Telescience Overview

- Research goal
 - Establish remote operation environments for high performance observation devices
- Research topics
 - Remote operation
 - High resolution image transfer
 - Grid enabled remote operation environment
 - Data analysis
 - Visualization
 - Networking
 - OoS







Remote operation

QoS

Bandwidth reservation

scheduling

Call admission

High resolution image transfer

HDTV codec IPv6 network

PRIME

Student education Collaboration

Data analysis

Visualization

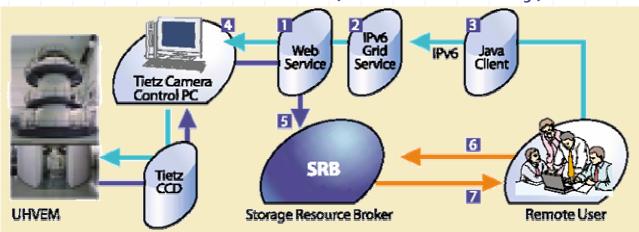
Remote visualization Parallel rendering

Grid Computing

Remote operation



- PRIME (collaboration with NCMIR at UCSD)
 - UCSD students have developed remote control system at Research Center for UHVEM (Osaka University)



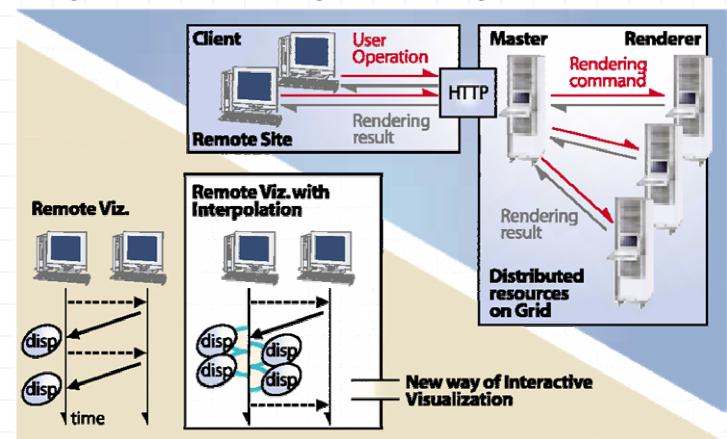






Data analysis

- 3D visualization of observed specimens
 - High resolution image rendering



Networking



- Our Framework of QoS for Grid data traffic
 - Execute call admission on each flow starts
 - Quality of each flow guaranteed by edge device
 - Policy server manages diffserv settings of edge router

Call

Site A Grid

admission

