> disable
- **Adjust the appearance and performance of windows**
 - Advanced performance settings -> choose best performance
I check these two boxes though (looks nicer)



- **Disk cleanup**

- settings -> system -> storage -> temporary files
Click remove files
- Windows key + r: %temp%
Delete everything here. Path will look like C:\Users\Chase\AppData\Local\Temp
- Windows key + r " temp "
Ctrl+a
Delete
It won't let you delete everything, just click skip for those.
Path is: C:\Windows\Temp
- CLEAN ALL CACHES:
Link:
<https://www.youtube.com/watch?v=X7FObUG1SS8&list=TLPQMDcxMTlwMjEXbtV-EV1AQQ&index=6>

3. Run another benchmark to see performance improvements

Benchmark software for CPU/GPU performance: Cpu-z , cinebench, geekbench5

Benchmark Software for System Responsiveness/Latency: latencymon

Benchmark website for Network: [Speedtest by Ookla - The Global Broadband Speed Test](#)

-----**For general users, stop here**-----

4. **ADVANCED OPTIMIZATIONS** (things in this section can potentially cause problems, use at your own risk)

- **Clean up Temp Files Located at: Win key + R %temp%**
 - Run CMD as admin @ C:\Windows\system32>
COMMAND: del /q/f/s %TEMP%*
- **Change System responsiveness in Registry Editor to 0**
 - First backup your registry
 - Then change System Responsiveness

Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WindowsNT\CurrentVersion\Multimedia\SystemProfile
SystemResponsiveness: 0 (Hexadecimal)

- **Optimize Network**

- set network priority
- Run cmd: ipconfig /flushdns
- Run cmd: winsock reset
- Disable nagles algorithm in registry
- Disable network throttling in GPE

- **Group Policy Editor (GPE)**

- QOS

- Enable 100% limit reservable bandwidth
Computer Configuration/ Administrative Templates / Network / QoS Packet Scheduler / Limit Reservable Bandwidth

Can also turn off power throttling with GPE

Prevent remote hacks (not risky & recommended)

- Set Domain Controller: Allow Server operators to schedule tasks to disabled via:
 - Computer Configuration/ Windows Settings / Security Settings / Local Policies / Security Options /

- **Best Apps for System Optimization in my experience**

- Process Lasso (optimize and monitor)
 - QuickCPU (easily optimize cpu utilization)
 - PowerSettingsExplorer (turn on hidden power features)
 - TCPOptimizer (optimize network)
 - DeviceCleanup (remove hidden devices you no longer use)
 - InterruptAffinityPolicyTool (would only recommend this to programmers)
 - TaskScheduler (See/Change things that are set to happen automatically)
 - Timer Resolution (force 0.5ms clock)

- **Final Things you may want to look up/consider**

- **Removing gamebar presence writer**
 - **Fullscreen Exclusive Mode for gamers**
 - **Stopping OneDrive from constantly syncing**
 - **Batch scripts to automate commands**
 - **memoryusage commands (potentially risky)**
(E.g., you can view the current setting via fsutil behavior query memoryusage)
 - **bcdedit commands (potentially risky)**
Bcdedit /set increaseuserva 8000 (aka half of 16 gb ram in mb)
bcdedit /set disabledynamictick yes
bcdedit /set useplatformtick yes
 - **More registry editor optimizations:** [Steam Community :: Guide :: Gaming Tweaks. Performance Enhancement's and System utilization](#)
