

SF Aware TE Topology YANG Model

[draft-ietf-teas-sf-aware-topo-model](#)

Presenter: Xufeng Liu (On behalf of authors/contributors)

Recap

- Draft describes a YANG data model for TE network topologies that are network service and function aware.
 - Several use-cases described in Appendix C

```
module: ietf-te-topology-sf
  augment /nw:networks/nw:network/nw:network-
types/tet:te-topology:
  +--rw sf!
  augment /nw:networks/nw:network/nw:node/tet:te
    /tet:te-node-attributes:
  +--rw service-function
  +--rw connectivity-matrices
  | +--rw connectivity-matrix* [id]
  | ...
  +--rw link-terminations
  +--rw link-termination* [id]
  ...
  augment /nw:networks/nw:network/nw:node/tet:te
    /tet:information-source-entry:
  +--ro service-function
  +--ro connectivity-matrices
  | +--ro connectivity-matrix* [id]
  | ...
  +--ro link-terminations
  +--ro link-termination* [id]
  ...
```

```
Cont ..
augment /nw:networks/nw:network/nw:node/tet:te
  /tet:tunnel-termination-point:
  +--rw service-function
  +--rw tunnel-terminations
  +--rw tunnel-termination* [id]
  ...
augment /nw:networks/nw:network/nw:node:
  +--rw service-functions
  +--rw service-function* [id]
  ...
```

Use-Cases [Appendix C]

- C.1. Exporting SF/NF Information to Network Clients and Other Network SDN Controllers
- C.2. Flat End-to-end SFCs Managed on Multi-domain Networks
- C.3. Managing SFCs with TE Constraints
- C.4. SFC Protection and Load Balancing
- C.5. Network Clock Synchronization
- C.6. Client - Provider Network Slicing Interface
- C.7. Dynamic Assignment of Regenerators for L0 Services
- C.8. Dynamic Assignment of OAM Functions for L1 Services
- C.9. SFC Abstraction and Scaling
- C.10. Dynamic Compute/VM/Storage Resource Assignment
- C.11. Application-aware Resource Operations and Management
- C.12. Interconnection between Service Functions/Termination Points in uCPE

Current Status / Next Steps

- Current Rev 13 [No changes since July 2024]
 - Yang Doctors Review [Ver 08]
- No open issues
- Next Steps
 - Limit the number of authors on front page to 5
 - Request WG to review the current version and provide feedback on the model and the use-cases
 - Ver 14 will be ready for LC

Thank You

draft-ietf-teas-sf-aware-topo-model@ietf.org