SR-MPLS-TP Inter-domain use cases

draft-hu-mpls-sr-inter-domain-use-cases-01.txt

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SR-MPLS-TP

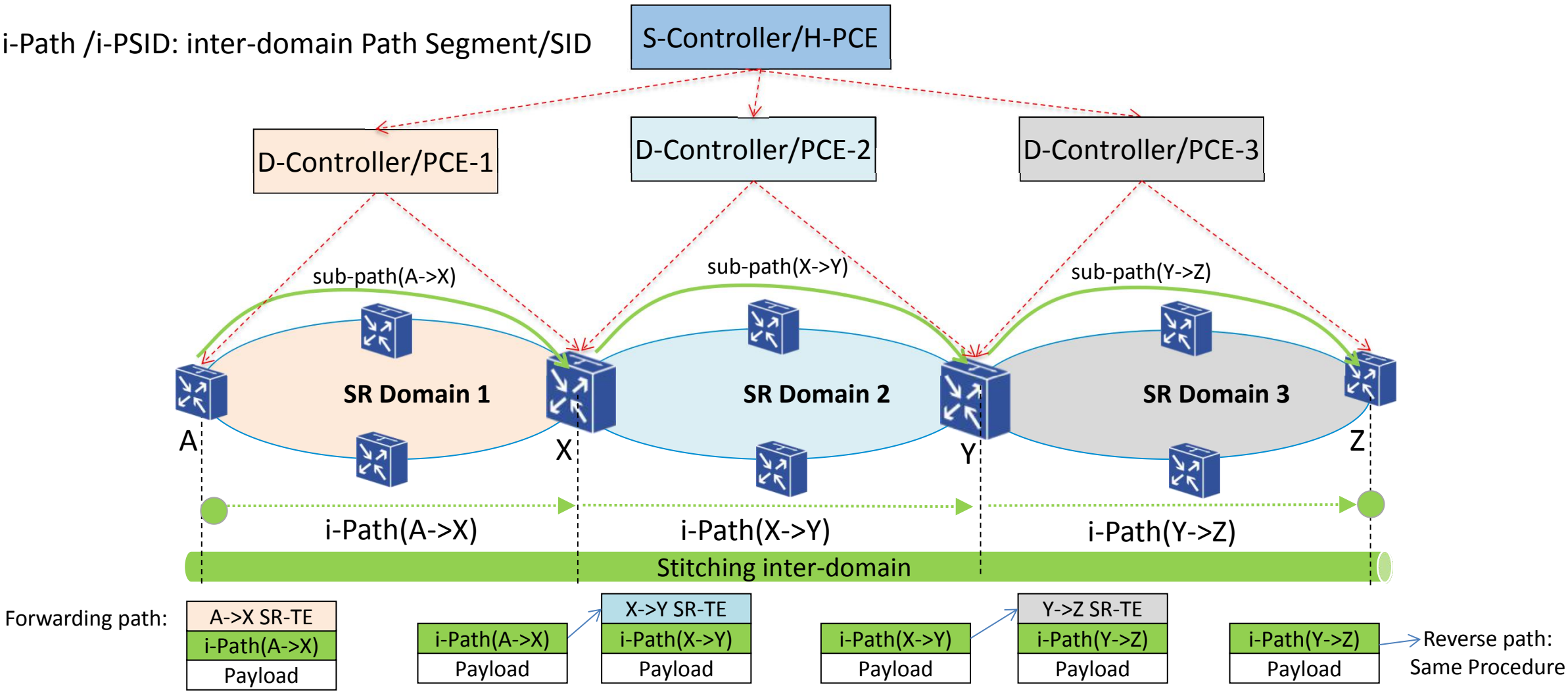
- **Transport Profile in SR-MPLS (SR-MPLS-TP)**
  - ✓ The SR bidirectional path MUST be established in MPLS-TP networks.
    - ✓ The Path Segment is defined to support SR bidirectional path correlation for transport network. (defined in [ID-ietf-spring-mpls-path-segment])
  - ✓ This document discusses the inter-domain scenarios in SR-MPLS-TP networks.
    - ✓ The SR bidirectional end-to-end paths across multiple domains.
    - ✓ Path Segment is uesd to indicate the inter-domain path or the end-to-end path.

SR-MPLS-TP Inter-domain

- SR-MPLS-TP Inter-domain
  - ✓ Stitching inter-domain model
    - Domains are isolated and the stitching SR node will push the list of SIDs for the new sub-tunnel
      - •Border Node Inter-domain Scenario
      - •Border Link Inter-domain Scenario
  - ✓ Nesting inter-domain model
    - Global segments listed at the ingress SR node and an end-to-end path SID uniquely across all the domains.
- SR-MPLS-TP Inter-working with MPLS-TP
  - The end-to-end VPN service can be achieved by inter-working between the SR and MPLS-TP networks with path segment .

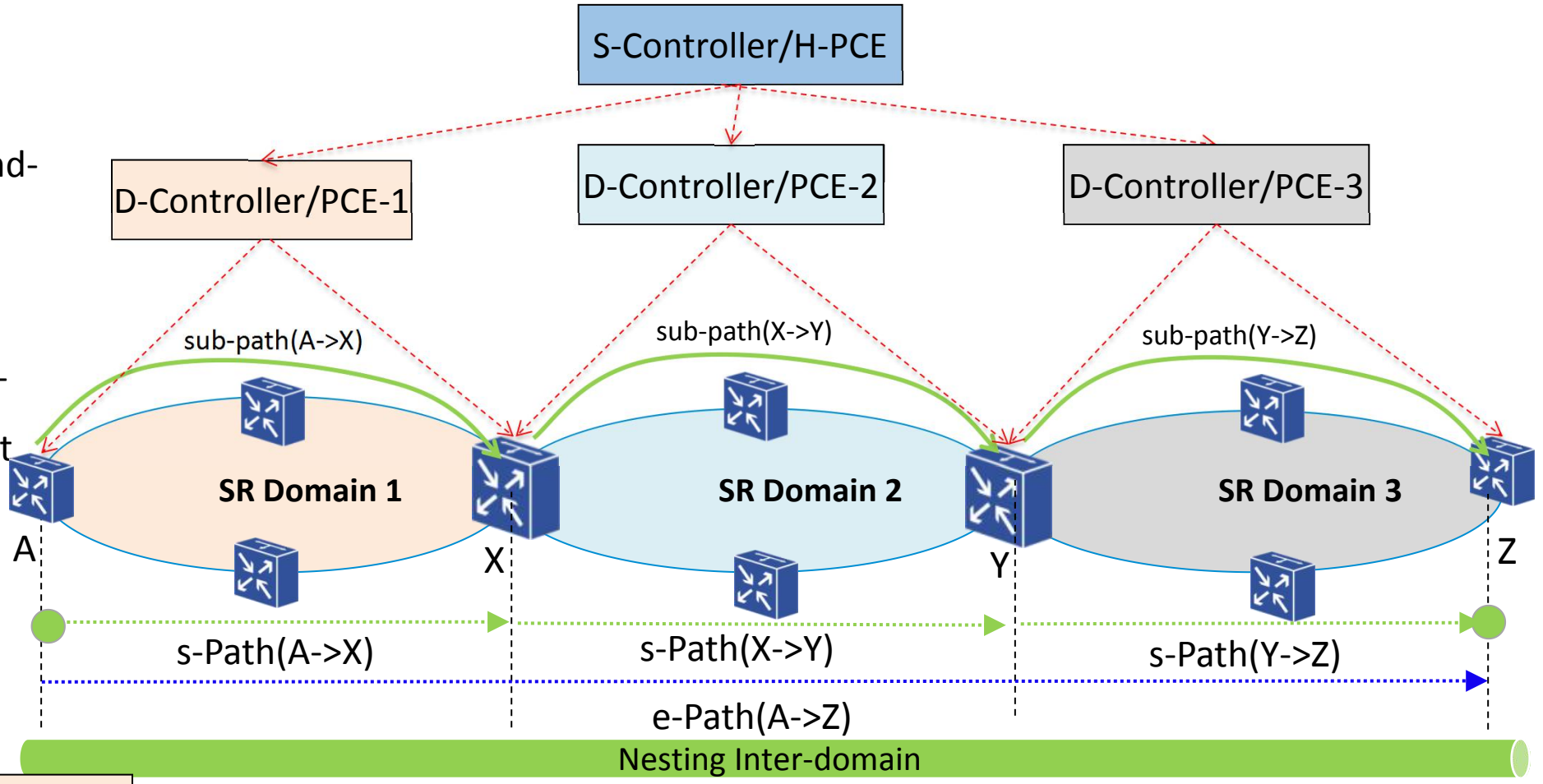
SR-MPLS-TP Stitching inter-domain

- ✓ i-Path /i-PSID: inter-domain Path Segment/SID

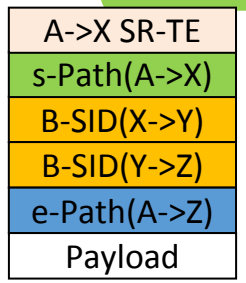


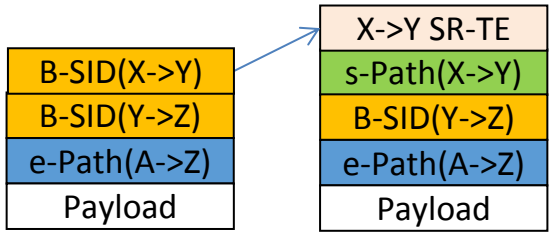
SR-MPLS-TP Nesting inter-domain

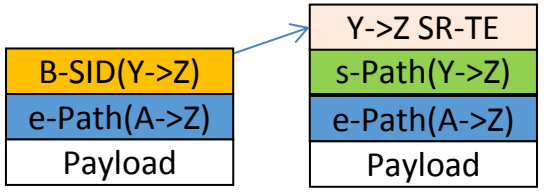
- ✓ BSID: Binding SID
- ✓ e-Path/e-PSID: end-to-end Path SID/Segment
- ✓ s-Path/PSID : sub-Path SID/Segment

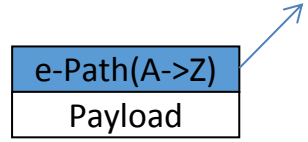


Forwarding path:



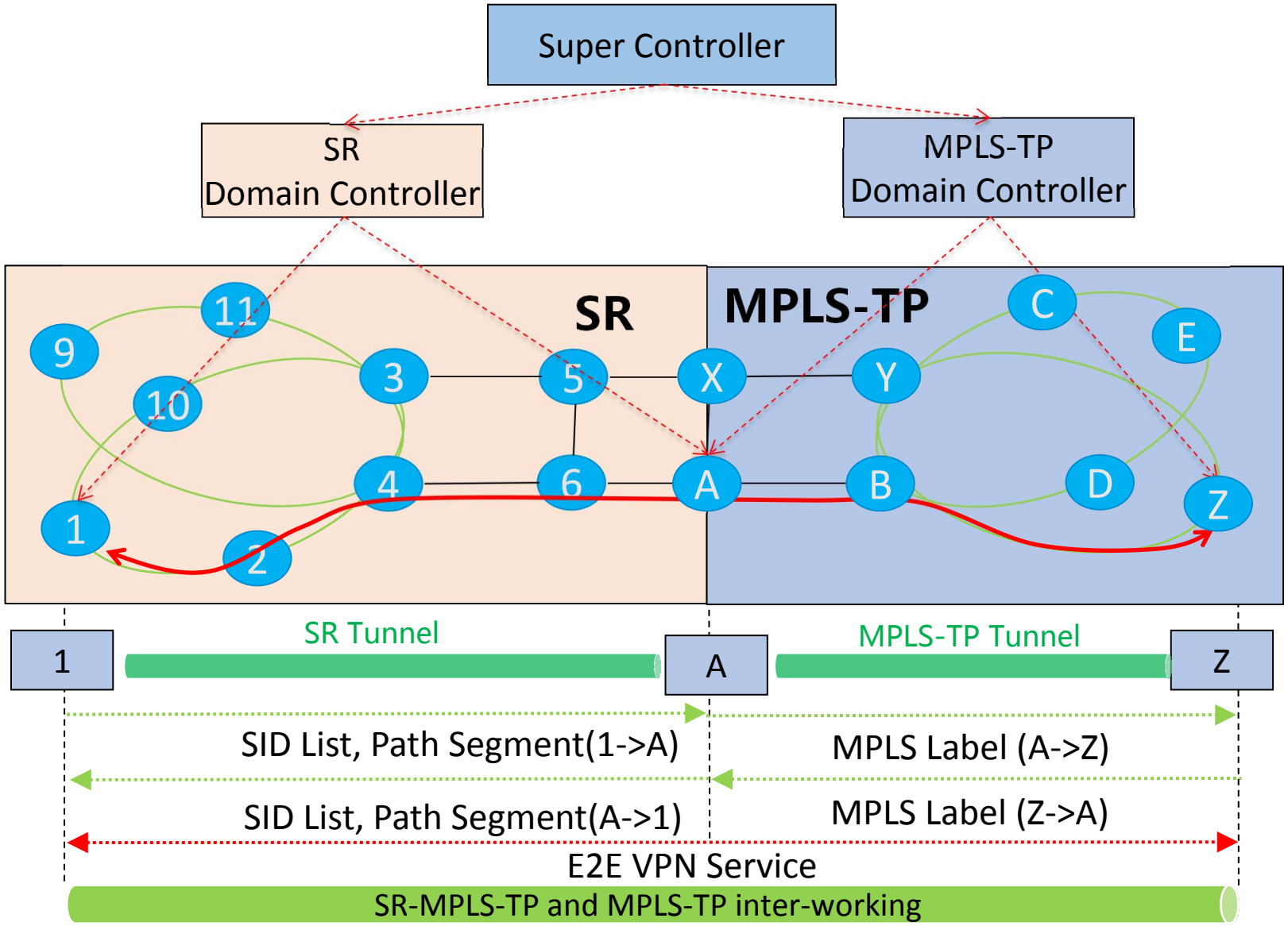






Reverse path:
Same Procedure

SR-MPLS-TP and MPLS-TP inter-working



Next Step

- Solutions for SR-MPLS-TP inter-domain.
- Comments and discussions are very welcome!

Thank you!