RSVP Egress fast-protection

draft-minto-rsvp-lsp-egress-fast-protection-01

Jeyananth Minto Jeganathan(minto@juniper.net)

Hannes Gredler(hannes@juniper.net)

Yimin Shen(yshen@juniper.net)

Problem statement

- RFC [4090](#) enable local repairing LSP in the order of 10s milliseconds in Core node, link failure.

- But it does not handle the LSP end node failure.

- Some services required sub-second restoration and some nodes intelligent enough to restore service using upstream label in case edge failure.

Requirements

- A node, backup egress, Could able to reroute traffic to ultimate destination.

- LSP required egress protection end point address is not a router ID of the failing egress node.

Methods

- This draft propose 2 methods

- Proxy

  Suitable for mixed environments, where an upgrade of the entire network is not feasible

- Alias

  will work with arbitrary TE constraints and suitable for networks that required LSP with those TE constraints
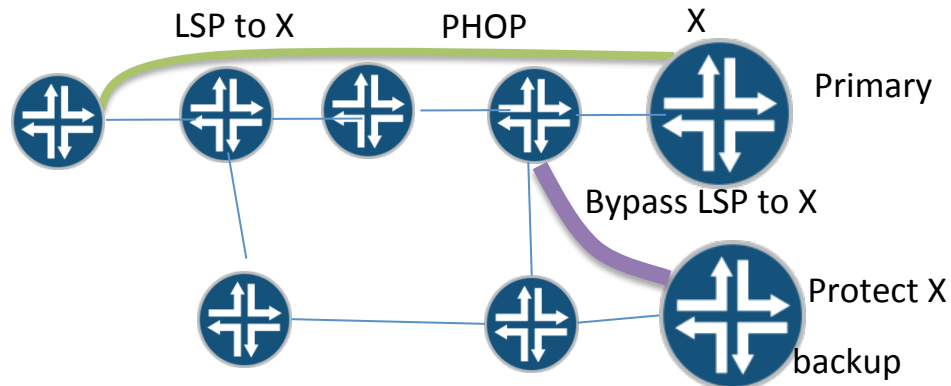
Proxy method
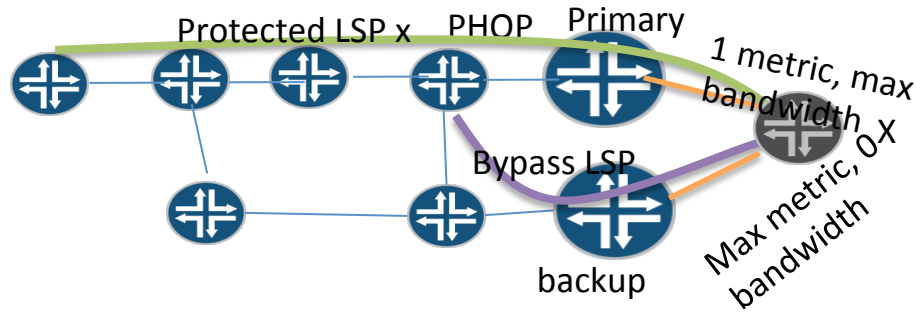
Let say LSP X need egress protection.

Advertise X as proxy node in TED.

Terminate protected LSP X in primary add RRO for proxy from primary.

Terminate bypass UHP in backup.

Alias method

○ Advertise as secondary loopback from primary.

○ A new TLV with optional label for mapping from protector or configure a mapping in PHOP.

○ Bypass computation to backup and UHP LSP signal with x.