In-situ OAM (IOAM) Data Fields

draft-ietf-ippm-ioam-data-02

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Updates between -01 and -02 version

- New section on timestamp formats in IOAM (section 5)
- Introduction of “IOAM Type” (section 7.2)
- Editorial
IOAM Type inspired by the need for a consistent approach to encapsulating IOAM data in protocols

- Allows to only use a single “next protocol” code point for IOAM from protocols that IOAM is encapsulated in
  - Required for some protocols (e.g. GRE)

- Consistent structure for all IOAM data with Type/Sub-Type
  - Currently 4 IOAM Types:
    - IOAM pre-allocated trace, IOAM incremental trace, IOAM POT, IOAM E2E
  - Each type has its own set of sub-types
    - -01 only had sub-types for pre-allocated and incremental trace,
      -02 enables sub-types for all Types, thus making the definition consistent and future proof
Two generic fields for timestamps coarse granularity and fine granularity

Three possible interpretations:
- PTP, NTP, POSIX
- Management plane determines which format is used
- Consistent definition of timestamp format for trace options and E2E option
Editorial Updates

• Octets-left became RemainingLen: Avoid potential confusion with definitions in encapsulating protocols

• Clean up of reference section: No more references to unmaintained documents

• Language clean up (Thanks to Mickey Spiegel)
Next Steps

• Please continue commenting. Targetting a stable doc (e.g., WGLC) by IETF102

• Sections which still require additional work
  • Security section – needs completion
  • Manageability section – needs completion
  • IOAM data export section – reference new draft-spiegel-ippm-ioam-
    rawexport-00.txt