The Future of Privacy in Internet Addressing

IETF 112 – Online
Genesis of this Talk

- Two drafts about Internet Addressing
  - promoting **broader thinking** of a new work in IETF

- Problem Statement Draft
  - Provides example scenarios that the existing Internet addressing structure itself is a potential hindrance for service provisioning
  - Revolves around following question:
    - Should limited domains purely rely on IP addresses and therefore deal with the complexity of translating any semantic mismatch themselves, or should flexibility for supporting those limited domains be a key focus for an evolved Internet addressing?

- Gap Analysis Draft
  - Focus on 3 key properties for Internet Addressing
    - **Fixed Address length** through 32/128 bit length
    - **Ambiguous Address Semantic** with explicit locator and implicit identifier
    - **Limited Address Semantic Support** with mainly prefix-based only semantics
  - Outline extensions to those key properties to fill identified gaps
  - Identify issues with those extensions
    - Which may be solved with an evolved addressing
Why @ PEARG?

- Address structure/model brings constraints limitation on both accountability and privacy
  - These aspects are discussed in the documents
    - any feedback/contribution on these aspects are welcome

- Gap Analysis Draft
  - Section 3.2 - Identity Extensions
  - Section 3.2.1 – Anonymous Address Identity
  - Section 3.2.2 – Authenticated Address Identity

- Would the PEARG be interested in discuss and document the question:
  - How can the IPv6 addressing model evolve in order to improve Privacy while preserving accountability?
Drafts can be Reviewed at **INTAREA WG:**


**THANKS!**

Welcome **Feedback**