IESG LC

draft-ietf-bfd-multipoint
draft-ietf-bfd-multipoint-active-tails

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The beginning

- Reviews by Reshad Rahman (doc shepherd)
- Reviews by Martin Vigoureux (AD)

Wouldn't be here without them; wouldn't reached this point in preparing the documents; wouldn't have documents in good technical and editorial states without them.

TSVART comments

Bob Briscoe have reviewed the mpBFD draft and provided comments:

- Add use case for mpBFD in the Introduction.

  Referenced draft-ietf-bess-mvpn-fast-failover; decided not to mention two individual drafts on use of mpBFD in VRRP and POM-SM

- Concerned by Term "connectivity" in this document is not being used in the context of connectivity verification in transport network but as an alternative to "continuity", i.e. existence of a forwarding path between the sender and the receiver."

  Responded, that interchangeable use of these terms may indeed be confusing, more discipline with the use of correct terminology may require open discussion but that is nothing that is unique or introduced in this document. Not resolved so far.

- Questioned why it is not an issue for the head to be unaware whether it needs to adapt its transmit interval.

  The following text was added in Timer Manipulation section:

  Because the Poll Sequence is not used, the tail cannot negotiate down MultpointHead's transmit interval. If the value of Desired Min TX Interval in the BFD Control packet received by MultipointTail is too high (that determination may change in time based on the current environment) it must be handled by the implementation and may be controlled by local policy, e.g., close the MultipointTail session.

- Inability to authenticate the sender with symmetric keys.

  Merged Assumptions section into Security Considerations and added the following text:

  Otherwise, asymmetric message authentication would be needed, e.g., protocols that use Timed Efficient Stream Loss- Tolerant Authentication (TESLA) as described in [RFC4082].

TSVART comments (cont.)

- Source address spoofing. Bob noted that "A 3-way handshake makes a protocol robust against simple source address spoofing. Without a 3WHS, surely the spec. needs to highlight this vulnerability or discuss ways to address it or why it is not an issue."

  Jeff had pointed that mpBFD does not introduce new vulnerability or create new attack vector to multicast networks. Not resolved.

- Scope of the specification.

  Addressed with several editorial updates.

- Incremental deployment or question about the scope of bfd.SessionType variable. Bob suggests explicitly state that implementations that do not support mpBFD specification are not required to use PointToPoint value of bfd.SessionType.

  bfd.SessionType introduced in RFC 7880 with scope for S-BFD only. mpBFD specification changes the scope of bfd.SessionType variable. It is obvious, in my view, that implementations that do not support mpBFD specification are neither expected, nor required to use PointToPoint value. Not resolved.

Mirja Kühlewind DISCUSS

- Pointed to RFC 5880 Operational Considerations section that requires BFD to reduce the rate of the BFD Control packets in response to congestion detection. As mpBFD cannot use values of Min RX Interval and Min TX Interval fields, Mirja requested to limit transmission rate in multihop use cases to one BFD control packet per second.

  The discussion continues.

- Recommended explicitly call out limit of mpBFD sessions at the head.

  The following text was added to the Security Considerations section:

  The implementation should have a reasonable upper bound on the number of MultipointHead sessions that can be created, with the upper bound potentially being computed based on the load these would generate.

Benjamin Kaduk: DISCUSS

- Pointed to the text from Section 6.8.7 RFC 5880 missing in the corresponding section 5.13.3 of the mpBFD specification
    Added the missing text
- Several editorial comments and nits
    Addressed in the working version of the mpBFD specification

Ben Campbell: DISCUSS

- Concerned by the relationship between mpBFD and mpBFD with active tails specifications. The latter updates the former. Ben's question Why not to merge the two?

   Shared the history and seems the issue is settled.

Reviews with questions and comments

- Good reviews with editorial comments came from:
  - Michael Richardson (mpBFD)
  - Stig Venaas (RtgDir on mpBFD with active tails)
  - Francis Dupont (GenArt on mpBFD)
  - Linda Dunbar (GenArt on mpBFD active tails)
  - Ben Campbell (mpBFD)
  - Alexey Melnikov (mpBFD)
  - Adam Roach (mpBFD and mpBFD with active tails)
  - Mirja Kühlewind (mpBFD with active tails)
  - Eric Rescola (mpBFD and mpBFD with active tails)
  - Warren Kumari (mpBFD)
  - Alvaro Retana (mpBFD)

  We believe that all comments have been addressed in the working versions of two documents