RSVP-TE Recovery Extension for data plane initiated reversion, protection timer and SNC options signalling

draft-takacs-ccamp-revertive-ps-08.txt

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Outline

- Update from last IETF
- Requirements
- Solution
- Next Steps

Update from the Last IETF

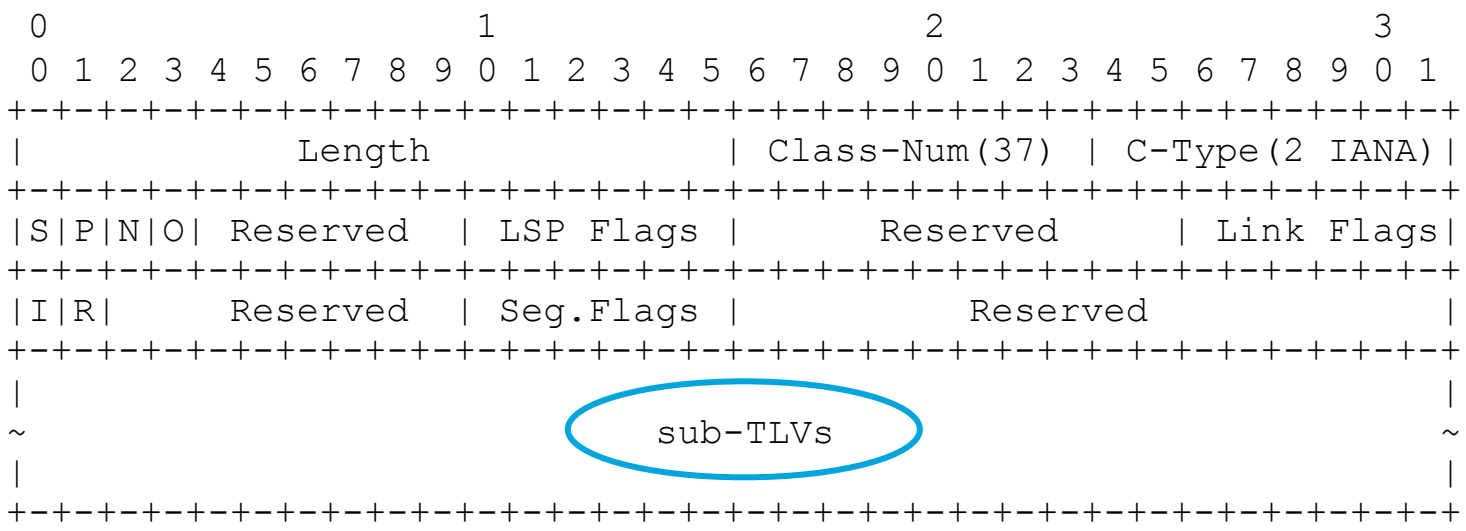
- Addressed comments from Lou, et al from last IETF WG meeting and sent an email to the WG.
  - Lou, et al made a comment that it has been quite a few IETF-s since the draft was presented and may be there are some other mechanisms device by now (e.g., via OAM work).
  - not find much that exists or is applicable to the requirement addressed by this draft.
  - The only thing we found was the Revert field in RFC6378.
    But Protection State Coordination Protocol (PSC) is orthogonal to this draft.

Requirements

- For successful establishment of a protected service, Ingress and Egress nodes need to agree on the following protection attributes:
  - Protection Revert Mode (i.e., revertive or non-revertive) [RFC4427]
  - Hold-off time (HOFF) [RFC4427]
  - Wait-to-Restore time (WTR) [RFC4427]
  - SNC Mode
- Pre-configuration of these protection attributes on per LSP basis is neither desirable nor scalable.
- Typically, these values are pre-configured to a default value.
  - Operators may need to tune WTR and HOFF timers on a per LSP basis to ensure best protection switching performance (e.g., to account for differential delays between worker and protection paths).
- Currently RSVP-TE does not specify signalling of these protection attributes.
- This requirement is identified in MPLS-TP Control Plane Framework Document.

Solution

- Update Protection Object format (a new C-Type) allowing sub-TLVs



- Introduce WTR, HOFF and SNC-options sub-TLVs
- If the WTR timer value is set to 0, the protection switching operation mode is assumed to be non-revertive (otherwise revertive).

Next steps

- Solution proposed in this draft has been identified in MPLS-TP Control Plane Framework as a (TP) requirement
- Draft has been through various revisions and is quite stable
- We would like to make this draft a WG Document