Local Protection Enforcement in PCEP

draft-ietf-pce-local-protection-enforcement

IETF 113 – Hybrid

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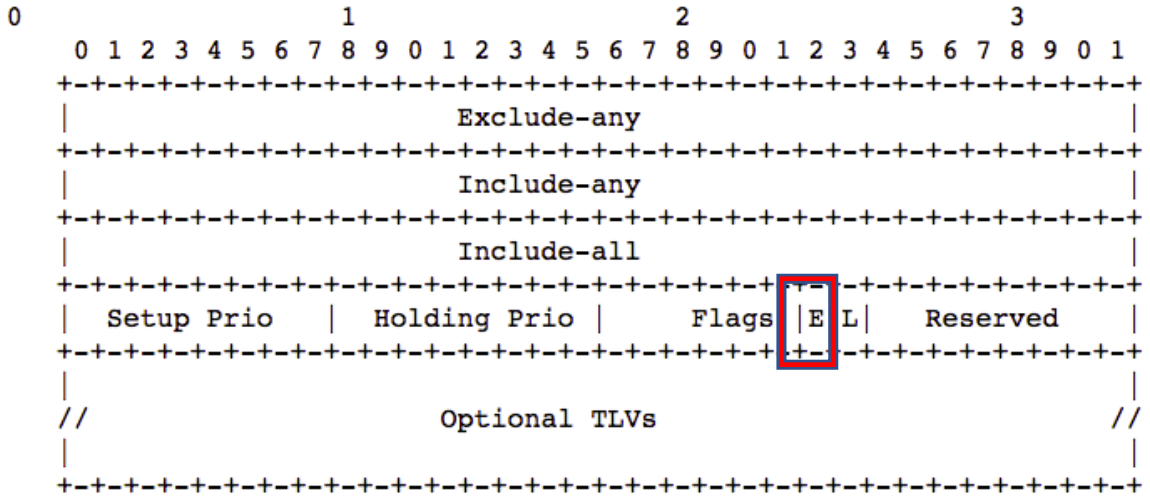
1. Wording and statements around the usage of existing Local Protection Desired Bit, while attempting to be *generally* backwards compatible with existing PCC and PCE implementations

2. New Flag: Enforcement (E-Flag) to accompany the L-Flag in the LSP Attributes object



Flags (8 bits)

- L flag: As defined in [RFC5440] and further updated by this document. When set, protection is desired. When not set, protection is not desired. The enforcement of the protection is identified via the E-Flag.

- E flag (Protection Enforcement): When set, the value of the L-Flag MUST be treated as a MUST constraint where applicable, when protection state of a SID is known. When E flag is not set, the value of the L-Flag MUST be treated as a MAY constraint.

Status

- -00 Uploaded Nov. 2019
- Presented IETF 106
- Presented IETF 108
- PCE WG Adopted Nov. 2020
- IANA early codepoint allocated Jan. 2021
  - Renewed Dec. 2021
- Implementations, various clarifications and editorial tweaks occurred
- Draft is stable

…Seeking working group last call

Outstanding

Generalize ‘Enforcement’?

During adoption call, comments were raised regarding generalizing enforcement.

Required to do by this document?

- draft-dhody-pce-stateful-pce-optional covers generalized object enforcement
- Enforcing LSPA Object flags generically does not exist in PCEP. Idea proposed on list to follow like rfc5420(LSP_REQUIRED_ATTRIBUTES)
  - Currently there are remaining bits in LSPA, and this document is coupled to existing flag (L flag).
  - Seems unnecessary at current time, authors prefer to leverage existing available bit, as document and impl. are stable - seeking WG consensus.

Thanks!