

Increased System Stability Through Windows Optimizing Utility

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Purpose: Using a Windows utility I developed, I can optimize a computer efficiently and easily which will help improve stability and performance in demanding applications and scenarios. Hypothesis: If I use a Windows utility that I developed which debloats and optimizes my computer, then my computer will have increased system sustainability and stability for hard-to-run and newer programs. Variables: Independent Variable - Using my Windows utility. Dependent Variable - System Stability. Control - performance without my optimizing program

Making The Code

- Figure out the objective (Know what the function you're creating will do to the computer.)
- Research Windows Update Mechanisms (Find out the core services responsible for hardware-draining background services.)
- Design the Script (Design what needs to happen for your function to work properly.)
- Write the Function (Use different functions that help execute a specific action.)
- Test the Function for validity (After testing the code, check settings to verify if the actions worked.)

Testing the Code

- Make a restore point in case of a testing malfunction
- Stress test on GPU before using the utility.
- Do a CPU test before using the utility.
- Use the Utility
- Stress test on GPU after using the utility.
- Do a CPU test after using the utility

Conclusion: After using my Utility, my computer was using less utilization in the video game test going from a max CPU utilization of 79% to 70% allowing for our CPU and GPU to run at lower temperatures. The lower temperatures on the CPU and GPU allowed faster clock speed which equated to higher frames per second which went from a max of 452 fps to 555 fps and more utilization for the GPU as it went from 1124MHz to 1244MHz clock speed.

Awards Won: