Postcard-based On-Path Flow Data Telemetry

(draft-song-ippm-postcard-based-telemetry-04)

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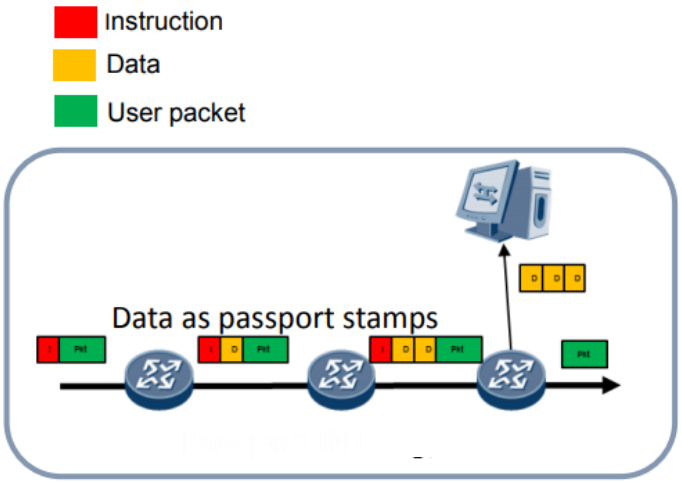
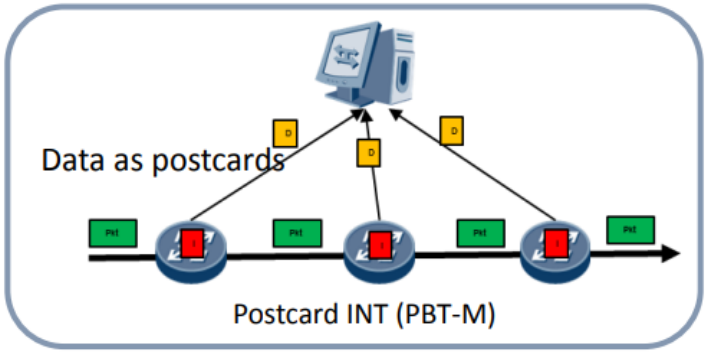
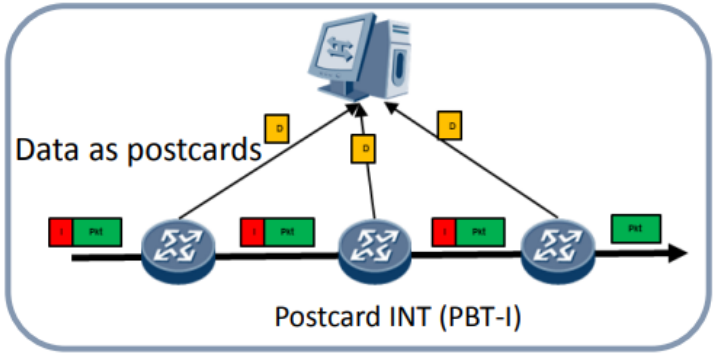
Passport and Postcard



- Tradeoffs
  - Performance Impact
  - Encapsulation and Overhead
  - Security
  - Configuration and correlation
  - Drop location identification
- Postcard-based telemetry solutions and implementation considerations



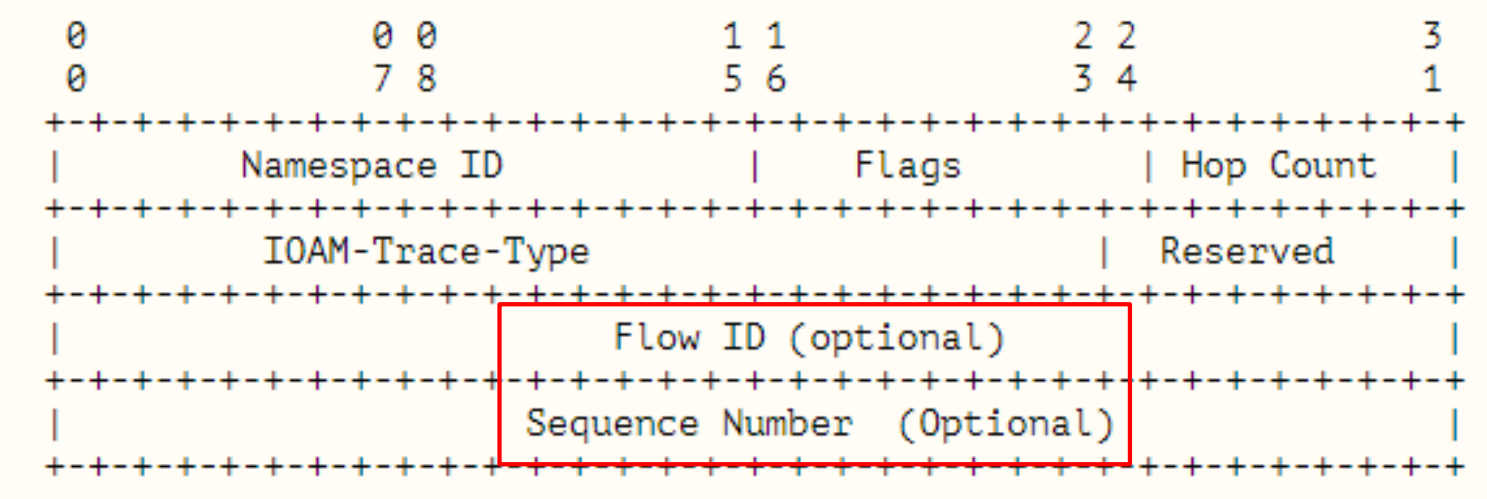
Applied and implemented in [draft-zhou-ippm-enhanced-alternate-marking]



IOAM is discussing on how to apply

PBT-I As An IOAM Option

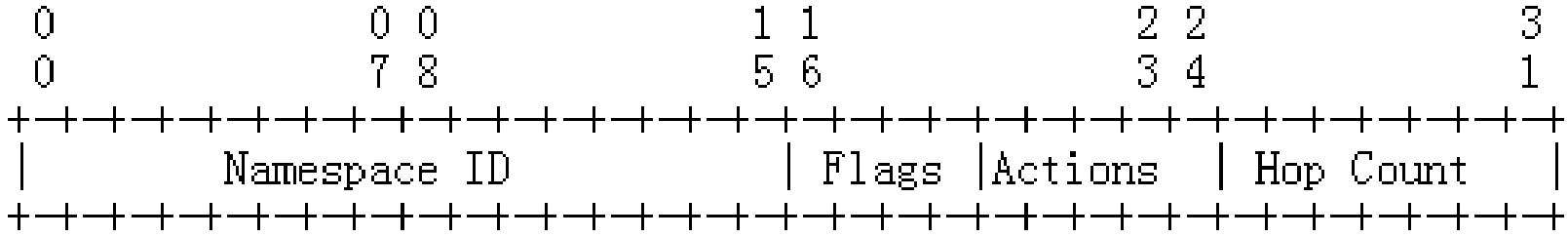
- Agreed in the side meeting and mailing list that define PBT-I as an IOAM option is a workable path forward.
- Closed the discussion on flow id and sequence number
- Agreed on the following option header as the starting point.
- Hackathon implemented this option in physical devices, and showed the analytics based on the postcard data.



Per-Hop Postcard (PHP) header

Discuss Actions

- Actions to indicate how to use the data.
- Propose to allocate 5 bits from the flags for actions.



- Proposed actions:
  - Bit 0: Queue depth exceed watermark for ECN. (IFA)
  - Bit 1: Queue depth exceed watermark for PFC. (IFA)
  - Bit 2: Resident delay breach. (IFA)
  - Bit 3: log (Ron)
- Send telemetry(packet), send ICMP should be data types.

Next

- Spin out the new IOAM option as a dedicated draft.
- Well discussed
- WG adoption

Thanks