

### draft-ietf-lsr-flex-algo

Peter Psenak (ppsenak@cisco.com)

Shraddha Hegde (<a href="mailto:shraddha@juniper.net">shraddha@juniper.net</a>)

Clarence Filsfils (cfilsfil@cisco.com)

Ketan Talaulikar (<u>ketant@cisco.com</u>)

Arkadiy Gulko (arkadiy.gulko@thomsonreuters.com)

#### Context

- WG LC was done
- Publication was requested on October 22<sup>nd</sup>, 2020
- The Routing Directorate review is marked as complete
- OSPF specific missing pieces were discovered during the implementation
  - would make the base Flex-Algorithm specification incomplete
- Added the missing parts
- Ask WG to review the changes
- Do another WG LC

## OSPF Flexible Algorithm Prefix Metric Sub-TLV

- New single byte Flags field was added
- Portion of the Reserved field was used
  - no backward compatibility issue
- E bit: if the bit is set, the metric specified is a Type 2 external metric
  - This is semantically the same as E bit in section A.4.5 of [RFC2328]
  - Applies to OSPF External and NSSA external prefixes

# OSPF Flexible Algorithm ASBR Reachability Advertisement

- OSPFv2 Extended Inter-Area ASBR LSA
  - semantically similar to Type-4 Summary LSA in base OSPFv2
- OSPFv2 Extended Inter-Area ASBR TLV
  - Advertises flex-algo specific reachability information for ASBR located in other area
- OSPF Flexible Algorithm ASBR Metric Sub-TLV
  - Advertises flex-algo specific metric for the remote ASBR
  - Multiple these TLVs, one per flex-algo, can be carried in the parent TLV
  - Parent TLVs:
    - OSPFv2 Extended Inter-Area ASBR TLV
    - OSPFv3 Inter-Area-Router TLV defined

# OSPFv2 EIA-ASBR LSA Advertisement and Processing

- Section 10.3. added
  - OSPFv2 EIA-ASBR LSA Advertisement and Processing
- Section 13.1 extended
  - Multi-area and Multi-domain Considerations

#### **OSPF IANA Considerations**

- Updated with the new code points for:
  - OSPFv2 Extended Inter-Area ASBR LSA
  - OSPFv2 Extended Inter-Area ASBR TLV
  - OSPF Flexible Algorithm ASBR Metric Sub-TLV
  - OSPF Flex-Algorithm Prefix Metric Bits

### Next Steps ...

- Ask WG to review the latest additions and modifications
- WG Last Call