

draft-sajassi-bess-evpn-igmp-mld-proxy-00.txt

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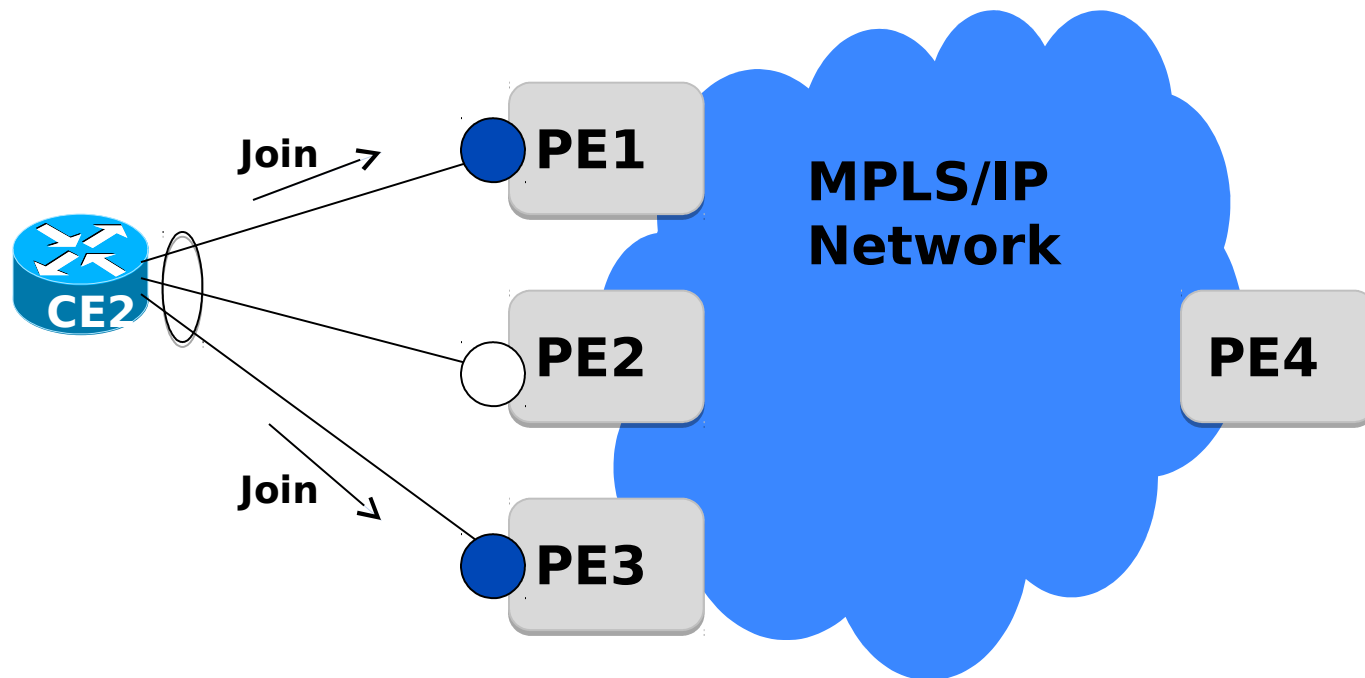
Update

- To provide the WG with an update on the multi-homing issue for IGMP/MLD proxy draft
- Multiple vendors have been working on this topic since Jan/2016
- Several proposal are in consideration
- Today, we will only discuss the issues
- Once we reach consensus, we'll present the solution – probably in the next IETF

Multi-homing Issue

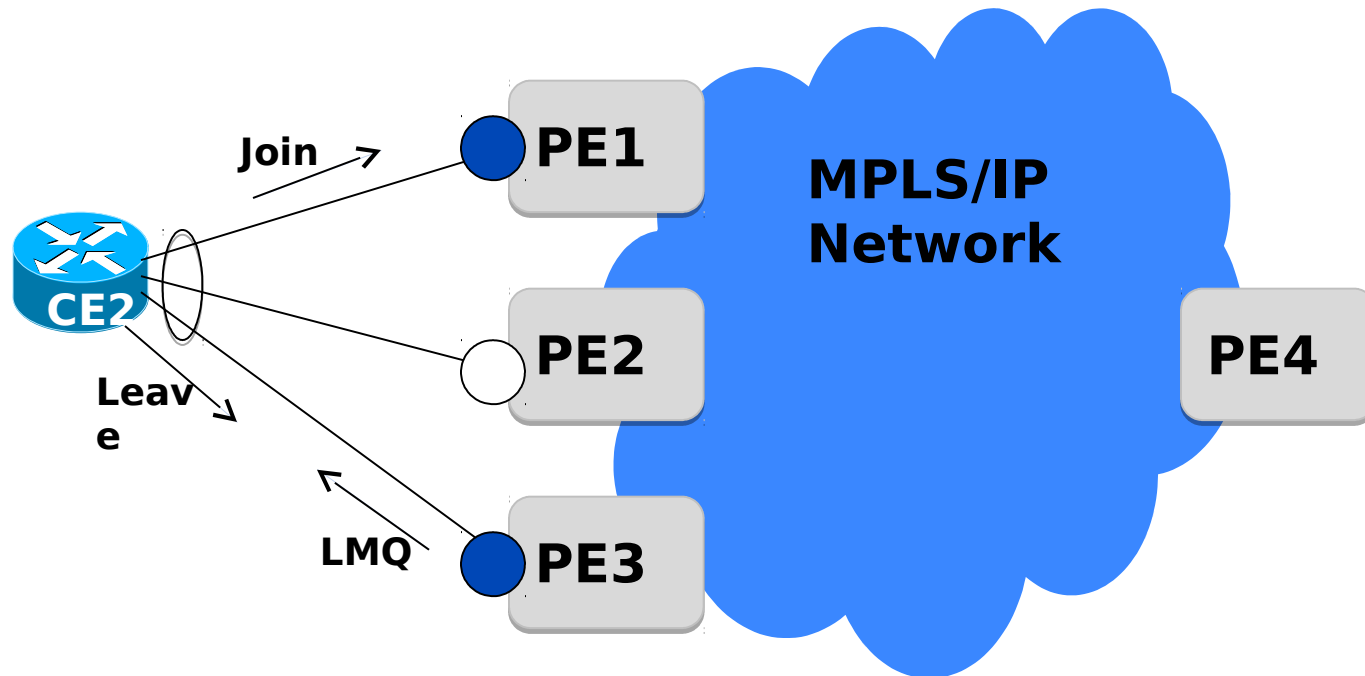
- How to handle IGMP/MLD proxy when the CE is multi-homed with All-Active redundancy
 - How to synchronize IGMP Join states among PEs in the redundancy group
 - How to synchronize “last member query” among PEs in the redundancy group

Multi-Homing Issue – Join Sync



- If PE2 is the DF for VLAN-x for which IGMP joins are received, then how does PE2 signal to other remote Pes (e.g., PE4) that it has an interest for that c-mcast group and thus should be the receiver for that traffic given that it is the DF

Multi-Homing Issue – Last Member Query



- If the last member of an c-mcast group leaves the group, then the PE that receives that “leave” message, would initiate last member query to make sure there is no more interested member for that group, before removing itself from the receiver list
- However, if PE3 sends LMQ, PE1 may receive it, how

Considerations: Sending a single copy of mcast traffic to the CE

1. DF per VLAN as baseline EVPN
2. DF per mcast group
3. Use anycast PE address for all redundancy groups sharing the same set of PEs

Considerations: How to synch up IGMP states among member PEs

1. Define new EVPN routes for IGMP join synch and IGMP “LMQ”
2. Define new attribute for Ethernet Segment route (instead of new routes)

Next Step

- More discussions and analysis !!