EVPN Multicast Forwarding for EVPN to EVPN Gateways

draft-rabnic-bess-evpn-mcast-eeg-05

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Refresher

Multicast in EVPN Service Gateways – filling an existing gap in the specs

Gap in EVPN Layer 2 Service Gateways

- RFC9251 defines IGMP/MLD proxy in an EVPN Broadcast Domain (single domain)

- RFC9014 defines the EVPN Layer 2 interconnect (Integrated model) where the Service Gateway connects two or more EVPN domains. Behavior is specified for unicast and BUM, but not IP multicast.

- The missing piece: Inter domain solution for multicast in RFC9014 Service Gateways

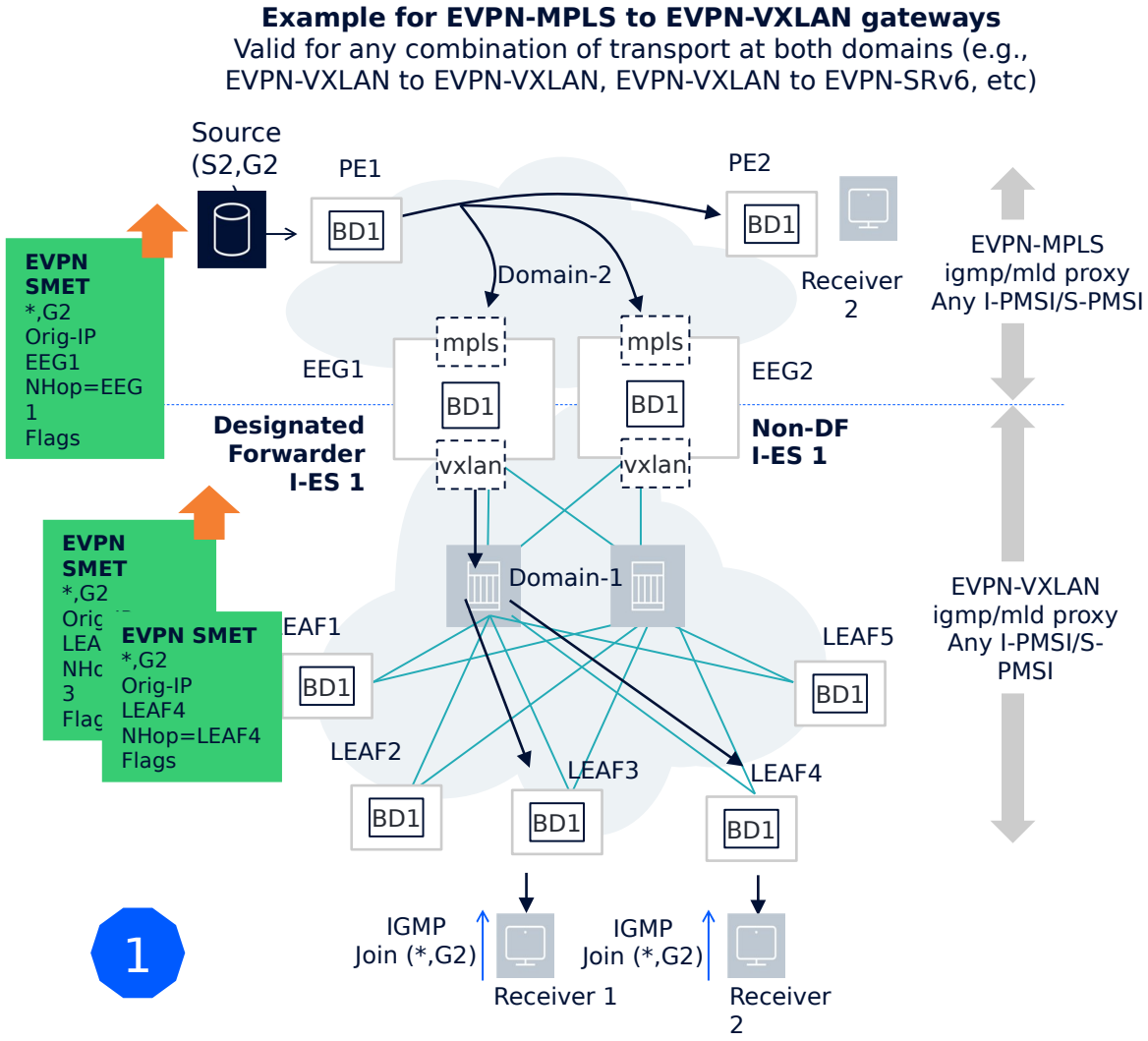
EVPN Layer 3 Service Gateways

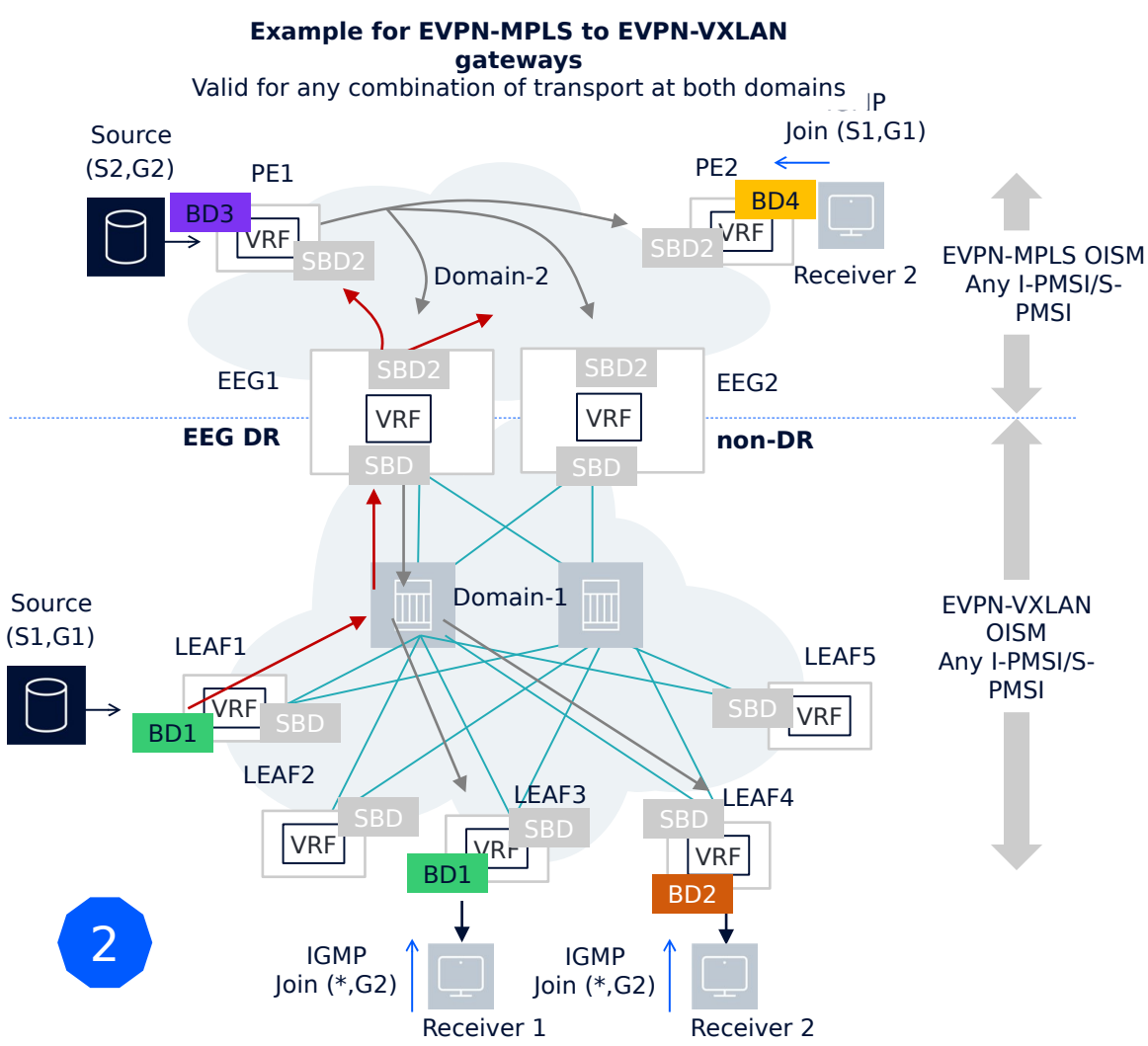
- draft-ietf-bess-evpn-ipvpn-interworking defines Service Gateway procedures to interconnect EVPN L3 domains for unicast traffic

- RFC9625 defines Service Gateway procedures to interconnect EVPN OISM domains to PIM or MVPN domains

- The missing piece: Inter domain solution for multicast in draft-ietf-bess-evpn-ipvpn-interworking EVPN to EVPN Service Gateways

EEG procedures for L2 GWs and L3 GWs





Changes since version 03

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- Version 03 presented in IETF 119
- Rev 4 and 5 clarifies the procedure for the EEG Designated Router election in the Layer-3 EVPN to EVPN Gateway section (sect 3):
  - The election MUST follow procedures of RFC9625 (OISM)
  - The candidates selection MUST be done only among EEGs attached to the same set of SBDs:
    - “If local EEG is attached to SBD1 and SBD2. Upon receiving an SBD-IMET route for SBD1 from a remote EEG1, EEG1 is considered a candidate Designated Router for SBD1 only if an SBD-IMET route for SBD2 is also received from EEG1”
  - The election produces a single winner for the SBD (SBD-DR) which is responsible for redistributing SMETs into the common set of SBDs of the same IP-VRF.
- Typos, updated references, improved readability

Next Steps

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1. Presented multiple times in IETF, last one in IETF119 (before IETF122)
2. Feedback addressed
3. Implementations exist
4. Document stable and authors request Working Group adoption call

Thank you