A YANG Data Model for Routing Management

draft-ietf-netmod-routing-cfg-20

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Changes since IETF 93

- The leaf `route-preference` was removed from `routing-protocol` in both configuration and state data.

- The identity `vrf-routing-instance` was added.

- The leaf `enabled` was removed from `routing-protocol` configuration.

- Assignment of L3 interfaces to routing instances is now part of interface configuration.

- Next-hop cases were simplified, and their configuration in static routes now corresponds to state data (RIBs).

- It is now recommended that routing protocol configuration be enclosed in containers *with presence*

Users of *ietf-routing*

19 active Internet-Drafts, 26 YANG modules

bgp-l3vpn
i2rs-fb-rib*
ietf-bfd
ietf-bier
ietf-gre-tunnel*
ietf-ipipv4-tunnel*
ietf-isis
ietf-isis-sr
ietf-l2vpn-svc*
ietf-l3vpn
ietf-l3vpn-svc*
ietf-key-table*
ietf-mpls

ietf-mpls-ldp
ietf-mpls-static
ietf-ospf
ietf-ospf-sr
ietf-ospf-bfd
ietf-pim-base
ietf-pim-rp
ietf-pim-sm
ietf-pim-dm
ietf-segment-routing
ietf-rib-extensions
ietf-rip
utunnel*

* limited use only (identities, typedefs)

Open Issue

Assignment of an L3 interface to a routing instance should be configurable separately for each address family.

Current schema:

```
module: ietf-interfaces
   +--rw interfaces
   |   +--rw interface* [name]
   |      +--rw name
   |      +--rw description?
   |      +--rw type
   |      +--rw enabled?
   |      +--rw ip:ipv4!
   |      ...
   |      +--rw ip:ipv6!
   |      ...
   |      +--rw rt:routing-instance?
   |
```

Options

❶ **Move** `rt:routing-instance` **under** `ip:ipv4` **and** `ip:ipv6`.

```
+--rw ip:ipv4!
   +--rw rt:routing-instance?
   ...
+--rw ip:ipv6!
   +--rw rt:routing-instance?
   ...
```

❷ List of per-address-family assignments

```
+--rw rt:routing-instance* [rt:address-family]
   +--rw rt:address-family
   +--rw rt:routing-instance-name
```

❸ Configure L3 "subinterface" for each address family.