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draft-ietf-lsr-flex-algo

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Changes From Previous Version

- No functional changes
- “Operational considerations” section has been added based on request from Alvaro during IETF 107
  - Inter-area Considerations
  - Usage of SRLG Exclude Rule with Flex-Algorithm
  - Max-metric consideration

Inter-area Considerations

- Describes the FAD area scope
- FAD usage in a multi-area environment
- ISIS FAD re-generation at L1/L2 router from L2 to L1
- OSPF AS flooding scope for FAD

Usage of SRLG Exclude Rule with Flex-Algorithm

- Independent from the SRLG usage for backup path computation
- Creates disjoint sets of paths by pruning the links belonging to a specific SRLG
- Facilitates the usage of already deployed SRLG configurations

Max-metric Consideration

- Existing max-metric functionality is limited to IGP metric
  - Makes link either non-reachable or to serve as the link of last resort
- Similar mechanisms needed for other Flex-algo metric types
  - ASLA Min Unidirectional Link Delay
  - ASLA TE-metric
- Link can be made unreachable by by removing the Flex-Algorithm ASLA Min Unidirectional Link Delay from the link
  - for all Flex-Algorithms that use Min Unidirectional Link Delay as metric
- The link can be made unreachable by by removing the Flex-Algorithm ASLA TE-metric advertisement from the link
  - for all Flex-Algorithms that use TE metric

Max-metric Consideration (cont.)

- The link can be made the link of last resort by setting the value of ASLA Min Unidirectional Link Delay value to (2^24 - 1)
  - for all Flex-Algorithms that use Min Unidirectional Link Delay as metric
- The link can be made the link of last resort by setting the value of ASLA TE-metric advertisement to the value of (2^24 - 1) in ISIS and (2^32 - 1) in OSPF
  - for all Flex-Algorithms that use TE metric

Next Steps …

- Initial version introduced in July 2017
- WG adoption in May 2018
- Multiple implementations available
- Multi vendor interoperability tested
- Draft has been stable for some time
- We are asking for the WG LC
- The draft provides the Flex-algo framework
  - new additions are expected – can be done in separate documents.