

# **draft-ram-l2vpn-ldp-vpls- etree-2pw-00**

IETF 80

Mar 2011

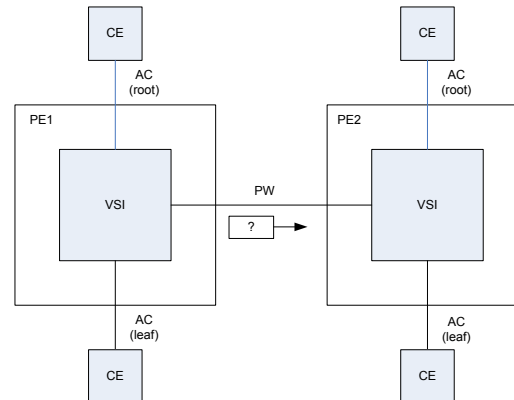
Rafi Ram ([rafir@orckit.com](mailto:rafir@orckit.com))

Daniel Cohn ([danielc@orckit.com](mailto:danielc@orckit.com))

Raymond Key ([raymond.key@team.telstra.com](mailto:raymond.key@team.telstra.com))

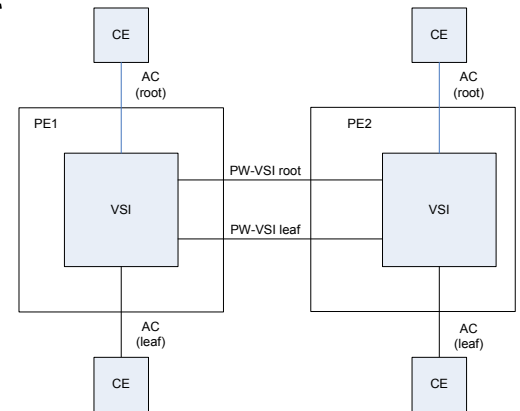
# Problem Statement

- E-Tree Requirements (draft-key-l2vpn-vpls-etree-reqt) include leaf-to-leaf communication restriction
- To enforce this restriction, PE must know the UNI type (root or leaf) of the AC in which each incoming frame is received
- No mechanism is currently defined to provide this information



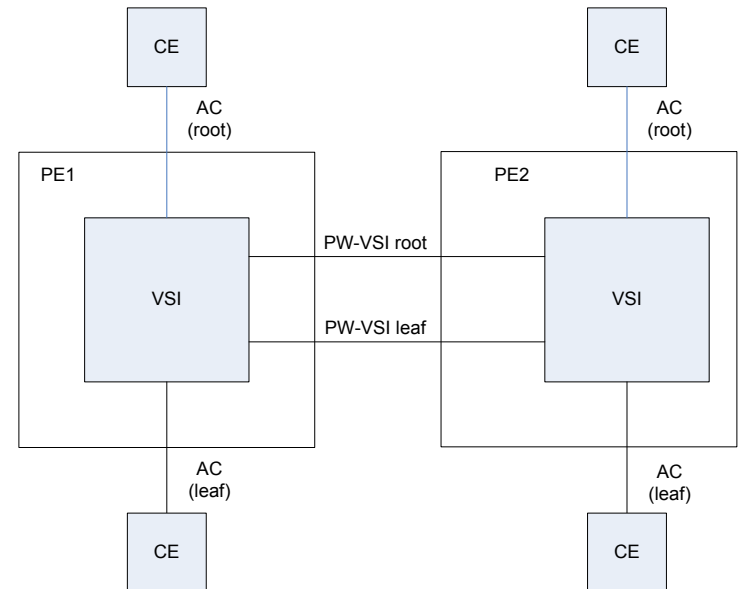
# Proposed Solution (1)

- Use a pair of PWs to interconnect core PE pairs
  - Root PW, with PW type = VSI Root
  - Leaf PW, with PW type = VSI Leaf
- Each PW pair uses same:
  - PW ID, for FEC 128
  - AGI, for FEC 129 (will be added in -01)
- PW pair treated as single VSI interface for MAC learning purposes



# Proposed Solution (2)

- Frames received in root AC are forwarded on root PW
- Frames received in leaf AC are forwarded on leaf PW
- Frame originating in leaf AC (i.e. received in leaf AC or leaf PW) are not delivered on leaf ACs
- For backward compatibility, frames received in Ethernet PW are treated as originating in root AC



# Benefits

- No additional requirements or assumptions imposed on UNI
- No additional signaling required other than PW type

# Next Steps

- Incorporate input into -01 draft
  - Add FEC 129 support
  - Consider using existing Ethernet PW types instead of VSI root
  - Consider adding support for BGP-VPLS
  - Additional input from WGs

Děkuji (Thank You)

Questions ? Comments ?