Traffic Engineering and Service Mapping Yang Model

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TE-Service Mapping Model Overview

- The role of TE-service Mapping model is to create a mapping relationship between -
  - Services – L3SM, L2SM, L1CSM, etc.
  - TE topo, TE tunnel and the VN

- TE-service mapping model also provides service policy/intent (e.g., VN/Tunnel selection policy, isolation, availability, etc.) for services (via importing `ietf-te-service-mapping-types`)

- This mapping will facilitate a seamless service operation with underlay-TE network visibility and control.
### TE-Service Mapping Model Overview (2)

Reorganized Map Type (for VN/Tunnel selection policy)

<table>
<thead>
<tr>
<th>New VN/Tunnel Binding</th>
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<tbody>
<tr>
<td>- Customer could request a VPN service with a new VN/Tunnel not shared with other existing services.</td>
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<td>- Hard Isolation with deterministic characteristics</td>
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<td>- Hard Isolation</td>
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<td>- Soft Isolation</td>
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<tr>
<th>VN/Tunnel Sharing</th>
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<td>- Customer could request a VPN where the tunnels can be shared with other existing VPNs.</td>
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<th>VN/Tunnel Modify</th>
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<td>- This mode allows the modification of the properties of the existing VN/tunnel (e.g., bandwidth) when VN/Tunnel Selection Mode is applied.</td>
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</table>
TE-Service Mapping Model Overview (3)

- Introduced “Availability” for customer to indicate the level of availability.
  - 99.9999 %
  - 99.999 %
  - 99.99 %
  - 99.9 %
  - 99 %

- This needs to be translated into network level policies - protection/reroute policies associated with VN/Tunnels.
Updates since IETF103

• The draft was adopted as a WG draft (the name change).

• General applicability statement was added (Abstract & Section 5) to widen the scope of the draft:
  ◦ Mapping of VPN services with TE models (TE-tunnel, TE-topology) and VN model.

• Models updated to align with changes with ACTN-VN model.
  ◦ ACTN-VN model has been generalized: ACTN-VN -> VN
Next Step

- Explore if any new service policy/intent should be added.
- Mature Yang models to be ready for Yang doctors’ review.
Thanks.