Signaling ERLD using BGP-LS

(draft-ietf-idr-bgp-ls-segment-routing-rld-00)

IETF 100, 13 November 2017
Singapore
Conceptual Sanity Check

- **Concept:**
  - **RLD**
    - The number of labels a router can look into and make decisions upon (normally in fast path)
  - **ELC**
    - Entropy Label Capability is the capability of a router to understand the entropy label
  - For Entropy based upon EL/ELI to work well, they need to be within the RLD depth (otherwise no entropy)
  - For ISIS & OSPF both RLD & ELC are signaled
Conceptual Sanity Check

- ERLD (Entropy-Capable Readable Label Depth)
  - Assumption was that the ONLY use case for RLD was to know where to optimally insert EL/ELI in the label stack
  - Hence no need to signal both RLD and ELC in BGP-LS and that was the birth of ERLD because it seemed reasonable optimization
  - BUT… is this really correct assumption nowadays?
Conceptual Sanity Check

- i.e. We have Alternate Marking as potential use-case
- Alternate marking intends to use MPLS Synonymous Flow Label Framework (draft-bryant-mpls-sfl-framework-05)
- So, question to the WG:
  - Is ERLD still a good decision?
    - Yes? then draft is almost ready for WGLC
    - No? then do we split ERLD up again (RLD, ELC)
    - No? Do we create new capability per use-case? (i.e. ALMC (Alt Mark Label Capability))
THANK YOU