

Extensions to RSVP-TE for P2MP LSP Ingress Local Protection

draft-chen-mpls-p2mp-ingress-protection

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Protocol Extensions for Ingress Local Protection

Locally detect & repair ingress failure
Ingress failure recovers within 50ms

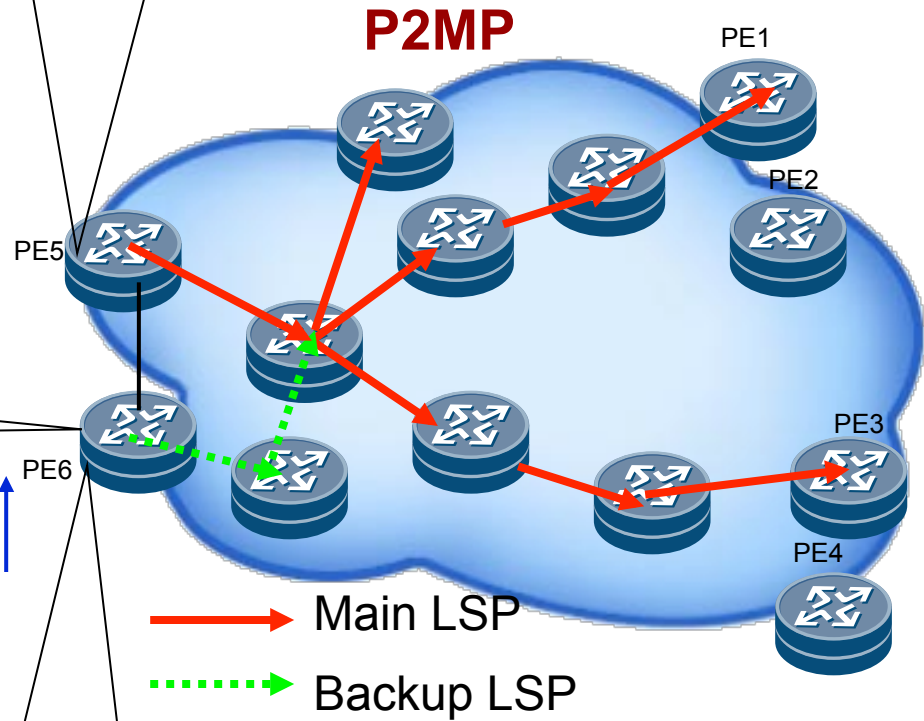
1. Desire for Ingress Protection
2. 1 to 1 or 1 to N backup
3. Info for creating Backup LSP
4. Info for importing traffic to Backup LSP

PE6 creates backup LSP,
FIB entry (inactive) with FEC

Status of protection (such as
protection is available/ready)

(Primary) Ingress

Backup Ingress



Options:

1. New RSVP-TE Messages
2. New/Enhanced RSVP-TE Objects in existing messages
3. OSPF Opaque LSAs

RSVP-TE Objects for Ingress Local Protection

PATH Msg contains

1. A bit in Attr Flags TLV
2. 1 to 1 or 1 to n in FRR
3. ERO, RRO, BW, etc in FRR
4. [FEC for importing traffic to Backup LSP](#)

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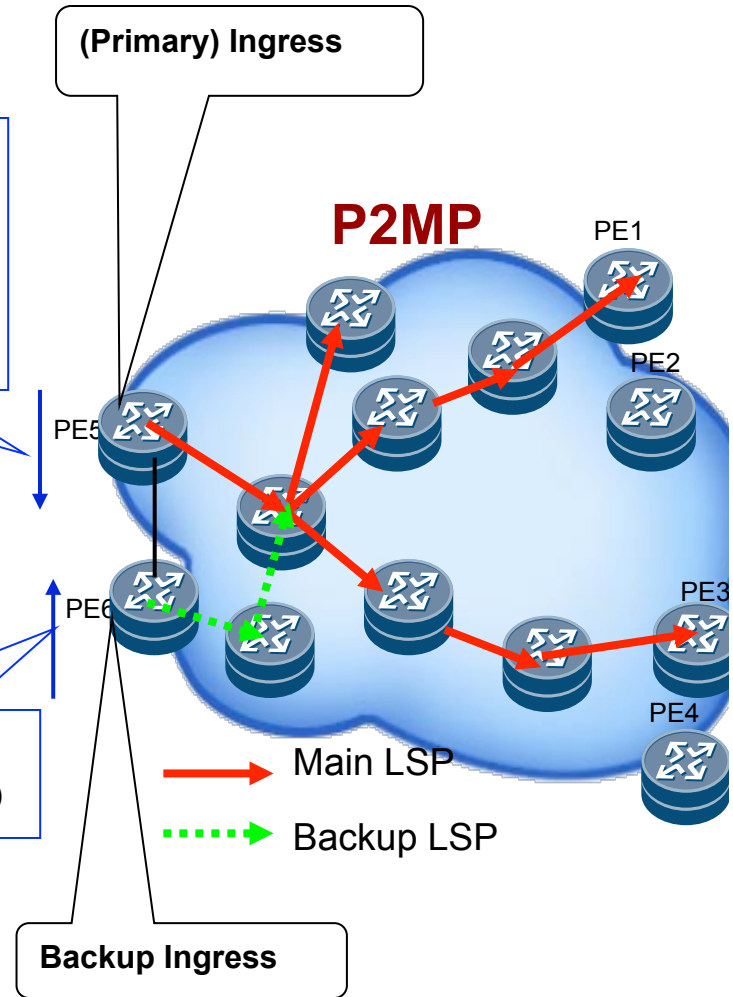
RESV Msg contains

Protection Status in RRO

Status of protection (such as protection is available/ready)

ERO contains path from backup ingress to next hops of primary ingress (maybe loose), to egresses

RRO contains path main LSP traversed



Next Step

- Welcome comments
- Request to make it into a working group document