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

draft-farrel-interconnected-te-info-exchange

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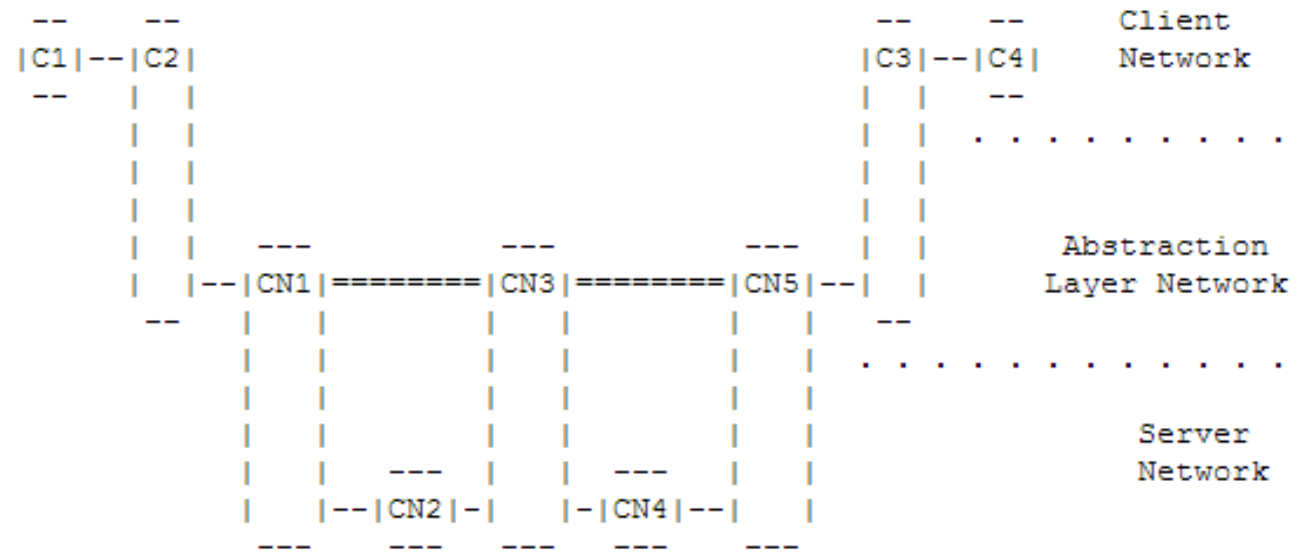
History and Purpose

- -00 posted in February 2013
- Intention to show
  - Problem statement and architecture for the exchange of TE information between interconnected TE networks in support of end-to-end TE path establishment
  - Limited to simple TE constraints and information that determine TE reachability
  - Four core use cases
    - Peer Networks
    - Client-Server Networks
    - Dual-Homing
    - Requesting Connectivity
  - Requirements
  - An architecture for network abstraction
  - Identify any missing tools

Proposed Architectural Solution

- Abstraction Layer Network



Client layer resources: C1, C2, C3, C4

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

Abstraction layer resources:

Nodes: C2, CN1, CN3, CN5, C3

Physical links: C2-CN1, CN5-C3

Abstract links: CN1-CN3, CN3-CN5

What is Abstraction?

- Policy-based aggregation
  - Policies set by one network with knowledge of the other networks
  - Overcome issues of scaling, stability, confidentiality, and misinformation found in aggregation
- Apply policy to the available TE information within a domain, to produce selective information that represents the potential ability to connect across the domain
  - Don't necessarily offer all possible connectivity options
  - Present a general view of potential connectivity
  - Consider commercial and operational realities
- Retain as much useful information as possible while removing the data that is not needed

Status

- I-D has been stable for several revisions
  - Includes text to show applicability of architecture to use cases
- Changes from -04 to -05
  - Attempt to address concerns from WG chairs
    - Short section on terminology
  - Attempt to address concerns about how we described the UNI
    - Add section 2.4 Requesting Connectivity

Next Steps

- Add authors of draft-ceccadedios-ccamp-overlay-use-cases as Contributors
  - Ooops! Should have done this in -05
  - We lifted text and ideas for the new work in -05
- Add Manageability and Security Considerations
- Make this *the* CCAMP document for this work