# RSVP-TE Recovery Extension for data plane initiated reversion and protection timer signaling

## draft-takacs-ccamp-revertive-ps-09.txt

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# Outline

- Requirements

- Updates since last version
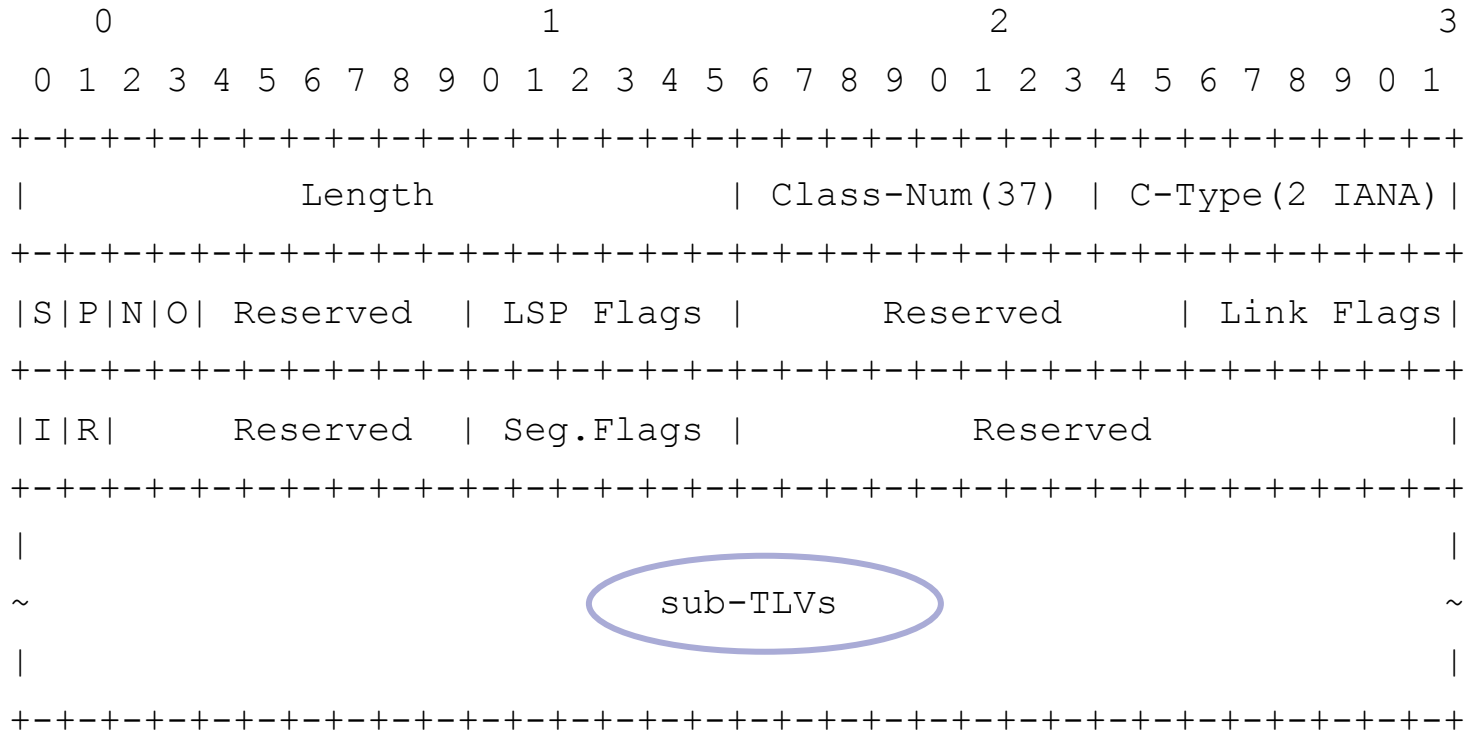
- Solution

- Next Steps

# 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]

- Pre-configuration of these protection attributes on per LSP basis is neither desirable nor scalable.

- Currently RSVP-TE does not specify signaling of these protection attributes.

# Update Since Last Version

- Lou, et al asked us to justify why we did not make use of OAM configuration framework to the mailing list.

- We followed-up and closed on the mailing list with the justification.

- Removed signaling SNC sub-type based on the feedback.

# Solution

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

```
     0                   1                   2                   3
 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|           Length              | Class-Num(37) | C-Type(2 IANA)|
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|S|P|N|O| Reserved  | LSP Flags |      Reserved     | Link Flags|
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|I|R|     Reserved  | Seg.Flags |         Reserved              |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                                                               |
~                          sub-TLVs                             ~
|                                                               |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

- Introduce WTR and HOFF 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

- Draft has been through various revisions and is quite stable
- We would like to make this draft a WG Document