

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

draft-farrel-interconnected-te-info-exchange-02.txt

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Why This Draft?

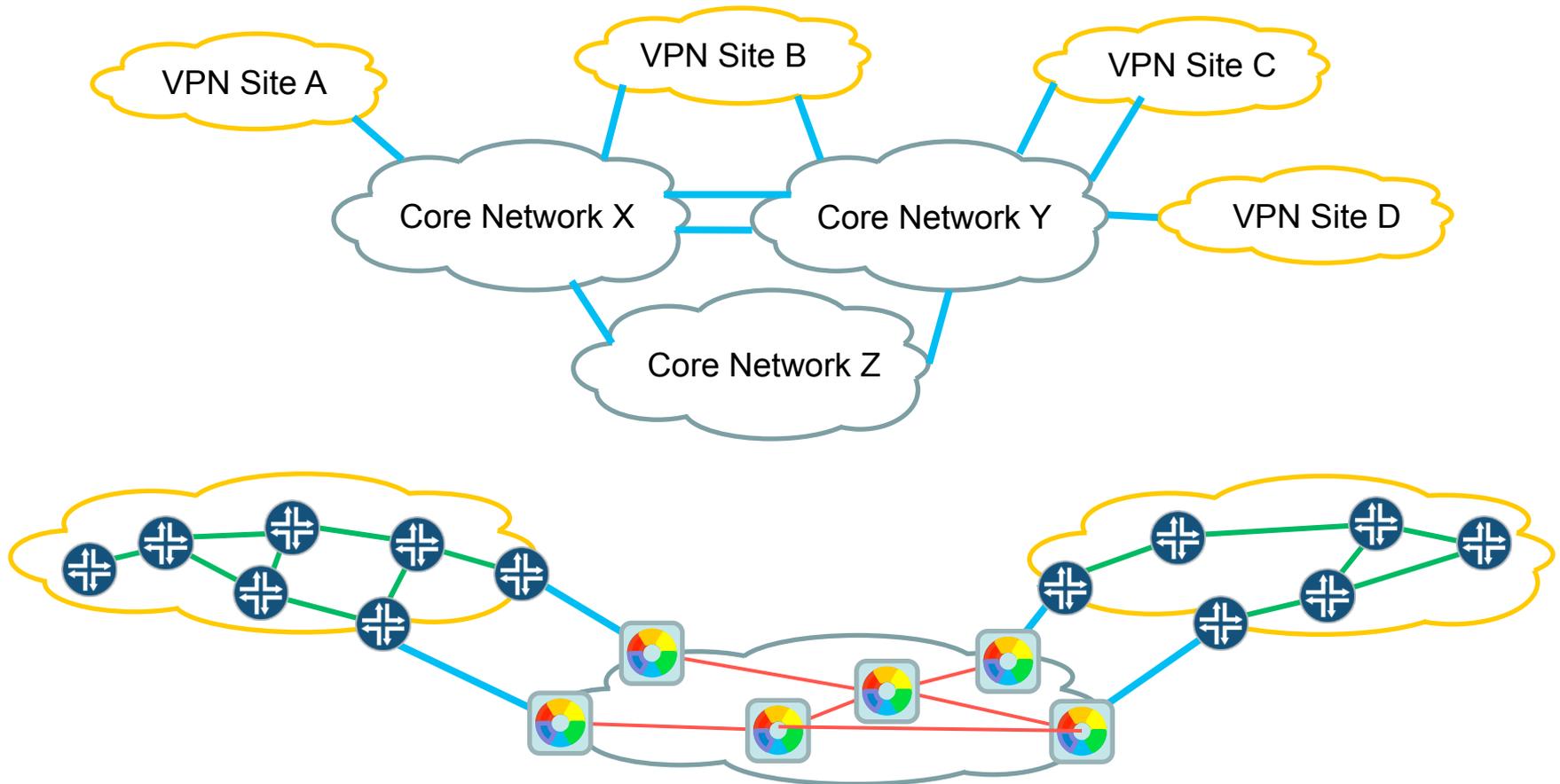
- Lots of I-Ds addressing aspects of this space
- Need to see the bigger picture
- Want to avoid feature-creep in our protocols
- Use cases have been a bit fuzzy
- Terminology needs to be clarified
 - For example, CCAMP has some differing definitions of “Virtual TE link”
 - Helpful to invent new (untainted) terms

Objectives for This Meeting

- Move toward agreement on what we are trying to achieve
- Kick-start discussion towards a single, converged architecture for the problem space
 - Encompass all of the different popular deployment models
 - Can be realised with existing protocol components
- Converge on terminology
- Make a plan to move forward

Problem Statement

- The network is partitioned vertically and horizontally
- TE optimization is an end-to-end function
- TE metrics are growing in number (b/w, delay, SRLG, optical, etc.)
- How do you achieve end-to-end TE paths?



Assertions

- Sharing all TE information between domains is not good
 - Does not scale
 - Breaks confidentiality
 - Might not be understood
- Aggregation loses information to the extent that end-to-end connectivity is unknown
 - Both virtual node and virtual link models
- On-demand capacity is subject to policy
 - Likely means that cross-domain connectivity is pre-planned

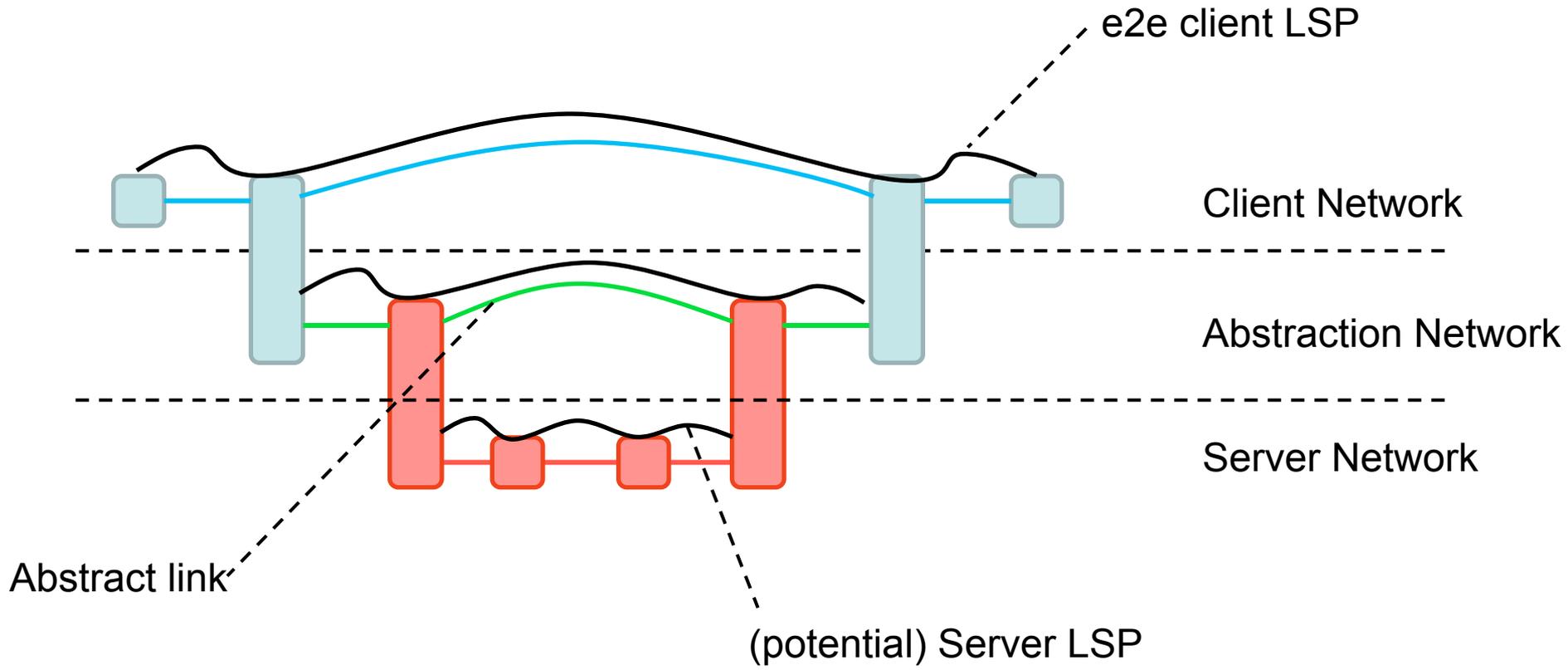
Backup Slides

- Architectural tools
- Simple architecture
- Example

Proposed Architectural Tools

- Abstract Link
 - This is a connection (LSP) across a network (peer or server) that could be set up and turned into a TE link according to the policy of the network advertising it
- Abstract Layer Network
 - A network of edge nodes, edge links, and abstract links that allows a dynamic creation of links between client edge nodes

Architectural Overview



Simple Example

