In-situ OAM (IOAM) in NSH

draft-brockners-sfc-ioam-nsh-01

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Key Updates from -00 to -01

• Use only a single “next protocol” code point for IOAM
  • Enabled by draft-ietf-ippm-ioam-data-02:
    IOAM-Type defines the IOAM Option type
    (incremental-trace, preallocated-trace, E2E, POT)
  • Allows for consistent encapsulation approach across many protocols

• Discussion of O-bit
  • IOAM does not alter use of the O-bit: Packets with IOAM data might be
    OAM packets or user traffic. As such, packets with IOAM data might have
    the O-bit set or not.
IOAM data encapsulated in NSH
(draft-brockners-sfc-ioam-nsh-01)

IOAM Shim for NSH

NSH Header

IOAM-Type: 8-bit field defining the IOAM Option type, as defined in Section 7.2 of [I-D.ietf-ippm-ioam-data].

IOAM HDR Len: 8 bit Length field contains the length of the IOAM header in 4-octet units.

Reserved bits: Reserved bits are present for future use. The reserved bits MUST be set to 0x0 upon transmission and ignored upon receipt.

Next Protocol: 8-bit unsigned integer that determines the type of header following IOAM protocol.
Status/Next steps

- IOAM for NSH has been discussed in SFC several times. FD.io/VPP provides an open source implementation

- Can we adopt the draft in SFC?