Equalizer

Quickstart and Demonstration Guide

Building Equalizer

- Get source tree from svn repository
- Linux, Mac OS X:

cd src; make

- set library path as printed by make
- see also src/README
- Windows:
 - Build src/VS2005/Equalizer.sln

Running the Server

• Linux:

```
./server/eqServer.<arch> [configfile]
```

- Mac OS X:
 - ./server/eqServer [configfile]
- Windows:
 - debug 'Equalizer Server'
 - OR: build\VS2005\win32\debug\eqServer

Running the eqPly Example

• Linux:

cd src/examples/eqPly;./eqPly.<arch>

Mac OS X:

• start X11

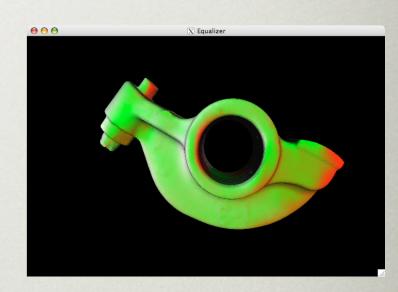
cd src/examples/eqPly;./eqPly

• Windows:

- debug 'eqPly Example'
- $OR: build\VS2005\win32\debug\eqPly Example$

Running the eqPly Example

- eqPly runs now with default config
 - one window, one pipe thread, one process
- Left mouse button rotates
- Middle mouse button zooms
- Right mouse button moves
- Exit by pressing <Esc>, all three mouse buttons or using window close button



Exploring Equalizer

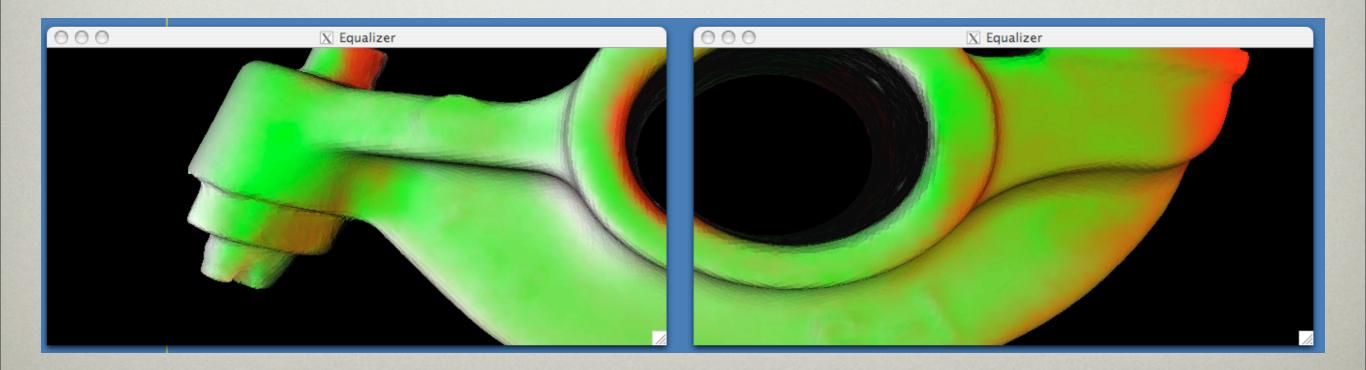
- To use a different config:
 - exit eqPly; stop server
 - start server with new config:

./server/eqServer examples/configs/2-window.eqc

- run eqPly again
- Load model with '--model <name>'
 - Sample Models at <u>www.cyberware.com</u>

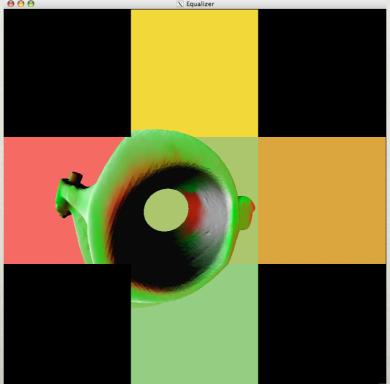
2-window

- Two windows, one pipe thread
- Compound wall description to produce side-by side image



2-window

- Set EQ_TAINT_CHANNELS to get channel background color
- One window, five channels
- Simulate a CAVETM on a single PC

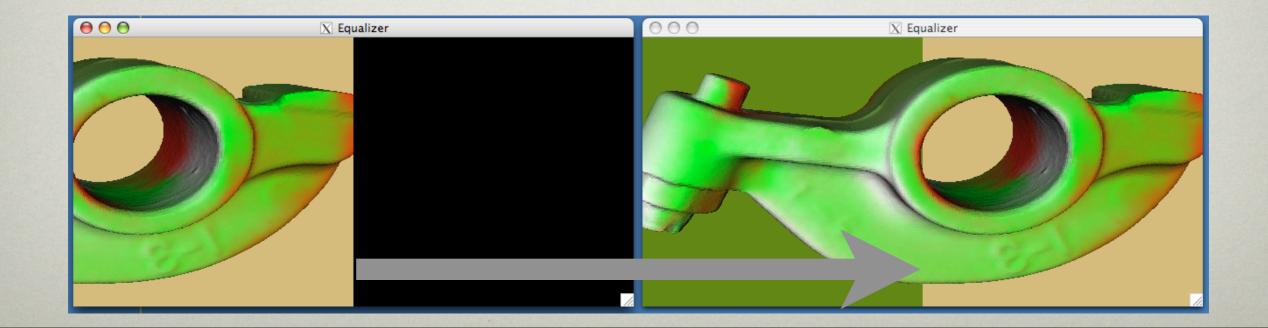


1-pipe.stereo.anaglyph

- Start eqPly with option -b
- Use anaglyphic (colored) glasses
- Two sequential eye passes on the same channel

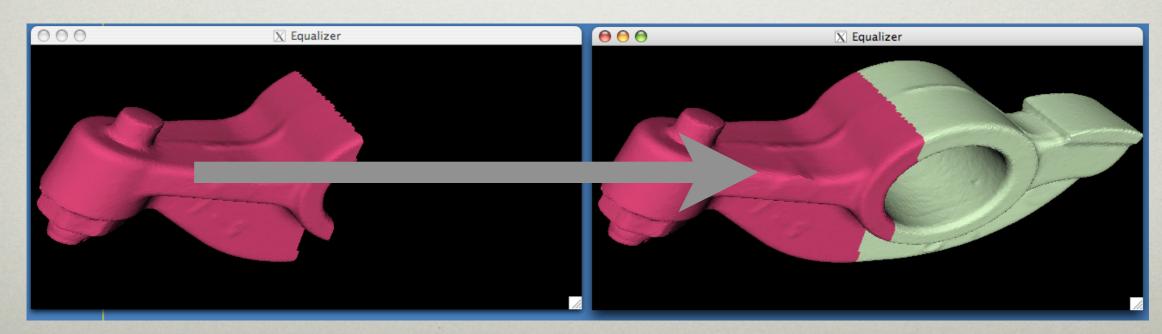
2-window.2D

- Left window renders half of the viewport for right window
- For deployment, windows are on separate pipes (GPUs) for scalability



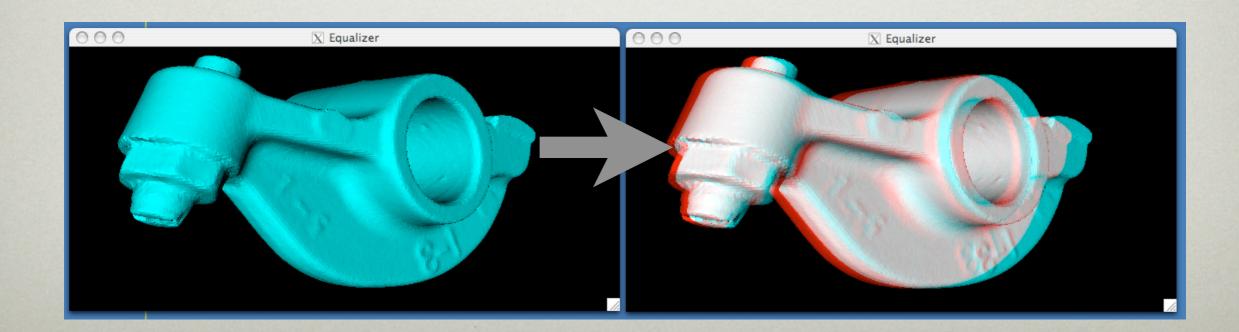
2-window.DB

- Left window renders part of the data for right window
- Coloring is automatic and intended
- Data is combined using Z-Buffer information



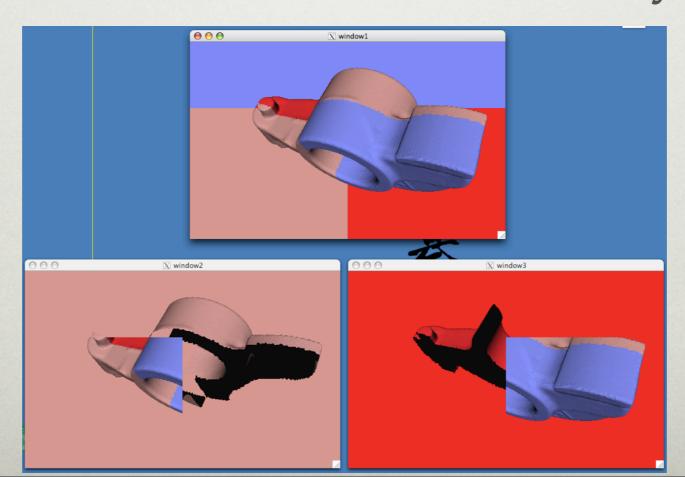
2-window.EYE.anaglyph

- Left window renders right eye
- Right window renders left eye
- Very good scalability on two pipes



3-window.DB.ds

- Parallel compositing (direct send)
- Each channel renders and composites
- Run 4-window.DB.bs for binary swap



Next Steps

- Multi-node configurations need password-less ssh setup
- Change hostnames to reflect your setup
- Active stereo configs require stereo visuals, i.e., high-end graphic cards
- Config file specification is available online