

Proxy MPLS Traffic Engineering Label Switched Path(LSP) draft-li-mpls-proxy-te-lsp-01

Zhenbin Li, Xinzong Zeng
Huawei Technologies

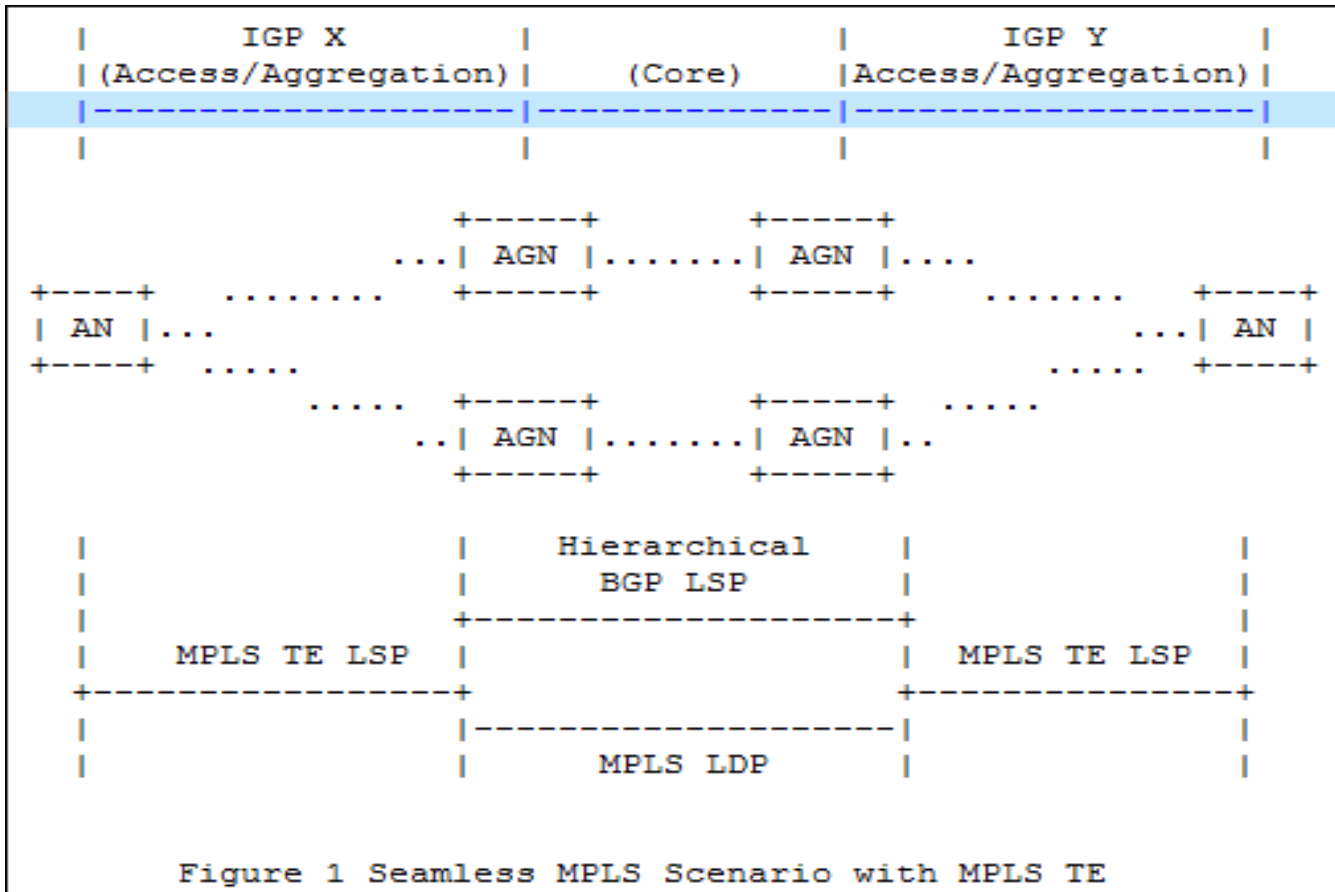
IETF 90, Toronto, ON, Canada

Introduction

- [I-D.draft-li-mpls-seamless-mpls-mbh-00] introduces the requirement and framework of Seamless MPLS for mobile backhaul networks where MPLS TE is often deployed in for high reliability, QoS, etc.
- To achieve the above requirement this draft proposes a method to setup proxy egress MPLS TE LSP with RSVP-TE signaling protocol which could stitch with BGP LSP to form an end-to-end LSP.
 - Define a new RSVP-TE object: Proxy Destination Object
 - Procedures of set up proxy egress TE LSP

Solution of LSP Stitching in Seamless MPLS

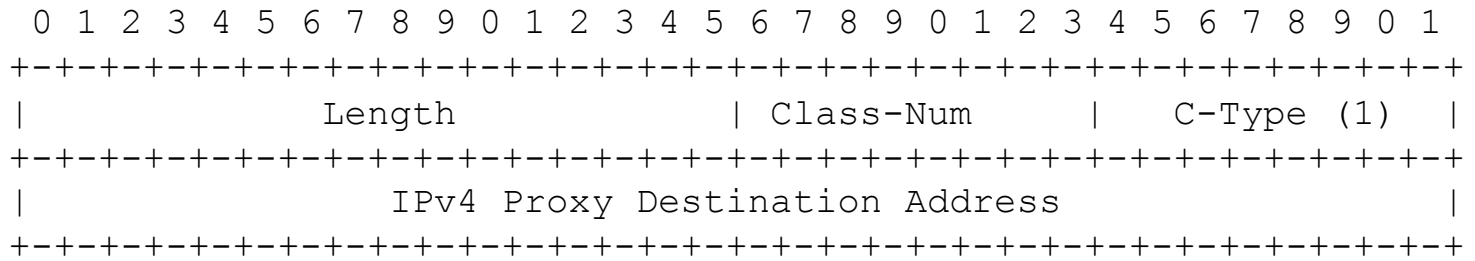
- Stitch multiple LSP Segments setup by different MPLS signaling protocols
- Stitch proxy egress LSP with ingress LSP



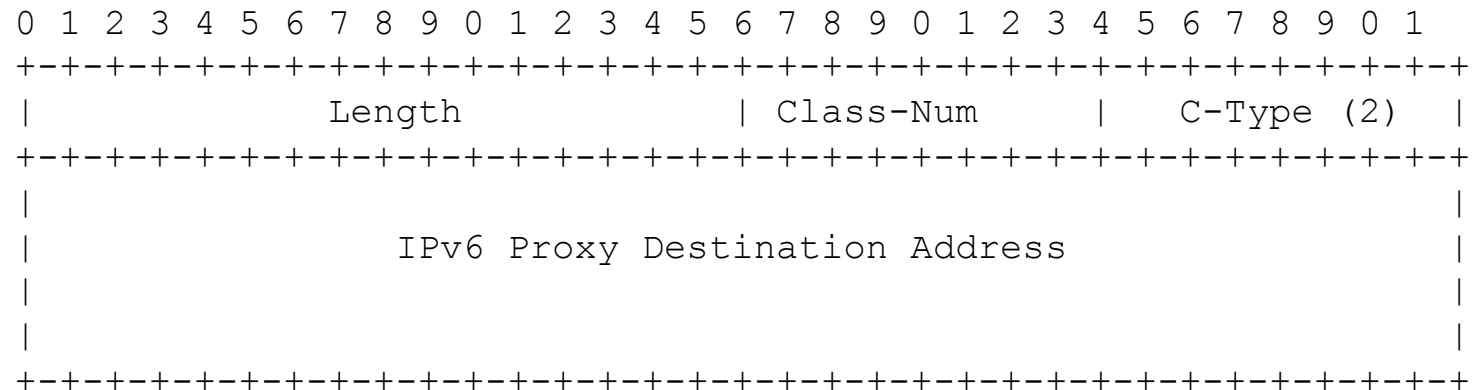
RSVP-TE Extension

- IPv4 Proxy Destination Object

Class-Num = TBD ((of form 0bbbbbb))

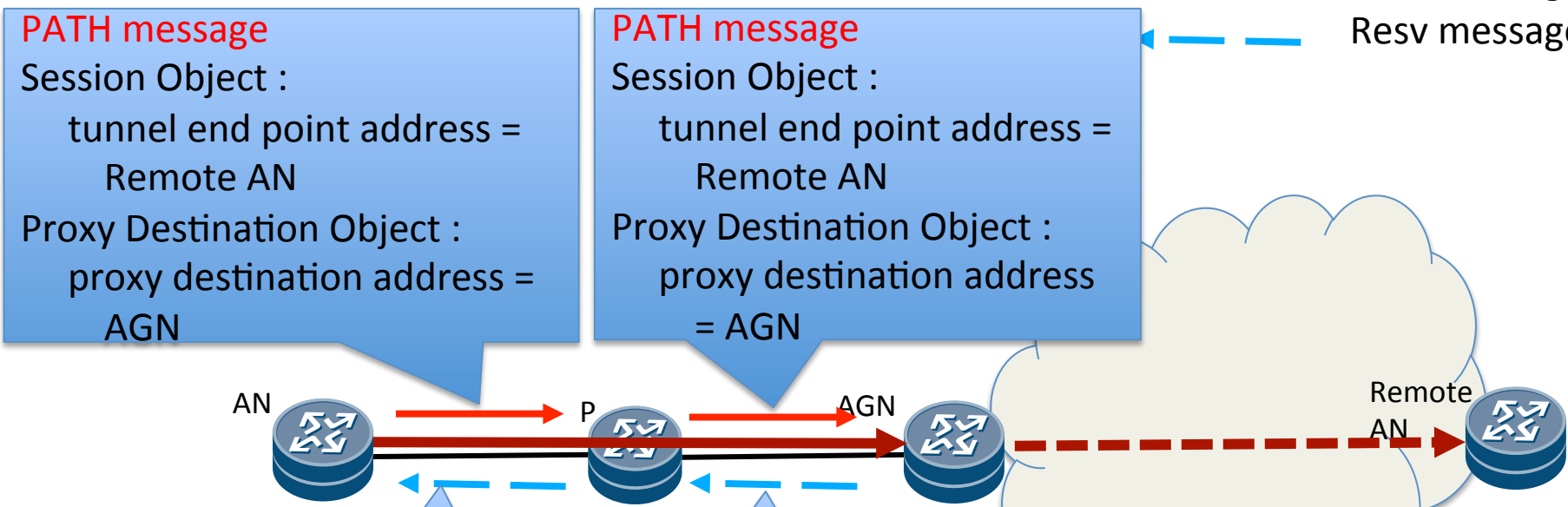


- IPv6 Proxy Destination Object



Procedures of set up proxy egress **TF | LSP**

LSP
 Path message
 Resv message



PATH message
 Session Object :
 tunnel end point address =
 Remote AN
 Proxy Destination Object :
 proxy destination address =
 AGN

PATH message
 Session Object :
 tunnel end point address =
 Remote AN
 Proxy Destination Object :
 proxy destination address
 = AGN

RESV message
 Session Object:
 Proxy Destination Object :
 same as PATH message

RESV message
 Session Object:
 Proxy Destination Object :
 same as PATH message

- Ingress: Use the proxy destination address to calculate path and the setup procedure is the same as current process.
- Egress: Identify itself as the proxy node, stitch the proxy RSVP-TE with the other LSP using tunnel end point address, return RESV message with the same proxy destination object.

Updates

- Add one section which is problem statement.
- Modify the solution section and procedure section.
- Correct text errors.

Next Steps

- Solicit more comments on mailing list.
- More scenarios will be taken into account.