IS-IS Segment Routing Extensions

draft-ietf-isis-segment-routing-extensions-09

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Version 08

• Introduction of the Segment Routing Local Block (SRLB) Sub-TLV
• SRLB Sub-TLV used in order to advertise the range of local labels
  – Currently, an IS-IS router only advertises its SRGB (global SIDs)
Version 08

• In the context of SDN (controller-based) networks, it is necessary for the controller(s) to know what is the local label range of each node
• Thus, the controller may instruct/program the router with the appropriate sid/label value
• The SRLB Sub-TLV aims to provide a mechanism through which a router advertises its SRLB
• The reporting of allocated labels is out of scope
  – E.g.: Adjacency-SIDs are reported by IS-IS
  – Other local SIDs are reported by BGP-LS (e.g.: SR TE Policy)
• Removed following text from section 2.4.5
  For a given prefix, if both a MS entry with its Prefix-SID Sub-TLV and a
  Prefix TLV (e.g.: TLV135) with its Prefix-SID are received, the Prefix-SID
  advertised within the Prefix TLV MUST be preferred while the MS entry
  MUST be ignored

• Preference rules between SIDs are described in
  draft-ietf-spring-conflict-resolution
Version 09

• Introduction of the SRMS Preference Sub-TLV
  – SR Mapping Server preference mechanism
• Allows to apply a preference rule when multiple mapping server advertisements are received
• The preference applies to the SRMS, not to the individual advertisement
• Simple mechanism
Version 09

• Clarified behavior for SRMS Preference, SRLB and SR Capability Sub-TLVs
  – Only one sub-TLVs MAY be originated
  – In case of multiple occurrences of the same Sub-TLV is received, the behavior is:
    • Undefined
    • Prefer the first Sub-TLV of the lowest number LSP
Questions?

Thanks!