Terminology and Models for Control of Traffic Engineered Networks with Provider-Customer Relationship

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Goals and Non-goals of the I-D

- Define the network scenario
- Compile terminology from Existing documents
- Identify problems with terminology
- Help to agree with terminology
- Provide a taxonomy of the different control models
- Non goals: Support a specific control model,

Network Scenario

- Interconnected network domains
- At the data plane level
 - there is client-server relationship: "server" domain provides services to "client" domain
- At control plane level
 - there is an administrative and policy boundary

Terminology: Customer-Provider vs Client-Server

- Client-server:
 - Pro: reflects the data plane relation
 - Con: does not reflect policy/administrative boundary
- Customer-provider:
 - Pro: reflects policy/administrative boundary
 - Cons:
 - ITU semantic already defined in G.8080/Y.1304
 - not used in RFC4208.

Terminology: UNI

- Interface between customer/client and provider/server domains
 - "User-to-Network Interface" (UNI)
- However, the term has been used in multiple contexts and SDOs
 - ITU, OIF, IETF...
- The exact definition and the associated functionalities depend on the application

Terminology: Reachability

- Reachability taxonomy from interconnected-te-info draft
- Several variations
 - Unqualified Reachability
 - Qualified Reachability
 - Qualified Reachability with associated potential TE path

Taxonomy of Control Models

Signalling only

Signalling + requirements

Signalling + collection

Basic reachability

Qualified reachability

Qualified reachability + associated TE-LSPs

Taxonomy of Control Models

- Signalling only
- Signalling + requirements
 - customer can specify constraints
- Signalling + collection
 - customer can receive information on service
- Signalling + basic reachability
- Signalling + qualified reachability
 - customer gets a priori provider's information
- Other models

Next Steps

- Receive feedback and comments from WG
- Agree on terminology
 - client-server
 - customer-provider
 - X-Y?
- Agree on Control Models Partionning