

draft-ietf-isis-yang-isis-cfg-02

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Changes from -01

- Introduction of node-tag

```
augment /rt:routing/rt:routing-instance/rt:routing-protocols/  
rt:routing-protocol:  
  +--rw isis  
    +--rw instance* [routing-instance]  
      +--rw routing-instance          rt:routing-instance-ref  
      +--rw node-tag {node-tag}?  
        | +--rw node-tag* [tag]  
        |   +--rw tag      uint32  
      +--rw topologies* [name] {multi-topology}?  
        | +--rw enabled?          boolean  
        | +--rw name              rt:rib-ref  
        | +--rw node-tag {node-tag}?  
        |   +--rw node-tag* [tag]  
        |   +--rw tag            uint32
```

Changes from -01

- Adding key-chain for authentication (reusing grouping from keychain for legacy auth)

```
+--rw isis
  +--rw instance* [routing-instance]
    +--rw routing-instance          rt:routing-instance-ref
    +--rw level-type?              level
    +--rw authentication* [level]
      | +--rw (authentication-type)?
      | | +--:(key-chain) {key-chain}?
      | | | +--rw key-chain?        key-chain:key-chain-ref
      | | +--:(password)
      | |   +--rw key?              string
      | |   +--rw (algorithm)?
      | |     +--:(hmac-sha1-12)
      | |       | +--rw hmac-sha1-12?  empty
      | |       | +--rw hmac-sha-384?  empty
      | |       +--:(hmac-sha-512)
      | |         +--rw hmac-sha-512?  empty
      | +--rw level                level
  ...
```

Changes from -01

- Introduction of fast-reroute
 - Global container is just for augmentation
 - Activation is only per interface
 - Remote LFA is child of LFA

Changes from -01

```
+--rw isis
  +--rw instance* [routing-instance]
    +--rw routing-instance          rt:routing-instance-ref
    +--rw fast-reroute {fast-reroute}?
      | +--rw lfa {lfa}?
    +--rw topologies* [name] {multi-topology}?
      | +--rw enabled?              boolean
      | +--rw name                  rt:rib-ref
      | +--rw fast-reroute {fast-reroute}?
      | | +--rw lfa {lfa}?
```

Changes from -01

```
+--rw interfaces
  +--rw interface* [name]
    +--rw name                               if:interface-ref
    +--rw topologies* [name]
      | +--rw name                             rt:rib-ref
      | +--rw fast-reroute {fast-reroute}?
      | | +--rw lfa* [level] {lfa}?
      | |   +--rw candidate-disabled?        boolean
      | |   +--rw enabled?                    boolean
      | |   +--rw remote-lfa {remote-lfa}?
      | |   | ...
      | |   +--rw level                        level
    +--rw fast-reroute {fast-reroute}?
      | +--rw lfa* [level] {lfa}?
      |   +--rw candidate-disabled?          boolean
      |   +--rw enabled?                      boolean
      |   +--rw remote-lfa {remote-lfa}?
      |   | +--rw enabled?                    boolean
      |   +--rw level                          level
```

Changes from -01

- Adding some Segment Routing
- We are proposing a SR YANG model (draft-litkowski-spring-sr-yang)
- Where should be protocol extensions ?

VRF centric vs Protocol centric

routing-instance-centric

```
+--rw routing-instance*
|  +--rw name
|  +--rw type?
|  ...
|  +--rw routing-protocols
|     +--rw routing-protocol*
|         +--rw type
|         +--rw name
|         ...
```

Used by Juniper, Alcatel-Lucent
(and *ietf-routing*).

routing-protocol-centric

```
+--rw routing-protocol*
|  +--rw name
|  +--rw type?
|  ...
|  +--rw routing-instances
|     +--rw routing-instance*
|         +--rw type
|         +--rw name
|         ...
```

Instance means VRF. Used by
Cisco, Brocade, HP, Huawei.

Parameters defined outside the inner list can serve as defaults for all entries of the inner list. Consequently, either design can be converted to the other but a round trip may result in a less compact configuration.

Next steps

- Design team is reviewing the operational states now
- Alignment with OSPF in progress
- Alignment required with future global rtg Yang design
- Need a crossWG consensus on VRF centric vs Protocol centric
- We NEED wg feedback about what we provided for configuration