

PIM Snooping Update

draft-ietf-l2vpn-vpls-pim-snooping-04

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Main Changes

- Added PIM Relay Mode
 - In-between PIM Snooping and PIM Proxy
- Re-arranged & Re-worded some sections & paragraphs
 - For better organization and readability
 - Addressed some comments from Giles

IGMP Snooping/Proxy

- IGMP Snooping
 - Joins/leaves are snooped for membership information
 - Join/leave messages sent as is to router ports only
 - Not flooded
- IGMP Proxy
 - Received Joins /leaves are consumed
 - New joins/leaves generated based on learned aggregated membership information and sent to router ports only
- In both cases, join/leave messages sent to router ports only
 - To avoid join suppression

PIM Snooping/Proxy

- PIM Snooping
 - PIM join/prune messages are snooped and flooded everywhere
 - Join suppression must be disabled on CE routers
 - Different from IGMP Snooping
- PIM Proxy
 - PIM join/prune messages are consumed
 - New PIM join/prune messages generated based on learned aggregated join states, and sent only to upstream ports
 - Will not trigger join suppression on CE routers
 - Similar to IGMP Proxy

PIM Relay

- Similar to IGMP Snooping
 - PIM join/leave messages are snooped
 - Sent as is to upstream ports only – not flooded
 - Will not trigger Join Suppression on CE routers
 - No need to disable Join Suppression on CE routers
- An implementation option
 - No upstream FSM
 - Reduces flooding (compare to snooping) while allowing upstream to track all downstream joins (compare to proxy)
- Better naming?

Status & Plan

- Making slow progress
- Plan to request WGLC by November meeting
- Please review & comment
 - Will be requested in PIM WG as well
 - Giles reviewed & commented on revision-03
 - Some comments addressed in -04