

# **GLIF NG Architecture**

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#### Status

- Green Paper published almost a year ago
  - Build an IP exchange
  - Build multi-layer GOLE
  - Explore multi-domain SDN
- GLIF community too busy to comment!



### Status (contd.)



- 1 year later
  - Global Network Architecture activity started and gaining steam
    - Focused on the infrastructure
  - GENI, REANNZ, Google, ESnet and Georgia Tech championing SDX's
    - [Essentially an IP exchange with SDN]
  - Multi-layer is the rage in the industry
    - [OFC, ONF, vendors Ciena, Infinera...]
  - Multi-domain still an open topic have we made much progress?

### What does GLIF really want to do?



- 1. Discuss 10 year out network architectures in production
- 2. Experiment and demonstrations to prove new ideas/architectures
- 3. Deploy new ideas/architectures
- Focus on inter-domain aspects
- 4. Develop and deploy open/common code? [Fenius]
  - 1. Could be capability that people have developed and is adopted
- 5. Community of operators
- 6. What else?

### **GLIF NG Architecture approaches**



- Let the GNA group do the work, and we can comment every GLIF meeting
  - How big is the overlap between the GNA team and GLIF attendance?
  - Does the GLIF community really like commenting on architectures?
- Let the GLIF NG activity actually deploy new stuff!
- Different from AutoGOLE
- In production!

## What does GLIF really should do? [the author's opinion only]



- 1. Deploy new ideas/architectures
  - Deploy SDX at every GOLE
- 2. Experiment and demonstrations to prove new ideas/architectures
- Connect all the SDX's up to carry IP traffic (certain routes)
- 3. Develop and deploy common code? [Fenius]
- Develop an application NBI
- Create network as a schedulable, predictable resource
- Deploy perfSONAR in every R&E network, build a GLIF mesh of performance
- 4. What else?

