



WHAT STARTS HERE CHANGES THE WORLD

THE UNIVERSITY OF TEXAS AT AUSTIN

DDDAS Project Update

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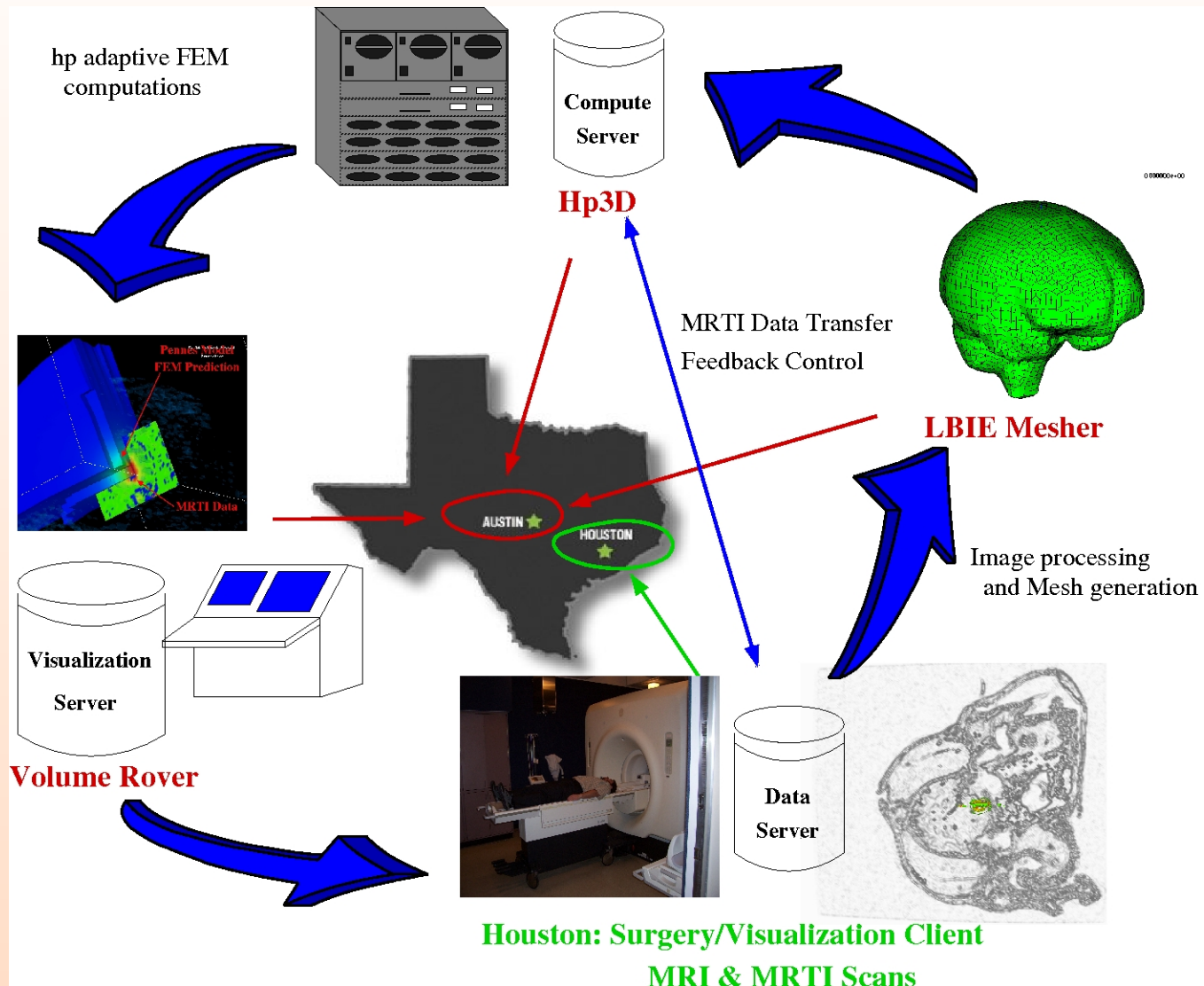


Outline

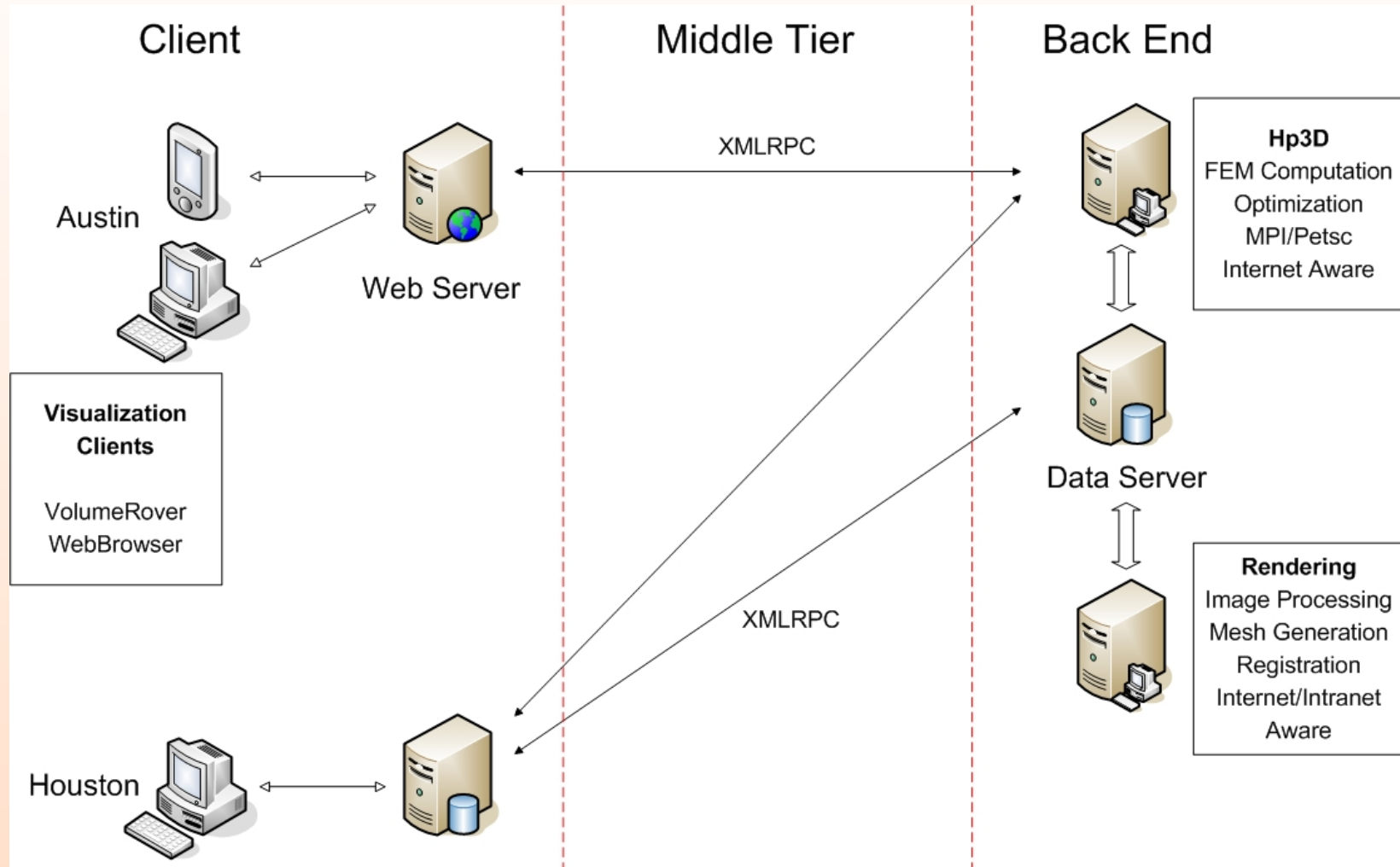
- **Plan for Capabilities for May 2007 conference**
- **Target date for first canine experiment**
- **Proposal Status**
- **Talks for next couple of weeks**



CyberInfrastructure



CyberInfrastructure



Outline of treatment

- Place patient in mri machine (mesh generated from day before and initial optimal parameters computed)
- Take set of MRI data and transfer via XML-RPC to TACC (if necessary) to do mesh-registration via image registration code.
- Volume/FEM Rendering at TACC send data to VolRover Client(s) via XML-RPC for visual confirmation of Mesh Registration



Outline of treatment

- **Experiment Ready. Start MRTI acquisition and data transfer. Start FEM code at TACC (lonestar). Open VNC on Maverick for visual confirmation of calibration.**
 - ▷ *Begin with XML-RPC in AVS: commercial package but have enough of the source code to do this*
 - ▷ *Is FEM Temp Visualization in Vol Rover Benificial?*



Plan for ICCS May 2007

GOAL: create one movie demonstrating that all the ingredients are working seamlessly

Priorities

- 1. Setup CVC software for real time mesh registration via image registration (rigid body motions only) and XML-RPC*
- 2. have FEM code ready for real time calibration/optimal control and AVS/VNC/XML-RPC visualization*
- 3. add mesh deformation if necessary*
- 4. add real time FEM Temp Visualization if necessary*



Target Date For Canine Experiments

- Several Phantom Runs must be completed first
- Ready For Real time Calibration and visualization (**Late March**)
 - *data transfer needs to be redone. average time to transfer a **5MB** file from Lonestar to Maverick is **5 sec** using San file system or SCP.*
 - *study various optimization methods*
- Ready for real time control by (**Mid-Late April**)



Proposal Status

???



Talks for next couple of weeks

website

