

# Equalizer

## Quickstart and Demonstration Guide

Latest version at <http://www.equalizergraphics.com/documents/EqualizerGuide.pdf>



# Building Equalizer

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- Linux, Mac OS X:
  - `cd src; make`
  - set library path as printed by make
- Windows:
  - Build Solution `src/vs2005/Equalizer.sln`



# Running the eqPly Example

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- Linux:

```
src# ./build/Linux/bin/eqPly
```

- Mac OS X:

```
src# ./build/Darwin/bin/eqPly.app/Contents/MacOS/eqPly
```

- Windows:

- debug 'eqPly Example'

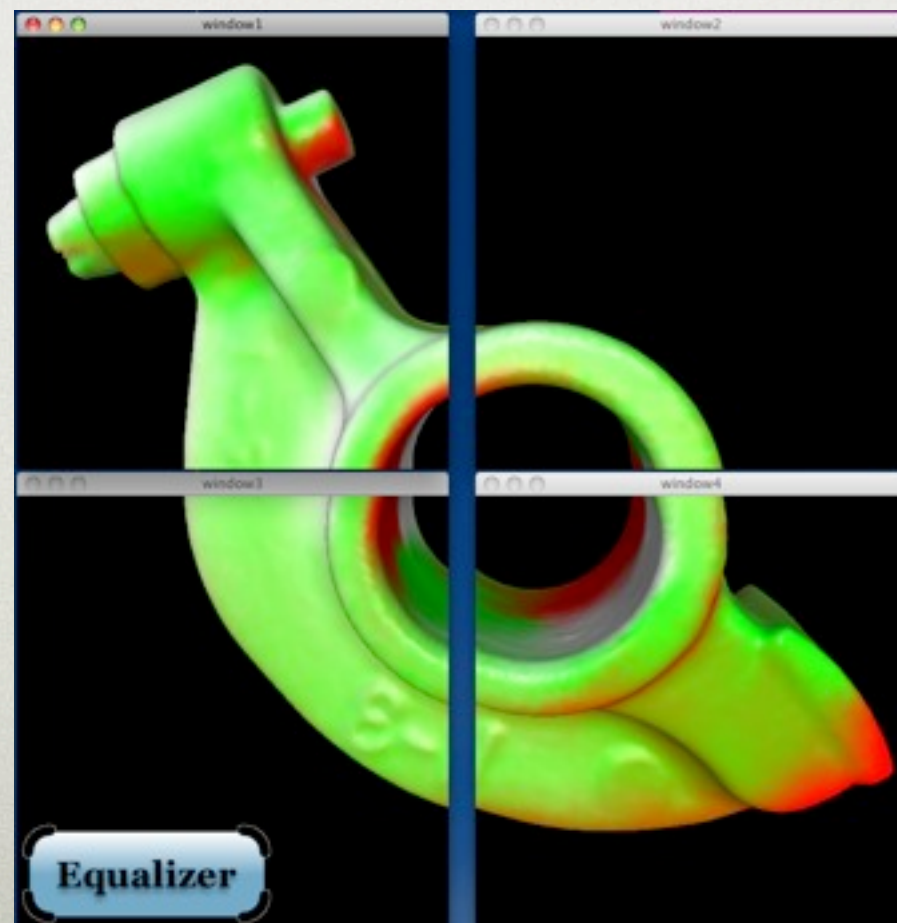
- **OR:** build\VS2005\win32\debug\eqPly.exe



# Running the Example Application

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- Press F1 for help
- If different configuration is loaded, use  
`-- --eq-config <path> / 4-window.all.eqc`





# Exploring Equalizer

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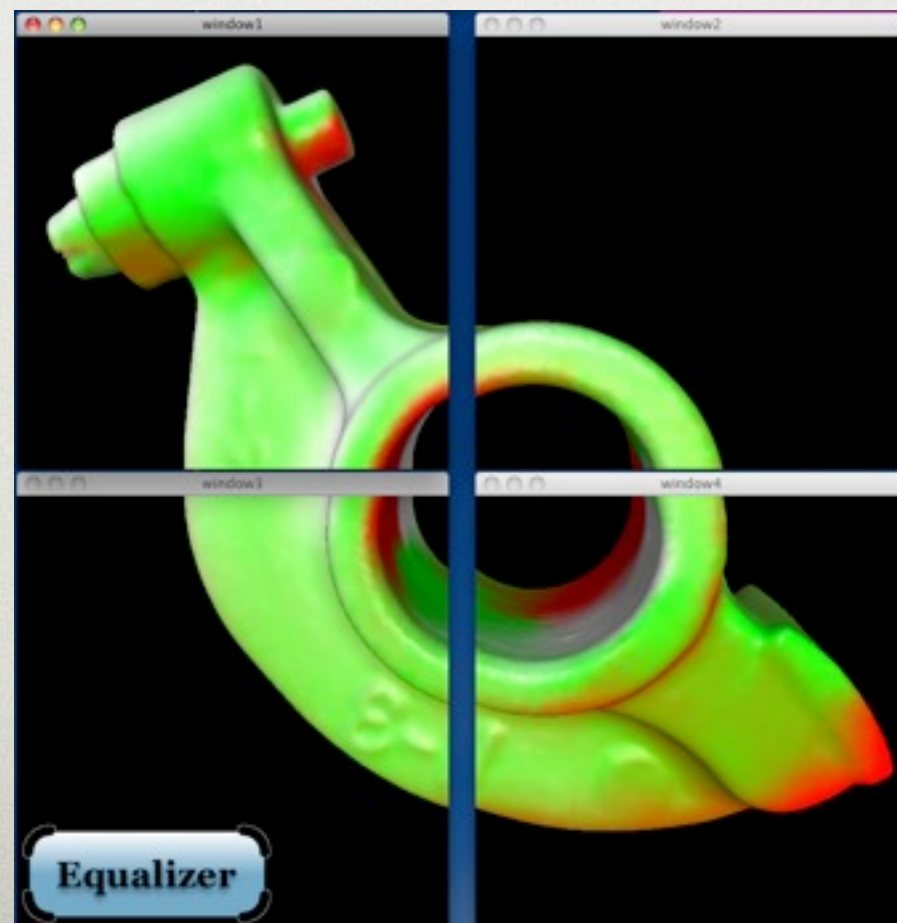
- Switch layout using 'l' to show a different feature
  - New layout name is shown for two seconds
- Load multiple models with '--model <filename | dirname>'
- Sample Models at [www.cyberware.com](http://www.cyberware.com)



# Layout wall

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- Four windows, four pipes
- To be deployed on four separate GPU's
- Software swap synchronization

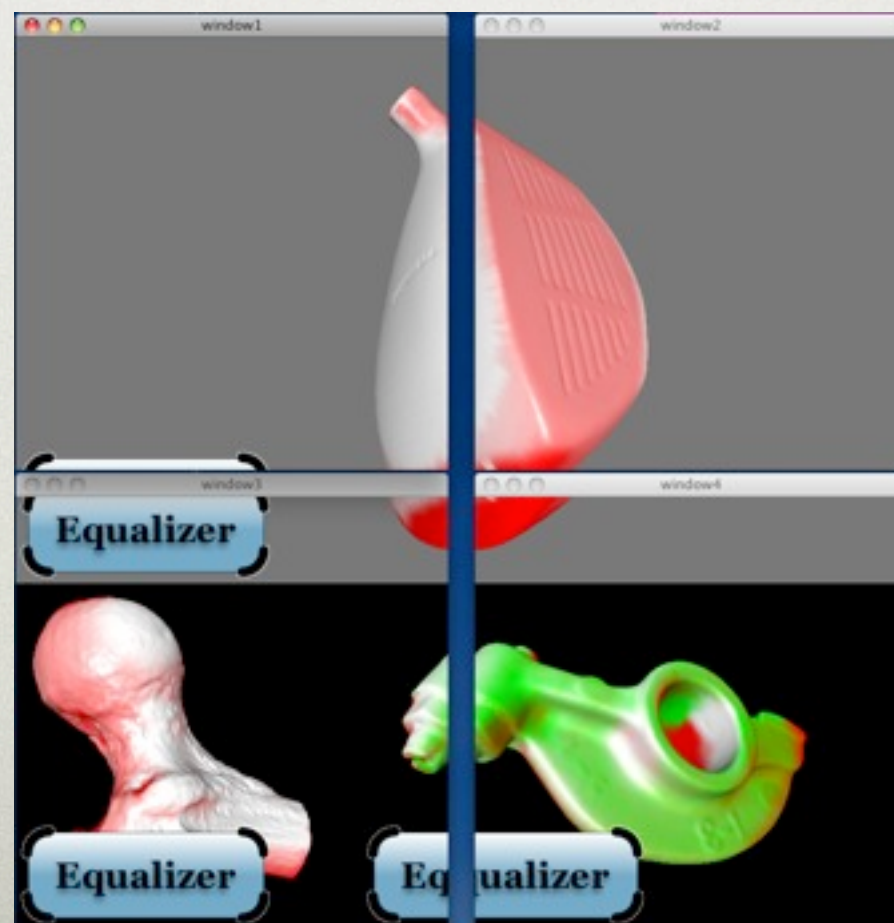




# MultiView

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- Three views on four windows
- Click in view to activate
- Use 'm' to change model of active view

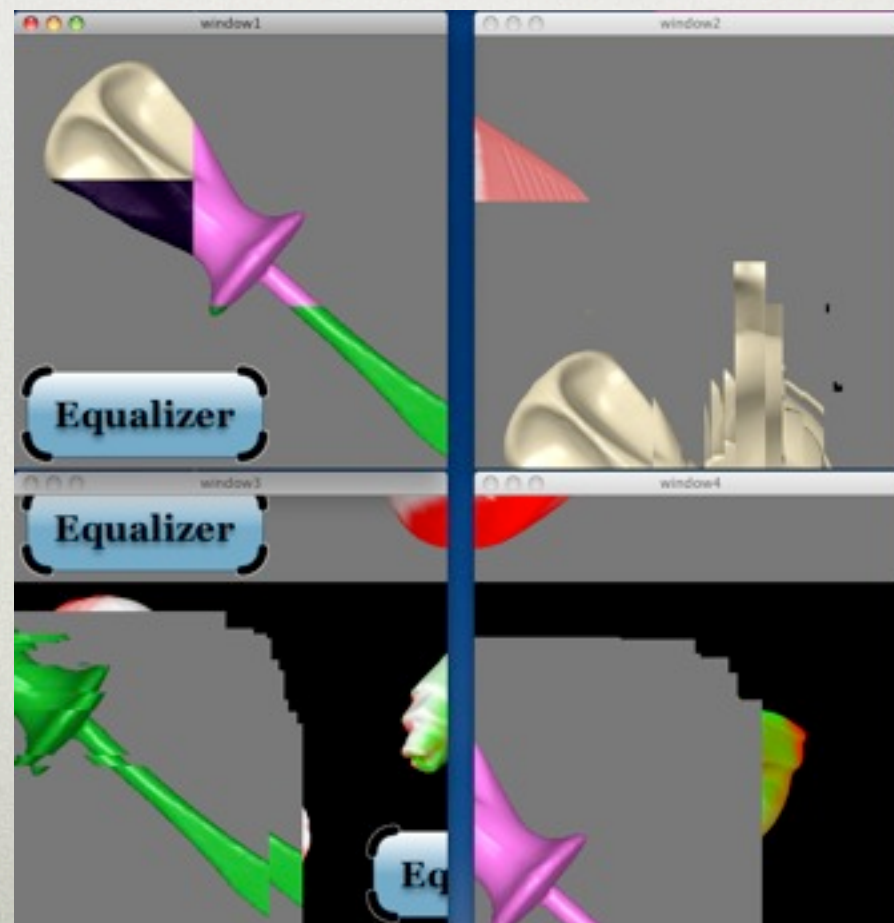




# 2D

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- Screen-space decomposition with automatic load-balancing
- Use 'd' to switch to demo color mode

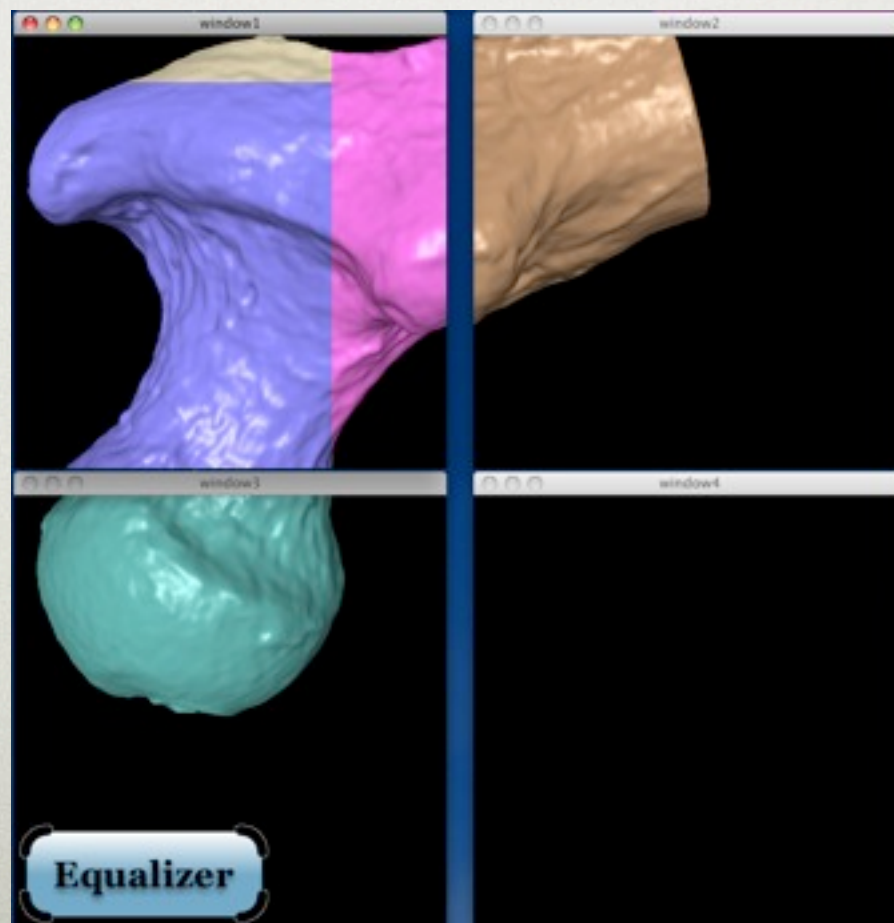




# WallLB

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- Cross-segment load-balancing
- Underused segments render for others
- Per-segment 2D compound

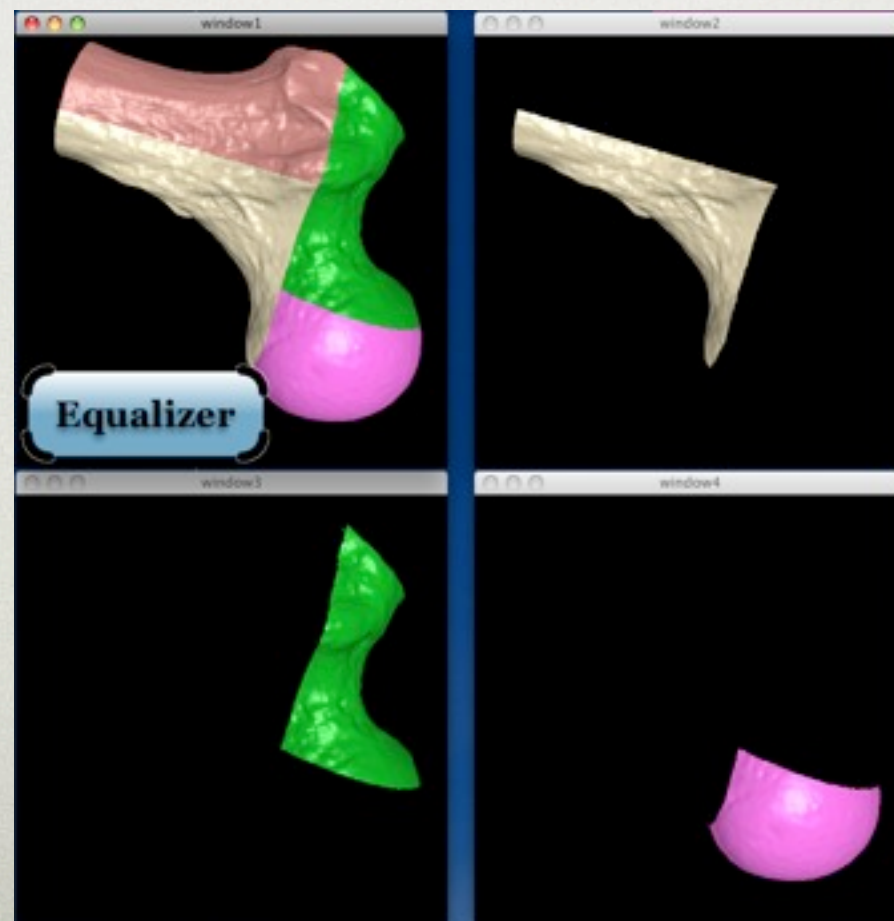




# DB

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- Database decomposition
- Each window renders  $\frac{1}{4}$  of the data
- Data is combined using Z-Buffer

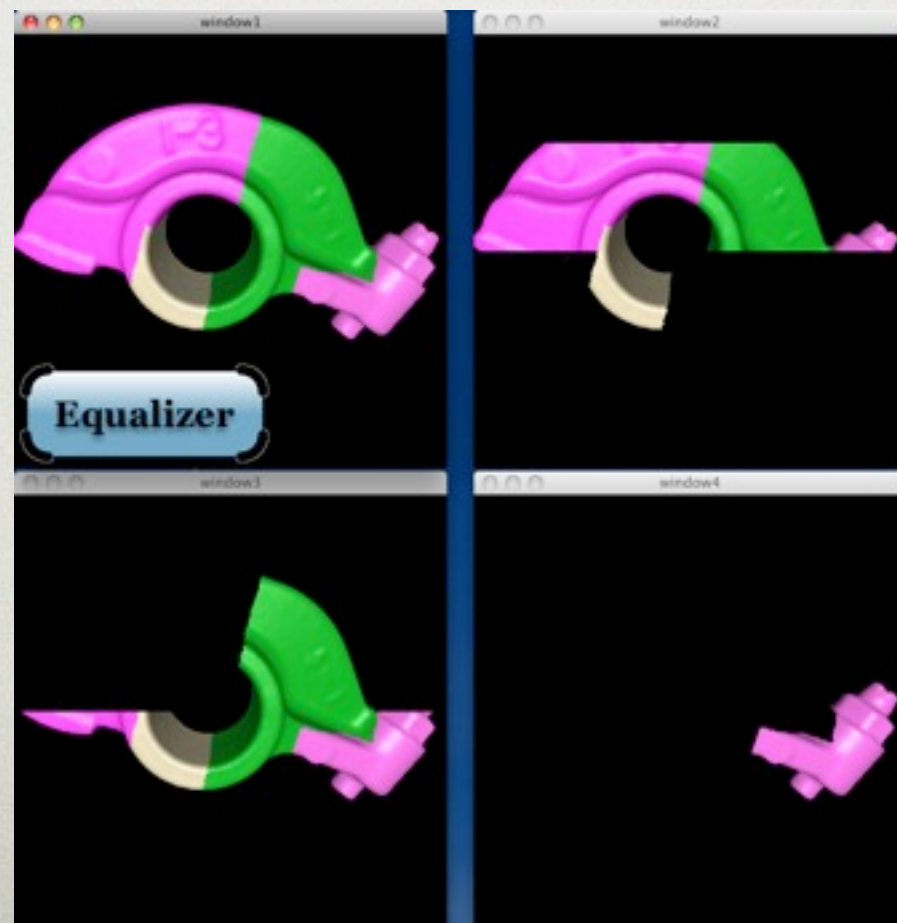




# DirectSend, BinarySwap

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- Parallel compositing for DB compounds
- Each channel renders and composites
- See website for algorithm details

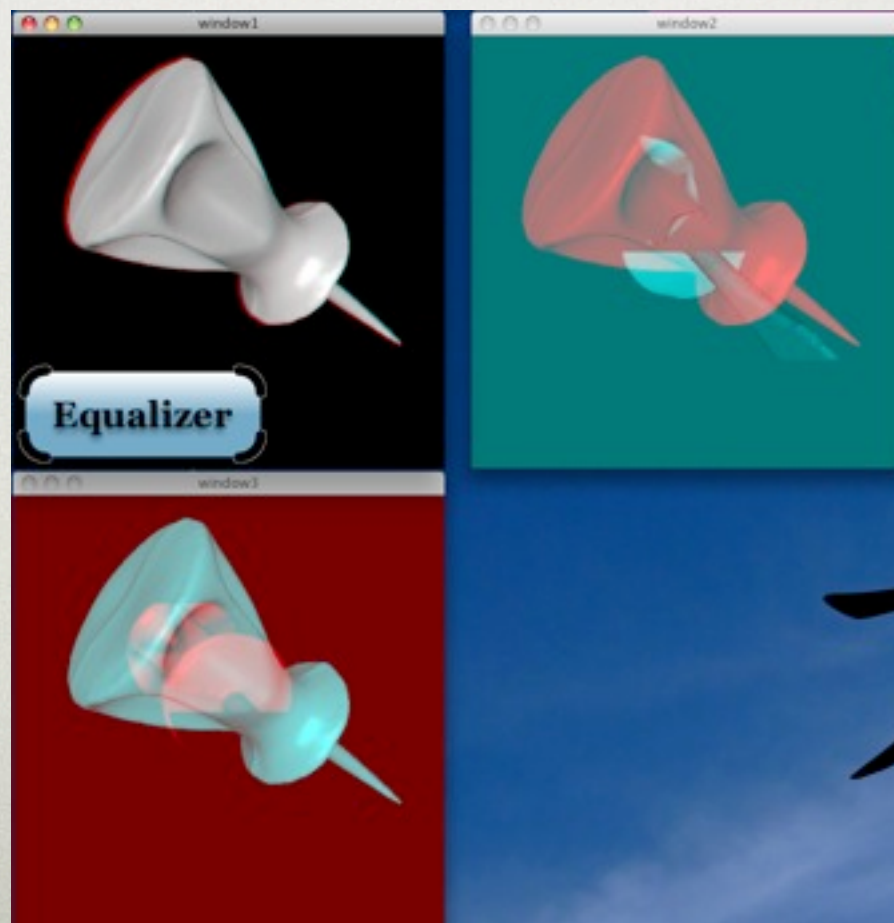




# Eye

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- Each window renders one eye pass
- Use 'd' to switch to black&white
- Active, passive and anaglyph stereo

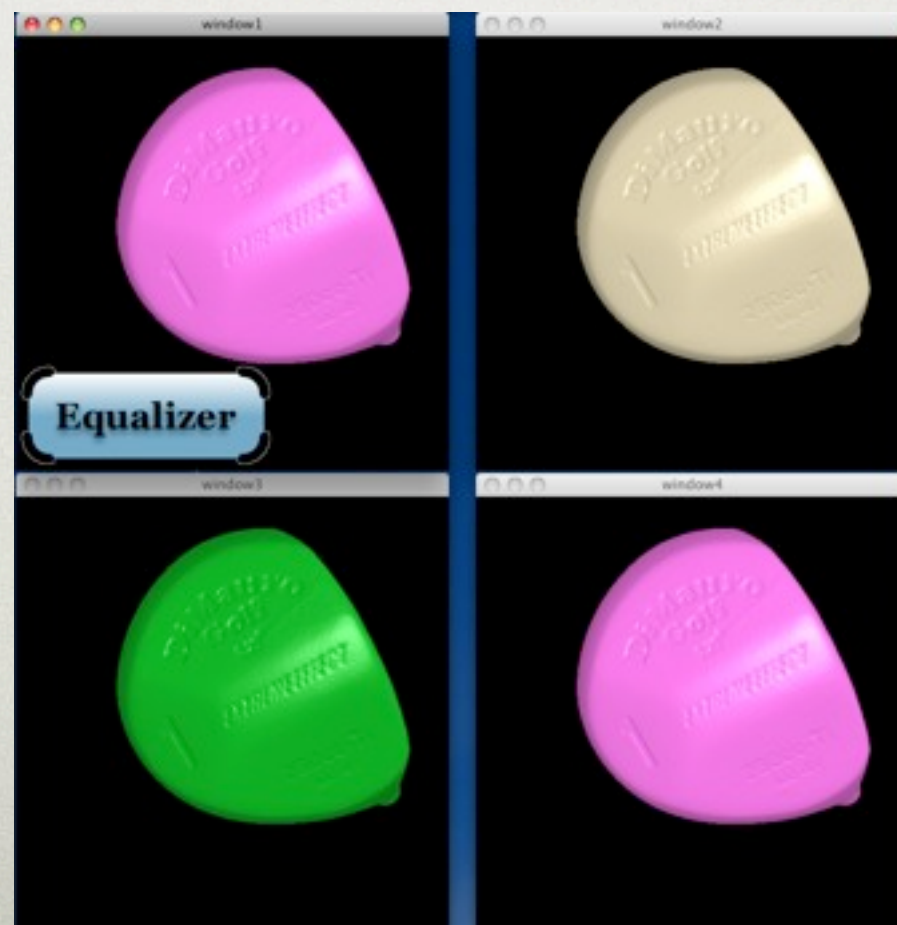




# DPlex

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- Time-multiplex
- Each window renders every 3rd frame
- Excellent load-balancing

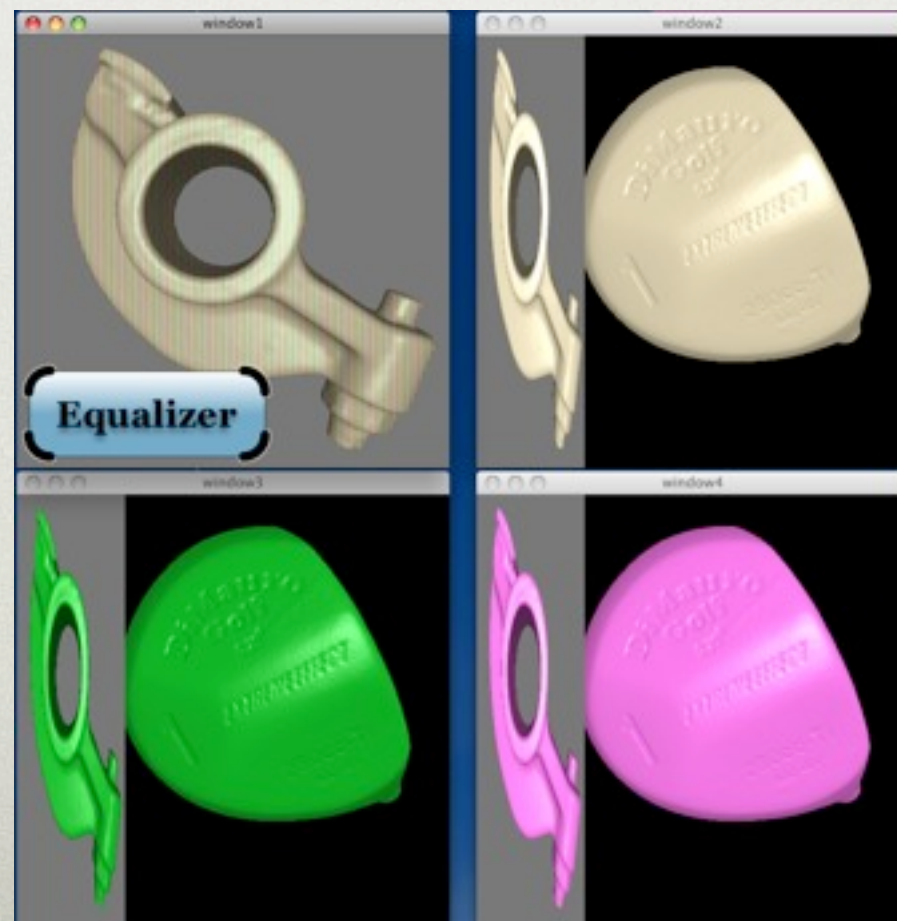




# Pixel

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- ‘Interlaced’ distribution of pixels
- Ideal for purely fill-limited applications
- Volume Rendering, Raytracing

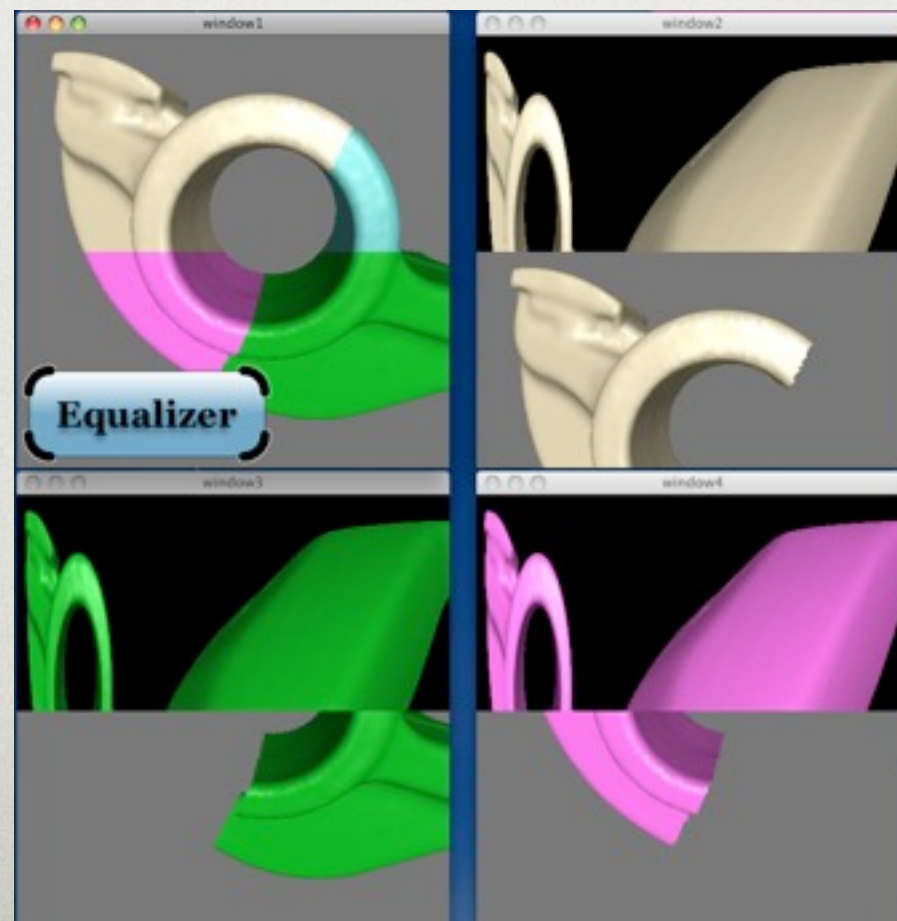




# MultiLevel

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- Combined 2D / DB compound
- Address different bottleneck
- Any other combination possible





# Next Steps

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- Cluster example configurations are named *n-node.\*.eqc*
  - Password-less ssh setup needed
  - Change hostnames to reflect your setup
  - ConfigTool creates some configurations
- Active stereo requires stereo visuals
- Read User Guide