Processing of the Hop-by-Hop Options Header

draft-peng-v6ops-hbh-05

Shuping Peng  Huawei
Zhenbin Li     Huawei
Chongfeng Xie  China Telecom
Zhuangzhuang Qin  China Unicom
Gyan Mishra    Verizon
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 1\textsuperscript{st} 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 30\textsuperscript{th} 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 26\textsuperscript{th} 2021 –
  • Change Section 7 titled “The Desired Processing Behavior” to “Requirements”
  • Further refine the “Requirements” section
WG Adoption?
Thank you!