

MPLS / TE YANG Data Model for Service Provider Networks

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draft-openconfig-mpls-consolidated-model-02

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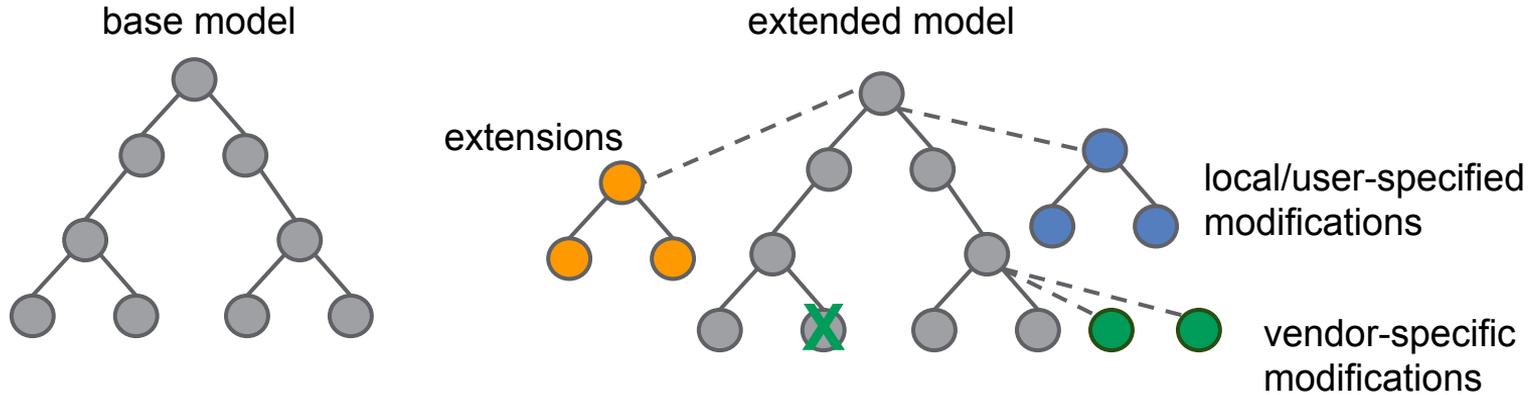
OpenConfig network operator group

www.openconfig.net

What is OpenConfig driving towards?

- Goal: have a vendor-neutral and programmable network infrastructure - data models are a key component of the solution
 - Data models must
 - cover the common operational use cases
 - be implementable and implemented by the equipment vendors
 - Data models don't have to be complete and comprehensive
- The OpenConfig model covers a subset of the MPLS functionality
 - complete coverage can be achieved via augmentations and extensions

Extending the model coverage



- base model as a starting point
- other models can augment the base model
- vendors can offer augmentations / deviations
- operators can add locally consumed extensions

What progress have we made towards this goal?

- Between last IETF and now, several meetings with the authors of the TEAS models
 - Review of the models
 - Agreement on the approach for base/extended state
 - Restructure the OC model to align better with the IETF model
- Extensive review of the model with several implementation providers

Changes from version 01 - high level

- Restructure the label-switched path stanza
 - flatter structure
 - better alignment with the IETF model
- Expand model coverage
 - operational state - e.g. support for RSVP sessions/neighbors, RSVP packets
 - support for multiple paths
- Alignment with the IETF model
 - Alignment on a variety of items more generic definition of IGP update thresholds, flexible SRLG definition, more targeted rsvp refresh configuration.
 - Also highlights differences in existing implementations - e.g. the need for RSVP hello definition at global level vs interface level, the way admin-groups are defined across implementations

Summary and next steps

Summary

- Progress towards aligning with the TEAS model, goal is to reuse groupings as possible
- Increased coverage
- Model is available in the public YangModels repository <https://github.com/YangModels/yang/tree/master/experimental/openconfig>
 - A new version will be posted post-IETF incorporating implementation feedback
- Feedback received on implementation feasibility