

**IETF 112 – PEARG**

# **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
  - <https://datatracker.ietf.org/doc/draft-jia-intarea-scenarios-problems-addressing/>
  - 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
  - <https://datatracker.ietf.org/doc/draft-jia-intarea-internet-addressing-gap-analysis/>
  - 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**:

- 1) Internet Addressing: Problem statements (<https://datatracker.ietf.org/doc/draft-jia-intarea-scenarios-problems-addressing/>)
- 2) Internet Addressing: Gap analysis (<https://datatracker.ietf.org/doc/draft-jia-intarea-internet-addressing-gap-analysis/>)

# THANKS!

Welcome **Feedback**