

Advanced Biomedical Collaboration
presents

Shared Volume Rendering for Radiology

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Project Goals

- Synchronous participation among biomedical professionals in complex environments at distributed locations.
- Focus on bringing visualization and networking technologies together for biomedicine

Project Information

- Advanced Biomedical Collaboration Testbed in Surgery, Anesthesia, Emergency Medicine and Radiology (ABC Testbed)
cci.uchicago.edu/projects/abc

Key Technologies

- Integrated collaboration and coordination support provided by Access Grid technology
- Distributed rendering support provided by Chromium with added video encoding software
- Rendering and data handling algorithms leveraged from the Visualization Toolkit
- XML-RPC used as a web services protocol to enable low-latency state updates

Chromium + video

High-resolution output for existing applications over the Access Grid, with a single user interacting with the application.

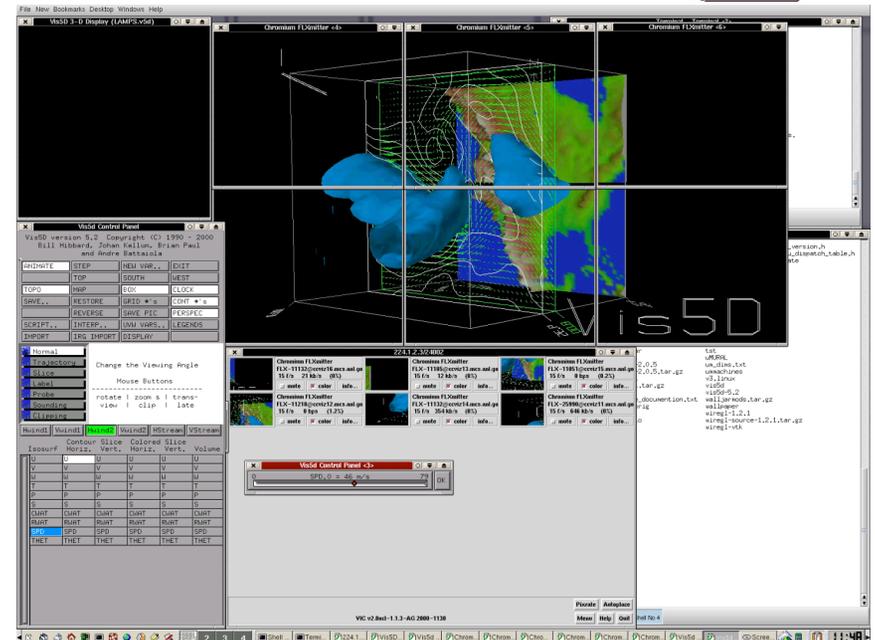
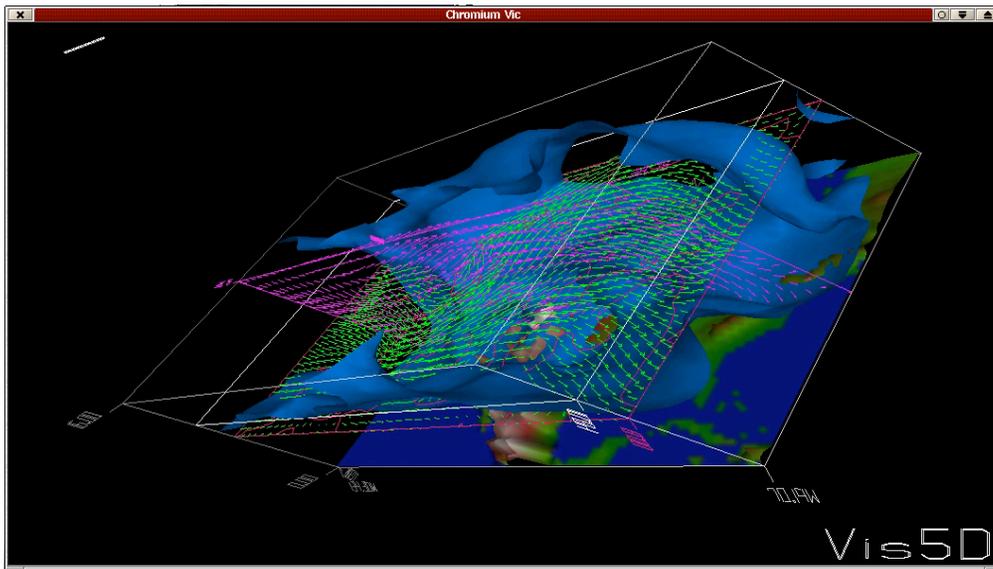
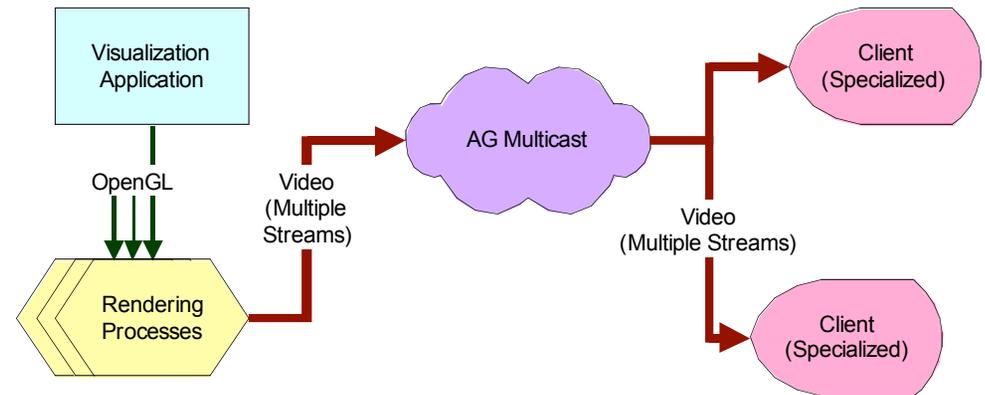
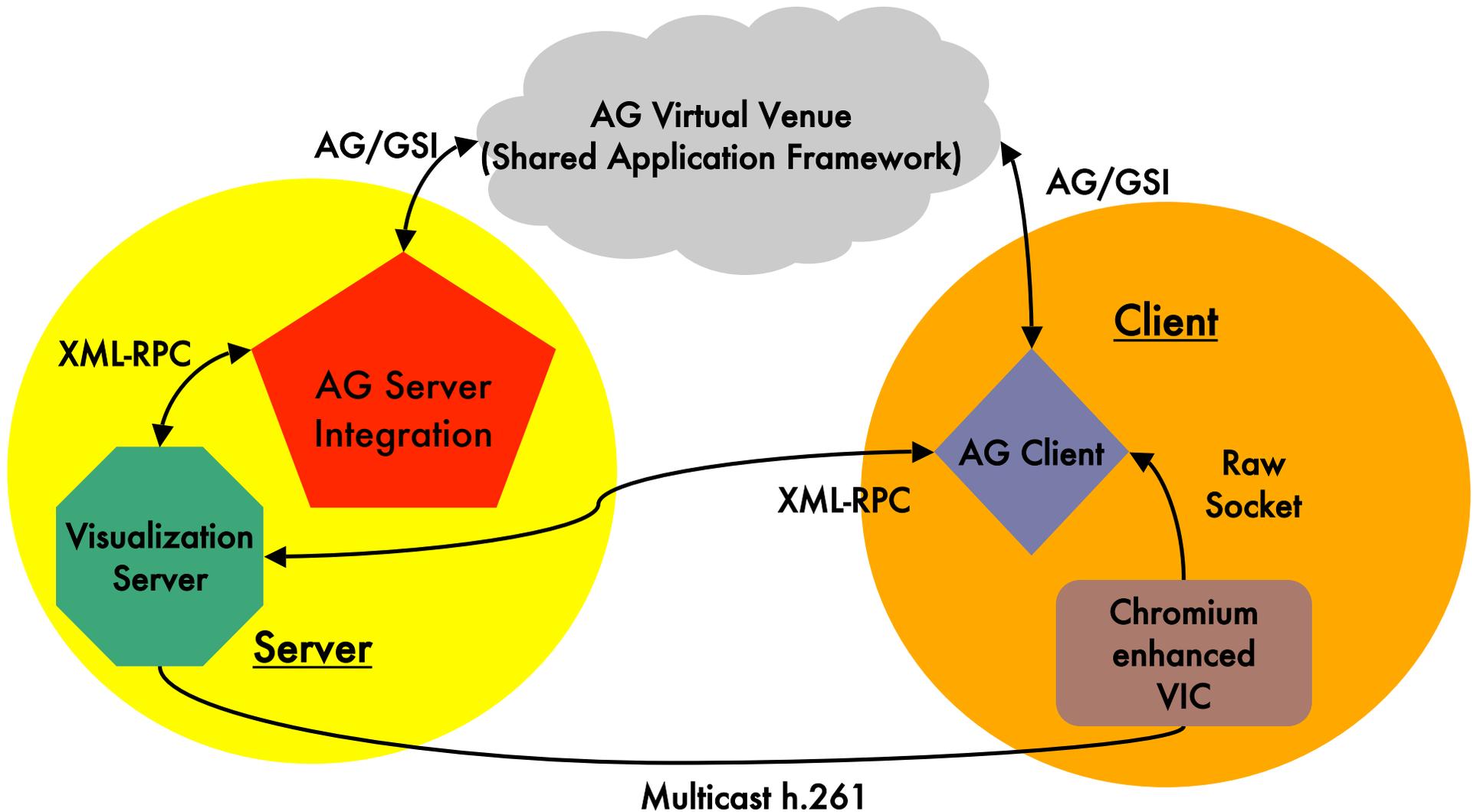


Diagram of System



System in Action



Demo

Lessons Learned

- Rendering speed an issue
- Need better control of colormap
- Social floor control works
- Need for multiple interaction modes

Thanks

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