IPv6 Security Overview

draft-savola-v6ops-security overview-03 Authors: P. Savola, E. Davies, S. Krishnan

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Changes since -02

- □ Expanded pieces which referenced drafts
 - Remove dependencies on non-progressing drafts
 - Especially section 2.1
- □ Updated Mobile IPv6 sections to reflect current specs

Changes since -02

- □ Added sections IPv6 Specification related
 - Anycast (2.1.6)
 - Interaction with Dynamic DNS (2.1.8)
 - Fragmentation: Reassembly (2.1.10), DoS (2.1.11)
- □ Extra issues with extension headers
 - Possibility of excessive hop-by-hop options
 - Risks of overuse of Router Alert

Changes since -02 contd

- □ Deployment issues added
 - Securing routers & using unguessable addresses (4.3)
 - Consequences of multiple addresses (4.4)
 - Filtering ICMPv6 (4.5)
- □ Up-to-date notes on fixed problems
 - Routing Headers (added notes on filtering)
 - Old Home Address Option

Specification problems for solution

- □ Advice on processing routing headers
 - ⇒ Node Requirements?
- □ Filtering best practice
 - ⇒ Firewall BCP? Node Requirements?
- ☐ Fragmentation and Reassembly rules Extension header processing rules
 - \Rightarrow Update of RFC2460
- □ Issues with Privacy Addresses
 - ⇒ New version of privacy addresses RFC3041

Next steps

- □ Solicit input on completeness
 - Not much comment on mailing list!
- ☐ At least move all fixed/non-issues to appendix
 - Decide whether to remove these
- ☐ More language improvements in Section 3 & 4
- □ Deeper look at tunnel mechanism security
- □ Note changed NAT-PT situation
- □ Document issues with ND proxy
 - pointer to new work being done for proxies and security
 - draft-daley-send-spnd-prob-01.txt
- □ Slated to be a WG item