PIM over Reliable Transport

draft-ietf-pim-port-00.txt

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Agenda

- Problem & Solution Statement
- Document & Working Group Status
- Acknowledgments

Problem Statement

- Periodic sending of JP messages
 - Could take more CPU than desirable
 - Could use more bandwidth than desirable
- More profound when there is a PIM instance per VPN
- Other periodic messages not as critical
 - Hello messages can be backed off

Solution Statement

- Make simple and isolated changes to PIMv2
 - No need to rev the protocol version
- Make optional on a per logical or physical interface basis
- Use existing transport layers
 - So we don't have to reinvent congestion control, in order delivery, and retransmission logic
 - TCP and SCTP
- Only for JP messages
- Avoid the complexities of mix-mode LANs

Document Status

- Last IETF presented first time:
 - draft-farinacci-pim-port-00
- Since last IETF
 - draft-farinacci-pim-port-02

-00 to -02 Diffs

- Add join latency reduction comments to intro section (Daniel)
- Added definition for "Segmented Multi-Access LAN" (Lenny)
- Add Interface-ID to JP message format (Lenny & Yiqun)
- Clarify use of well-known port number from passiveopen side (Yiqun)

Stig Comments on -02

- What if both TCP and SCTP options used
 - Which transport should you choose?
 - Possible solution, choose overlap, when there isn't one use datagram mode
- Transitional periods, what if one side is established and the other is not
 - Will datagram JPs be sent which are ignored by established side?
 - Possible solution, sending side doesn't queue or send datagram
 JPs, use periodic timer for next time
 - If established, send transport JP
 - If pending, wait again
 - If connection attempt time-out, send datagram JP

Working Group Status

- Working group document
 - draft-ietf-pim-port-00
- draft-farinacci-pim-port-02 == draft-ietf-pim-port-00
- Not published yet
 - Waiting for TCP/SCTP port number from IANA

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