

# **Recommendation on Stable IPv6 Interface Identifiers**

**(draft-ietf-6man-default-iids-00)**

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IETF 91  
Honolulu, Hawaii, U.S.A. November 9-14, 2014

# Link-layer addresses in IPv6 IIDs

- Embedding link-layer addresses in IIDs has a number of security & privacy implications:
  - Network reconnaissance (address scanning)
  - Node tracking
  - Device-specific attacks
- However, specs still mandate that SLAAC IIDs be generated by embedding link-layer addresses

# draft-ietf-6man-default-iids

- Updates a number of RFCs (mostly “IPv6 over foo” documents) recommending that:
  - Nodes SHOULD NOT embed the underlying hardware address in IPv6 Interface Identifiers
  - Nodes SHOULD employ RFC 7217 as the default method for generating stable addresses with SLAAC

# Open issues #1 (I)

- Recent feedback (Ralph Droms):
  - Spell out the considerations for which a node might decide not to comply with the recommendations in this document
  - The document should allow for the continued use of hardware addresses in the IPv6 IIDs, given proper justification (e.g., to allow for header compression)

# Open issues #1 (II)

- Dave Thaler suggests:

*“Link layers MUST define a mechanism that provides privacy. A link layer MAY also define a mechanism that is more efficient and does not provide privacy. The choice of whether to enable privacy or not SHOULD be configurable in such a case.”*

# Open issues #2

- Carsten Bormann:

*“we need to distinguish between L2 addresses (which may be dynamic) and “hardware” addresses”*

- My suggestion:

Use “link-layer addresses” instead?

**Comments?**