

Yang Data Model for SFF Service Topology

draft-wang-i2rs-yang-service-topo-dm-01

Design Team Volunteers:

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Introduction

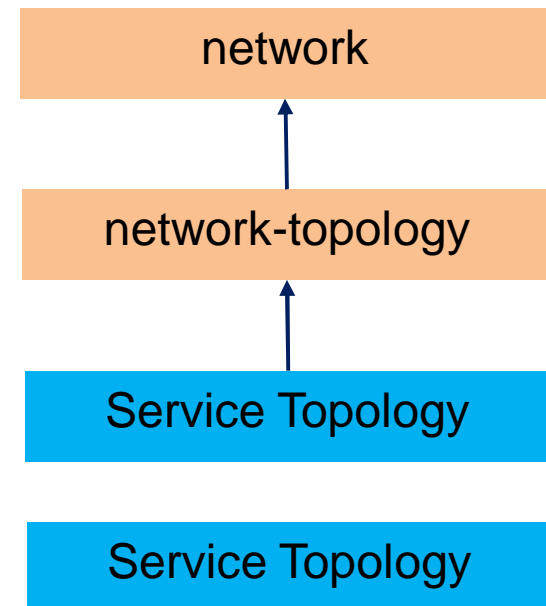
- “ The requirement of collecting network information “under layer-3” is specified in
 - . draft-medved-i2rs-topology-requirements and
 - . draft-amante-i2rs-topology-use-cases

- “ The relationship between L2 topology model and generic topology model is specified in
 - . draft-clemm-i2rs-yang-network-topo

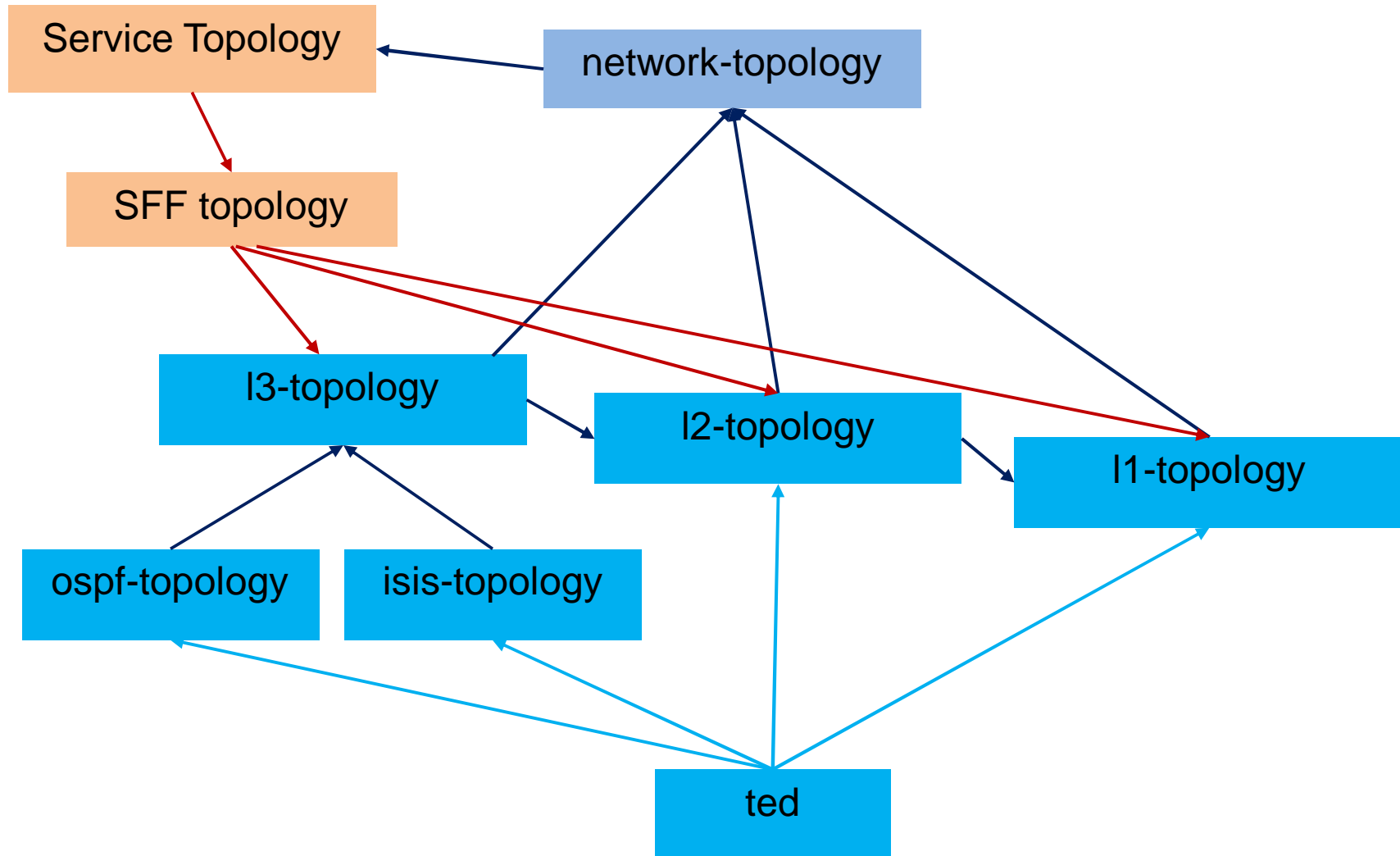
- “ This document defines data model for L2 network topology

SFF Topology Data Model

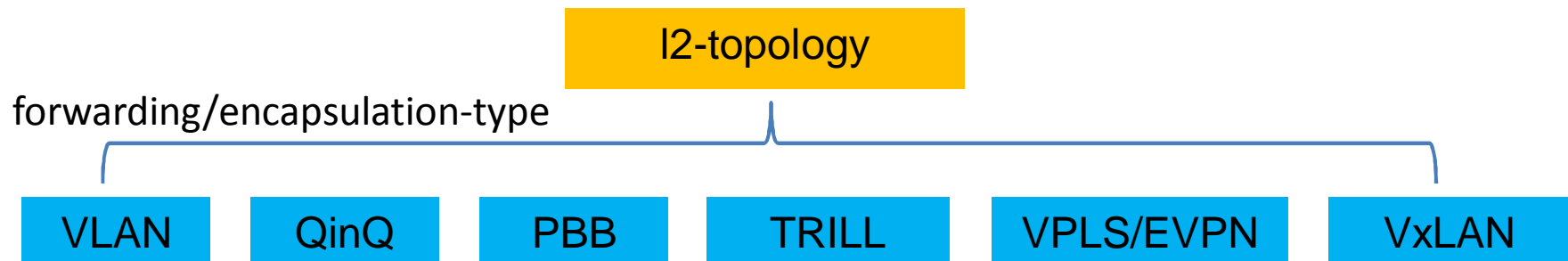
- “ Based on the generic network and network-topology model defined in
 - . draft-clemm-i2rs-yang-network-topo-02
- “ With Augments to
 - . l2-network-type
 - . l2-network-attributes
 - . l2-node-attributes
 - . l2-link-attributes
 - . l2-termination-point-attributes



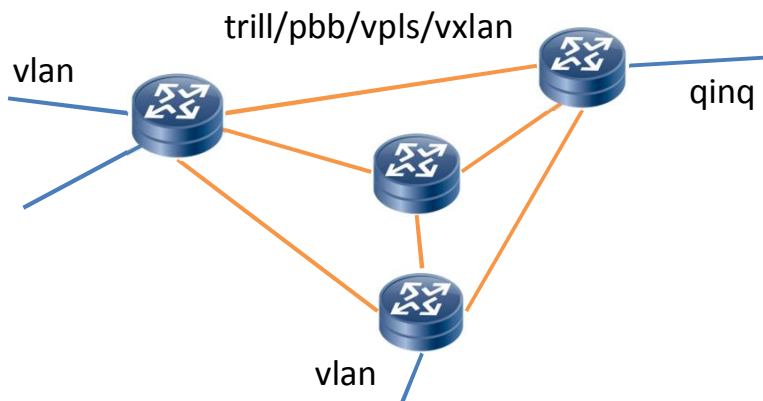
Relationship with other topo models



Different L2 Technologies



“ Different layer-2 technologies may be enabled on different ports in one L2 topology



Service Extensions for SFF topology

```
module: Service Topologies
augment /nt:network-topology/nt:topology/nt:topology-types
  +--rw Service-Topologies
    +--rw SFF-topology
    ... (other potential types)
    +--rw L3VPN-Service-topology
    +--rw EVPN-Service-topology
```

This
section
Still in
Debate

module: SFF topology

```
augment /nt:network-  
topology/nt:topology/nt:topology-types
```

```
+--rw Service-Topologies
```

```
+--SFF Topology!
```

```
augment /nt:network-topology/nt:topology
```

```
+--rw service-topo-id network-id
```

```
+--rw service-topology-attributes
```

```
+--rw node-count uint32
```

```
+--rw topology-extension!
```

```
augment /nt:network-topology/  
nt:topology/nt:node
```

```
+--rw node-type!
```

```
| +--rw classifier-node? string
```

```
| +--rw sf-node? string
```

```
| +--rw sff-node? string
```

```
+--rw next-hop*[hop-id] |
```

```
+--hop-id node-id
```

```
+--rw node-extension!
```

```
+--rw classifier-extension!  
    (text not agreed upon)  
+--rw sf-node-extension!  
| +--rw sf-id node-id  
| +--rw sf-node-locator uint32  
| +--rw sf-type!  
| | +--rw firewall? uint32  
| | +--rw loadbalancer? uint32  
| | +--rw NAT44? uint32  
| | +--rw NAT64? Uint32  
| | +--rw DPI? Uint32  
| +--rw sf-inventory-data!  
+--rw sff-node-extension!  
+--rw sff-id node-id  
+--rw (sffn-address)?  
    . . .  
+--rw sffn-virtual-context!  
    . . .  
+--rw Attached-service-address!  
    . . .  
+--rw customer-support*[customer-id]  
| +--rw customer-id uint32  
+--rw customer-service-resource*  
    . . .  
+--rw sffn-vntopo!
```

Next Steps

- “ Design team welcome new members
- “ Revise and align with
 - . draft-penno-sfc-yang-13.txt
 - . draft-xia-sfc-yang-oam-01.txt