Enhanced Alternate Marking Method

draft-zhou-ippm-enhancedalternate-marking-11

Online, Nov 2022, IETF 115
How To Augment Alternate-Marking

- Alternate Marking (RFC8321bis, RFC8889bis) is an hybrid PM method.
  - It can be used to measure packet loss, latency, and jitter on live traffic.
  - RFC8321bis requires one or two bits to mark consecutive batches of packets.
  - RFC8889bis allows a flexible performance management approach

- However, there are some pending points to explore:
  - In some protocols, no additional bit can be used.
  - Deployment experience requirements (e.g. entropy of the pseudo-random FlowMonID).
  - Implementation of the whole framework, included multipoint measurements.

This draft aims to consider all these aspects and generalize the AltMark Data Fields for all the transport protocols:

- The extended data fields can be used for several applications:
  1. **shortest marking periods** of single marking method for thicker packet loss measurements.
  2. **more dense delay measurements** than double marking method (down to each packet).
  3. **increase the entropy of flow monitoring identifier** by extending the size of FlowMonID.
  4. **automatically set up the backward direction** flow monitoring.
  5. (further extensions to explore)
Thank You

Comments are welcome!