

GLIF Research & Applications Working Group

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Image courtesy of Steve Wallace

GLIF RAP: Goals

- **Goal: To train a new generation of scientists on the use of supernetworks**
- **TECH Group is focusing on lambda connectivity to the campus edges. RAP group advocates getting lambdas from the campus edge to the laboratory, to provide an end-to-end solution.**
- **Focus on three areas**
 - **User Applications**
 - **Infrastructure**
 - **Research**

GLIF RAP: User Applications

- **User Applications – *Larry Smarr and Maxine Brown***
 - Generate more users and applications using the GLIF infrastructure
 - Create taxonomy
 - Archive teaching materials from centers that teach scientific applications using lambdas (e.g., UK e-Science Center teaches “Networks for Non-Networkers”)
 - Create liaisons with other groups
 - Applications collected by iGrid 2005 are of interest to the RAP Group. RAP wants to develop a *taxonomy* defining classifications of LambdaGrid applications
 - Need to do a post mortem
 - Obtain quantitative measurements (bandwidth, burstiness, size of data files, etc). What would the GLIF TECH Group find useful?
 - What do scientists do with lambdas that they couldn't do with a production network?

GLIF RAP: Infrastructure

- **Infrastructure – *Jason Leigh***
 - *Live the Dream:* interconnect GLIF sites with HD video teleconferencing, tiled displays, etc.
 - Create a living (persistent) demonstration; show by doing
 - Global Lambda Visualization Facility is connecting 6-8 OptIPuter sites this year

GLIF RAP: Research

- **Research – Cees de Laat**
 - Research coordination and roadmaps on various topics:
 - Devices: Photonic devices, modules
 - Architectures (e.g., Optical burst switching, JIT, WSS, StarPlane, portsite)
 - Integration
 - Advocate new research programs by funding agencies
 - Advocate new hardware/software development by industry