Simple Two-Way Active Measurement Protocol (STAMP) Extensions for Bit Error Rate Measurement

draft-gandhi-ippm-stamp-ber-02

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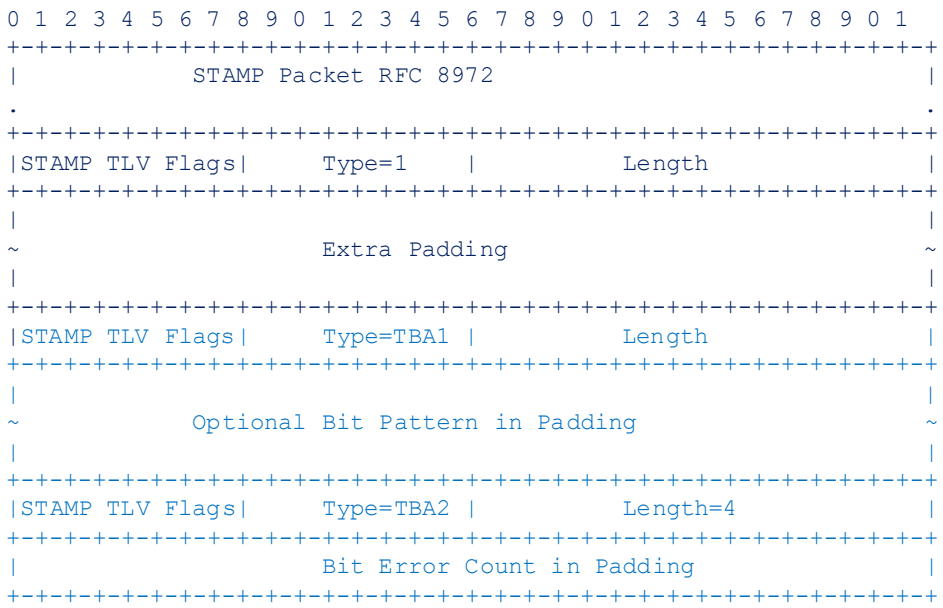
BER Measurement in Extra Padding TLV Using Pattern Matching

1. STAMP is used for BER measurement, in addition to latency and loss measurement
2. BER measured in STAMP “Extra Padding” TLV (Type=1) defined in [RFC8972]
   a. STAMP base packet (44 bytes), headers and other STAMP TLVs are not used for BER measurement
3. Sender fills data in extra padding with repeated bit pattern
4. Reflector checks the extra padding for bit errors by matching with the expected bit pattern that is signaled or locally configured
   a. Returns the bit error count back to the sender in a new STAMP TLV
   b. Clears the bit errors in the extra padding using pattern matching and reflects the TLV to measure BER in the reverse direction



- STAMP Extensions: Define two new STAMP TLVs.
  1. TBA1: Bit Pattern in Padding TLV
  2. TBA2: Bit Error Count in Padding TLV
- Using Conformant flag defined in draft-ietf-ippm-asymmetric-pkts

Next Steps

- Thank you, Will Hawkins, for your great work on the Teaparty open-source implementation of this draft
- Thanks to William, Ruediger, Greg, Zhenqiang for review comments
- Welcome your review comments and suggestions
- Requesting WG adoption

Thank you!