PCEP Extension for
SR-MPLS Entropy Label Position

draft-peng-pce-entropy-label-position-01

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Overview

- draft-ietf-mpls-spring-entropy-label proposes to apply the entropy labels to SR-MPLS networks and provides following criteria to determine the best ELI/ELs placement:
  - a limited number of \(<\text{ELI}, \text{EL}>\) pairs SHOULD be inserted in the SR-MPLS label stack;
  - the inserted positions SHOULD be within the Entropy Readable Label Depth (ERLD) of a maximize number of transit LSRs;
  - a minimum number of \(<\text{ELI}, \text{EL}>\) pairs SHOULD be inserted while satisfying the above criteria.

- It is required for the controller (e.g. PCE) to perform the TE path computation as well as the Entropy Label Position (ELP).
PCEP Extensions

• **Open Object**
  - indicate that it supports the SR path with ELP configuration.

• **LSP Object**
  - indicate to compute the SR path with ELP information.

• **ERO Object**
  - indicate that the position after this SR-ERO subobject is the position to insert <ELI, EL>, otherwise it cannot insert <ELI, EL> after this segment.
Updates of RFC8231

- **LSP Object**
  - As defined in [RFC8231], the length of LSP Object Flag field is 12bits and bit 1 to bit 11 has been assigned.
  - This document proposes to define a new LSP-EXTENDED-FLAG TLV for LSP object to extend the length of the flag field.

![LSP-EXTENDED-FLAG TLV Format](image)

**Figure 3: LSP-EXTENDED-FLAG TLV Format**
Next Step

• Comments and discussions are very welcome!
Thank you!