

An In Situ Operations, Administration, and Maintenance (IOAM)

Multi-path Flag

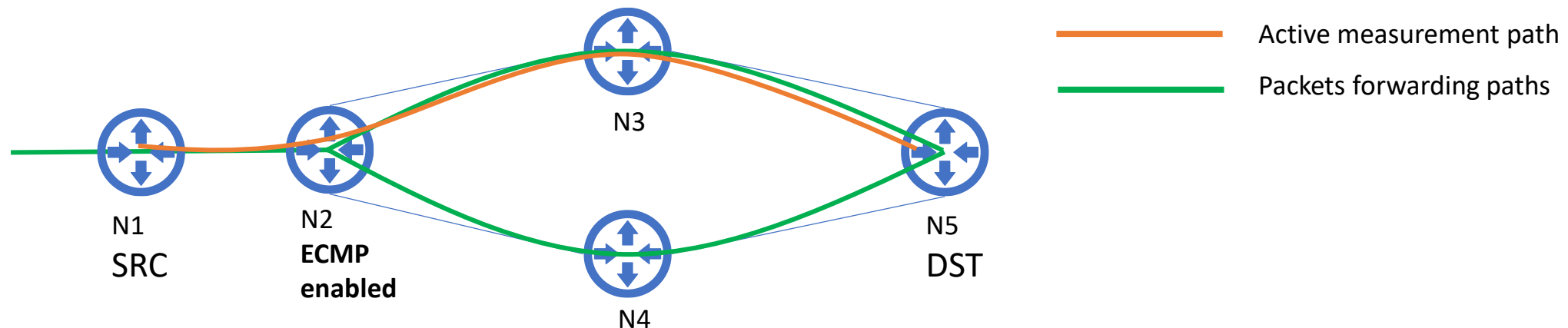
draft-zhang-ippm-ioam-mp-00

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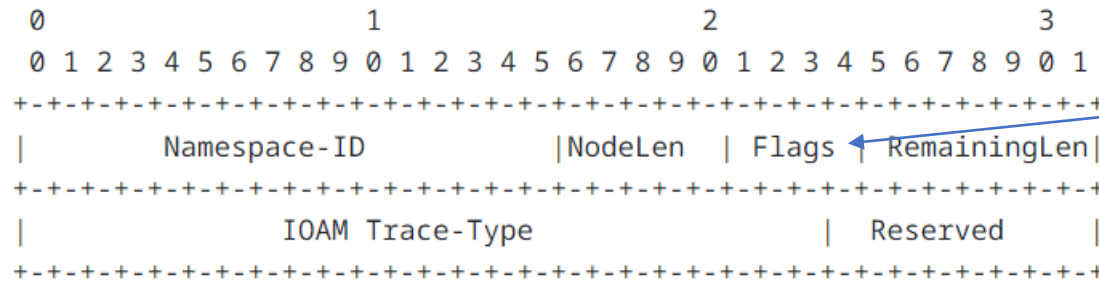
Background

- IOAM collects OAM information within the packet while the packet traverses a particular network domain.
- [RFC9322] provides three kinds of active measurements using IOAM, and defines a Active flag to indicate that a packet is used for active measurement.
- [I-D.gandhi-ippm-stamp-ext-hdr] extends STAMP to reflect any IPv6 options(including IOAM data fields) and MPLS Network Action Sub-Stacks for hop-by-hop and edge-to-edge active measurements.
- **However, active measurements are typically for a specific path, it can't collect all the path's information on the same time when there are multiple paths.**



IOAM Extension & Examples

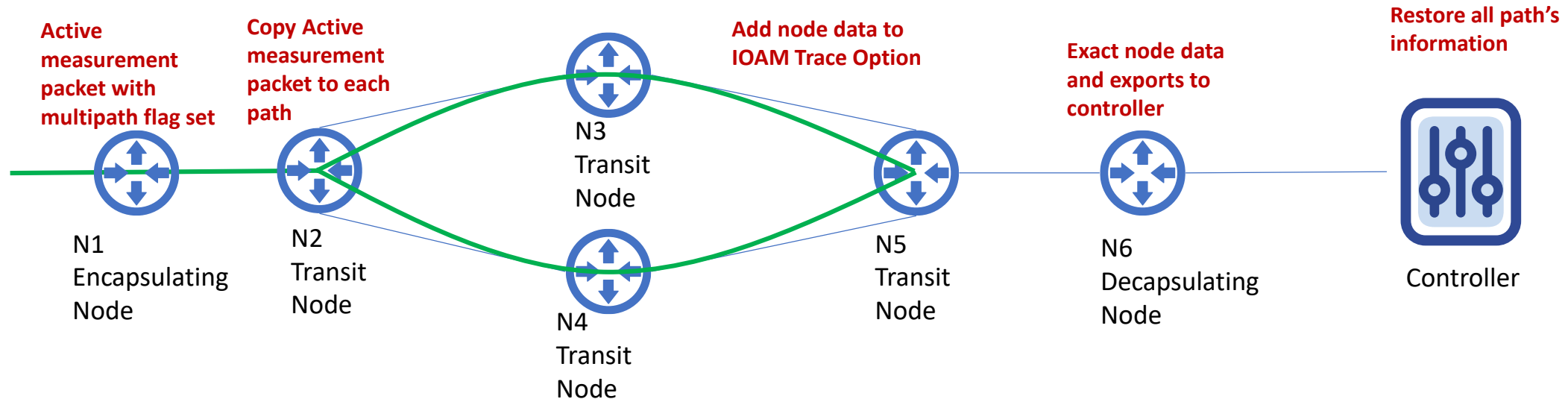
- Define a new Flag in the Pre-allocated and Incremental Trace option header:



New Flag: **Multipath flag**

Indicate this active measurement packet should **be copied to each path**.

- Example of multi-path active measurement with IOAM



- Similarly, this extension can also be used with STAMP

Any comments and opinions are welcome!

Thank You