BFD Padding Alteration

draft-xiao-bfd-padding-alteration-00

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Intention of this draft

• Proposes the procedures to alter BFD padding
  – It’s a supportive document to draft-ietf-bfd-large-packets
  – It attempts to resolve an issue documented in draft-ietf-bfd-large-packets
  – It extends the Poll/Sequence mechanism defined in RFC 5880, to support “soft-switch” of BFD padding
One issue documented in draft-ietf-bfd-large-packets

• When an implementation is incapable of processing Large BFD Packets, it could manifest in one of two possible ways:
  – A receiving BFD implementation is incapable of accepting Large BFD Packets. This is identical to the packet being discarded.
  – A receiving BFD implementation is capable of accepting Large BFD Packets, but the Control packet is improperly rejected during validation procedures. This is identical to the packet being discarded.
Turn on BFD Padding at one side

- If the Padding Poll Sequence succeeds, the BFD session switch to be running with large packets in one direction
- If the Padding Poll Sequence fails, the BFD session remains running with small packets and an error would be reported
Turn on BFD Padding at both sides

- If the Padding Poll Sequence fails at any side or both sides, the BFD session remains running and error reported
Other Scenarios when BFD Padding Alters

• Increase BFD Padding
  – Padding Poll Sequence would be used with larger padding poll packet

• Decrease BFD Padding
  – Poll Sequence defined in RFC 5880 would be used, with poll packet as a scheduled periodic, but new-size BFD packet

• Turn off BFD Padding
  – Poll Sequence defined in RFC 5880 would be used with poll packet as a scheduled periodic, but small BFD packet
Next steps

• Ask for more reviews and comments
• Revise this draft to resolve comments
• Ask for WG adoption