draft-ali-ccamp-xro-lsp-subobject-02.txt

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Overall Problem Space

- Between areas, ASes, across UNIs and NNIs, visibility of TE Database information is limited

- The aim is to allow path diversity across such boundaries, while respecting that not information can or will be shared

- This draft pertains especially to boundaries where policy limits information flow

- E.g. at a UNI where the operator limits visibility into the network
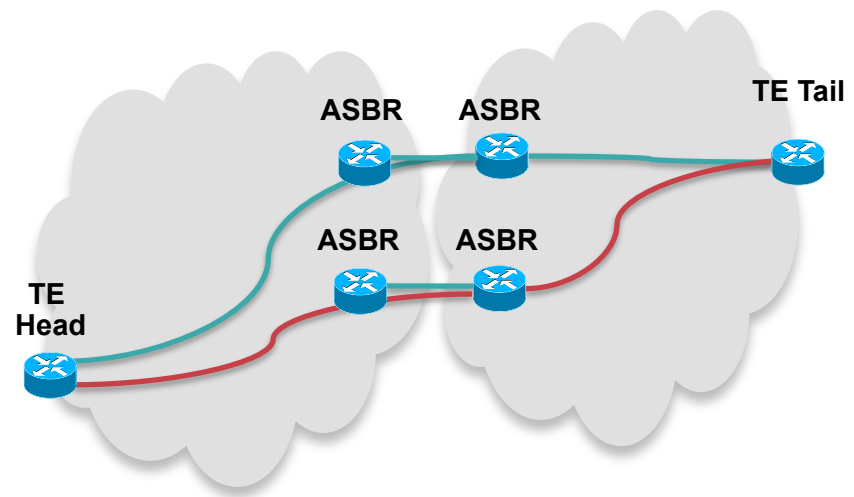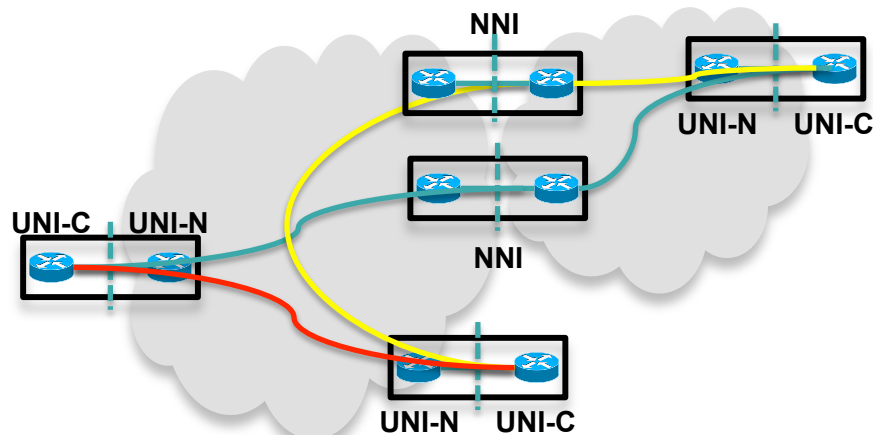
Route Diversity using Exclude Routes

- Not all use-cases are covered with the existing XRO subobjects

  - ➢ Exclusion of the route of an LSP

    Where the ingress node is denied RRO by policy

    Which does not involve the node signaling the diverse LSP

  - ➢ LSP diversity is a responsibility of the server layer

    Permits client layer to broadly express diversity requirements

- Simplest use cases

  - ➢ 1:1 protection

  - ➢ Pre-planed IP backbone redundancy requires diverse links in the optical plane

LSP Subobject

- New LSP subobject of Exclude Route (XRO) Object and Explicit Exclusion Route Subobject (EXRS) defined in [RFC4874].

- Carries FEC of the LSP or Tunnel from which diversity is desired

- Defines flags:

  - ➤ Exclusion-Flags: SRLG, Node, & Link exclusion.

  - ➤ Attribute Flags:

    LSP ID ignored (Tunnel Exclusion)

    Destination node exception

    Processing node exception

    Penultimate node exception

  - ➤ Last 3 are oriented toward UNI interface

Comment at last IETF

- Suggested that PPRO could be used
- Further investigation and offline discussions showed that the PPRO is for a very different purpose and not useable in this situation

Next Steps

- Call for workgroup adoption