The Future of The IPv6 HBH Extension Header

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**History**

The HBH extension header was specified by RFC 1882 (1995), and RFC 2460 (1998).

The Router Alert option was specified in RFC 2711 (1999).

RFC 8200 Obsoletes RFC 2460

Unfortunate first application of the HBH extension header

Many implementations punt packets containing the Router Alert option to the control plane, causing the Router Alert to become a DoS vector.

Many application punt all packets containing an HBH extension header to the control plane, causing the HBH extension header to become a DoS vector.

While [RFC2460] required that all nodes must examine and process the Hop-by-Hop Options header, it is now expected that nodes along a packet's delivery path only examine and process the Hop-by-Hop Options header if explicitly configured to do so.
Does the current specification satisfy the need for IPv6 Hop-by-hop extensibility?

Can we expect the current situation to improve without any changes?
Questions For This Session

• Do we want to proceed with rehabilitation of the HBH Option Header?
• Do we want to take some other action
  • Deprecate the HBH Option?
• Do we need to reexamine currently defined HBH options?
  • Do we want to deprecate selected HBH options?
• What work / documents need to progress to make this happen?