

Visualization Server Shared Application

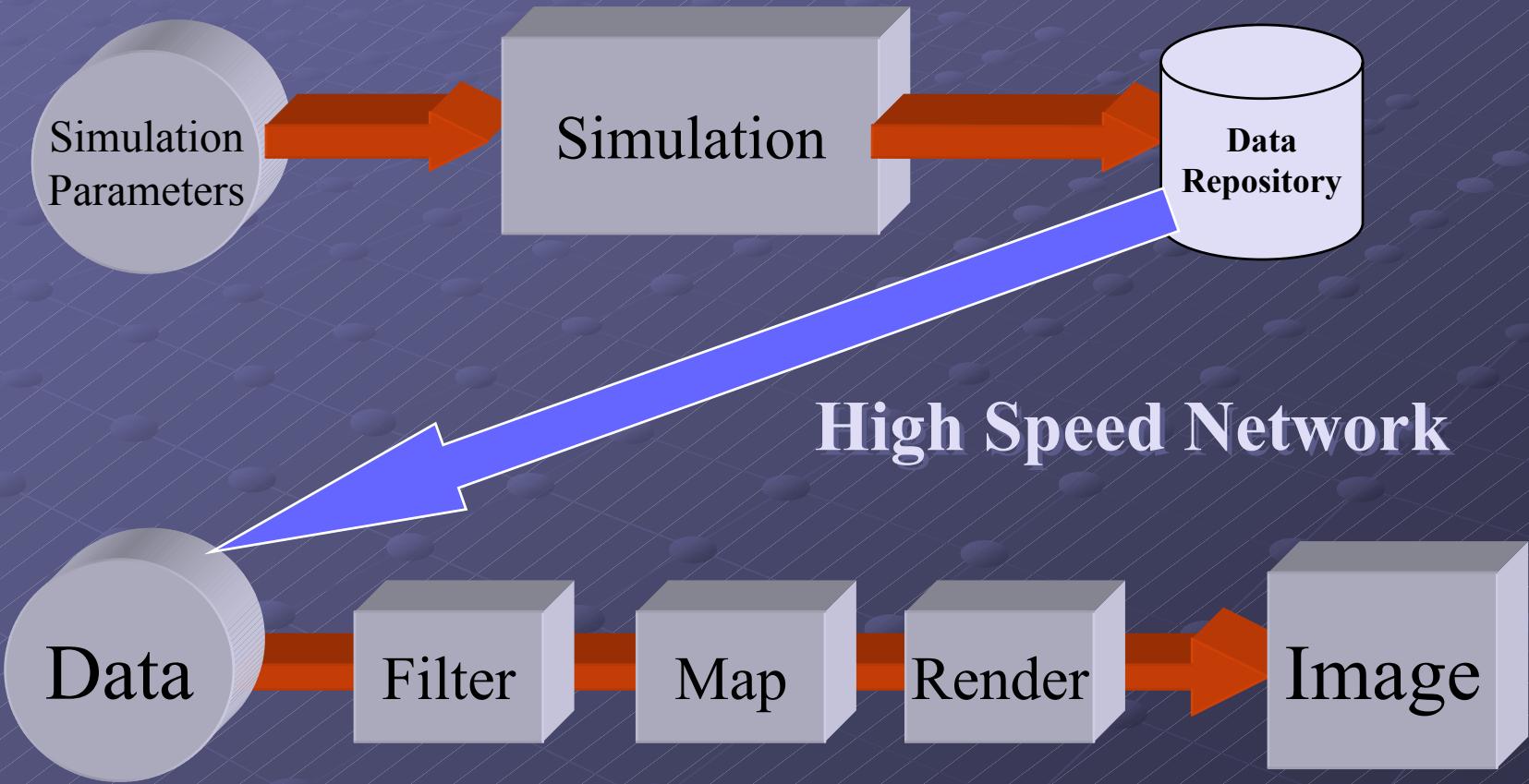
Brian Corrie

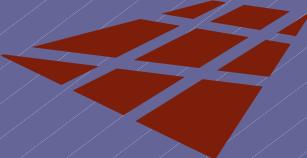
WestGrid/Simon Fraser University

Why Collaboration and Visualization?

- “*The purpose of computing is insight, not numbers*”
Richard Hamming (1962)
- The human element of grid computing
 - People are arguably the most important “grid resource”
- How do we accelerate understanding?
 - Understanding through collaboration
 - Understanding through visualization
 - *The right people, the right time, the right information*

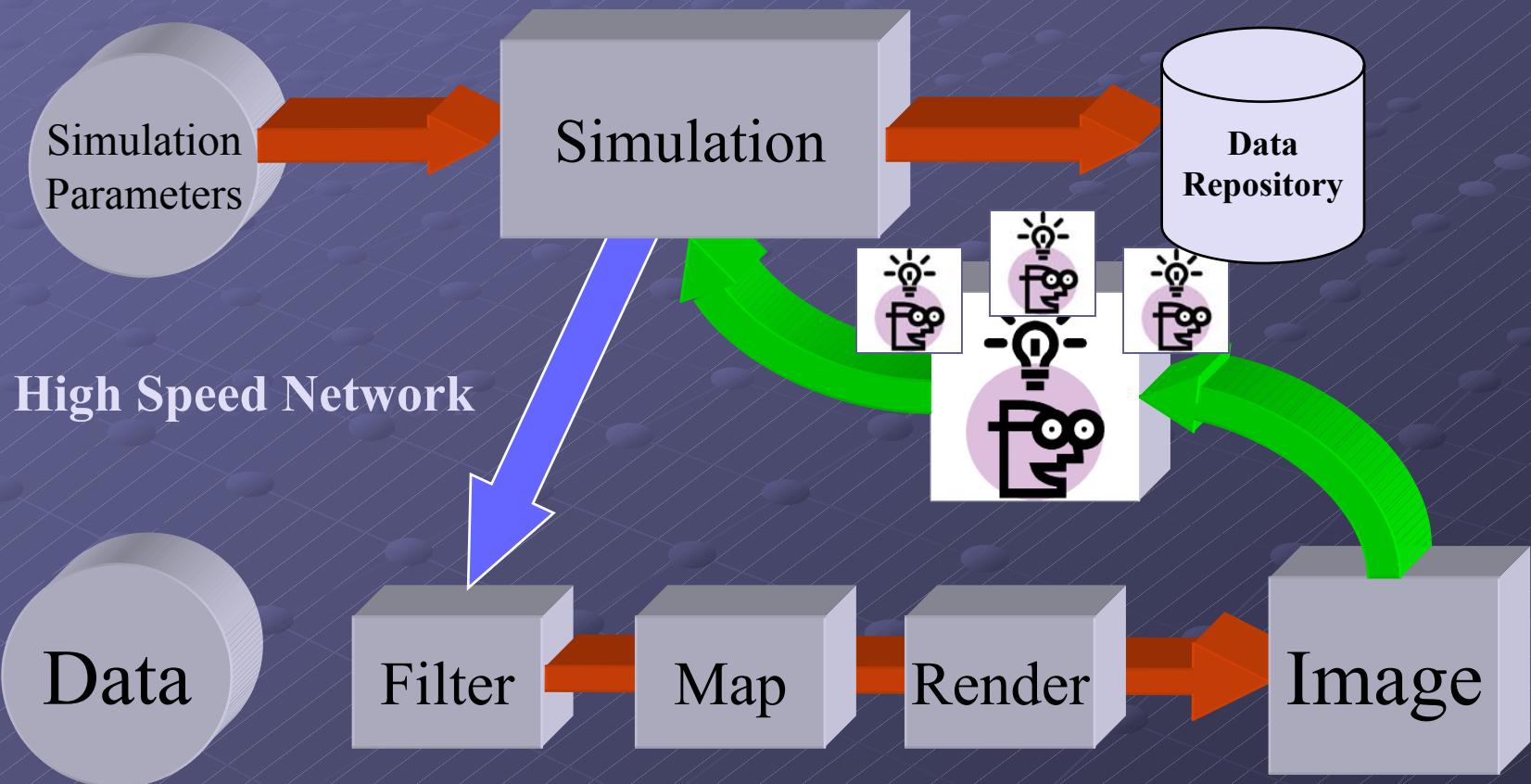
The Traditional Simulation & Visualization Pipeline





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Human-in-the-loop Computation



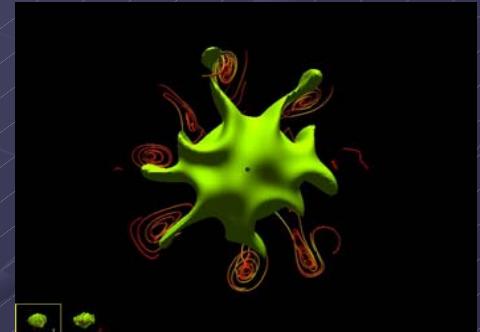
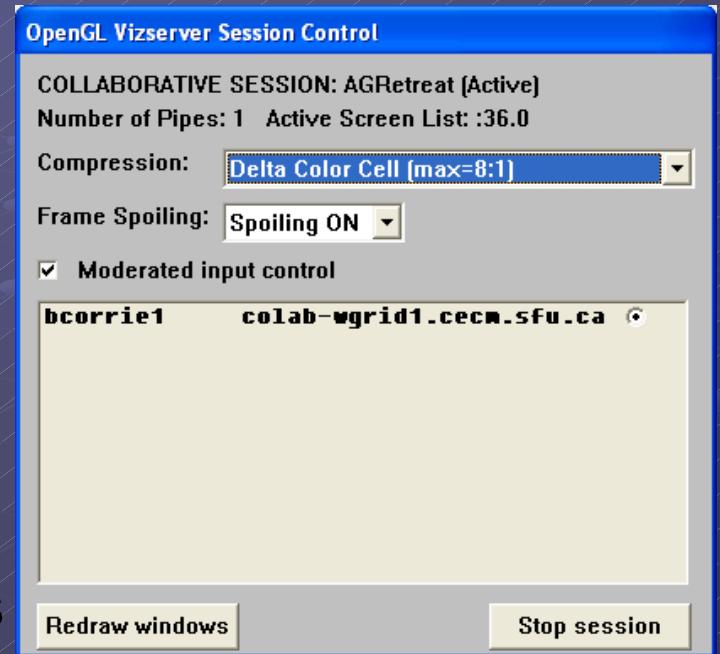
What is VizServer?

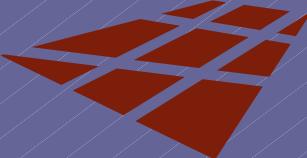
Collaborative Visualization

- SGI product
- Server runs only on SGI
- Multi-platform client

VizServer features

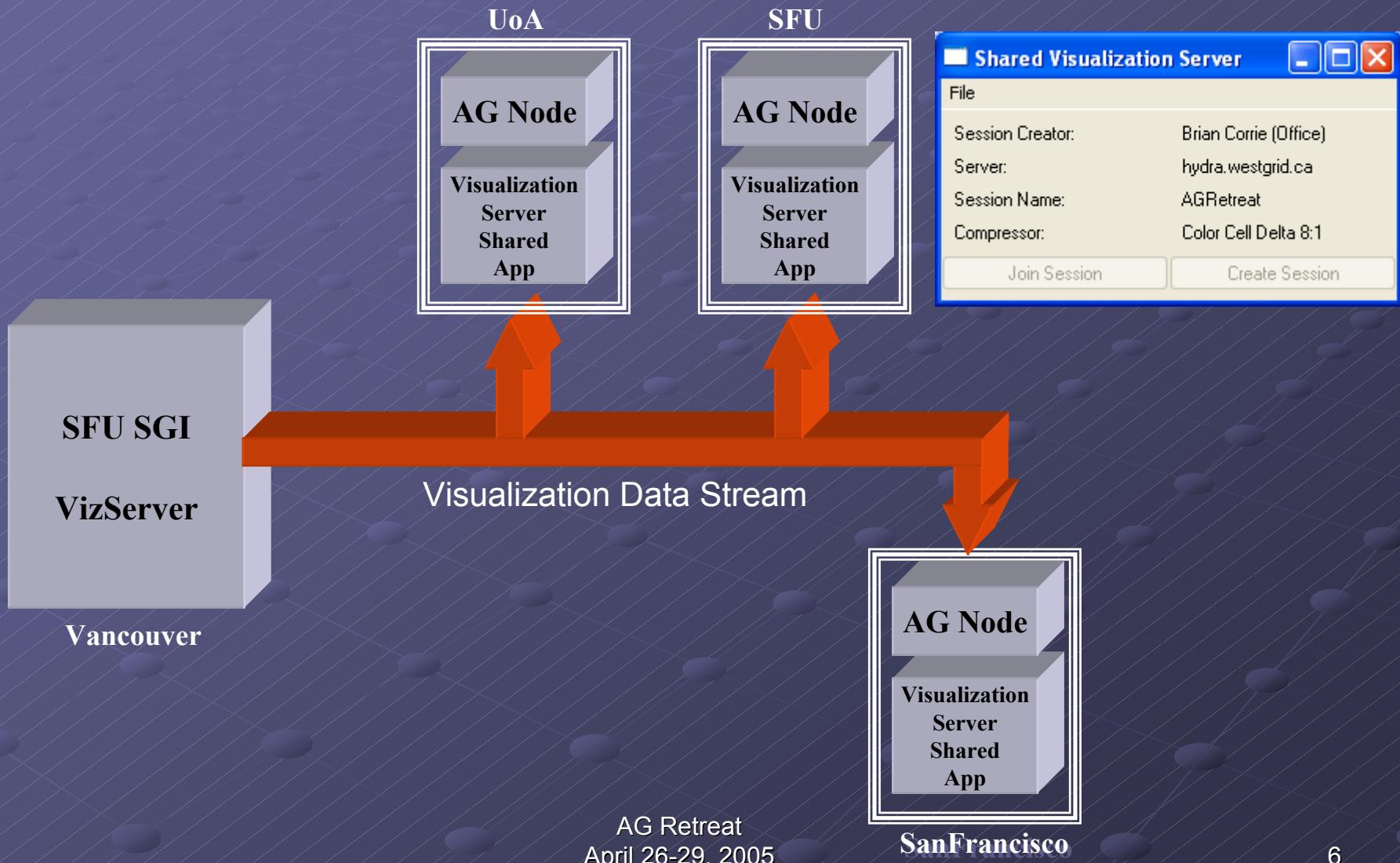
- Multiple simultaneous sessions
- Multiple simultaneous clients
- Interactive control
- Multiple control mechanisms
- Image compression
- Stereo display





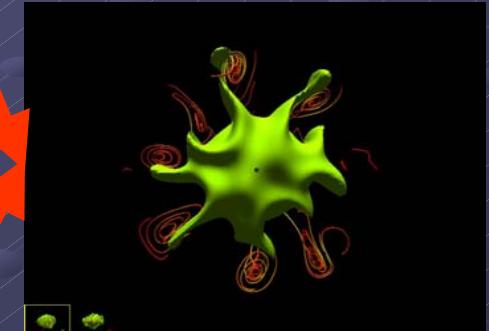
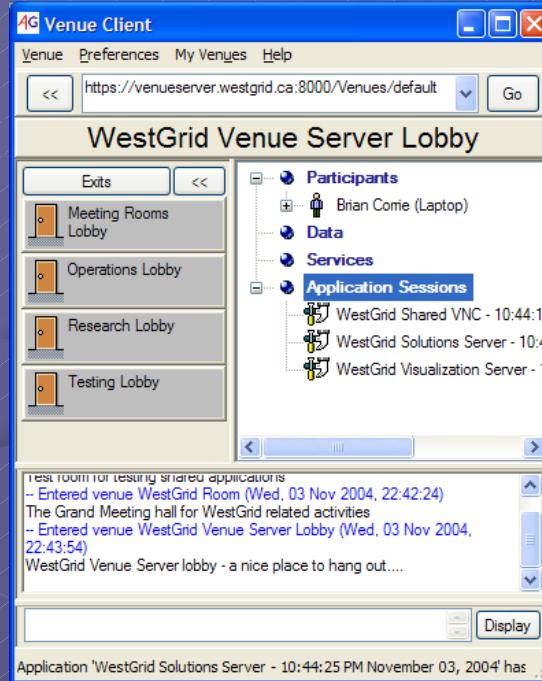
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Visualization → User Tying it all together



The VizServer Shared App

Add Shared App



VizServer Features

- Client/Server shared app architecture
 - Uses data store to save state
 - State used to determine if client or a server

- Uses many SharedAppClient features
 - Data store: store state
 - Event mechanism: manage state gracefully
 - Application control: start/stop applications

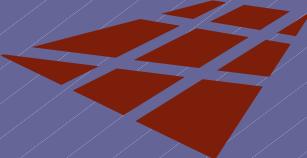
Acknowledgements

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- Andrew Patrick and the ACE group (NRC/CRC)
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● For more information:

- Contact Brian Corrie (bcorrie@sfu.ca)
- Download at:
 - www.westgrid.ca/support/collab/research-agvizserver.php



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Demos/Questions...

AG Retreat
April 26-29, 2005