

Network Services Framework

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Network Services Framework: NSI-WG



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NSI Concepts: Multi-Domain





NSI Protocol





Lawrence Berkeley National Laboratory



Service Termination Point (STP)



An STP names a topological location that is the ingress/ egress point of a Network.

ESnet

STP Concept (contd.)

An STP is a symbolic reference:

- 1. a Network identifier string in the higher order portion
- 2. a local STP identifier in the lower order portion.
- An STP must always resolve to a specific topological port object as defined in the intra-network topology representation.
- SDP: when two STPs with matching capabilities are paired



Connection Service using STPs



GLIF and NSI Discussion



GLIF supported the case to create NSI-WG

- FENIUS as an intermediate step to move multiple implementations towards the same API
 - Very successful demonstrations and new concepts (Aut.-Gole)

Request for support from GNI-API/GLIF group

- Ensure that the FENIUS effort stays in sync with NSI WG
- All the GLIF requirements are properly represented for NSI v1
 protocol specification
- <u>Most important</u>: Put resources to help define and create a prototype implementation of the NSI protocol. Focus on learning, documenting and transitioning FENIUS to NSI.
- **<u>Challenge</u>**: Demo with NSI protocol at the 11th Annual GLIF 2011?

OGF Status



NSI Services Framework – in public comment

Comments received, document being revised

NSI Connection Services Architecture doc in progress

Weekly Wed. calls with "spirited" discussions incl. email

NSI Protocol

• Needs to gather momentum