

draft-mackenzie-bess-evpn-l3mh-proto-
03

EVPN Multi-homing for L3 services

IETF-118

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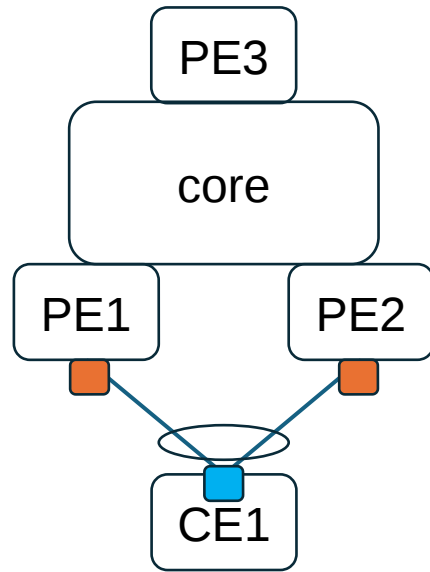
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Problem Statement



- L3 interface
- Bundle interface

- 1- Unicast load-balancing from core to CE
“ARP/ND adjacency on single PE base on CE hashing”
- 2- Multicast load-balancing from core to CE
“IGMP/MLD join/leave on single PE base on CE hashing”
- 3- IGP adjacencies over LAG port
“Adjacency formed to one PE, IGP routes on that PE only”
- 4- Multiple subnets on same ES
“Support of multiple VLAN and VRF”

Solution

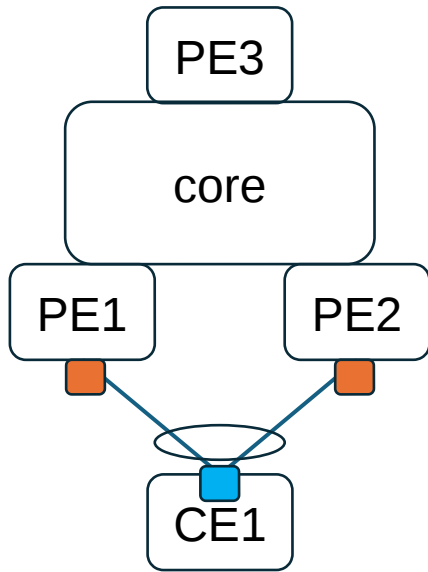


Table synchronization:

ARP/ND, IGMP/MLD, IGP tables using RT-2, RT5, RT-7 and RT-8

Where:

- L3 route targets represents IP VRF
- ESI represents L3 Interface
- Attachment circuit ID represents subnet/VLAN/sub-interface

with few more options

■ L3 interface

■ Bundle interface

Advantages

- No more dedicated ICCP channel, no more need for ICL link
- Underlay agnostic
- Fast convergence
- Leveraging existing EVPN signaling capability

Next Step

Solution is already deployed since many years.

Draft is multi-vendors

**** asking for Workgroup adoption ****