

Security Implications of the Use of IPv6 Extension Headers with Neighbor Discovery (draft-gont-6man-nd-extension-headers)

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Problem statement

- IPv6 fragmentation is not necessary for ND
 - Need to send lots of options? – Send it in multiple RAs!
- Use of fragmentation prevents feature parity with IPv4
 - It makes ND-monitoring (NDMon, etc.) impossible
 - Makes mitigation of ND-based attacks difficult
- In the case of SEND,
 - You **may** need it
 - But certainly you don't want to be in that position :-)

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- Forbids use of IPv6 fragmentation with traditional Neighbor Discovery
- Notes that in the case of SEND:
 - You may explicitly enable IPv6 fragmentation
 - Relying on IPv6 fragmentation is a bad idea

Recap of the discussion

- Document received its share of discussion on-list
- There seemed to be consensus on forbidding IPv6 fragmentation with traditional ND
- It was argued that the document needed to discuss use of IPv6 fragmentation with SEND
 - The current version of the I-D does that!

Moving forward

- Adopt this document as a 6man wg item?

Feedback?

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