Temporary Address Extensions for Stateless Address Autoconfiguration in IPv6
(draft-ietf-6man-rfc4941bis-08)

Fernando Gont
Suresh Krishnan
Thomas Narten
Richard Draves

IETF 6man Interim Meeting
March 31st, 2020
Overview

- Revision of RFC4941
- WGLC’ed on January 9th-23rd, 2020
- This presentation summarizes recent comments and changes
Implications of multiple addresses

- Concerns raised about possible impact of multiple addresses on network elements

- Outcome from WG discussion:
  - This is a general issue of SLAAC – not specific to RFC4941
  - But nice to have a paragraph on this, and also limit the number of concurrent addresses

- Changes incorporated:
  - Two paragraphs added to Section 4
    - Text discussed and agreed upon on the mailing list
  - TEMP_VALID_LIFETIME changed from 1 month to 2 days
    - This limits number of concurrent temporary addresses to 2
Whether to enable by default

- RFC4941 said:
  "use of temporary addresses SHOULD be disabled by default"
- rfc4941bis removes such recommendation
- Outcome from WG discussion:
  - It would be a very bad signal for the IETF to recommend disabling a mechanism meant to improve privacy
- Notes:
  - BCP188: “Pervasive Monitoring Is an Attack”
  - BCP204: “Host Address Availability Recommendations”
  - All popular IPv6 host implementations enable temporary addresses by default
RFC4941 and privacy

- There was discussion about the extent to which temporary addresses help privacy

- Outcome from WG discussion:
  - Temporary addresses mitigate (i.e., make it harder) address-based network activity correlation
  - They also limit the time window during which a host is exposed via an address that becomes revealed
  - This is a revision of RFC4941. Folks can always pursue work to obsolete RFC4941 if deemed appropriate.

- Changes incorporated:
  - Focus on what temporary addresses achieve (as opposed to “privacy”)
  - Change title from “Privacy Extensions” to “Temporary Address Extensions”
Summary

- Version -07 published to address WGLC comments
- Version -08 published to address 2nd WG chairs review
- Ready to ship?