Problem Statement and Architecture for Information Exchange Between Interconnected Traffic Engineered Networks

draft-farrel-interconnected-te-info-exchange-03.txt

Adrian Farrel, John Drake (Juniper Networks)

Nabil Bitar (Verizon Networks)

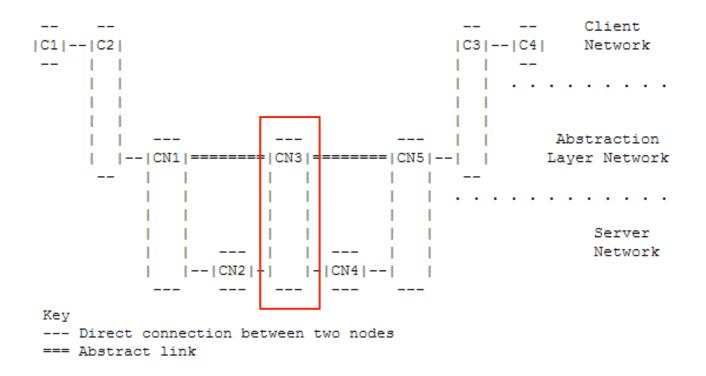
George Swallow (Cisco Systems, Inc.)

Daniele Ceccarelli (Ericsson)

Xian Zhang (Huawei)

Changes from -02 to -03

Section added: Nodes in the abstraction layer network



Client layer resources: C1, C2, C3, C4

Server layer resources: CN1, CN2, CN3, CN4, CN5

Abstraction layer resources: C2, C3, CN1, CN3, CN5, C2-CN1, C3-CN5, CN1=CN3, CN3=CN5

Changes from -02 to -03

- Section filled: Requirements for advertising links and nodes
 - The Abstraction Layer Network is "just another network layer": this requires a routing protocol running between the nodes in the Abstraction Layer Network.
- Section added: Modeling the UNI (e.g. Ethernet RFC6005)
 - Client network
 - Ethernet service network (UNI links + tunnels across the server network == abstraction layer network)
 - Server network
- Section filled: Abstraction in L3VPN Multi-AS Environments
 - CE = client network edge
 - PE = server network edge node
 - Abstraction layer network = CE nodes, CE-PE links, PE nodes, PE-PE tunnels

Changes from -03 to -04 (recently published)

- Section added: Not finding optimal paths in all situations
 - As has been well described in this document, abstraction necessarily involves compromises and removal of information. That means that it is not possible to guarantee that an end-to-end path over interconnected TE domains follows the absolute optimal (by any measure of optimality) This is taken as understood, and future work should not attempt to achieve such paths which can only be found by a full examination of all network information across all connected networks.
- Terminology: UNCHANGED
 - Client/Server terminology is used referring to a control plane relationship and not to a data plane relationship

From IETF 88



Document 1 - Models & Terminology
A lot of good text already written & available



Document 2 - Framework
Includes analysis of what can be supported
and what functions need support
Again, already some good text available

Next Steps

- Signaling extensions outside ID scope
 - WG to decide whether to work on
 - Draft deliberately neutral
- Discuss how this draft can get slotted in as a Models & Terminology / Framework Document.
 - Well-equipped to meet the desired objectives
 - Are there any missing pieces?
 - Should the draft be split?
- More detailed analysis to ensure that the ID meets the objectives for documents 1 (&2?)
- Request adoption as a WG Document
 - WG adoption is the beginning of the process, not the end