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**Results and Analysis:**

Teams should describe what data will be taken, why this data was chosen, and how it will be analyzed.

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**Data collected**

1. SoC power: System-on-chip power usage
2. System power: System power usage
3. Frame rate: Frames per second, missed VBlanks per second, and consecutive missed VBlanks
4. GPU: GPU engine usage, percent of total available
5. CPU: percent of total available
6. Memory: Total, in use, committed, paged, and non-paged

**Reason data this collected**

1. SoC power and System power - collected to view how much power is being used while each app is being used
2. Frame rate - collected to view how fast the communication is between each app and the hololens
3. GPU, CPU, Memory usage - collected to see how efficiency of the application

**Analyzing the trace with WPA**

Windows Performance Analyzer is the standard tool to visualize traces as graphs and tables to allow you to analyze the system and application performance.

For a step-by-step guide for WPA: <https://docs.microsoft.com/en-us/windows-hardware/test/wpt/wpa-step-by-step-guide>

There are several files you’ll need to analyze your trace file in WPA:

* HoloLens trace file (\*.etl)
* Symbol file (\*.pdb). Make sure it’s extracted (not zipped)
* WPA profile (\*.wpaProfile)

1. Set up your files in a folder for WPA to access them.
2. Launch the Windows Performance Analyzer (WPA).
3. Open the ETL trace file by selecting File > Open > select the .etl in your file browser.
4. Load symbol file into WPA by selecting Trace > Load Symbols.
5. Apply WPA profile to generate graphs for analysis. In your WPA folder, select Profiles > Apply > Browse > choose the WPA profile file > Apply.
6. Once the graphs are selected, WPA will display them in the Analysis tab.

**Analyze and compare remote/non-remote rendering applications**

Use WPA graphs and tables to discuss the results.