OSPF/ISIS YANG Data Model
for Segment Routing
IETF 105, Montreal

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Updates since last IETF

● Added Adj-sid configuration under interface
  +--rw segment-routing
    +--rw adjacency-sid
      +--rw adj-sids* [value]
      |   +--rw value-type? enumeration
      |   +--rw value uint32
      |   +--rw protected? boolean
    +--rw advertise-adj-group-sid* [group-id]
      |   +--rw group-id uint32
    +--rw advertise-protection? enumeration

● The drafts have been stable
Next Steps

- Collect/address comments
- Request/Start YANG Doctor review
- In pipeline for WG LC
YANG Model for OSPFv3 Extended LSAs

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Updates since last IETF

- Version -02 to -05.
- Editorial changes
  - Fixed references
  - Model description
- Removed Type (identityref) in TLV, to be consistent with base OSPF and ISIS model.
Next Steps

- Collect/address comments
- Request WG adoption
## OSPF RFCs Published since 2016

<table>
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<tr>
<th>RFC</th>
<th>Title</th>
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<td>7770</td>
<td>Extensions to OSPF for Advertising Optional Router Capabilities</td>
<td>In base model</td>
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<td>7777</td>
<td>Advertising Node Administrative Tags in OSPF</td>
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<td>7884</td>
<td>OSPF Extensions to Advertise Seamless Bidirectional Forwarding</td>
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<td>Detection (S-BFD) Target Discriminators</td>
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<td>OSPFv3 over IPv4 for IPv6 Transition</td>
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<td>8330</td>
<td>OSPF Traffic Engineering (OSPF-TE) Link Availability Extension</td>
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<td>for Links with Variable Discrete Bandwidth</td>
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<td>8362</td>
<td>OSPFv3 Link State Advertisement (LSA) Extensibility</td>
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<td>8379</td>
<td>OSPF Graceful Link Shutdown</td>
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<td>8444</td>
<td>OSPFv2 Extensions for Bit Index Explicit Replication (BIER)</td>
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<td>8476</td>
<td>Signaling Maximum SID Depth (MSD) Using OSPF</td>
<td>Included in OSPF SR YANG</td>
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<td>8510</td>
<td>OSPF Link-Local Signaling (LLS) Extensions for Local Interface ID</td>
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<td>Advertisement</td>
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</table>
This feature was included in the base model, but not complete. Will be removed from the base model.
RFC 8379
OSPF Graceful Link Shutdown -1/2

module: ietf-ospf-graceful-link-shutdown

augment /rt:routing/rt:control-plane-protocols
  /rt:control-plane-protocol/ospf:ospf/ospf:areas
  /ospf:area/ospf:interfaces/ospf:interface:
    +--rw graceful-link-shutdown
    +--rw enable?  boolean

augment /rt:routing/rt:control-plane-protocols
  /rt:control-plane-protocol/ospf:ospf/ospf:areas
  /ospf:area/ospf:database/ospf:area-scope-lsa-type
  /ospf:area-scope-lsas/ospf:area-scope-lsa/ospf:version
  /ospf:ospfv2/ospf:ospfv2/ospf:body/ospf:opaque
  /ospf:extended-link-tlvs/ospf:extended-link-tlv:
    +--ro grace-link-shut-sub-tlv!
    +--ro remote-address-sub-tlv
      |  +--ro remote-address?  inet:ipv4-address
    +--ro local-remote-int-id-sub-tlv
      +--ro local-int-id?  uint32
      +--ro remote-int-id?  uint32

Configuration

OSPFv2 database
augment /rt:routing/rt:control-plane-protocols
   /rt:control-plane-protocol/ospf:ospf/ospf:areas
   /ospf:area/ospf:database/ospf:area-scope-lsa-type
   /ospf:area-scope-lsas/ospf:area-scope-lsa/ospf:version
   /ospfv3-e-lsa:e-router-tlvs/ospfv3-e-lsa:link-tlv:
      +--ro grace-link-shut-sub-tlv!

augment /rt:routing/rt:control-plane-protocols
   /rt:control-plane-protocol/ospf:ospf/ospf:database
   /ospf:as-scope-lsa-type/ospf:as-scope-lsas
   /ospf:body/ospfv3-e-lsa:e-router
   /ospfv3-e-lsa:e-router-tlvs/ospfv3-e-lsa:link-tlv:
      +--ro grace-link-shut-sub-tlv!
RFC 8510
OSPF Link-Local Signaling (LLS) Extensions for Local Interface Id Advertisement

module: ietf-ospf-lls-local-id

augment /rt:routing/rt:control-plane-protocols
    /rt:control-plane-protocol/ospf:ospf:
    +--rw lls-int-id
        +--rw enable? boolean

Configuration
Next Steps

- Collect/address comments
- Request WG adoption