Privacy Extensions for Stateless Address Autoconfiguration in IPv6

(draft-gont-6man-rfc4941bis-00)

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Issues with RFC4941

- Prevents use of only temporary addresses

- Recommends reusing the same IID for multiple prefixes

- Reuses the same IID as host moves from one network to another

- Limits non-deprecated addresses to one per prefix

- Miscellaneous issues

Goals of this document

- Fix the aforementioned issues in RFC4941

- Replace the algorithm in RFC4941 with two alternative algorithms that comply with draft-gont-6man-non-stable-iids

- Formally obsolete RFC4941

Generation of non-stable IIDs

- We propose two alternative algorithms:

    – Random IIDs that change upon network disconnection/attachment

    – A la RFC7217:

    F(Prefix, MAC_Address, Network_ID, Time, DAD_Counter, secret_key)

Moving forward

- Adopt as 6man WG item?