RSVP-TE Summary Fast Reroute Extensions

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Outline

• Background

• Reviews/Updates

• Summary/Next Steps
Background

• Draft presented initially in IETF92, Dallas
• Focus is on addressing a scalability problem with current wide deployments of RFC4090 for RSVP-TE FRR
• The solution tries to minimize the amount of signaling and processing overhead that occurs at the PLR and MP post an FRR event by
  • associating primary LSPs with bypass (protecting) tunnel by use of group IDs so action is taken on a group versus LSP
  • exchanging in advance the post-FRR SREFRESH message-IDs so SREFRESHs continue after the FRR event- i.e. avoid full refreshes
• Document previously reviewed by:
  • Lou Berger - provided comments were addressed
  • MPLS Review-Team (Mach Chen, Eric Osborne, Greg Mirsky) - provided comments were addressed
  • Document Shepherd Nic Leymann – provided comments were addressed
B-SFRR Extended ASSOCIATION

- RSVP ASSOCIATION object was defined in [RFC4872] as means to associate LSPs with each other, e.g. protected LSPs with their LSPs protecting them
- Generalized by additional extensions in RFC6780
- New SFRR extension:
  - A new Association Type: (TBD-1) Bypass Summary FRR Association (B-SFRR)
  - Extended Association ID Format as:

![IPv4 Extended Association ID field](image)

Figure 1: The IPv4 Extended Association ID field
B-SFRR Summary FRR Bypass Object

- Carried in the Path message of a bypass LSP session
- Serves as indication to MP that one or more SFRR groups of protected LSPs that got rerouted over the bypass tunnel.

- New object of B-SFRR
  - Class-Num = (TBD-2) of the form 11bbbbbb
  - Allows for backward compatibility
  - C-Type: (TBD-3) FRR_ACTIVE

Figure 3: Summary FRR Bypass Object
Next Steps

• Request to make this draft as WG document
Thank You!