Usage of Host Generating Interface Identifier in DHCPv6

draft-xia-dhc-host-gen-id-00.txt
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Problem Statement

• A DHCP server manages prefixes resource. A host attaching an access router needs to request prefixes from the DHCP server for address configuration.

• In some case, the host is required to generate it’s interface identifier due to security, privacy and so on.

• No existing DHCP procedure is suitable for this scenario.
• DHCPv6 (RFC3315) assumes that a DHCP server is responsible for the assignment of an *integral* address which includes prefix and interface identifier.

• RFC3633 defines Prefix Delegation options providing a mechanism for automated delegation of IPv6 prefixes for a requesting router. This mechanism is only applicable to routers not hosts.

• In draft-xia-dhc-host-gen-id we propose to combine these two techniques and use it for address assignment
Solution – Separation of prefix assignment and IID generation

Prefix assignment

Interface ID generation

1 Solicit

2 Advertise

3 Combination of Prefix and Interface Identifier

4 Request

5 Reply
Adopt this draft as a WG draft?
Thank you