Include Routes - Extension to RSVP-TE

draft-ali-ccamp-rsvp-te-include-route-04.txt

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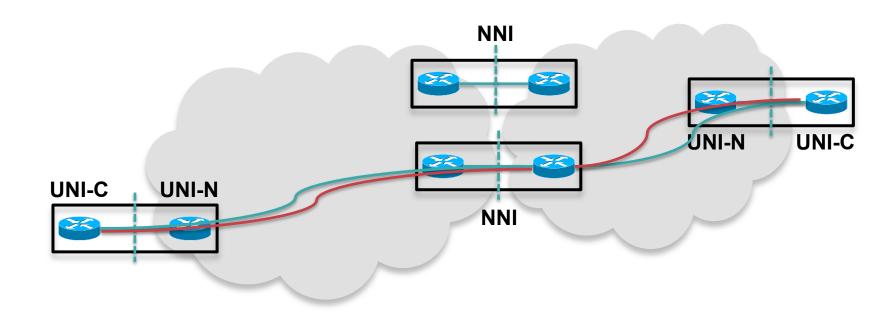
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Overall Problem Space

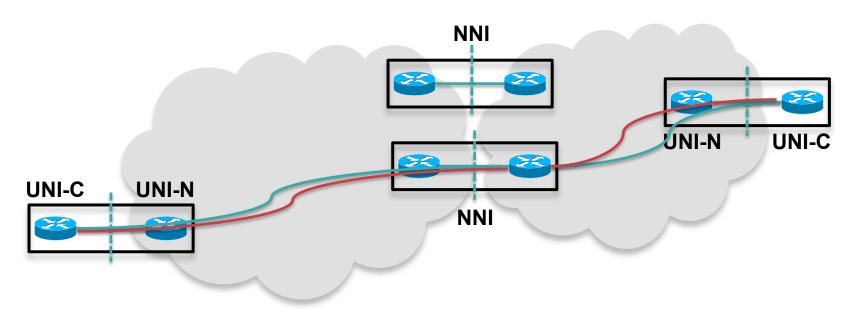


- A TE headend may have no visibility across UNI or NNI boundarys
- This draft is to allow such a headend to request commonality between paths

Requirement: Homogeneity and Fate-sharing

- Requirement is to have two LPSs to follow same route:
 - > Fate Sharing.
 - ➤ Homogeneous Attributes: E.g., when LSPs are bundled together, it is often required that they have same delay and DV characteristics.
- The ingress node requires certain nodes, links, or <u>path of another</u>
 <u>LSP</u> to be explicitly included.

Requirement (2)



- Requirement is to allow the ingress node to be able to include path of another LSP explicitly.
- If the path take by the reference LSP is known, existing ERO subobjects can be used.
- This draft addresses the scenarios in which path of the reference LSP is unknown to the Ingress node.
 - > Ingress node may not be on route of the reference LSP.
 - ➤ Ingress node may lack sufficient topological knowledge, e.g. due to confidentiality.

Solution/ Changes from v3

- Based on WG feedback, definition of Explicit Inclusion Route
 Subobject (EIRS) is removed from the previous proposal.
- Added IPv4/ IPv6 Point-to-Point Path ERO subobjects, instead.
- Encoding and processing rules of the new Path ERO subobjects are very similar to Path XRO subobjects in [draft-ietf-ccamp-lsp-diversity]

(the exception being include vs. exclude semantics)

Added Matt Hartley as a co-author.

Next Steps

Authors consider draft mature enough to call for WG adoption