

IPv6 Hop-by-Hop Options Processing Procedures

<draft-ietf-6man-hbh-processing-01>

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Changes from -00 draft



- Added text to Section 1 that the focus of this document is to set a minimum bound on the number of Hop-by-Hop Options a node should process.
- Added text to Section 4 that the authors expect some Hop-by-Hop options will be supported Internet wide, and others only in limited domains.
- # 7, Added reference to RFC 7872 in Section 4.
- #6, Revised text in Section 4 to reflect the constraints on publishing RFC 8200 to progress on standards track.
- Fixed typo in last paragraph of Section 5.2.
- #21, Changed text in Section 6 that new options SHOULD NOT (from MUST NOT) be defined that are not expected to be processed at full forwarding rates.

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Issue Tracker



Captured Issues raised in Adoption Call

https://github.com/ietf-6man/hbh-processing/issues

Currently 9 open issues

Open Issues Summary



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- #18: What status will the recommendations/requirements have?
 - Expect WG to discuss this issue
- #9 #15 : Should we deprecate Router Alert?

Are routers required to process (RAO)?

- Expect WG to discuss this issue in another draft
- #5 #12 : slow/fast path
 - we think resolved?
- #8: Lack of graceful handling of malformed EHs?
 - Ready for offers of text
- #4: RFC9098 notes that nodes do need to process payload
 - Expect WG to discuss this issue
- #3: Does the WG have ASIC experience with EH?
 - May be relevant to a different draft, we expect to close this issue
- #2 : Leading edge line-speed routers might ignore HBH EH!
 - ?

Issue #5, #12 - Definition of Fast Path and Slow Path?



Current draft discusses full forwarding rate.

Issue #8 - Lack of graceful handling of malformed EHs



- One of the main security problems associated with IPv6
 EHs is that too many implementations seem fail to
 gracefully handle malformed/malicious Ehs.
- Is this different from other headers (IPv6, EH, Transport)?
- Editors: Please suggest text for the security considerations.

Issue #4 - RFC9098 notes that nodes do need to process payload



- Misses the discussion in RFC9098: quite often forwarding nodes do need to process IPv6 payloads.
- Are HBH Options considered payloads?
- Editors: What text do we add about this?

Next Steps



- Resolve issues.
- Receive more comments/issues?
- Revise the ID.

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QUESTIONS / COMMENTS?

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