

On-Path Telemetry for Active Performance Measurements

draft-fioccola-ippm-on-path-active-measurements-01

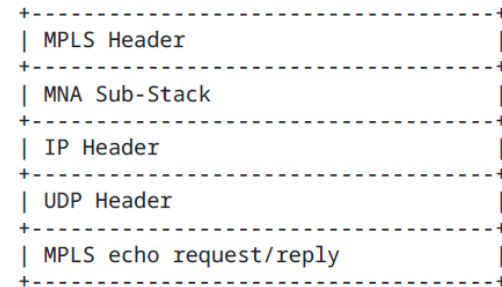
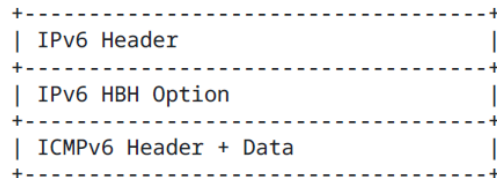
Dublin, Nov 2024, IETF 121

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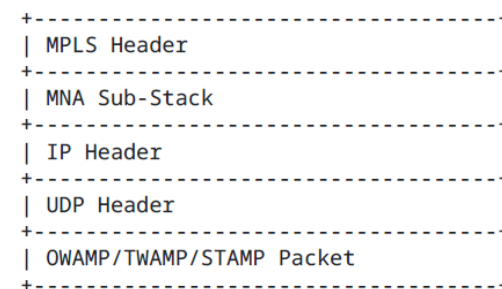
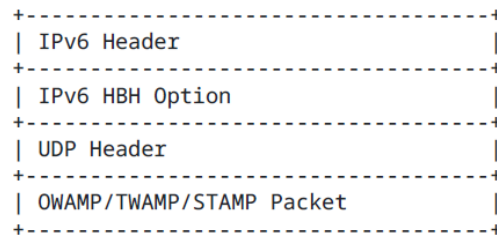
On-Path Telemetry for Active Performance Measurements

- In several scenarios it is beneficial to perform HBH and E2E active measurements.
- Active test packets can be used in combination with Hybrid Methods to perform On-path Active Performance Measurements.

ICMP and ICMPv6



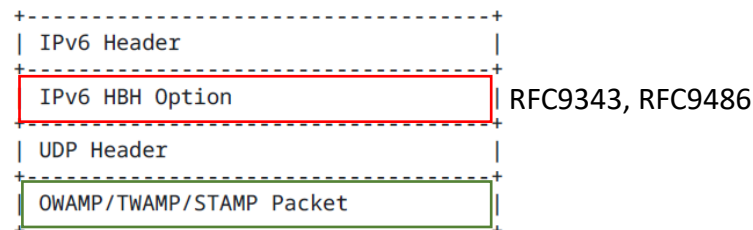
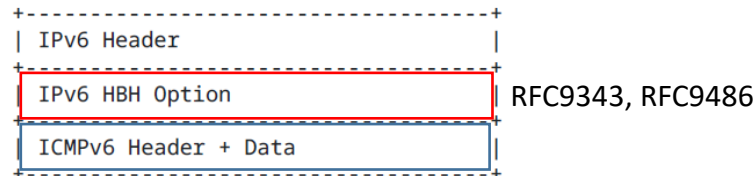
OWAMP, TWAMP and STAMP



On-Path Telemetry for Active Performance Measurements for IPv6

The IPv6 HBH options, **RFC9343 (AltMark)** or **RFC9486 (IOAM)**, augment the active methods by enabling on-path HBH measurements in addition to E2E measurements.

- This approach is not adding any new functionalities to ICMPv6, OWAMP, TWAMP or STAMP, but it is only leveraging existing mechanisms.
- It is possible to use YANG to configure, and IPFIX or YANG notifications to report telemetry information (STAMP TLV has also been proposed in draft-ietf-ippm-stamp-ext-hdr).



Changes from -00 to -01

Some comments received during the IETF 120 and addressed in the new revision, in particular:

- Added MPLS echo request/reply (RFC8029), MPLS Loss and Delay Measurement (RFC6374)
- Included the case of the MPLS LSP Ping
- Minor changes and references updated

Evaluate WG Adoption.

Comments are welcome!

Thank You