YANG Data Models for TE and RSVP

draft-ietf-teas-yang-te-06

draft-ietf-teas-yang-rsvp-07

draft-ietf-teas-yang-rsvp-te-00

draft-ietf-mpls-base-yang-04

code @ https://github.com/ietf-mpls-yang/te

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Agenda

• Updates to I-Ds (since IETF97)

• Next steps
I-D: draft-ietf-teas-yang-te-06
Summary of Changes

• Credits:
  – Thanks to Sergio Belotti and Italo Busi et. al for discussions and providing review comments
  – Thanks to multi-vendor team for continued discussions during meetings

• High-level model changes:
  – further alignment of names/types with OC-MPLS models
  – Added new leafs under TE tunnel container
  – Replaced types by newly defined routing types where necessary
  – Introduced path-signaling-type per tunnel and per path
  – Added new leafs under named-path-constraints (exclude/include ERO list)
  – Made modification to explicit-route-object
Next Steps

- Complete definition of tunnel RPCs
- Request further review and address comments
I-D: draft-ietf-teas-yang-rsvp-07
I-D: draft-ietf-teas-yang-rsvp-te-00
I-D: draft-ietf-teas-yang-rsvp-te-mpls-00
Summary of Changes

• Document reorganization:
  – Split the modules into new documents:
    – draft-ietf-teas-yang-rsvp: contains RSVP base and RSVP extended YANG module definition
    – draft-ietf-teas-yang-rsvp-te: contains RSVP-TE generic YANG module definition
    – draft-ietf-teas-yang-rsvp-te-mpls: contains RSVP-TE MPLS YANG module definition

• Model changes
  – Added parameters in RSVP sessions
  – Added parameters in RSVP neighbor
  – Added a leafref in TE model from LSP to RSVP session
  – Integrated with changes in key-chain model
Next Steps

• RSVP base/extended in I-D: draft-ietf-teas-yang-rsvp model is stable and ready for WGLC
• We request further review from WG and welcome comments
I-D: draft-ietf-mpls-base-04
Summary of Changes

• Modelled additional parameters in MPLS base model

• MPLS augmentation to IETF routing YANG model for IP routes (AF=IPv4/IPv6)

• MPLS augmentation to IETF routing YANG for (non-IP) “MPLS” routes
Update # 1

Additional MPLS base parameters

• Changes to use rt-types
• Add TTL-propagate leaf
• Add support for MPLS label blocks
Update # 2

Augmentation to RIB for MPLS routes

- Augmentation show IPv4-RIB augmentation for AF IPv4 prefixes
- Types of routes:
  - IP routes – identified by IP destination prefixes
  - MPLS routes – identified by application FECs, e.g
    - per-VRF label
    - per-CE label
    - etc.
Next Steps

• MPLS base I-D:<draft-ietf-mpls-base> is stable and ready for WGLC
• We request further review from WG and welcome comments
Thank You
TE/RSVP and MPLS YANG Modules
Structure and Relationship

ietf-te.yang

ietf-te-rsvp.yang

ietf-te-device.yang

ietf-te-sr-mpls.yang

ietf-te-rsvp-mpls.yang

ietf-rsvp.yang

ietf-rsvp-ext.yang

ietf-mpls-base.yang

ietf-otn-base.yang

draft-ietf-teas-yang-te-05