# MVPN UMH Selection Procedures using Source-Active A-D Routes

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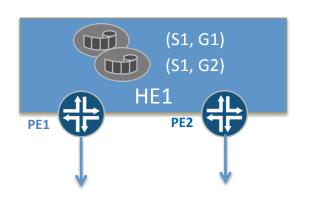
## Background

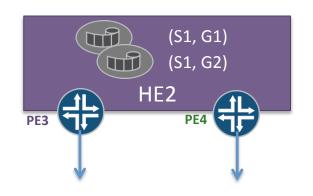
- Current UMH selection procedures use the Source address to determine the UMH.
- Currently Defined in RFC 6513
- May wish to use more than the source address if multiple Headends are sourcing the same content
  - Not currently possible to select one Group from one Headend and another Group from a different Headend when using an Anycast Source address

### New procedures

- Have the ingress PEs learn of the sources
  - RP or MSDP
- Ingress PEs advertise Source-Active A-D routes, as normal
- Ingress PEs can be configured to apply some policy to these Source-Active A-D routes
  - Say, some BGP community added to the Source-Active Routes
- Egress PEs then selects the "best" Source-Active route.
  - Using normal BGP route selection methods
  - The originator of this route is its umh for the S,G.

#### Source Active Routes for UMH





5:**PE1**:32:**S1**:32:**G1** 5:**PE2**:32:**S1**:32:**G1** 

5:**PE3**:32:**S1**:32:**G1** 5:**PE4**:32:**S1**:32:**G1** 

5:**PE1**:32:**S1**:32:**G2** 5:**PE2**:32:**S1**:32:**G2** 

5:**PE3**:32:**S1**:32:**G2** 5:**PE4**:32:**S1**:32:**G2** 



#### Next steps

- We plan on adding additional procedures around using different source addresses for the same content
  - S1 and S2 treated as same flow
  - Join the traffic for the best Source.
- Interested in any feedback