Advanced Requirements for IPv6 Customer Edge Routers

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v6ops Working Group

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Updates in the -01 version

- Convinced concerned parties to not use the single /64 and ND Proxy for cellular and instead go with DHCPv6 PD (RFC 3633).

- Thus the ND Proxy section was elided from the –bis document after agreement with concerned parties.

- Clarified text in the DNS section and removed most text with MAY requirements.

- Added a new DHCPv6 requirement – see section 5.7.

- Added new and modified text for 6rd support.

New DHCPv6 req

- When the WAN interface sends a DHCPV6 SOLICIT message, the CE router SHOULD request all mandatory information (such as IA_NA and IA_PD options) in the SOLICIT regardless of whether any partial information was received in response to previous SOLICITs.

Edited and new 6rd text

- 6RD-2: If the IPv6 CE Router implements 6rd CE functionality, it MUST support user-entered configuration and using the 6rd DHCPv4 Option (212) for 6rd configuration. The IPv6 CE Router MAY use other mechanisms to configure 6rd parameters. Such mechanisms are outside the scope of this document.

NEW TEXT below

- 6RD-3: If the CE router implements 6rd functionality, it MUST allow the user to specify whether all IPv6 traffic goes to the 6rd Border Relay, or whether other destinations within the same 6rd domain are routed directly to those destinations. The CE router MAY use other mechanisms to configure this. Such mechanisms are outside the scope of this document.

What is left to do?

- Recommend OSPFv3/RIPng for routing protocol default in the LAN.

- Zigbee folks have asked for the ”ULA MUST be enabled by default” in the bis document.

- Do we delay Last Call if the Zigbee ULA request does not gain consensus?

- Shortly after this IETF, we will publish new revision that could go to Last Call with no change in ULA requirement.

Where do we go from here?

- Document could be completed in v6ops – note the –bis specification still covers only the two-router case.
- Or the document could move to homenet.
- Questions/Comments?