

SC'18 Network Research Exhibition

AutoGOLE

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Abstract

The Global Lambda Integrated Facility (GLIF) Automated GOLE (AutoGOLE) is a worldwide collaboration of GLIF Open Lightpath Exchanges (GOLEs) and R&E networks to deliver network services end-to-end in a fully automated way, wherein connection requests are handled through the Network Service Interface Connection Service (NSI-CS).

An increasing number of networks across the globe is now using NSI to provision and deprovision international network services. This saves considerable time of NOC engineers to facilitate international network service requests. Service creation is done within minutes, instead of multiple days or even weeks since manual human interaction is very limited or even zero.

We are showing the Automated GOLE running across the participating R&E production networks and exchanges. We include MEICAN, a web front-end created by RNP and used by NOC engineers to perform multidomain provisioning operations and monitoring of dynamically created network services. MEICAN offers NOC workflows to create, modify and delete multidomain network services.

Goals

1. Showing the AutoGOLE provision and deprovision international network services, fully automated
2. Showing the MEICAN front-end of the AutoGOLE, where NOC engineers manage international network services.

Resources

The AutoGOLE may have dynamic endpoints (STP) on the SC'18 showfloor. We will show the Automated GOLE control plane live at SC. In terms of bandwidth, the AutoGOLE can provision anything between 1Mbps and 100Gbps at this moment. The AutoGOLE service currently now consists of single or double tagged Ethernet VLANs, but is technology agnostic collaboration.

Involved Parties

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