YANG Data Model for OSPF Protocol
draft-ietf-ospf-yang-08
draft-ietf-ospf-sr-yang-02
IETF99, Prague

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draft-ietf-ospf-yang-08

Changes in draft-ietf-ospf-yang-08

- OSPF Operational State
  - Included in the same tree as OSPF configuration, consistent with Network Management Datastore Architecture [I-D.ietf-netmod-revised-datastores].
- Removed inheritance
- Added spf-log and lsa-log
- Use dotted-quad for OSPFv2 LSA ID
- Fixed virtual-link transit-area-id leafref path and must statement
- Conform to RFC6087BIS appendix C: YANG Module Template
- Fixed virtual link and sham link to include link-local database.

```
augment /rt:routing/rt:control-plane-protocols/rt:control-plane-protocol:
  +--rw ospf
     +--rw operation-mode?   identityref
     +--rw instance* [af]
        +--rw af                identityref
        +-- ...
        +--ro spf-log
        |  +--ro event* [id]
        |     +--ro id                    uint32
        |     +--ro spf-type?             enumeration
        |     +--ro schedule-timestamp?   yang:timestamp
        |     +--ro start-timestamp?      yang:timestamp
        |     +--ro end-timestamp?        yang:timestamp
        |     +--ro trigger-lsa*
        |        +--ro area-id?           area-id-type
        |        +--ro link-id?           union
        |        +--ro type?              uint16
        |        +--ro lsa-id?            yang:dotted-quad
        |        +--ro adv-router?   yang:dotted-quad
        |        +--ro seq-num?      uint32
        +--ro lsa-log
        |  +--ro event* [id]
        |     +--ro id                uint32
        |     +--ro lsa
        |     |  +--ro area-id?     area-id-type
        |     |  +--ro link-id?     union
        |     |  +--ro type?        uint16
        |     |  +--ro lsa-id?      yang:dotted-quad
        |     |  +--ro adv-router?   yang:dotted-quad
        |     |  +--ro seq-num?      uint32
        |     +--ro received-timestamp?   yang:timestamp
        |     +--ro reason?           Identityref
```

New spf-log and lsa-log, align with ISIS model.

Current Status and Next Steps:

- Dependencies
    - ietf-routing-types.yang: in WG last call
    - RFC8022 refactoring to be consistent with NMDA
    - No redistribution (aka, import policy) or any other features dependent on policy (e.g., default origination)
        - Route policy draft (draft-ietf-rtgwg-policy-model) expired in April 2016

- Virtual Meeting with BFD YANG Design Team to discuss protocol specific BFD configuration one more time (Jeff Haas)
- YANG doctor review
- Last Call for publication

draft-ietf-ospf-sr-yang-02

# Changes in draft-ietf-ospf-sr-yang-02

- Operational State

    Included in the same tree as OSPF configuration, consistent with Network Management Datastore Architecture [I-D.ietf-netmod-revised-datastores].

- Added local-block-tlvs and srms-preference-tlv

- Removed binding TLV

- Conform to RFC6087BIS appendix C: YANG Module Template

```
grouping local-block-tlvs {
  description "The SR local block TLV
               contains the range of labels
               reserved for local SIDs.";
  container local-block-tlvs {
    description "List of SRLB TLVs.";
    list local-block-tlv {
      description "SRLB TLV.";
      leaf range-size {
        type ospf:uint24;
        description "The SID range.";
      }
      uses sid-sub-tlv;
    }
  }
}
```

```
+--ro local-block-tlvs
| +--ro local-block-tlv*
|     +--ro range-size? ospf:uint24
|     +--ro sid-sub-tlv
|         +--ro sid? uint32
|
```

SR Local Block TLV
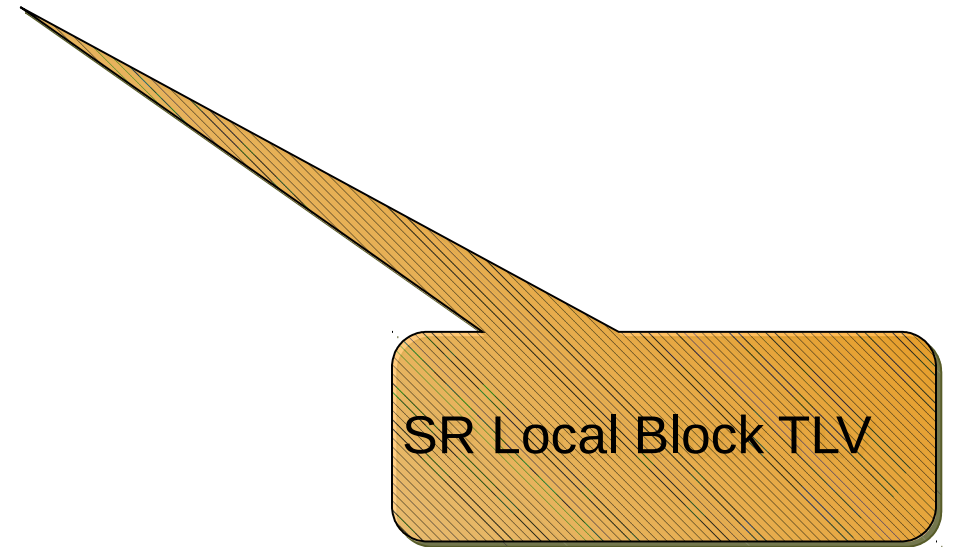
```
grouping srms-preference-tlv {
  description "The SRMS preference TLV is
                used to advertise a
                preference associated with
                the node that acts as an SR
                Mapping Server.";
  container srms-preference-tlv {
    description "SRMS Preference TLV.";
    leaf preference {
      description "SRMS preference TLV,
                    value from 0 to 255.";
      type unit8 {
        range "0 .. 255";
      }
    }
  }
}
```

```
+--ro srms-preference-tlv
   +--ro preference?  uint8
```

SRMS Preference TLV

Next Steps: draft-ietf-ospf-sr-yang

- Awaiting progression of OSPF segment routing draft

Thank You!