

Yang Data Model for Layer 3 TE Topologies

draft-ietf-teas-yang-l3-te-topo-04

Xufeng Liu (Volta Networks)

Igor Bryskin (Huawei Technologies)

Vishnu Pavan Beeram (Juniper Networks)

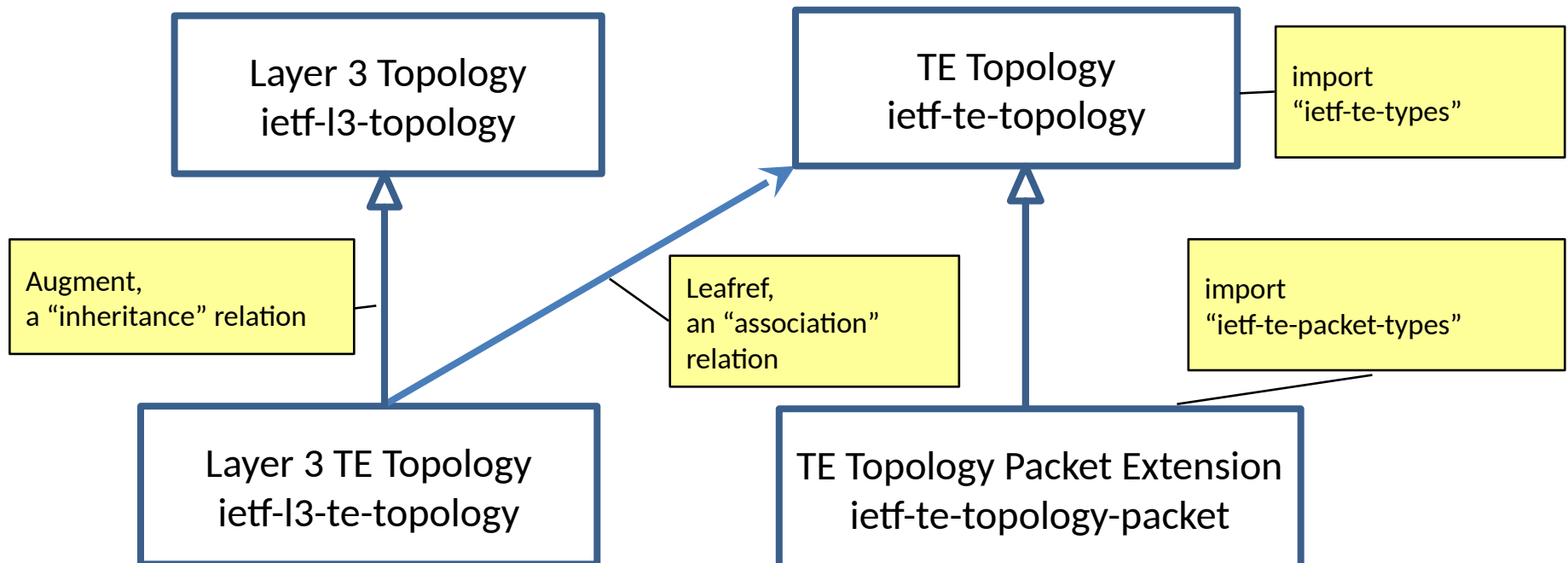
Tarek Saad (Juniper Networks)

Himanshu Shah (Ciena)

Oscar Gonzalez De Dios (Telefonica)

Augmentation Hierarchy

- L3 TE Topology augments L3 Topology and references TE Topology.
- Packet extension module augments ietf-te-topology.



Changes Since Last Revision

- Aligned with latest dependencies
 - Used te-types in draft-ietf-teas-yang-te-types instead of draft-ietf-teas-yang-te.
 - Used module ietf-te-packet-types for packet related types.

Planned Changes

- Performance metrics on a TE link
 - Use one-way performance metrics

```
augment /nw:networks/nw:network/nt:link/tet:te
      /tet:te-link-attributes:
+--ro performance-metrics-one-way
|   +--ro one-way-delay?                               Uint32
|   .....
+--ro performance-metrics-two-way
|   +--ro two-way-delay?                             Uint32
.....
+--rw throttle
+--rw threshold-out
|   +--rw one-way-delay?                               uint32
|   +--rw two-way-delay?                             uint32
|   +--rw one-way-min-delay?                          uint32
|   +--rw one-way-max-delay?                          uint32
|   +--rw one-way-delay-variation?                    uint32
|   +--rw one-way-packet-loss?                       decimal64
|   +--rw two-way-min-delay?                          uint32
|   +--rw two-way-max-delay?                          uint32
|   +--rw two-way-delay-variation?                    uint32
|   +--rw two-way-packet-loss?                       decimal64
```

Next Steps

- Complete and confirm performance metrics.
- Ask for YANG doctor's review.
- Welcome further reviews and suggestions.
- Working Group Last Call after completing above.

Yang Data Model for SR and SR TE Topologies

draft-ietf-teas-yang-sr-te-topo-04

Xufeng Liu (Volta Networks)

Igor Bryskin (Huawei Technologies)

Vishnu Pavan Beeram (Juniper Networks)

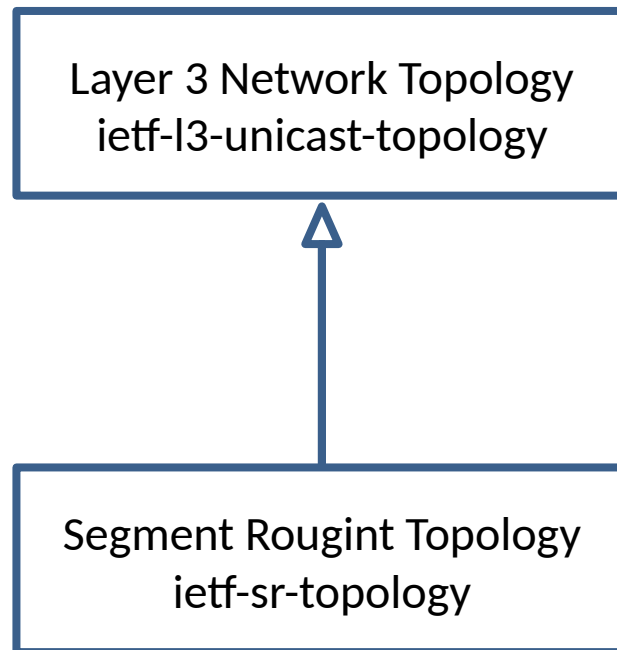
Tarek Saad (Juniper Networks)

Himanshu Shah (Ciena)

Stephane Litkowski (Orange)

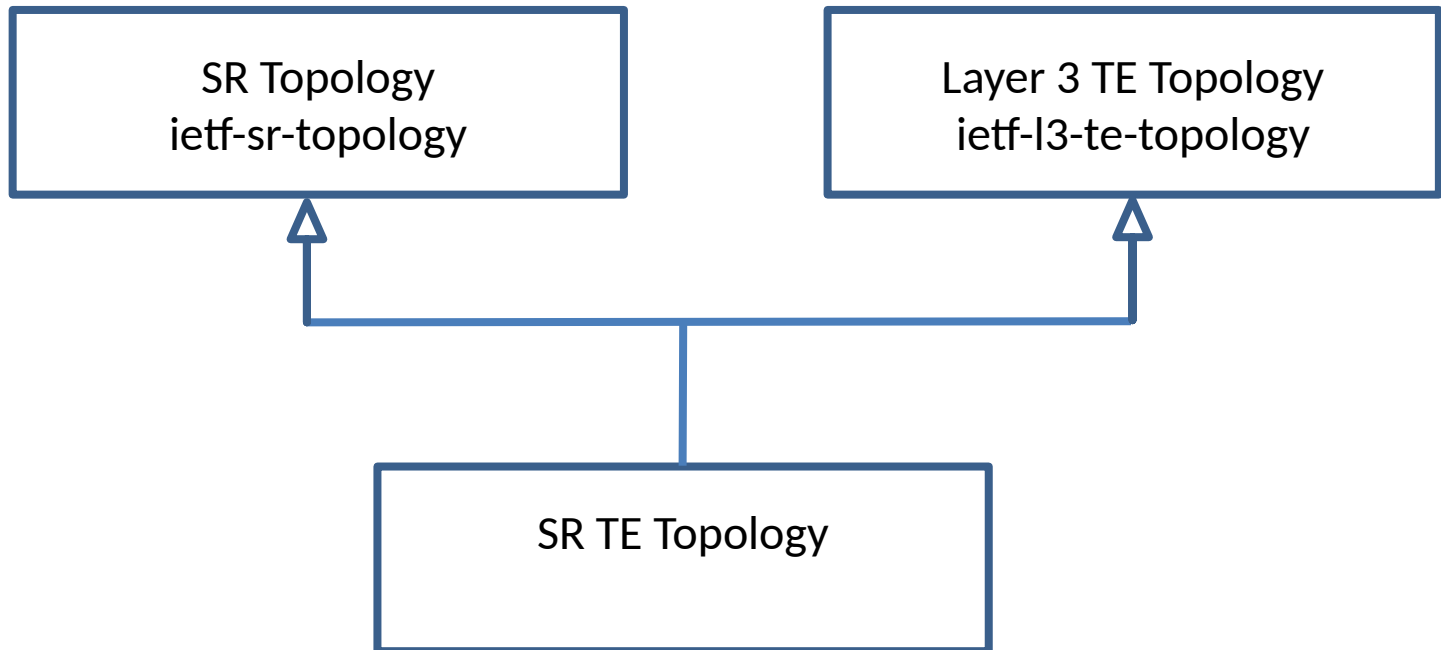
SR (Segment Routing) Topology

- Augment layer 3 network topology model



SR (Segment Routing) TE Topology

- Multiple inheritance:
 - Is both SR topology and layer 3 TE topology model.
 - Uses multiple network types: “l3-te” and “sr”.



Changes Since Last Revision

- Aligned with latest dependencies
 - Used the groupings from the latest draft-ietf-spring-sr-yang-12.

Changes Since Last Revision

- Fixed information source modeling
 - There are use-cases where different instances of the same source protocol provide the topology information.
 - Added a leaf to indicate the instance of the information source.

```
augment /nw:networks/nw:network/nw:node/l3t:l3-node-attributes:
  +--rw sr
    +--ro information-source?      enumeration
    +--ro information-source-instance?  string
    +--ro information-source-state
      +--ro credibility-preference?  Uint16

augment /nw:networks/nw:network/nt:link/l3t:l3-link-attributes:
  +--rw sr!
    +--ro information-source?      enumeration
    +--ro information-source-instance?  string
    +--ro information-source-state
      +--ro credibility-preference?  uint16
```

Next Steps

- Ask for YANG doctor's review.
- Welcome further reviews and suggestions.
- Working Group Last Call after completing above.