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Automated GOLE Pilot Project

- Experiment toward production since 2010
 - The notions of Global Open Lightpath Exchanges is proven
 - The notion that GOLE services can be automated is proven (Fenius)
 - The NSI architecture is proven (proves we can come to agreement☺)
 - The NSI CS protocol is proven v1 and v2
 - NSI standards proven multiple interop implementations
 - NML Topology tested and proven
 - Video service experiments, VLBI experiments, ...
- The Automated GOLE Project offers a global live testbed that needs to continue for this community
 - Expanding the resources
 - Enhancing the tools that operate it
- And a global community for coordinated filed deployments
- I need to address other issues... (GN3+)
- But will remain involved be that good or bad ☺

Acknowledgements

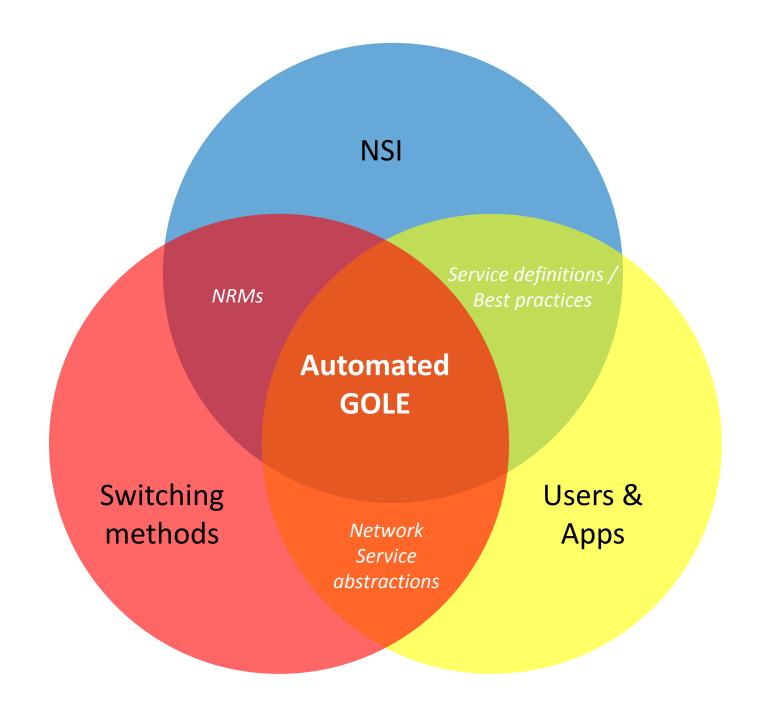
Thanks to John Vollbrecht, Jerry Sobieski and all who have contributed to this TF over the past years already!



Objectives

- Implementation of a standard: NSI
- Playground:
 - The best practice is by iteration
 - Gaining experience on multi-domain dynamic services
 - Connection, discovery, topology and monitoring services
 - Interdomain BoD authentication and authorization testing
 - Performance verification possible
- Proving and improving new services
 - Across heterogeneous domains
 - With real users and applications
- Creating a collaborative "Invented here" syndrome





Expansion

- What there is to date is good (but)
- More partners and reachable locations: North America,
 South America, South Africa, Asia, Australia, Europe ...
- More exciting topology: partial mesh
- More bandwidth available on some links, e.g. >1G
- More scalable switching fabric:
 - Policing
 - VLAN retagging and perhaps even label switching and VLAN encapsulation
 - Needs more sophisticated switches
- More users ...



Real users and apps using the A-GOLE fabric

- Automated GOLE can show its value through users:
 - E.g. JIVE, CERN, genomics, GENI and other storage and compute (cloud) initiatives
 - NSI tutorial
- These parties won't have to reinvent the wheel / don't have to request worldwide lambda services
- Building network best practices
- Inviting people



Continuing the good work ...

Planning

- Stakes in the ground
 - Everyone to NSI 2.0 end of Q1
 - Topology Service at GLIF Singapore and SC'13 (DTOX)
 - Group process
- Demonstrations and presentations
- More NSI/A-GOLE workshops
- To be continued in biweekly our calls
 - Next call January 30-31, announced via mailing list





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