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