

# IPv6 CE Routers

IETF 118 (v6ops)

draft-winters-v6ops-cpe-lan-pd-04

7084bis

## IPv6 CE Routers Drafts

- Prefix Delegation on the LAN
- Update to 7084bis

# Problem Statement

- Many ISP will assign a prefix larger than /64 to the CE Router, as recommended in [RFC6177]. If an IPv6 CE Router doesn't support IA\_PD on the LAN it will not be able to assign any prefixes beyond itself, limiting the usefulness of assigning prefixes larger than /64. Supporting IA\_PD on the LAN interfaces will allow for those unused prefixes to be distributed into a network.

# Flat vs Hierarchical Model

## Hierarchical

PD clients (7084 Router) ask for larger prefixes, the CE Router must have rules for dividing delegating prefix essentially making a tree of prefix in the house.

## Flat

PD clients (7084 Router) can ask for multiple /64 IA\_PD's from the Customer Edge router.

Draft contains **both**.

## Changes from 03

- Added Hierarchical Model to the draft as a option.
- Requirements
  - Prefix Delegation
  - Hierarchical (Width based)
  - Flat

# Prefix Delegation on the LAN

- The single goal of this draft is to enable DHCPv6 prefix delegation on LAN interfaces.
- Prefix Delegation beyond the border router is important for supporting in home solutions (SNAC).

# Next Steps

- Adopt?

# RFC 7084bis

- RFC Updates
  - 8200, 8201, 8415, 8504
- Remove Transition text (6RD/DS-Lite) and
  - Reference RFC 8585 and 9313
- MUST ingress filtering (spoof prevention)
- MUST NOT use EUI-64 on WAN interface
  - IPvSeeYou
- BCP this time around?