Overview

Frame Debugger

The CGI Studio Analyzer contains a Frame Debugger. This feature can be used to analyze the rendering process of Candera on a target device. It provides an overview about the composition of one frame (rendered nodes), shows detailed OpenGL information and adds the ability to capture the color, depth and stencil buffers.

Requirements

- Windows Host running CGI Analyzer
- Application
  - Monitor and Frame Debugger enabled (CMake)
  - TCP/IP connection
  - Enough free RAM during execution on the target device to copy framebuffer contents.

Supported Platforms

- Host Simulation
- iMX6 Integrity
- Experimental support for other OpenGL ES 2.0 and OpenGL ES 3.0 based devices

Features

- Capture frame timeline (rendered cameras, nodes, OpenGL calls, ...)
- Capture while application is running or in paused mode
- Single step to next frame
- Capture single node/single camera
  - View color, depth and stencil buffer before & after a node was rendered
  - Highlight pixels changed by the selected node
  - Save captured images as PNG
- Visualize intermediate results of rendered nodes.

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