IGP Flexible Algorithm with L2bundles

draft-peng-lsr-flex-algo-l2bundles-05

Authors: Yongqing Zhu, Shaofu Peng, Ran Chen, Gregory Mirsky
Presenter : Ran Chen

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Motivation

• This document describes how to create Flex-algo with L2bundles scenario.
IGP L2 Bundle Member Extensions

- **ISIS L2 Bundle Member EAG advertisement**
  - "Administrative group (color) Sub-TLV" and "Extended Administrative Group Sub-TLV" MAY be contained in ISIS TLV-25
  - Advertise multiple L2 Bundle Attribute Descriptor with each specify a single bundle member.

- **OSPF L2 Bundle Member EAG advertisement**
  - "Administrative group (color) Sub-TLV" and "Extended Administrative Group Sub-TLV" MAY be contained in "L2 Bundle Member Attributes sub-TLV".
  - Advertise "L2 Bundle Member Attributes sub-TLV" per L2 Bundle Member.

- **FAD Flags Extensions**
  - Extend a new flag (L-flag) of ISIS FAD Flags Sub-TLV and OSPF FAD Flags Sub-TLV to let each node to check L2 member link resource of interface bundle during flex-algorithm path calculation.

```
 0 1 2 3 4 5 6 7...
+-------------------...
|M|L|   ...   ...
+-------------------...
```
Status/History

• Submit the version -00 in December 2019
• Update in -01 version
  – Remove L2 Bundle Member EAG Extension.
  – Use L2 Bundle Member Attributes TLV/sub-TLV with traditional "Administrative group (color) Sub-TLV" and "Extended Administrative Group Sub-TLV“ (RFC8668) based on discussions on LSR mailist.
• Update in -03 and -04 version
  – Add the Flex-algo L2bundles Use-cases
  – Add the FAD Flags Extensions
• Update in -05 version
  – Add co-author Yongqing
  – Some editorial changes
• The mechanism is stable since -04 version
Next Step

• Comments welcome

• WG adoption 😊
Thanks!