

draft-sajassi-bess-evpn-mvpn-seamless-interop-04.txt

A. Sajassi (Cisco), K.
Thiruvenkatasamy (Cisco)

S. Thoria (Cisco), A. Gupta (Avi Networks),
L. Jalil (VZ)

IETF 105, July 2019

Montreal

Overview

- Presented at IETF 99
- This draft describes a unified solution for
 - Seamless interoperability of multicast traffic between EVPN and MVPN network.
 - Optimized inter subnet forwarding within EVPN fabrics
- Has very good interest in the industry
- Rev04 has addressed the major comments

Main comments on Rev03

- Proposal doesn't provide true ethernet emulation for intra subnet traffic (TTL and source MAC are not preserved)
- MVPN-EVPN gateway model is under specified.
- RP configuration needed in EVPN-PEs.

Intra subnet traffic handling

- In Rev04, a new section (Section 11) is added, which specifies procedure to retain TTL and source MAC for intra subnet traffic.
- As per procedure, TTL and source MAC are not changed in the ingress PE.
- Egress PE decrements TTL/re-writes S-MAC only for inter subnet receivers (TTL and S-MAC are retained for intra subnet receivers).

MVPN-EVPN Gateway models

- MVPN-EVPN gateway model is captured in the new draft.
- Gateway model is used in the following use cases
 - MVPN and EVPN PEs use different tunnels
 - MVPN PE are connected to subset of EVPN-PEs
- Gateway PE re-originates MVPN routes between EVPN and MVPN networks.

RP configuration

- A new section has been added to capture various RP deployments options.
- EVPN only fabric doesn't need to have explicit RP configuration.
- In RP-less mode, EVPN PE operates spt-only mode

Other minor changes

- Changes in the requirement sections
 - Clarified that optimum forwarding requires the use of same tunnel type between EVPN and MVPN PEs
 - Added new ones:
 - Solution needs to support sources and receivers external to the tenant domain.
 - RP can be placed anywhere in the network. (Inside EVPN fabric or MVPN network or external multicast network)
- Clarified L3VPN/MVPN configuration requirements
- Clarified host routes advertisement handling towards MVPN-PEs.

Next Steps

- Has been around for almost three years
- Has already been implemented.
- The solution has been deployed by many customers across multiple sectors (data centers, banking, service providers, broadcasting, etc.)
- Requesting WG call