

IOAM-DEX in MPLS Networks

Using MNA

draft-mb-mpls-ioam-dex

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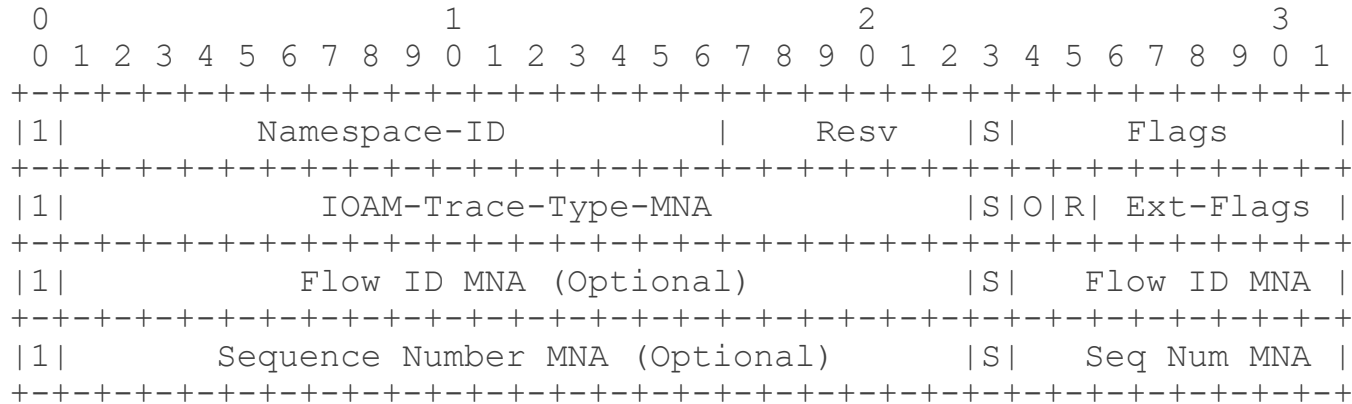
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Update

- Thank you, Loa, for the Early RtgDir review
- IOAM-DEX in MNA uses LSE Format D
- Extension of IOAM-Trace-Type is left for further study in IOAM (RFC 9197).
Removed Extended IOAM-Trace-Type-MNA field
- IOAM-Trace-Type field is realized in IOAM-DEX in MNA as follows:
 - The concatenation of IOAM-Trace-Type-MNA, O, and R fields, explained above, is identical to IOAM-Trace-Type in the interpretation of its bits, assigned in IANA's IOAM Trace-Type registry
- Clarified use of optional fields, i.e., Flow ID MNA and Sequence Number MNA.

IOAM-DEX in MPLS Network Actions

IOAM-DEX in MNA:



To address the AD mutability concern:

- Extended optional Flow ID MNA field
- Extended optional Sequence Number MNA field

According to RFC 9326, Flow ID MUST be unique within the IOAM domain. As the consequence, the nodal allocation is unsafe as it may result in collision. Centralized assignment of Flow ID values MAY be used.

In networks that use label stack to produce entropy information used in ECMP environment for load-balancing, the encapsulating IOAM node MUST use only 11 MSBs of the Sequence Number MNA field. 2K space seems sufficient for correlation of nodal telemetry information at the Collector. If that is the case, should we make it the common, the only case?

Conclusions & Next Steps

- Welcome comments, questions, and cooperation
- Ready WG AP

Thank you!