IETF Network Slice YANG Data Model

draft-liu-teas-transport-network-slice-yang-04

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Existing Network Topology Models

Network Topology Model
RFC8345
ietf-network-topology

L2 Topology Model
RFC8944

L3 Topology Model
RFC8346

TE Topology Model
RFC8795

OTN Topology Model
draft-ietf-ccamp-otn-topo-yang
Augmentation for Network Slice

Network Topology Model
RFC8345
ietf-network-topology

L2 Topology Model
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L3 Topology Model
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TE Topology Model
RFC8795

OTN Topology Model
draft-ietf-ccamp-otn-topo-yang

IETF Network Slice Model
(This document)
### IETF Network Slice with TE

- **Multiple inheritance:**
  - Is both Network Slice topology and TE topology.
  - Uses multiple network types: “network-slice” and “te-topology”.

<table>
<thead>
<tr>
<th>Network Slice</th>
<th>TE Topology</th>
</tr>
</thead>
<tbody>
<tr>
<td>ietf-network-slice</td>
<td>ietf-te-topology</td>
</tr>
</tbody>
</table>

#### Network Slice with TE

```plaintext
ietf-network-topology:
  "network-id" (key)
  "network-types": {"network-slice":{}, "te-topology":{} }
  <other network topology attributes>

ietf-network-slice:
  <network slice attributes>

ietf-te-topology:
  <TE attributes>
```
Network Slice with L3 TE and SF Aware

- For L3 packet use cases
  - ietf-te-topology-packet provides extensions for packet network.
  - ietf-l3-unicast-topology provides extensions for L3 network.
  - ietf-te-topology-sf supports network services and functions.

```
{ "network-types": { "network-slice": {}, "l3-unicast-topology": {}, "te-topology": { "packet": {}, "sf": {} } } }
```
Updates Since Last Presentation

- Aligned to latest draft-ietf-teas-ietf-network-slices.
- Clarified augmentation relationship with other models.
- At least one implementation has been done
Next Steps

- Ready for Working Group Adoption.
- Further examine proper attributes to be included in this model.
- Welcome reviews and suggestions.