Support for RSVP-TE in L3VPNs

draft-kumaki-murai-I3vpn-rsvp-te-04.txt

Kenji Kumaki KDDI Corporation

Tomoki Murai Furukawa Network Solution Corp.

Dean Cheng Huawei Technologies

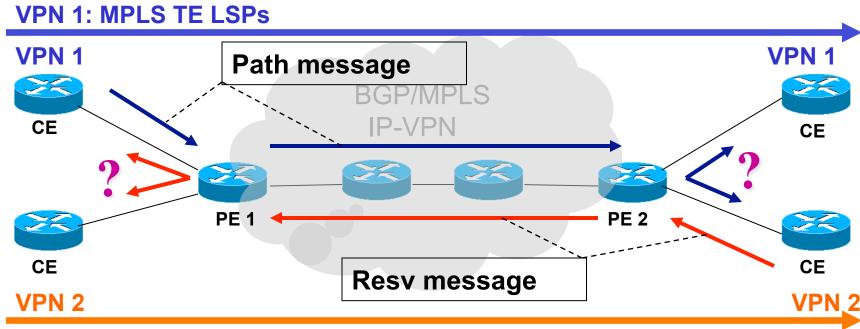
Satoru Matsushima Softbank Telecom

Peng Jiang KDDI R&D Labs

Brief Recap 1/3 (Motivation)

- Aggregation for VPNs over RSVP-TE
- Service Providers will provide customer LSPs in BGP/ MPLS VPNs.
 - Requirements for Supporting Customer Resource ReSerVation Protocol (RSVP) and RSVP Traffic Engineering (RSVP-TE) over a BGP/MPLS IP-VPN
 - RFC 5824
- It is necessary that RSVP control messages, such as Path messages and Resv messages, are appropriately handled by PE routers.
- Our goal is to establish an end-to-end MPLS TE LSP between customer sites.

Brief Recap 2/3 (Problem Statement)



VPN 2: MPLS TE LSPs

- The PE2 can't identify Path messages between the VPN1 and the VPN2 when it sends them to the same destination.
- The PE1 can't identify Resv messages between the VPN1 and the VPN2 when it sends them to the same destination.
- Need to extend from current specification (RFC 3209).

Brief Recap 3/3 (Solution)

- Define the new object types
 - LSP_TUNNEL_VPN-IPv4 / LSP_TUNNEL_VPN-IPv6 SESSION Object
 - LSP_TUNNEL_VPN-IPv4 / LSP_TUNNEL_VPN-IPv6 SENDER_TEMPLATE Object
 - LSP_TUNNEL_VPN-IPv4 / LSP_TUNNEL_VPN-IPv6 FILTER_SPEC Object
- Very simple minimal extension which is backward compatible

Related drafts

- Submit to PCE WG
 - PCEP extensions for a BGP/MPLS IP-VPN draft-kumaki-murai-pce-pcep-extension-l3vpn-08
- The PCE architecture is the most suitable to calculate MPLS TE LSPs between BGP/MPLS IP-VPN sites

Recent Updates

- Support from Huawei and Softbank
- Furukawa Implemented
- Updated text for clarity and readability
 - Cleaned up the abstract
 - Rewrote some of the introduction text to clarify application and intention of the document
 - Clarified motivation and network example
 - Various edits and nits

Next Steps

- Need more comments and feedback from WG
- Request WG to accept this I-D as a WG document
- Poll WG for interest

November 2011 82th IETF@Taipei