RSVP-TE Extensions to Establish Associated Bidirectional LSP

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Definition

- **Associated bidirectional path**: The forward and backward directions are **setup, monitored, and protected independently**. [RFC5654]

- **Co-routed bidirectional path**: A path where the forward and backward directions follow the same route (links and nodes) across the network. Both directions are **setup, monitored and protected as a single entity.** [RFC5654]

- **A point-to-point co-routed bidirectional LSP is a point-to-point associated bidirectional LSP** with the additional constraint that its two unidirectional component LSPs in each direction follow the same path (in terms of both nodes and links). [RFC5960]
  - ✓ Indicating that a co-routed bidirectional LSP is a special case of associated bidirectional LSP

Requirements

- R7 MPLS-TP MUST support associated bidirectional point-to-point transport paths.

- R11 The end points of an associated bidirectional transport path MUST be aware of the pairing relationship of the forward and reverse paths used to support the bidirectional service.

- R12 Nodes on the path of an associated bidirectional transport path where both the forward and backward directions transit the same node in the same (sub)layer as the path SHOULD be aware of the pairing relationship of the forward and the backward directions of the transport path.

- R14 MPLS-TP MUST support bidirectional transport paths with asymmetric bandwidth requirements.

- R50 The MPLS-TP control plane MUST support establishing all the connectivity patterns defined for the MPLS-TP data plane (i.e., associated bidirectional P2P) including configuration of protection functions and any associated maintenance functions.

- **Conclusion**: all these requirements are not relevant with the sequence of establishment

Discussion

- What is the meaning of setting up independently?
  - ✓ One direction can not trigger the setting up of the reverse

    direction? (MS-PW is a case that one direction triggers another direction)
  - ✓ Or it just means that there are two signaling procedures?

Next Steps

- We would like to hear opinions from WG