

GLIF FAQ

What is the GLIF?

The Global Lambda Integrated Facility is a world-scale laboratory for application and middleware development on emerging optical wavelength grids (a.k.a. lambda grids), where network capacity ceases to be a traditional performance bottleneck for distributed systems comprised of various combinations of processors, storage devices, visualization devices, sensors/instruments, etc.

Who are the GLIF participants?

GLIF participants are organizations who share the vision of building a network infrastructure based on the new grid-computing paradigm, in which the central architectural element to enable the most demanding e-science applications is optical networks, not computers. GLIF participants voluntarily contribute network resources and/or actively partake in GLIF activities.

What is GLIF-Tech?

The shared vision of a global lambda *integrated* facility, supporting seamless end-end lightpaths traversing multiple autonomous optical domains requires a high degree of interoperability among the GLIF network resource providers. In particular, interoperability of network technologies, interfaces, and service implementations, as well as harmonization of lightpath contracting and fault management processes are required.

GLIF-Tech is a technical forum focussed on addressing these operational issues. GLIF-Tech is not a standards body.

I am a researcher - how do I connect to the GLIF?

The network resources that make up the GLIF are provided by a number of independent optical domain network operators working together to enable quick and easy provisioning of end-end lightpaths. The GLIF itself does not provide any network services.

Therefore, is connected to the GLIF any entity which has a lightpath connection to a GLIF network resource provider. End-end lightpath services can be obtained from an appropriate GLIF network resource provider.

Who are the GLIF lambda providers?

The GLIF lambda providers can be found at <http://www.glif.is/lambda/>

Who are the GLIF GOLE operators?

The GOLE operators can be found at <http://www.glif.is/gole/>

GLIF mini-glossary

GLIF network resources: GOLEs and lambdas

GOLE: GLIF open lightpath exchange, comprised of one or more network devices performing lightpath switching.

lambda: a high-capacity optical circuit which terminates on a GOLE

lightpath [service]: a high capacity circuit or QoS-supported virtual circuit [service], or the concatenation of several of these to form an end-end lightpath. A lightpath can take up a portion or all of the capacity of a lambda.