

Processing of the Hop-by-Hop Options Header

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Motivations

- The HBH Options Header is a valuable container for facilitating new services
 - The hop-by-hop processing behavior is very desirable
 - New services: IOAM, Alternate Marking, PMTU, etc.
- The HBH Options Header is rarely utilized in the current operators' networks.
 - Protect the control plane from undesired traffic by dropping or ignoring hbh
- Our main purpose is to
 - Break the endless cycle that resulted in HBH to become a DOS vector.
 - Enable the HBH options header to be utilized in a safe/secure way without impacting the management plane.
 - Ease the deployments of the new HBH based network services in a multi-vendor/operator's scenario that can now be deployed without operational impact.

Updates to Draft

- Revision 2 – December 1st 2020 –
 - Removed the solutions discussion from section 7 so the draft is focused on the Problem Statement only for v6OPS and the solutions to be focused on in 6MAN.
- Revision 4 – June 30th 2021 –
 - Removed the “proposed” processing behavior (the reference to a proposal in 6man) but only keep the desired behavior and requirements
 - Replaced fast path verbiage with forwarding plane and slow path verbiage with control plane.
- Revision 5 – July 26th 2021 –
 - Change Section 7 titled “The Desired Processing Behavior” to “Requirements”
 - Further refine the “Requirements” section

WG Adoption?

Thank you!