



Gallium3D Overview

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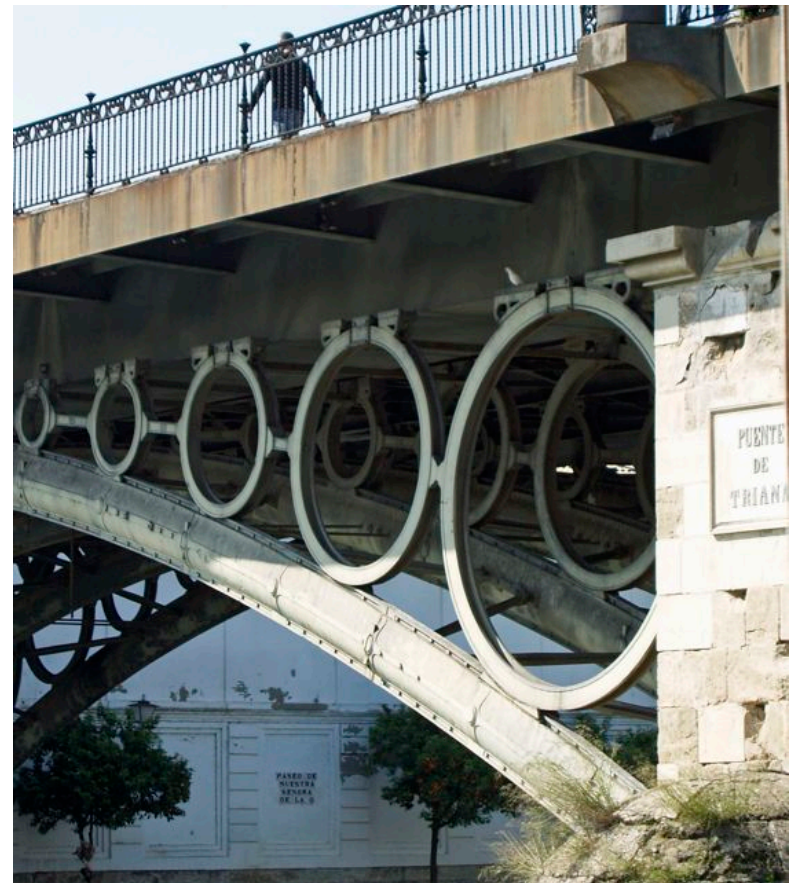
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Virtual Machine Group



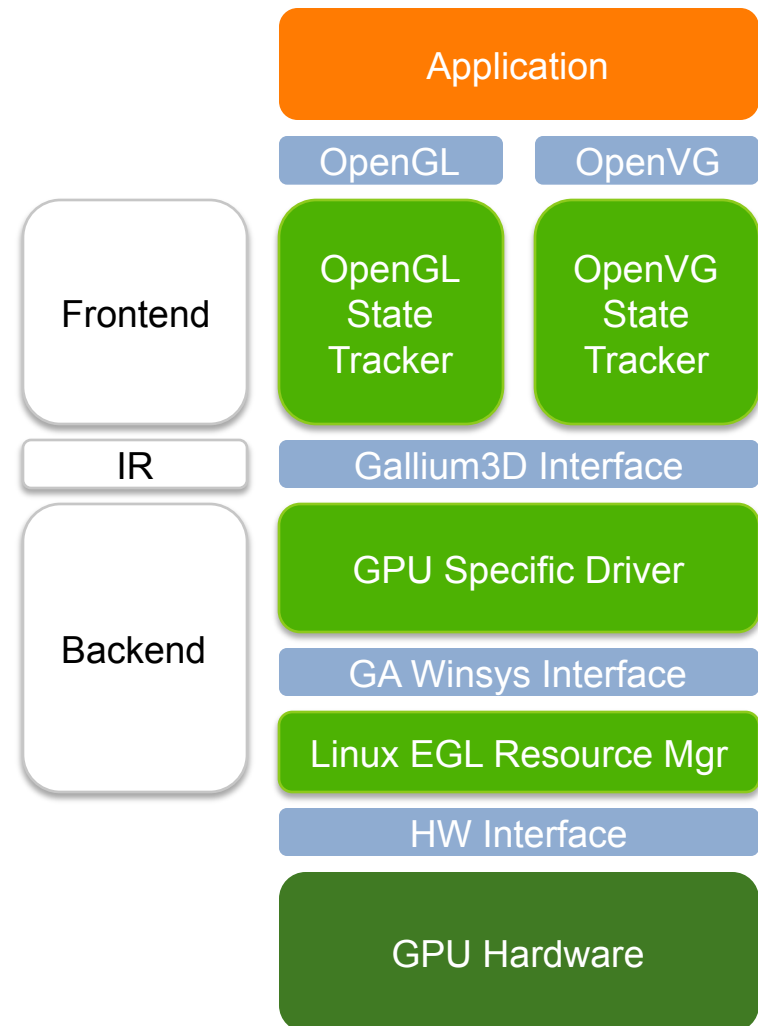
Gallium3D Design Goals

- ❖ Portability to all major operating systems and graphics interfaces
- ❖ Make drivers smaller and simpler
- ❖ Model modern graphics hardware



Gallium3D Architecture

- ❖ Simplify implementation of complex shader pipelines by borrowing compiler concepts
- ❖ Gallium3D Interface is the IR
- ❖ Frontends are specific to API's
- ❖ Backends are specific to GPU Hardware



Status of Open Source Components

Complete:

- ✧ OpenGL 2.x State Tracker
- ✧ OpenGL ES 1.1 State Tracker
- ✧ OpenGL ES 2.0 State Tracker
- ✧ OpenVG 1.0 State Tracker
- ✧ Softpipe (Software Renderer)
- ✧ EGL 1.0 Winsys
- ✧ X11/DRI Winsys

Partially Complete:

- ✧ OpenVG 1.1 (over 75% complete)
- ✧ OpenCL 1.0 (just started, less than 10% complete)

Face to Face Technical Session



- ✧ Full day, In depth, technical session on Gallium3D internals
- ✧ Face to face in Palo Alto on Nov 13th
- ✧ Contact jowen@vmware.com to reserve a seat at this session

