Domain Path (D-PATH) for Ethernet VPN (EVPN) Interconnect Networks

draft-ietf-bess-evpn-dpath-02

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Agenda

1. Changes in the last revision

2. Next-steps

Use of D-PATH In EVPN Layer 2 Interconnect Networks

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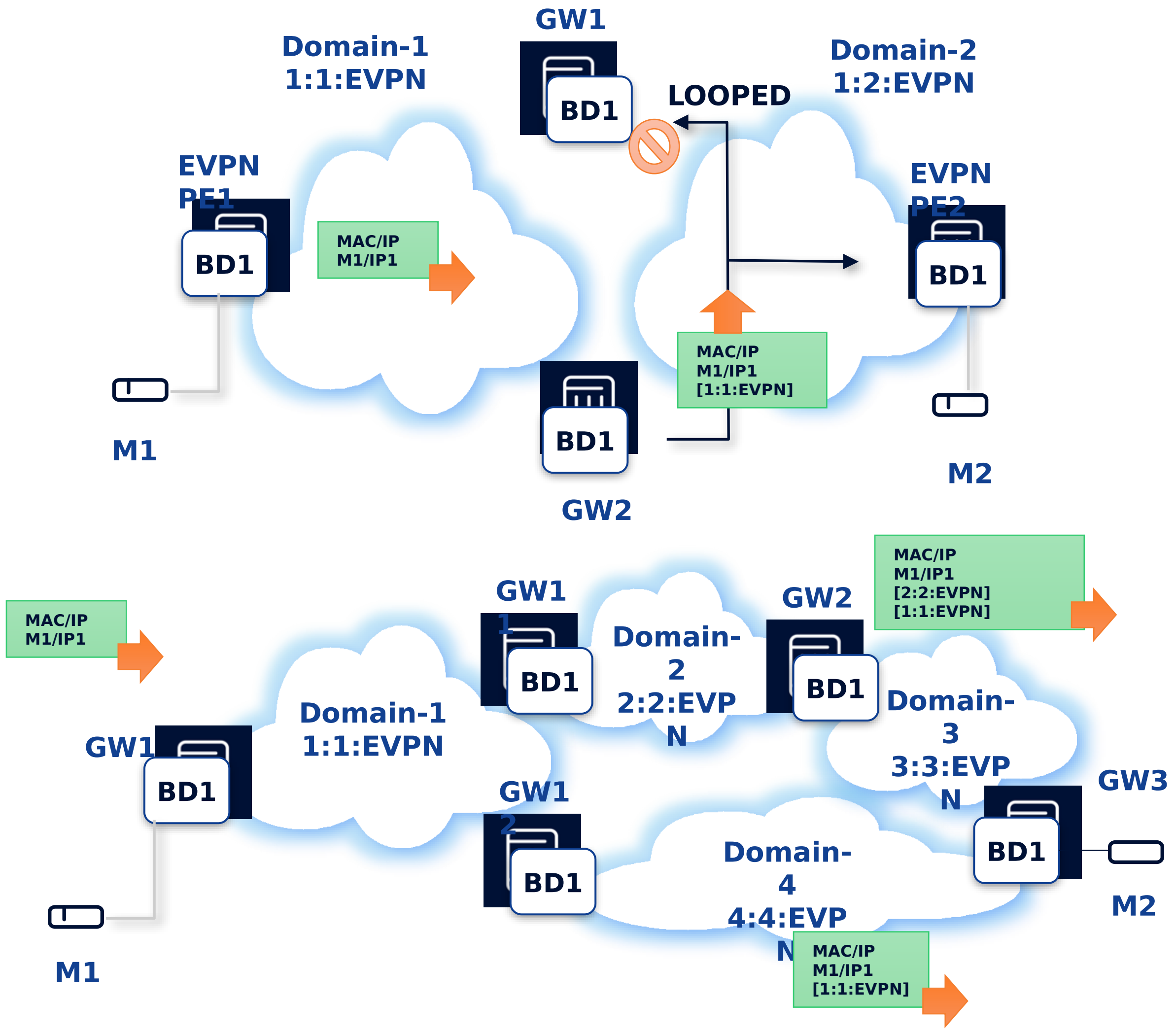

Loop Protection on the DCGWs

- GW1 and GW2 can compare the D-PATH of the incoming routes with their local list of Layer2-Domain-IDs and detect a loop if any of the local Layer2-Domain-IDs matches a domain in the received D-PATH.
- This procedure prevents the re-advertisement of the route back into Layer2-Domain-1.
- D-PATH can also be used in VPWS Service Gateways, e.g., I-D.sr-bess-evpn-vpws-gateway, for AD per EVI routes, and also for IMET routes

Traceability and best path selection

- GW3 has the visibility of the Layer2-Domains through which the route has gone, and
- GW3 can also use the D-PATH for best path selection in case GW3 receives a MAC/IP Advertisement route for M1/IP1 by some other means.

Changes in the last revision

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- Clarified that D-PATH is used to prevent control plane loops and add end-to-end traceability for EVPN route types 1, 2 and 3, and that the data plane loops created by BUM traffic some examples in the draft are addressed using other mechanisms like Interconnect Ethernet Segments (I-ES in RFC9014).

- Typos, updated references, acknowledgments section

Next Steps

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1. Presented multiple times in IETF, last one in IETF120 (before IETF122)
2. Feedback addressed
3. Multiple implementations exist
4. Document stable and ready for WG LC

Thank you