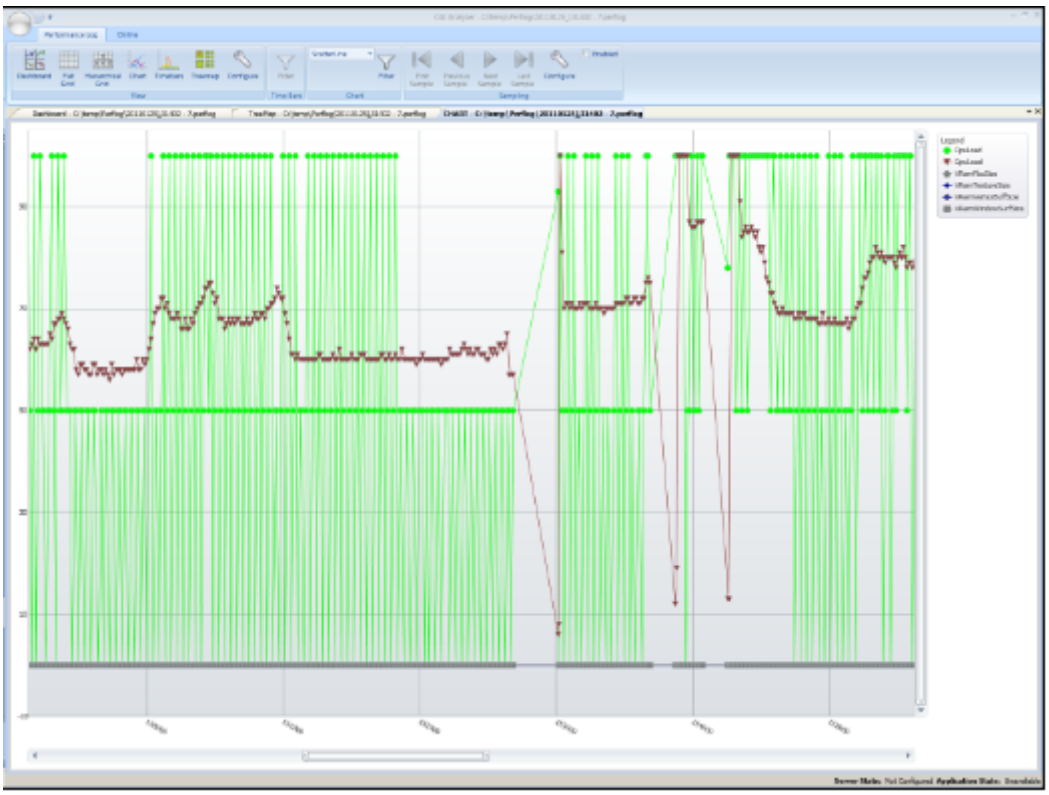
Performance Analysis > Introduction

Performance Analysis with CGI Analyzer

By enabling the Candera Monitor component (CMake: *FEATSTD_MONITOR_ENABLED*), Candera code is instrumented with performance traces, which are evaluated by the CGI Analyzer tool. In addition, also custom instrumentations can be added to applications, which will be visible in CGI Analyzer.



Offline Analysis

Performance logs are recorded with Candera Monitor and can be evaluated in CGI Analyzer regarding:

- frame rates
- CPU/GPU load
- CPU/GPU memory usage

Online Analysis

With online experiments, performance bottlenecks can be discovered: If framerate goes up after deactivating a dedicated part of the Candera Engine or the rendering pipeline, the bottleneck is located.

Following online experiments are supported:

- Replace textures by 2x2 texture
- Replace fragment shader with a very simple one
- Ignore draw calls

Besides online experiments, CGI Analyzer Online Analysis supports:

- Live display of key performance indicators (frame rate, CPU load, GPU load), where available
- Computation and transfer of Render Benchmarks from target to host (for multi frequency rendering)
- Online determination of scene graph characteristics (number of vertices, texture sizes, render order)
- Online measurement of render times (for each node on a per-camera base)
- Guards (FPS, unconditional)

For more information about CGI Analyzer, refer to CGI Analyzer User Manual.

Revision #4
Created 2023-02-22 08:47:27 UTC by Tsuyoshi.Kato
Updated 2024-07-29 06:23:17 UTC by Tsuyoshi.Kato