

# Path Segment used in SR and MPLS Interworking

draft-xiong-mpls-path-segment-sr-mpls-interworking-00.txt

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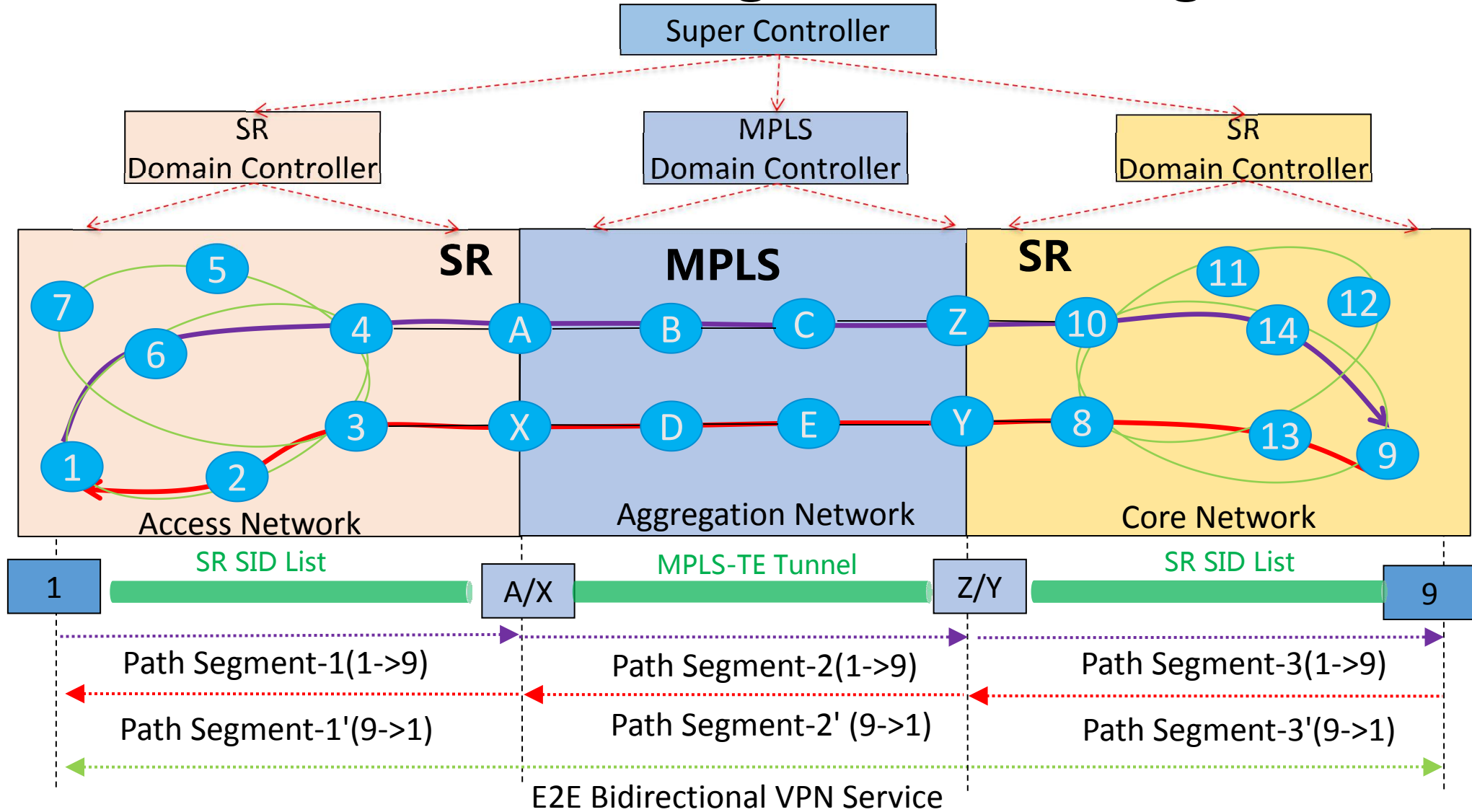
# Path Segment

- **Path Segment defined in [ietf-spring-mpls-path-segment] has been proposed and adopted in Spring WG**
  - ✓ Path Segment (Path ID/PSID) is introduced for SR path identification
    - Performance measurement
    - Bidirectional path correlation
    - End-to-end Path Protection
  - ✓ Path Segment MAY be used to correlate the inter-domain paths or unidirectional paths to provide end-to-end bidirectional VPN service in SR and MPLS interworking scenario.
    - ✓ Bidirectional Path Correlation
    - ✓ Inter-domain Path Correlation



Figure 1: Label Stack with Path Segment

# SR and MPLS Interworking with Path Segment



- ✓ Node 1 (1 and 1') and 9 (3 and 3')---Path Bidirectional correlation
- ✓ Node A (1 and 2)/X (2' and 1'),Z (2 and 3) and Y (3' and 2') ---Path Inter-domain correlation

# Interworking Consideration

- SR Interworking with MPLS

- The end-to-end bidirectional VPN service can be achieved by interworking between the SR and MPLS networks with path segment correlation.
  - Stitching Model or Nesting Model
  - Border Node or Border Link
  - Sub-path OAM or End-to-End OAM

- ✓ Stitching Model

- Domains are isolated and the edge nodes will correlate the paths with Path Segment to achieve paths stitching and bind the unidirectional paths for end-to-end bidirectional service.

- ✓ Nesting Model

- Global segments listed at the ingress node and the unidirectional end-to-end paths can be identified by Path Segment and correlate to achieve end-to-end bidirectional service.

# Next Step

- Solutions for SR and MPLS Interworking.
- Comments and discussions are very welcome!

Thank you!