Security and Interoperability Implications of Oversized IPv6 Header Chains
(draft-gont-6man-oversized-header-chain)

Fernando Gont & Vishwas Manral

IETF 83
Problem statement

• Specs-wise, IPv6 first-fragments may fail to contain the entire IPv6 header chain
  • Lots of Extension Headers/Options, and/or,
  • Small fragment sizes
• They prevent stateless filtering
  • which is currently possible with IPv4
• They may also break NAT64
• It is likely that IPv6 firewalls will drop them
  • Do they, already?
draft-gont-6man-oversized-header-chain

- Discusses security and interoperability problems arising from these packets
- Requires IPv6 packets to contain the entire IPv6 header chain in the first 1280 bytes
Moving forward

- Comments?
- Adopt this document as a 6man wg item?
Feedback?

Fernando Gont
fgont@si6networks.com