

Yang Data Model for L2 Topology

draft-dong-i2rs-yang-l2-network-topology

Introduction

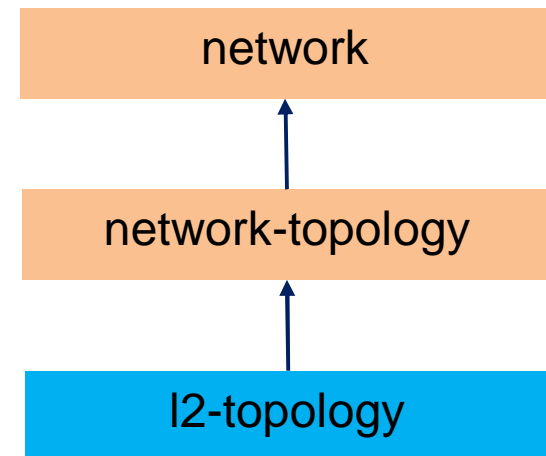
- “ The requirement of collecting network information “under layer-3” is specified in
 - . draft-medved-i2rs-topology-requirements and
 - . draft-amante-i2rs-topology-use-cases

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

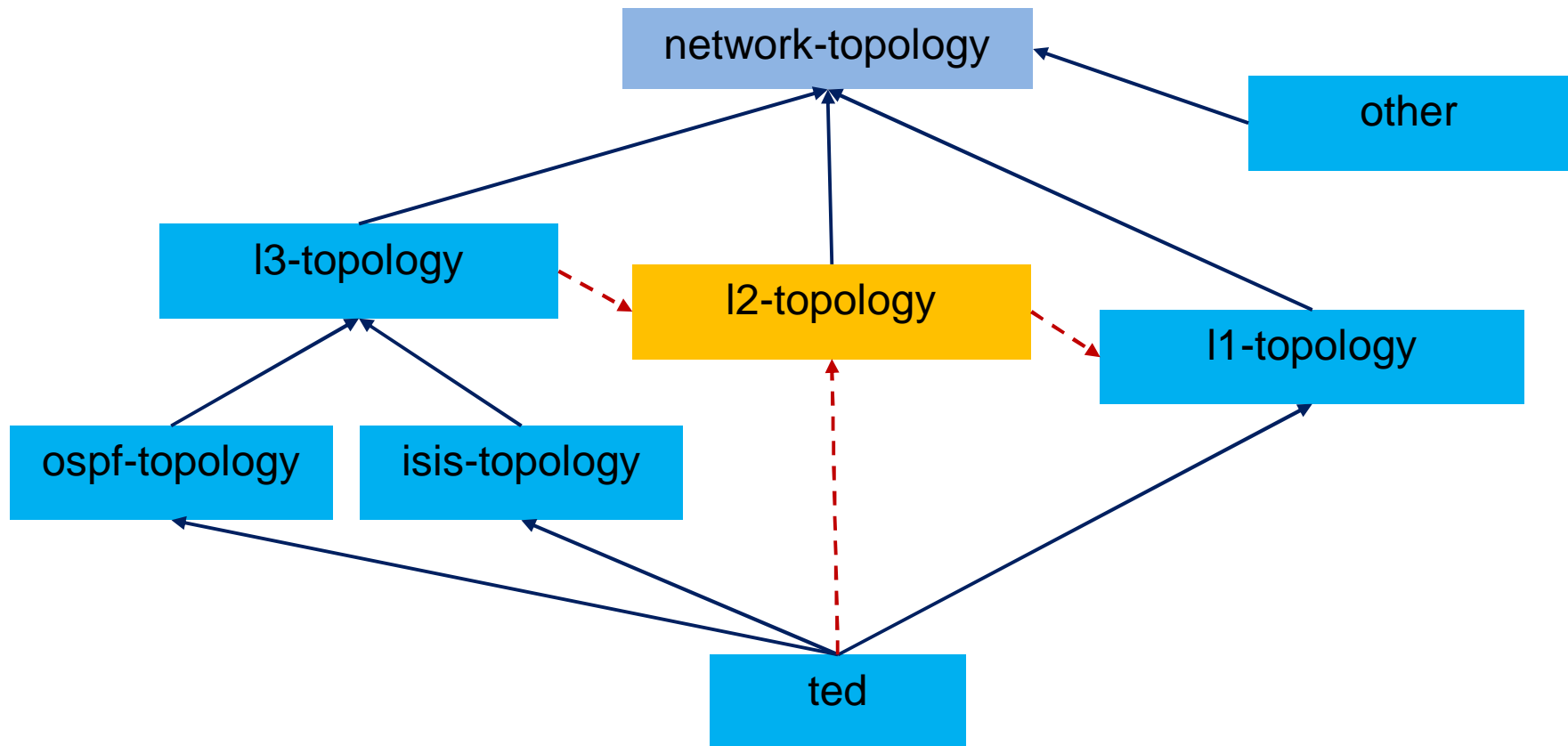
- “ This document defines data model for L2 network topology

L2-Topology Data Model

- “ Based on the generic network and network-topology model defined in
 - . draft-clemm-i2rs-yang-network-topo-02
- “ With layer-2 specific augments
 - . l2-network-type
 - . l2-network-attributes
 - . l2-node-attributes
 - . l2-link-attributes
 - . l2-termination-point-attributes



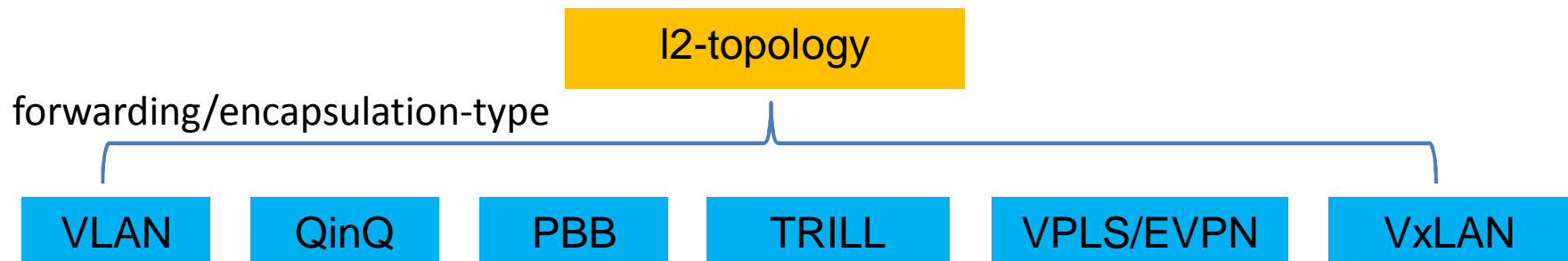
Relationship with other topo models



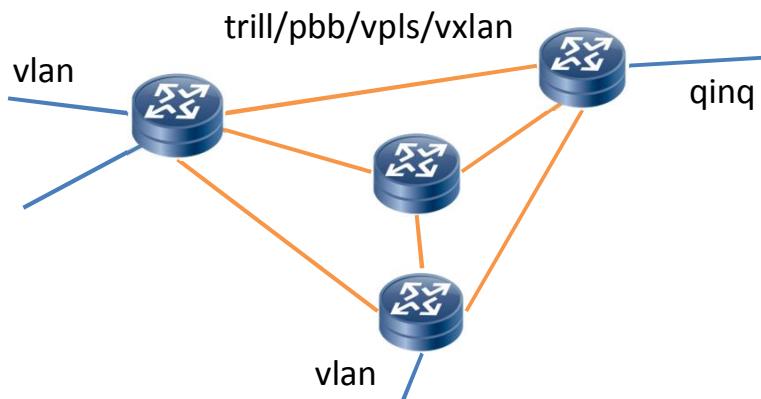
Updates in v-01

- “ Align with the base network & network-topology model
- “ Draw a line between topology info and inventory info
 - . Inventory related info is specified in a separate model
- “ Open to incorporate more L2 capabilities and parameters
 - . QinQ
 - . PBB
 - . TRILL
 - . VPLS
 - . VXLAN
 -

Different L2 Technologies



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



L2 Yang Model Overview

```
module: l2-topology
augment /nt:network/nt:network-types:
  +--rw l2-network!
augment /nt:network:
  +--rw l2-network-attributes
    +--rw name?    string
    +--rw flag*   flag-type
augment /nt:network/nt:node:
  +--rw l2-node-attributes
    +--rw name?                string
    +--rw description?        string
    +--rw chassis-id?         yang:mac-address
    +--rw management-address*  inet:ip-prefix
    +--rw management-vid?     vlan
    +--rw nick-name?          nickname {TRILL}?
    +--rw flag*               flag-type
augment /nt:network/ntopo:link:
  +--rw l2-link-attributes
    +--rw name?    string
    +--rw rate?    decimal64
    +--rw flag*   flag-type
augment /nt:network/nt:node/ntopo:termination-point:
  +--rw l2-termination-point-attributes
    +--rw description?    string
    +--rw mac-address?    yang:mac-address
    +--rw port-vlan-id?   vlan
    +--rw ppvid
      | +--rw ppvid?      vlan
      | +--rw ppvid-flags? bits
    +--rw vlan-name* [vlan-id]
      | +--rw vlan-id    vlan
      | +--rw vlan-name? string
    +--rw encapsulation?  identityref
    +--rw maximum-frame-size? uint32
    +--rw link-aggregation
      | +--rw aggregation-status? bits
      | +--rw aggregated-port-id? string
    +--ro tp-state?      enumeration
```

Next Steps

- “ Revise the model/draft based on feedbacks
- “ Welcome contributions to this work