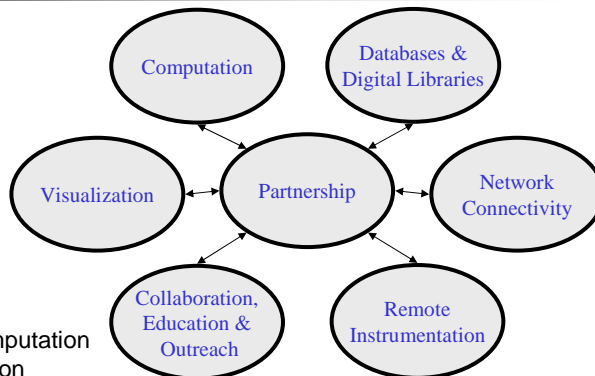


Telescience Project

Toyokazu Akiyama
Cybermedia Center,
Osaka University



Overview

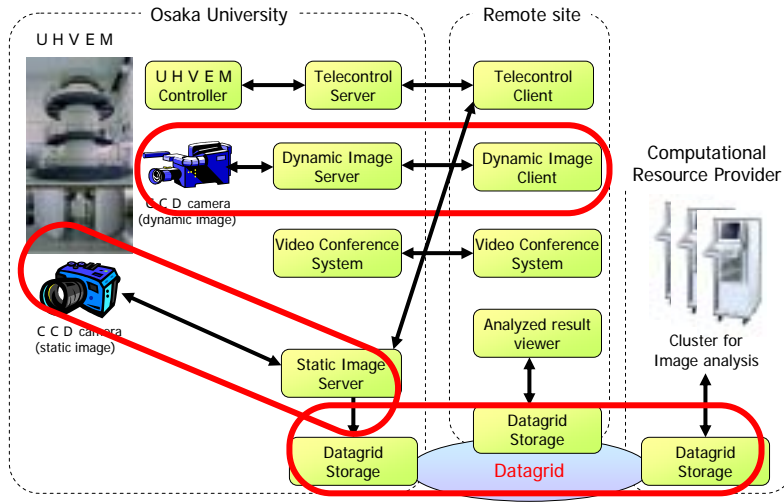


- Telemicroscopy
- Globus Enabled Computation
- Advanced Visualization
- Advanced Networking
- SRB Enabled Access to Distributed/Federated Databases
- Environment that Promotes Collaboration, Education and Outreach

Source: Steven Peltier



Telemicroscopy



Status updates

- New collaboration
 - NCHC
- Challenges on dynamic image transfer
 - iGrid2002
 - SC2002
- New equipments installation

iGrid2002

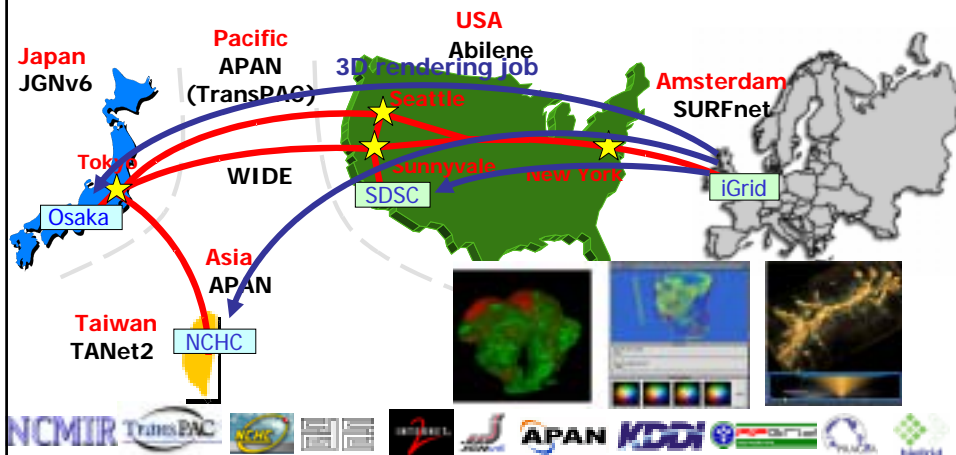
- Telecontrol from Amsterdam and SDSC over global IPv6 network.
- DVTS over IPv6
- Participants
 - NCMIR, SDSC(US)
 - NCHC(Taiwan)
 - Research Center for UHVEM, Cybermedia Center(Japan)



Demonstration configuration



Demonstration configuration



SC2002

- Telecontrol from Baltimore
- HDTV over IPv6
- Participants
 - NCMIR, SDSC
 - KDDI R&D Laboratories Inc.
 - Research Center for UHVEM, Cybermedia Center



HDTV Codec & Network Adapter

KDDI



KH-300N



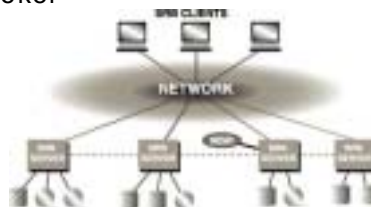
MPTS LINK

- HDTV over IPv6 requirements
 - 1 . 100Mbps bandwidth (including 4ch sound)
 - 2 . Under 10^{-5} error rate (for business use spec)

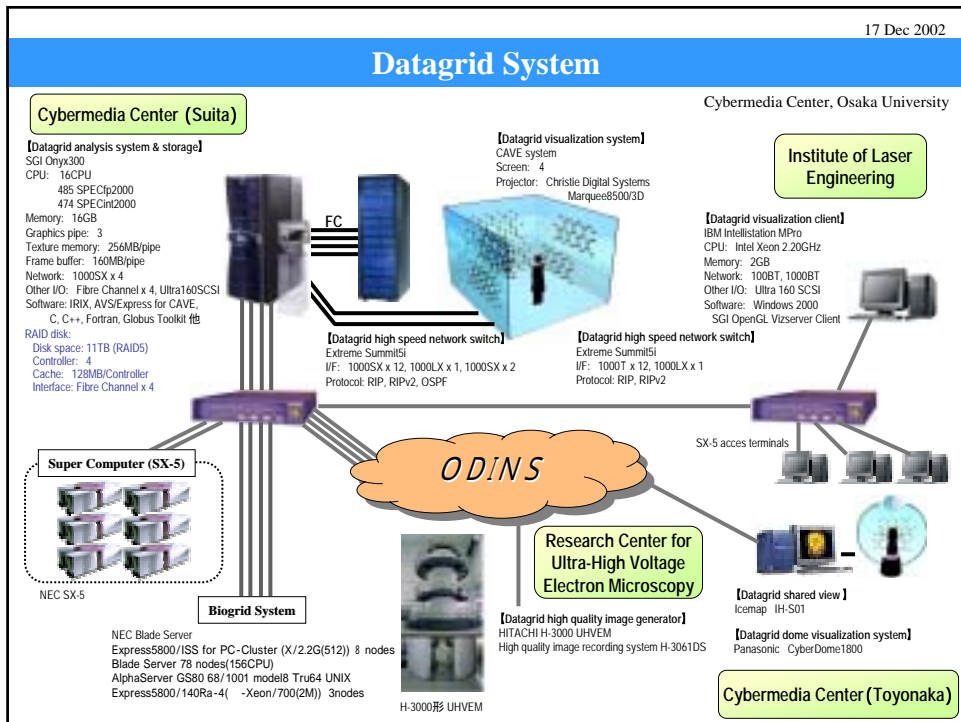


New equipments installation

- CCD camera for static images
 - 4k x 4k slow-scan CCD camera
- Visualization environment
 - CAVE, Vizserver
- Data sharing environment
 - Storage Resource Broker
 - MCAT server
 - Miracle Linux 2.1
 - Oracle 9.2.0i
 - SRB agents



Datagrid System



Future Works

- Development of data sharing and visualization environment
- Integration of telemicroscopy system
 - Telescience portal



- Development of QoS enabled environment