IGMP & MLD Snooping
YANG Model extension for L2VPN

draft-zhao-pim-igmp-mld-snooping-yang-l2vpn-ext-00

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Status

• version 00

  – First version for presentation.
  – Effort from multicast yang design team
    Ericsson/IBM/Juniper/China Mobile
Relationship with RFC 9166

- RFC 9166 defines a yang data model for configuring IGMP & MLD Snooping.
- It only covers IGMP & MLD Snooping in bridge service.
• RFC9166 was draft-ietf-pim-igmp-mld-snooping-yang, and once included l2vpn part for igmp snooping. It entered into RFC Ed queue in August, 2020.
• But it was blocked in MISSREF state more than a year because of normative reference to draft-ietf-bess-l2vpn-yang.
• So a WGLC in PIM WG for removing l2vpn part was held in September, 2021 and passed.
• Not long afterward draft-ietf-pim-igmp-mld-snooping-yang was published as RFC9166.
• IGMP & MLD Snooping could be used in L2VPN service, so it is still needed to be covered in yang data model.
Mrouter interface for L2VPN

- There are 2 types of mrouter interfaces in L2VPN. They could be called AC mrouter interface and PW mrouter interface.
Outgoing interface for L2VPN

- Manually configured outgoing interface
Outgoing interface for L2VPN

- Dynamically learned outgoing interface

```plaintext
  +--ro 12vpn-outgoing-ac* if:interface-ref
  +--ro 12vpn-outgoing-pw* pw:pseudowire-ref
  +--ro 12vpn-outgoing-ac* if:interface-ref
  +--ro 12vpn-outgoing-pw* pw:pseudowire-ref
```
Using snooping instance in L2VPN

• The igmp-snooping-instance and mld-snooping-instance could be referenced in L2VPN service.

```
augment /ni:network-instances/ni:network-instance/ni:ni-type/l2vpn:l2vpn:
  +--rw igmp-snooping-instance?  ims:igmp-mld-snooping-instance-ref
  +--rw mld-snooping-instance?  ims:igmp-mld-snooping-instance-ref
```
Next Step

• Apply for WG adoption
• Need more comments