

Transmission of IPv6 Packets over PLC Networks

draft-hou-6lo-plc-05

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Status

- draft-hou-6lo-plc-05
 - Revision based on comments on the mailing list and during IETF 102

Comment 1: Privacy issue in IPv6 address configuration

- Concern:
 - IP address = Prefix + IID derived by EUI-64 or EUI-48
 - Globally unique, but expose the device ID to the public network
- Clarification added in the draft
 - Such kind of address SHOULD only be used for link local address configuration, SHOULD NOT be used for communication with the public network.

Comment 2: Terminology Alignment

- Confusion due to mixed usage of terminology from different PLC technologies
 - Example: PCO stands for “PAN coordinator” in version 04, and “proxy coordinator” in IEEE 1901.1
- Terminology is now aligned in the whole draft
- A terminology mapping table is added

IEEE 1901.2	IEEE 1901.1	ITU-T G. 9903
PAN Coordinator	Central Coordinator	PAN Coordinator
Coordinator	Proxy Coordinator	Full-function device
Device	Station	PAN Device

Comment 3: Fragmentation

- The description “The number of data octets of the PHY payload can change dynamically based on channel conditions” makes people confused.
- Does the fragmentation in the adaptation layer changes according to the channel conditions?
 - No, but the fragmentation in the MAC layer does.
 - Whether adaptation layer fragmentation is needed depends only on the MAC layer’s MTU.
- Clarification is added in the draft

Other Modifications

- Reorganize of the overview
- Rephrase the section 3.4 (routing protocol), more information added for L2 routing in IEEE 1901.1
- Reorganize the ND section, more detailed description about prefix dissemination, context dissemination and address registration
- Clear the ambiguous or misleading descriptions in the draft

Future Work

- WG Adoption?
 - More IP based applications communicate via PLC
 - A guideline for PLC IPv6 adaptation is needed
- Welcome feedback!