draft-ietf-l2vpn-evpn-03.txt

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Changes from Rev02

- Some changes in terminology
  - Active/Active -> All-Active
  - Active/Standby -> Single-Active
- Added IANA allocations
- Further clarifying ESI uniqueness requirement (6.0)
- Further clarifying ES-Import RT (8.6)
- Further clarifying Split-Horizon (9.3)

Changes from Rev02 – Cont.

- Describing Backup Path (9.4)

- Added Route Resolution section (10.2.2)

- Added "MAC Duplication Issues" (16.1)

ESI Uniqueness (6.0)

- ESI uniqueness is required for

  - Auto-sensing and auto-deriving ES ID

  - Auto-discovery of member PEs of an ES

  - Aliasing

  - Backup Path

- If ESI uniqueness cannot be guaranteed from MHD or MHD protocols (e.g., LACP or MSTP), then it needs to be configured

ES-Import RT (8.6)

- Added text to describe ES Import Extended Community is of type RT

- And thus a BGP speaker that implements RT-Constrain using RFC 4684, MUST apply RT-Constrain procedures to this RT.

Split-Horizon (9.3)

- Added a paragraph to further explain ESI label usage for split-horizon mechanism

  - This label is only needed for All-Active mode of operation

  - Furthermore, even with All-Active mode of operation, only non-DF PE MUST append this label for their BUM traffic – e.g., DF PE need not to send it.

Backup Path (9.4)

- Added a paragraph on the operation of Backup Path

  - It is used for Single-Active mode for DHN (not MHN)

  - PEs in an ES advertise Ether AD route with Active/standby flag set to 1 in the ext. comm.

  - PEs in an ES also advertise Ether AD route per EVI for the same ESI

  - Upon failure of the primary PE, remote PEs can switch to backup PE

Route Resolution section (10.2.2)

- If MAC route is for PBB-EVPN, then don't wait for receiving Ether AD route (to do aliasing)

- If MAC route is for a local ESI, then don't alter forwarding state based on the received route

- If MAC route is for a remote ESI, then only install forwarding state when both MAC route and Ether AD route (for that ESI) is received

"MAC Duplication Issues" (16.1)

- In case of mis-configuration where same host MAC address is configured on two different hosts, it is important to catch this scenario and avoid incrementing MAC mobility sequence no to infinity

- A PE that detects MAC mobility event by way of local learning, starts a timer and if it receives N MAC moves within this time period, its must alert the operator and stop processing and sending MAC advertisement route for that MAC address

Additional Changes for Rev04

- More terminology

  - EVPN instance as routing/forwarding table versus as VPN instance – need to define separate acronyms

- Prefix length in MAC route (bits versus bytes)

Next Step

- Incorporate comments from IDR for BGP section

- Publish Rev04

- Initiate WG last call for Rev04