Usage of Host Generating Interface Identifier in DHCPv6

draft-xia-dhc-host-gen-id-02.txt

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Background

• This draft was presented at IETF 72 and IETF74 meeting. This is the third presentation.

• The most of comments we received are positive,
Problem Statement

• The configuration of IPv6 address of a host includes two parts: a prefix and an interface ID.

• In many cases, the interface identifier is generated by the host itself.
  1) The interface identifier of a CGA (Cryptographically Generated Address) could only be generated based on a public key held by the host.
  2) The host generates interface identifier when using IPv6 Stateless Address Autoconfiguration.
Problem Statement (cont.)

• The prefix is managed by a DHCP server, or an access router

• In some deployments, it is preferable that a DHCP server not an access router provides prefixes for a host, as is also described in draft-droms-dhc-dhcpv6-default-router

• No existing DHCP procedure is suitable for this scenario that a host generates interface ID while a DHCP server provides prefixes
Solution – Separation of prefix assignment and interface ID generation

Prefix assignment

Interface ID generation

1 Solicit

2 Advertise

3 Combination of Prefix and Interface Identifier

4 Request

5 Reply
Adopt as a WG draft?
Thank you