# **Global Lambda Integrated Facility**

#### **Cees de Laat**

#### www.glif.is



### Contents

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# History

- Brainstorming in Antalya at Terena conf. 2001
- 1th meeting at Terena offices 11-12 sep 2001
  - On invitation only (15) + public part
  - Thinking, SURFnet test lambda Starlight-Netherlight
- 2nd meeting appended to iGrid 2002 in Amsterdam
  - Public part in track, on invitation only day (22)
  - Core testbed brainstorming, idea checks, seeds for Translight
- 3th meeting Reykjavik, hosted by NORDUnet 2003
  - Grid/Lambda track in conference + this meeting (35!)
  - Brainstorm applications and showcases
  - Technology roadmap
  - GLIF established

# **GLIF** Mission Statement

- GLIF is a world-scale Lambda-based Laboratory for application and middleware development on emerging LambdaGrids, where applications rely on dynamically configured networks based on optical wavelengths
- GLIF is an environment (networking infrastructure, network engineering, system integration, middleware, applications) to accomplish real work

# GLIF - 4 meeting

- Invitation only
- Nottingham 3 September (+preparatory afternoon on 2 September)
- 60 participants
- Attendance from China, Japan, Netherlands, Switzerland, US, UK, Taiwan, Australia, Tsjech, Korea, Canada, Ireland, Russia, Belgium, Denmark
- www.glif.is

# Nottingham 2004



# GLIF Q3 2004



Visualization courtesy of Bob Patterson, NCSA.

# **The main objectives of this year's (2004) meeting** GLIF Governance and policy

Our small-scale Lambda Workshop is now turning into a global activity. TransLight and similar projects contribute to the infrastructure part of GLIF. A good and well understood governance structure is key to the manageability and success of GLIF. Our prime goal is to decide upon and agree to the GLIF governance and infrastructure usage policy.

# GLIF Lambda infrastructure and Lambda exchange implementations

A major function for previous Lambda Workshops was to get the network engineers together to discuss and agree on the topology, connectivity and interfaces of the Lambda facility. Technology developments need to be folded into the architecture and the expected outcome of this meeting is an agreed view on the interfaces and services of Lambda exchanges and a connectivity map of Lambdas for the next year, with a focus on iGrid 2005 and the emerging applications.

#### **Persistent Applications**

Key to the success of the GLIF effort is to connect the major applications to the Facility. We, therefore, need a list of prime applications to focus on and a roadmap to work with those applications to get them up to speed. The demonstrations at SC2004 and iGrid 2005 can be determined in this meeting.

#### Control Plane and Grid Integration

The GLIF can only function if we agree on the interfaces and protocols that talk to each other in the control plane on the contributed Lambda resources. The main players in this field are already meeting, almost on a bi-monthly schedule. Although not essential, this GLIF meeting could also host a breakout session on control plane middleware.

# Last slide

Special thanks to our host MCNC and very special thanks to Gigi Karmous Edwards!