

Visualization and VR for the Grid

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If the Grid is to be useful for “real world” applications, Grid software must effectively handle increased user demands and software complexity incurred by visualization and VR. Such user needs include real-time user interaction that often requires specialized graphics hardware. Furthermore, visualization and VR techniques are often integrated into high-level, multicomponent scientific problem-solving environments. Such complex software environments require additional software to bridge the gap to currently available Grid middleware tools. As such, there exist a number of challenges to successfully integrating visualization and VR for real-world applications on the Grid.

In this talk, I will review the state-of-the-art in visualization and VR techniques for the Grid, discuss their use—both current and potential—in real-world applications, and present an outline for a future Grid visualization and VR research agenda.