Multicast Source Redundancy in EVPN Networks

draft-ietf-bess-evpn-redundant-mcast-source-01

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Agenda

Changes in rev 01

Next Steps

The Goal – a solution for Multicast Redundancy

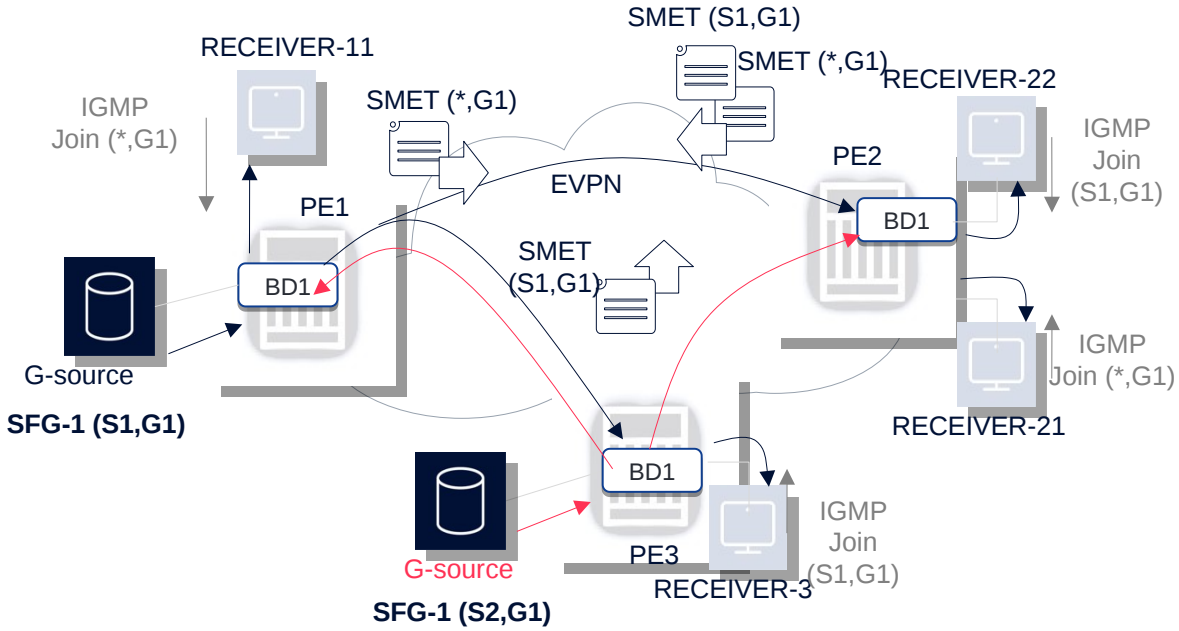
That works in any EVPN network

In any redundancy scenario for a given multicast flow:

- Multi-homed Source
- Redundant Single-Homed Sources
- Redundant Multi-Homed Sources

And any EVPN tenant domain configuration:

- Sources and Receivers in the same BD
- Sources and Receivers in different BD of the same tenant
- A mix of the two above



And avoids packet duplication on the receiver systems

Assuming that there may be multiple Redundant Sources sending the same Single Flow Group (SFG) to the network

NOTE: Single Flow Group (SFG)

A multicast group address G which represents traffic that contains only a single flow (e.g., G1)
Multiple sources may be transmitting an SFG (e.g., S1 and S2)

What’s new in revision 01

Minor edits/fixes

New section 5.1 on the Advertisement of DCB Labels

The Hot Standby solution makes use of DCB (Domain-wide Common Block) labels for identifying traffic from ESes attached to redundant sources (ESI labels for S-ES)

I-D.ietf-bess-mvpn-evpn-aggregation-label defines DCB labels but assumes they can only be used along with MP2MP/P2MP/BIER tunnels, and, if a DCB label is signaled in the PMSI attribute, the ESI label for the attached ES must also be DCB

Section 5.1 extends the use of DCB labels so that:

- They can be used along with IR (Ingress Replication) PMSI trees too
- They can be used even if the PMSI Tunnel Attribute does NOT use a DCB label

Conclusions and next steps

Authors seeking for more WG Feedback

Some more clarifications on the use of the Context Label Space ID Extended Community might be needed

Then the document will be close to be done

Thank you