LISP EID Anonymity

LISP WG IETF 104 Prague
March 2019

Dino Farinacci, Padma Pillay-Esnault, & Wassim Haddad
Document Status

-05 fixed nit and clarification – no technical change.

Appendix B. Document Change Log

[RFC Editor: Please delete this section on publication as RFC.]

B.1. Changes to draft-ietf-lisp-eid-anonymity-05

- Posted March IETF week 2019.
- Do not state that ephemeral EIDs make the privacy problem worse.

B.2. Changes to draft-ietf-lisp-eid-anonymity-04

- Posted October 2018 before Bangkok IETF deadline.
- Made Padma requested changes to refer to ephemeral-EIDs allowed to have many on one interface and can be registered with more than 1 RLOC but one RLOC-set.
Problem Statement

• Making EIDs
  • Private
  • Not trackable

• Without enforcing more encryption

• Useful in mobility use cases when the locator (visible) is also changing
Solution

• Hide in a crowd or rather in a pool of addresses
• Ephemeral EIDs are IP addresses
  • A recycled random number within a specified range
  • Crypto hash may be used for generating the EID
• Source creates one or more ephemeral EIDs and start using them.
• May create several ephemeral EIDs on a same interface
• May use one of them for each session with a peer for example
• Ephemeral EID have a limited life and may be one time only before recycling
LISP base Protocol changes

- Relies on existing mechanisms for registration and deregistration in MS.
- Reservation of a range for the pool
- Collision avoidance recommendations
Next Steps

• Last call
• Questions/comments?