



Managing the Use of Privacy Extensions for SLAAC in IPv6

**(draft-gont-6man-managing-privacy-
extensions-01.txt)**

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Problem statement

- There are different policies for generating Interface IDs
 - Modified EUI-64 Format
 - Privacy Extensions (RFC4941 & Microsoft's variant)
- Different systems have different defaults
- It's currently impossible to convey information about the desired policy during SLAAC.
- Consequence: If a specific policy is desired, the admin needs to resort to manual configuration of each system – **painful!**

Goal

- Allow administrators to convey policy information regarding how Interface IDs should be generated, such that
 - Policy for Interface I-Ds is homogeneous for a given prefix
 - No manual configuration is needed
- Have this information be advisory (SHOULD rather than MUST)
 - Hosts can always generate their Interface IDs as they please – if they have reasons to do so
- Obvious mechanism for conveying this information: Prefix Information Option in Router Advertisements

Updated Prefix Information Option

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```

SAG	Semantics
00	No advice on IID generation
01	Use Modified EUI-64 Format (RFC 4291)
10	Use Privacy Extensions (RFC 4941)
11	Unused (reserved for future use)

Upcoming changes (version -02)

- Title changed to “Managing the Address Generation Policy Employed for Stateless Address Autoconfiguration in IPv6”
- Clarified that each policy is mutually exclusive: generate only one address, using the selected policy
- Added a “Privacy Considerations” section
- Specified defaults (with normative language)
- Specified a variable for router implementations:
 - DesiredAddressPolicy (defaults to “Default”)
- Specified variables for host implementations:
 - AddressPolicyConfiguration (defaults to “Enabled”)
 - DefaultAddressPolicy (defaults to “PrivacyExtensions”)
- Result: Privacy Addresses are used by default, but the router can advise hosts to use a different policy



Moving forward

- A heads-up of our working copy has been posted on the mailing-list, and we'll formally rev the document this week
- Feedback will be highly appreciated -- particularly if you have suggested improvements before (have your comments been addressed in the upcoming rev?)