

mLDP extensions for integrating
EVPN and multicast
draft-allan-l2vpn-mlbp-evpn-03

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What's it about?

- mLDP extensions to simplify signaling of MDTs for EVPN
- The actual extension in the form of mLDP FEC types combined with PE procedures
 - VLAN tagged FEC (base draft)
 - I-SID tagged FEC (for 802.1ah & 802.1aq)
 - Shared FEC (all flavors...)

Use Cases

- Draft focuses to two use cases
 - Service Specific Trees
 - Large set of small sites, tree leaves come and go
 - Shared trees
 - Small set of large sites
 - Member LANs will come and go, but tree is typically stable (always has at least one member LAN)
- Shared trees is the interesting case

Tree Naming

- The draft proposes two “styles” of encoding mLDP FECs
- For service specific trees
 - General form is {RT, LAN-ID} for any-to-any, and {RT, root, LAN-ID} for p2mp
- For shared trees
 - General form is {RT, <IP list>} for any-to-any trees and {RT, source IP, <receiver IP list>} for p2mp trees

PE Procedures

- For EVPN base, PBB-EVPN, and SPBM-EVPN BGP communicates sufficient information such that:
 - PEs can determine “designated forwarder” roles for LAN services, and what other PEs are DFs
 - If configured to use service specific trees, perform the necessary mLDP signalling
 - If configured to use shared trees, construct the FECs and do any necessary mLDP signalling
 - (tree may already exist)

Next Steps

- Collect comments from list
- Explore applicability to other drafts?
 - E.g. NVO3, EVPN overlay
- We are asking for WG adoption....