



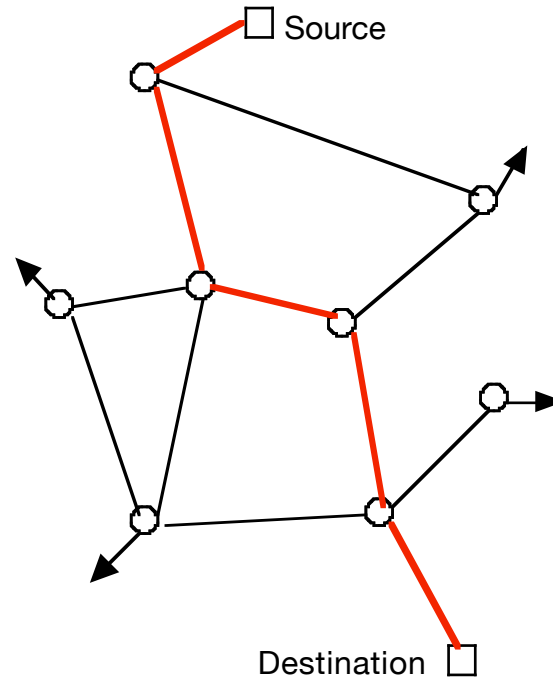
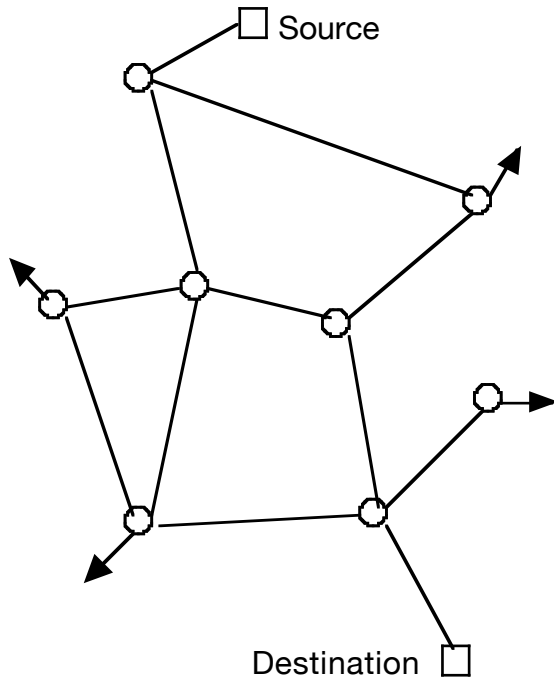
# An Overview of UKLight and ESLEA

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# Packet-Switched and Circuit-Switched Networks



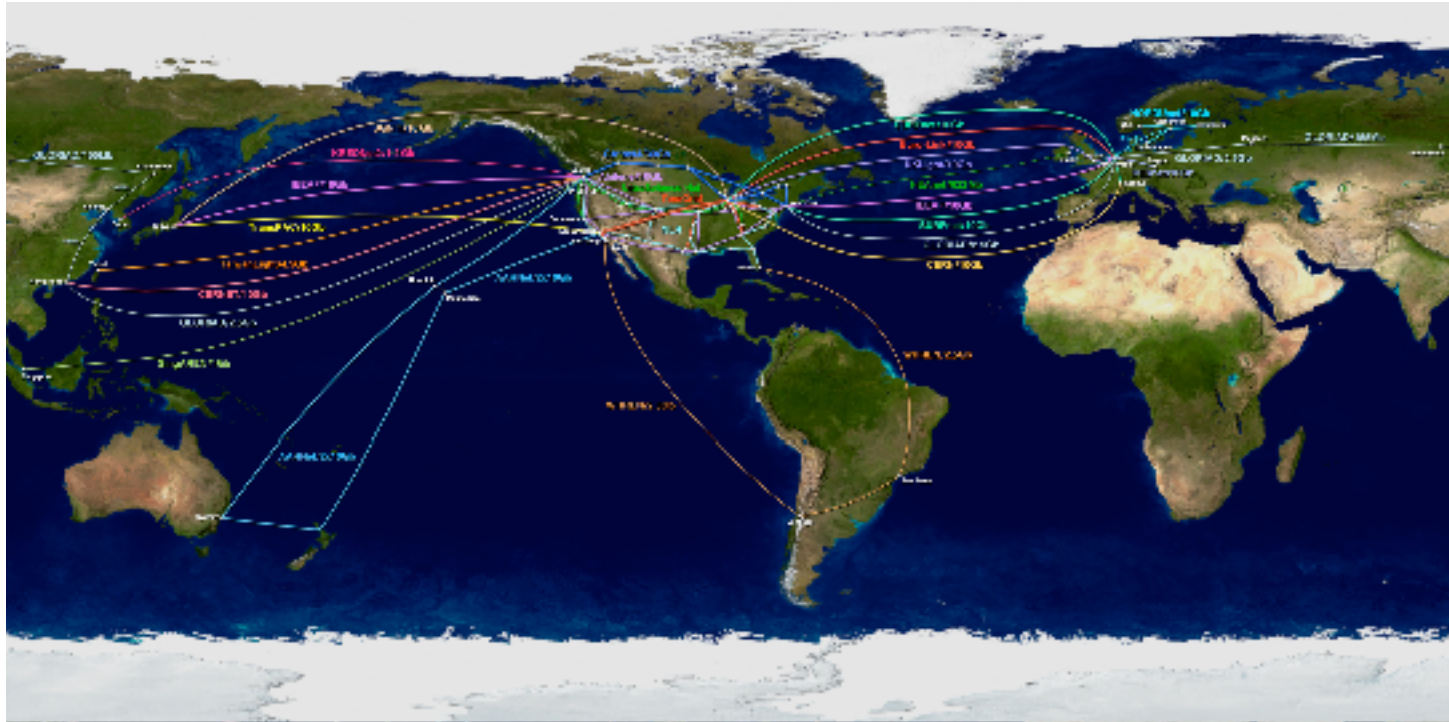


## Global Lambda Integrated Facility

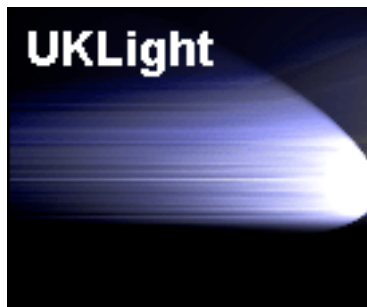
- Founder members:
  - StarLight in the US,
  - NetherLight in the Netherlands,
  - CANARIE in Canada,
- now many more members,
- UKLight is the UK contribution,
- <http://www.glif.is/>



# Global Lambda Integrated Facility

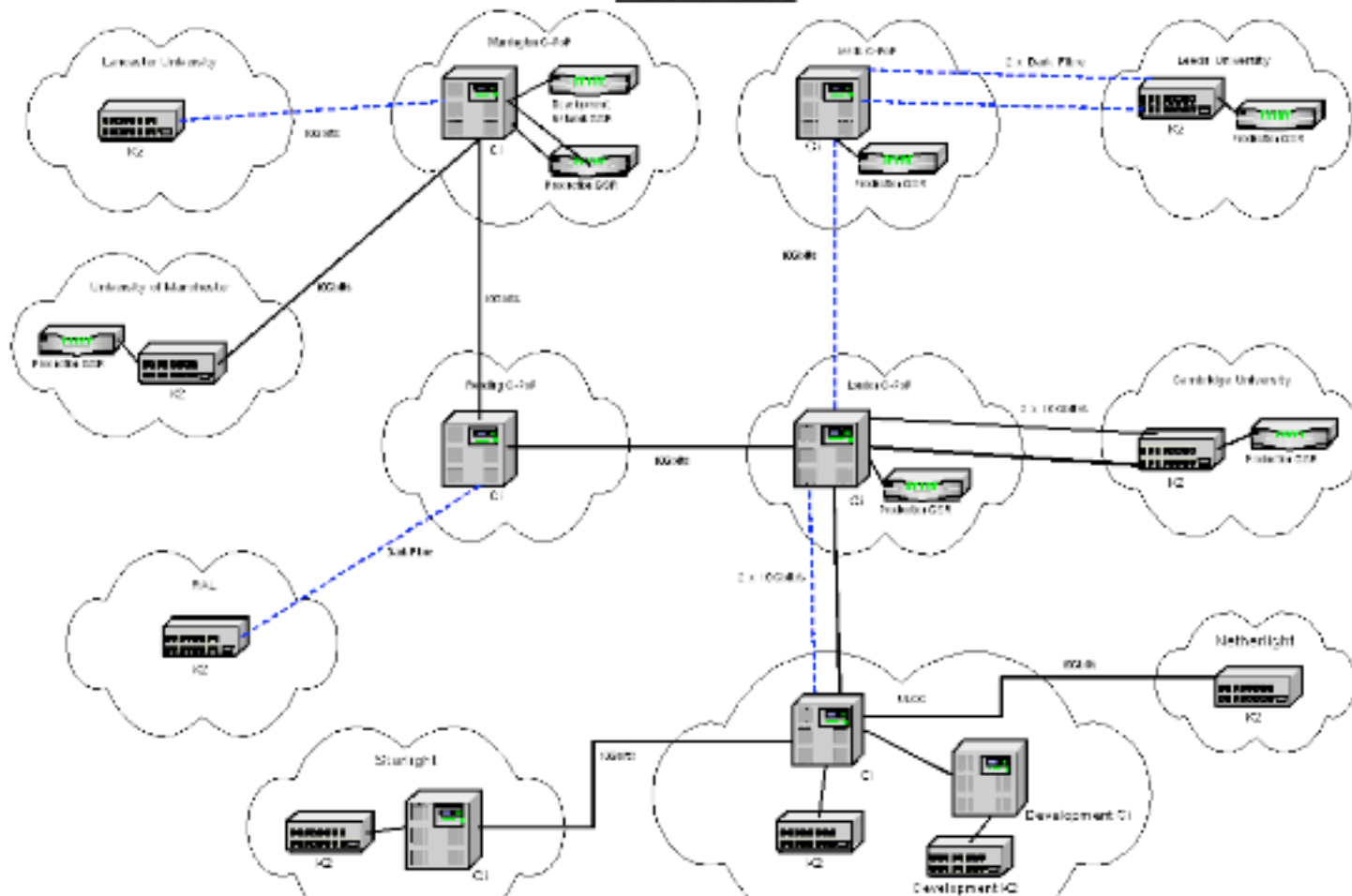






- 10 Gbit/sec connections from hub in London to StarLight and NetherLight,
- a collection of 1 Gbit/sec links from London hub to selected points in the UK,
- provides dedicated, switched-circuit connections for approved projects,
- managed by UKERNA and funded by HEFCE.

UKLight & the extended development network -  
Phase 1 & Phase 2



# UKLight Projects

- ESLEA (Exploitation of Switched Light-paths for e-Science Applications)  
<http://www.eslea.uklight.ac.uk>
- MASTS (Measurement at All Scales in Time and Space)  
<http://grid.ucl.ac.uk/MASTS.html>
- 46 PaQ (IPv4 + IPv6 Performance and QoS)  
<http://grid.ucl.ac.uk/46PaQ.html>
- and others...



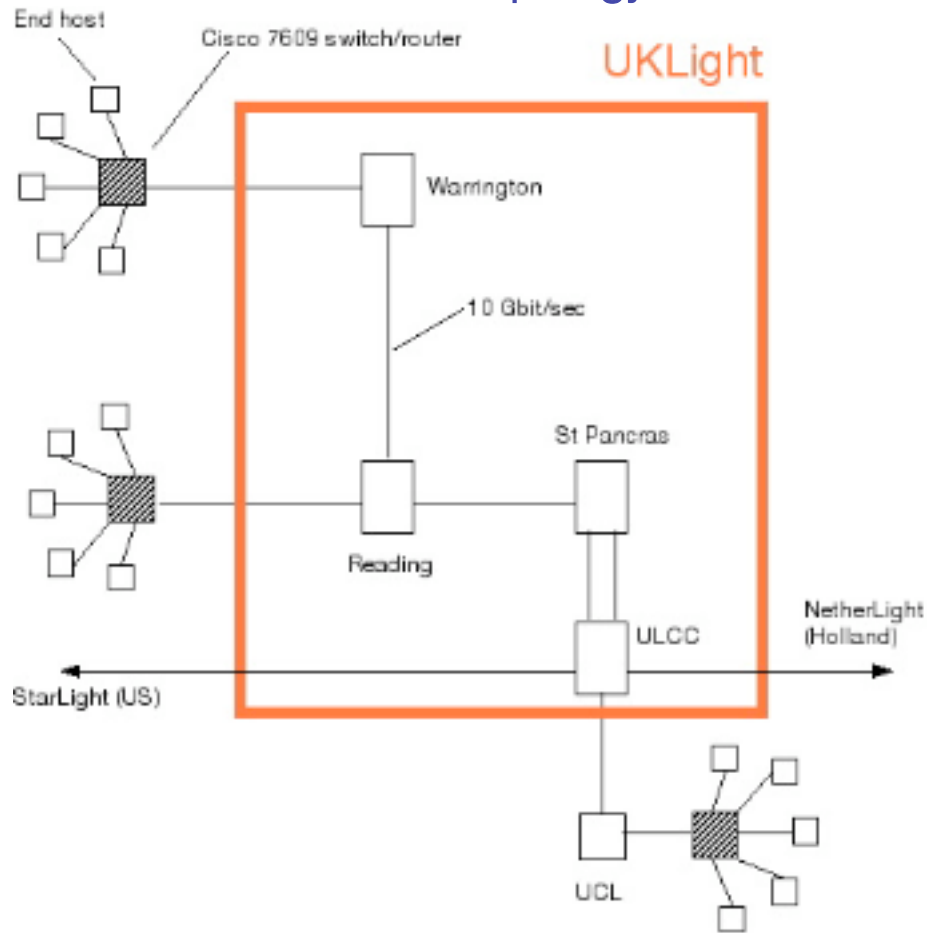
# ESLEA

- Investigate the use of switched-circuit networks and demonstrate that they offer concrete advantages in real application areas.
- Principal Investigator: Prof. Peter Clarke (NeSC).
- Institutions:
  - University of Edinburgh,
  - University College London,
  - University of Manchester,
  - University of Oxford,
  - University of Lancaster,
  - Rutherford Appleton Laboratory,
  - Daresbury Laboratory.

# ESLEA Sub-Projects

- Exploitation sub-projects:
  - High-energy physics,
  - eVLBI,
  - RealityGrid,
  - e-Health.
  
- Capability development:
  - control plane software,
  - protocol development.

# ESLEA Topology



# Further Information

- UKLight:
  - URL: [www.uklight.ac.uk](http://www.uklight.ac.uk)
  - David Salmon (UKLight Manager): [D.Salmon@ukerna.ac.uk](mailto:D.Salmon@ukerna.ac.uk)
  
- ESLEA:
  - URL: [www.eslea.uklight.ac.uk](http://www.eslea.uklight.ac.uk)
  - Colin Greenwood (ESLEA Project Manager): [coling@nesc.ac.uk](mailto:coling@nesc.ac.uk)
  - Clive Davenhall: [clive@nesc.ac.uk](mailto:clive@nesc.ac.uk)
  
- GLIF
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