Managing the Address Generation Policy for Stateless Address Autoconfiguration in IPv6 (draft-gont-6man-managing-slaac-policy)

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Problem Statement

- IETF-wise we have support for both stable and temporary addresses
- Support for temporary addresses (RFC 4941) varies across platforms

os	Status
Windows 7	Impl. and enabled by default
FreeBSD	Impl. but not enabled by default
NetBSD	Not Implemented
OpenBSD	Impl. but not enabled by default (*)

^(*) when enabled, temporary addresses **replace** traditional SLAAC addresses

Problem Statement (II)

- There is no mechanism to manage the SLAACpolicy
- This makes network management difficult (if you have requirements in this area)

Managing SLAAC policy

- It is about conveying information about the desired SLAAC policy
- Allows for an homogeneous SLAAC policy in the local network
- Relieves the administrator from manual configuration of lots of systems

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 Specifies two bits (AGP) in the PIO, to provide ADVICE about the desired SLAAC policy

AGP	Semantics
00	No advice (use your default policy)
01	Generate stable addresses
10	Generate temporary addresses
11	Unused (Reserved for future use)

Semantics of "01" and "10" could be specified to mean "ONLY", and "11" defined as "Generate BOTH stable and temporary addresses"

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 Allows for SLAAC policies with a per-SLAACprefix granularity

(the policy is specified in each PIO)

- Possible use cases:
 - Generate temporary addresses for the the global prefixes, but not for the ULA prefix"
 - "Generate temporary addresses for all prefixes"
 - "Do not generate temporary addresses"
 - "We don't care how you generate your addresses"
 - etc

Moving forward

- Comments?
- Adopt this document as a 6man wg item?

Feedback?

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