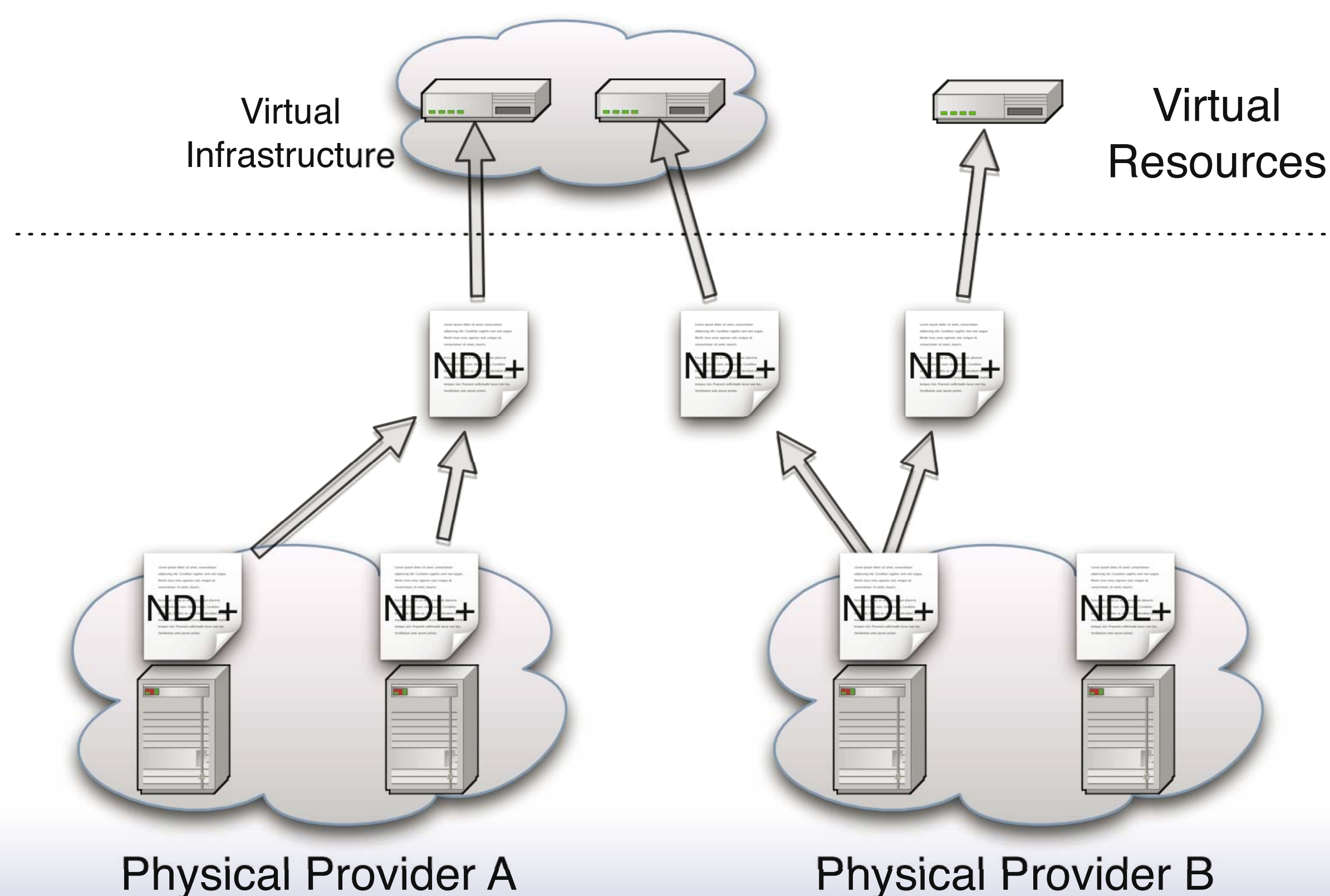
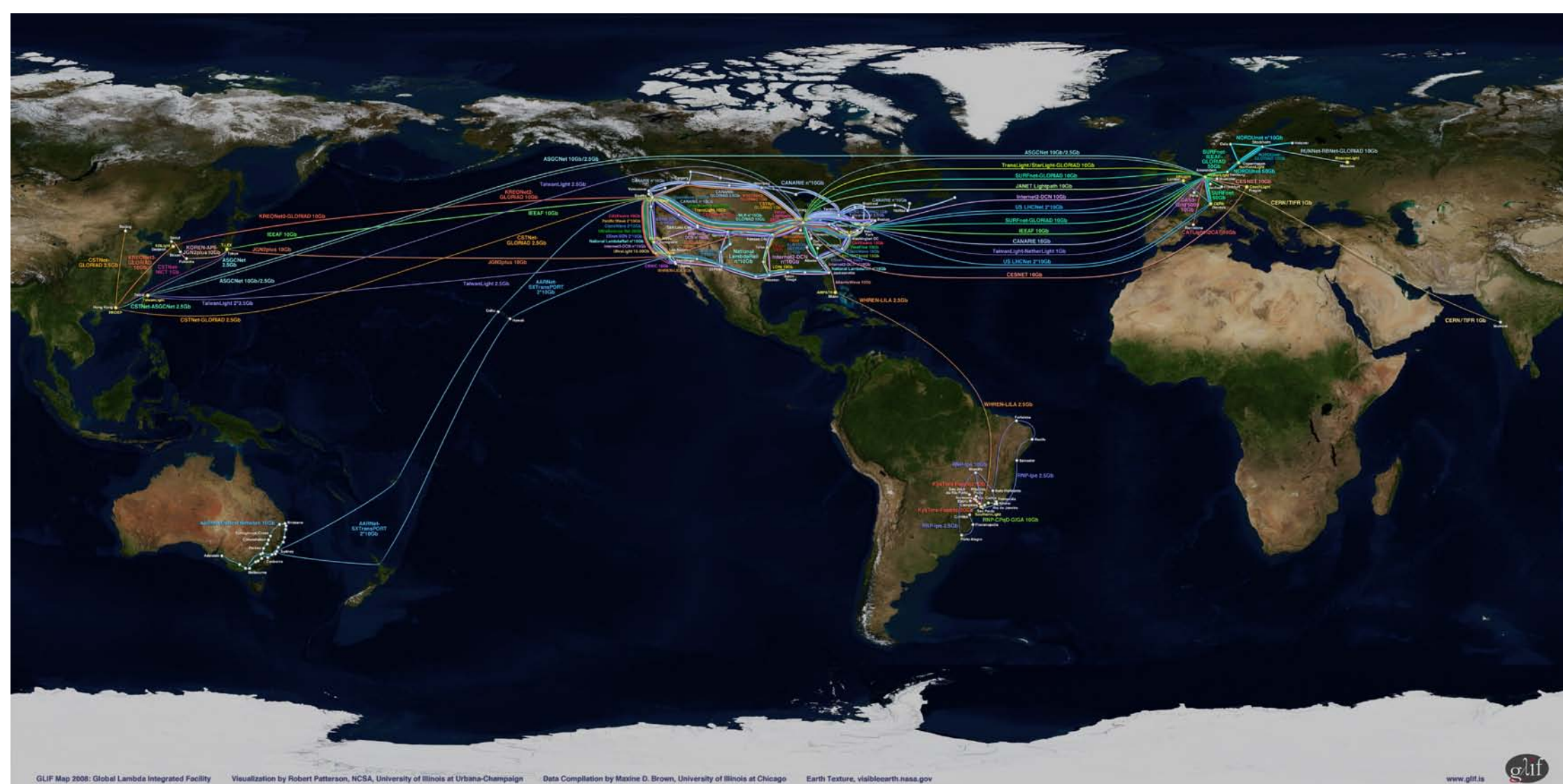


# Applications of the Network Description Language

The Network Description Language (NDL) is an ontology created by the University of Amsterdam for describing computer networks and connecting resources. NDL can describe topologies of different layers, and how these interact. This allows network domains to exchange topology information to allow path computation in optical networks. NDL is also an important tool for fault detection and visualization.

## Automated GOLE Demonstrator

Currently lightpaths in GLIF are provisioned manually. The Automated GOLE demonstration shows that we can have automated dynamic GOLES that can provision virtual circuits, without manual intervention, initiated by the end-user through the Fenius common interface. NDL provides a means to dynamically exchange network topologies, and allows for easy visualisation of the global network.



## GEYSERS

In GEYSERS, an extended version of NDL is used for automated composition of virtual infrastructures in a multi-provider domain. Descriptions of network and physical resources are used to enable a common control plane that can provide virtual infrastructures spanning resources from different physical providers.