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 passive-open 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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