E-VPN Update
draft-raggarwa-sajassi-evpn-02.txt

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Updates to the draft

- ESI MPLS Label signaling changes

- Ethernet Segment Route changes

- Editorial changes

ESI MPLS Label Signaling - Background

- ESI MPLS label is required for enabling "split horizon" for active-active multi-homing

- When P2MP LSPs are used as the data plane for sending multi-destination packets received by an MES, say MES1, from a CE on a LAG:

  - MES1 must push the ESI MPLS label, corresponding to the LAG, on packets sent on the P2MP LSP

  - The ESI MPLS Label must be signaled by MES1 to all the other MESes that have members in one or more VLANs present on the LAG

    - This is required to enable the other MESes to install "appropriate" MPLS forwarding state

ESI MPLS Label Signaling - Changes

- The solution in version 1 of draft-raggarwa-sajassi-l2vpn-evpn required the use of Ethernet Segment routes to signal the ESI MPLS Label

  - The distribution of the Ethernet Segment route may be constrained to only the MESes that are multi-homed to the LAG

    - Not a good fit for signaling the ESI MPLS Label as the label may be required on other MESes as well

- The updated version introduces a new ESI MPLS Label Extended Community which is advertised in Ethernet auto-discovery routes

  - For this purpose the Ethernet A-D routes are advertised per Ethernet segment

Ethernet Segment Route

- Ethernet Segment route is no longer used to signal the ESI MPLS label

  - As described in the previous slides

- Ethernet Segment route has been removed from version 2 of the draft

- Signaling of LACP parameters requires further work

Next Steps from IETF 79

- Broad support for E-VPN work at IETF 78

- Request the WG to take on the work on E-VPN

  - If chairs believe that a charter update is required then we request that such an update be made to include E-VPN in the charter

- Would like the WG to adopt draft-sajassi-raggarwa-l2vpn-evpn-req and draft-raggarwa-sajassi-l2vpn-evpn as WG drafts as soon as the WG decides to take on the E-VPN work

- Comments?