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SRv6 YANG Model

`draft-raza-spring-srv6-yang-05`

K. Raza (Cisco)
S. Agarwal (Cisco)
X. Liu (Volta)
Z. Hu (Huawei)
I. Hussain (Infinera)
H. Shah (Ciena)
D. Voyer (Bell Canada)
H. Elmalky
S. Matsushima (SoftBank)
K. Horiba (SoftBank)
A. AbdelSalam (Cisco)
J. Rajamanickam (Cisco)

Overview

- YANG data model for Segment Routing IPv6 (SRv6) base
 - base framework for configuring and managing an SRv6 subsystem
 - expected to be augmented by other SRv6 technology models accordingly.
- Additional YANG model for SRv6-Static application.
 - allows a user to specify SRv6 [local] SIDs and program them in the forwarding plane

ref: draft-ietf-spring-srv6-network-programming

Overview (2)

- YANG modules:
 - ietf-srv6-types:
 - defines common and basic types related to SRv6
 - ietf-srv6-base:
 - specifies management model for SRv6 base constructs (locator, SIDs, etc.)
 - ietf-srv6-static:
 - specifies management model for SRv6-static application

History

- Rev -00: Posted around IETF-100 in Singapore
- Rev -01: Presented in IETF-101 in London
- Rev -02 to -05: Updates, Cleanup

Changes from v1 - v5

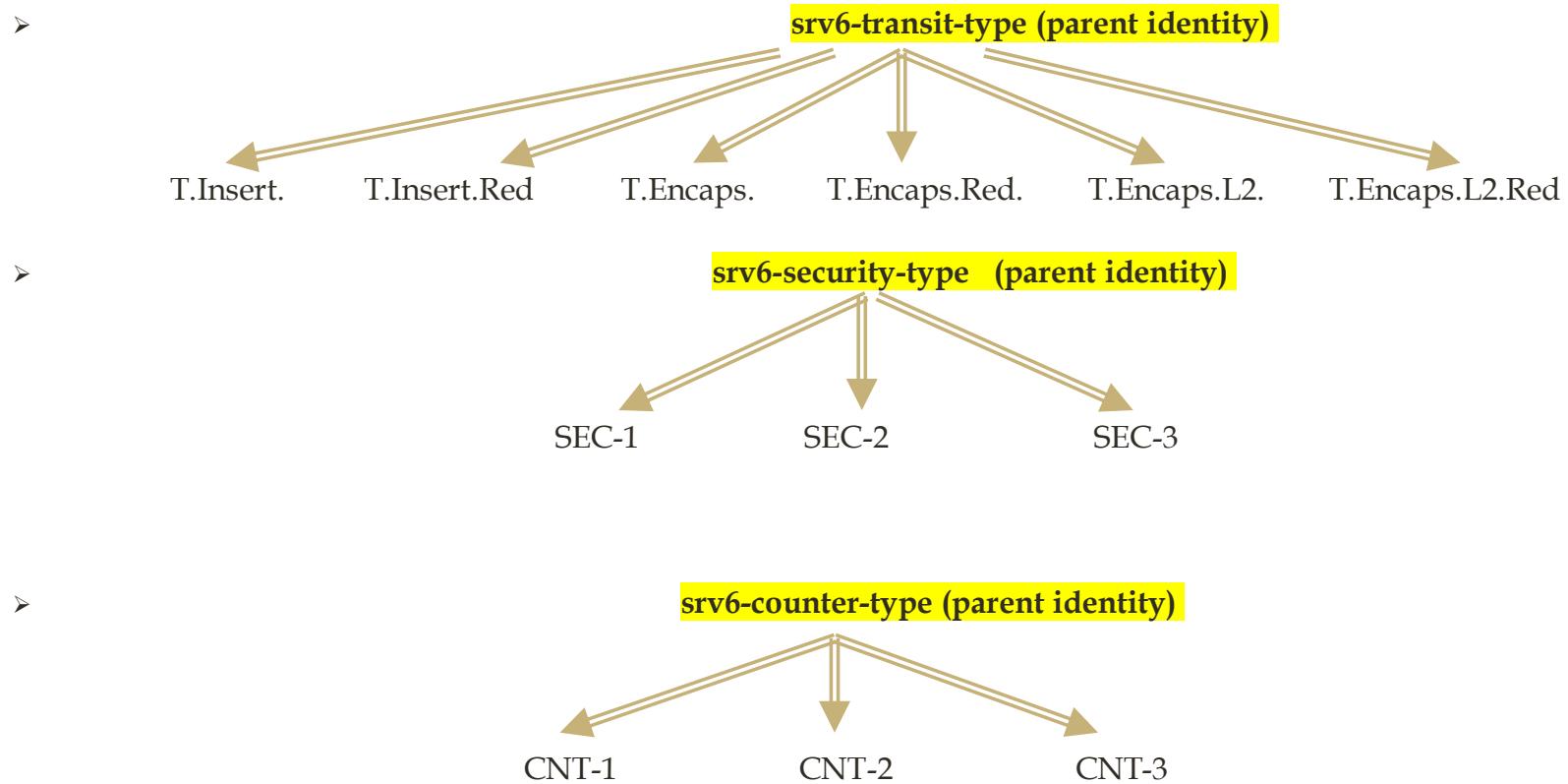
- Alignment with SRv6 net-pgm draft / spec
 - Added several new END functions in ietf-srv6-types.yang
 - Added similar changes (containers) to ietf-srv6-static.yang
- Minor Cleanup

Changes from v1 - v5 (cont'd)

- The changes include def and static behaviors for:
 - OAM:
 - End.OP (OAM Operation of punt)
 - SR-policy:
 - End.B6.Insert.Red (Reduced insert variation of End.B6.Insert)
 - End.B6.Encaps.Red (Reduced encaps variation of End.B6.Encaps)
 - USD variants (USD, PSP_USD, USP_USD, PSP_USP_USD):
 - END
 - END.T
 - END.X
 - EVPN:
 - End.DX2, End.DX2V, End.DT2U, End.DT2M

Changes from v1 - v5 (cont'd)

Converted several enums to identity data types in ietf-srv6-types.yang

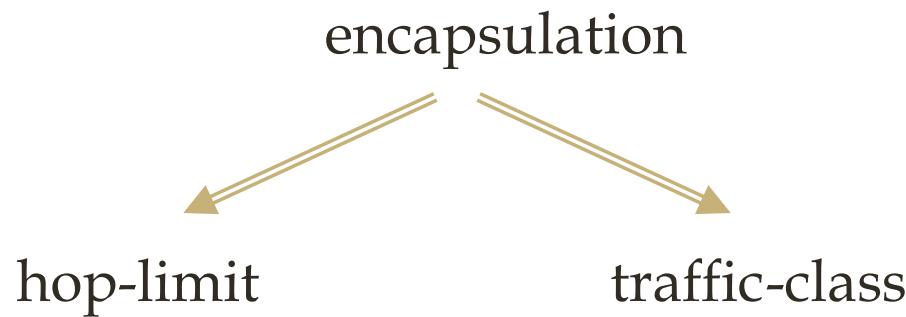


Changes from v1 - v5 (cont'd)

2 new containers under grouping srv6-encap ietf-srv6-base.yang



srv6-encap



SRv6-static: EVPN/L2VPN behaviors

```
module: ietf-srv6-static
augment /rt:routing/srv6:srv6/srv6:locators/srv6:locator:
+--rw static
    +--rw end-dx2
        |  +--rw path
        |  +--rw interface  if:interface-ref
    +--rw end-dx2v
        |  +--rw lookup-table-vlan  srv6-types:table-id
    +--rw end-dt2u
        |  +--rw lookup-table-l2-mac  srv6-types:table-id
    +--rw end-dt2m
        |  +--rw flooding-table-l2-mac  srv6-types:table-id
        |  +--rw paths
            |  +--rw path* [path-index]
            |  +--rw path-index  uint8
            |  +--rw interface?  if:interface-ref
```

Draft: Next Steps

- Asking for WG adoption
- Further updates as per WG feedback and SRv6 net-pgm