Signaling Entropy Label Capability and Entropy Readable Label Dept
Using ISIS

draft-ietf-isis-mpls-elc

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Signaling Entropy Label Capability and Entropy Readable Label-stack
Depth Using OSPF

draft-ietf-ospf-mpls-elc

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ISIS ELC Advertisement

- Removed from ISIS Router Capability TLV
- Moved under prefix advertisement
- Routers may not know the identity of the prefix originator in the remote area/domain
- Routers may not know the capabilities of the prefix originator in the remote area/domain

ISIS ELC Advertisement

- A new bit in Prefix Attribute Flags Sub-TLV
  - ELC-Flag (Bit 3)
  - If a router supports ELs on all of its linecards, it SHOULD set the ELC flag for every local host prefix it advertises in IS-IS.
  - If a router has multiple line cards, the router MUST NOT announce the ELC for any prefixes that are locally attached unless all of its linecards are capable of processing ELs.
  - When a router leaks a prefix between two levels (upwards or downwards), it MUST preserve the ELC signalling for this prefix.
  - When redistributing a prefix between two IS-IS protocol instances or redistributed from another protocol to an
    IS-IS protocol instance, a router SHOULD preserve the ELC signalling for that prefix.

ISIS ERLD Advertisement

- new MSD type in Node MSD sub-TLV [RFC8491]
- If a router has multiple linecards with different capabilities of reading the maximum label stack depth, the router MUST advertise the smallest one.

OSPF ELC Advertisement

- Removed from OSPF Router Informational LSA
- Moved under prefix advertisement
- OSPFv2
  - New flag in the Flags field of OSPFv2 Extended Prefix TLV [RFC7684]
- OSPFv3
  - New flag in the OSPFv3 PrefixOptions [RFC5340]
- Same rules for advertising the flag as for ISIS

OSPF ERLD Advertisement

- new MSD type in Node MSD TLV [RFC8476]
- Same rules for advertisement as in ISIS

Next Steps

- Questions/Comments?

Thank you!