LunarG Mesa Regression

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LunarG Mesa Testing

- Trace based testing of Mesa Releases (Vulkan and OpenGL)

  - share.lunarg.com

  - AMD and Intel configurations

  - Extensive trace library from Steam Games

    - Currently using vktrace/vkreplay trace technologies

    - In process of moving over to GFX Reconstruct (next slide)

- Solution is currently proprietary

  - LunarG is investigating open source options...

Tracing/Replay

- GFX Reconstruct - New and improved API trace and replay

  – https://github.com/LunarG/gfxreconstruct

  – vktrace/vkreplay deprecation is coming (Q4/Q1)

- Benefits of GFX Reconstruct

  – Improved Android support

    • Android is given same priority as desktop

  – Automatic code generation to accommodate evolving API

  – Increased portability

    • x86 vs. x64 differences

    • Cross OS portability (i.e. with compatible GPU/driver, trace on windows & replay on linux).

    • *Cross vendor GPU support (trace on one GPU, replay on another)*

  – LZ4 compression for trace data

  – *Future valuable plug-ins with minimal code changes*

    • Generate C code program

    • Data mining utilities (search for feature usage)

    • Extract/replace shaders

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