

Teraport: A Grid Enabled Platform with Optical Connectivity

Wednesday 15 February 2006 09:00 (20 minutes)

The purpose of the Teraport project is to provide computing and network infrastructure for a university-based, multi-disciplinary, Grid-enabled analysis platform with superior network connectivity to both domestic and international networks. The facility is configured and managed as part of larger Grid infrastructures, with specific focus on integration and interoperability with the TeraGrid and Open Science Grid (OSG) fabrics. The cluster consists of 122 compute nodes with dual 2.2 GHz 64-bit AMD/Opteron processors (244 total), 15 infrastructure nodes, and 11 TB of fiber channel RAID, all connected with Gigabit Ethernet. The software environment, SuSE Linux Enterprise Server with the high performance Global Parallel File System (GPFS), was chosen for cost and proven benchmarks of the Opteron platform with IBM software components. As part of the project, the optical path (dense wavelength division multiplexing equipment and routers) was upgraded, providing 10 Gbps connectivity to Starlight in Chicago.

Primary author: GARDNER, Robert (UNIVERSITY OF CHICAGO)

Co-author: CROSS, Greg (University of Chicago)

Presenter: GARDNER, Robert (UNIVERSITY OF CHICAGO)

Session Classification: Poster

Track Classification: Computing Facilities and Networking