

# Gateway-Initiated 4over6 Deployment

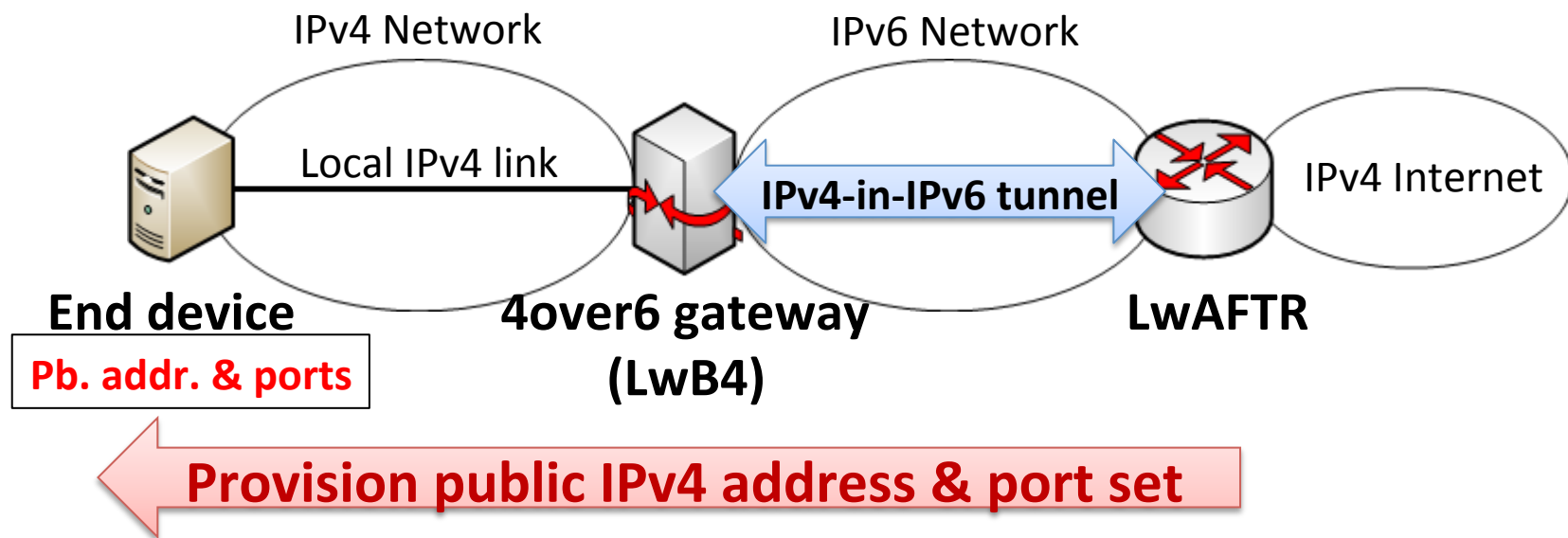
**draft-chen-softwire-gw-init-4over6**

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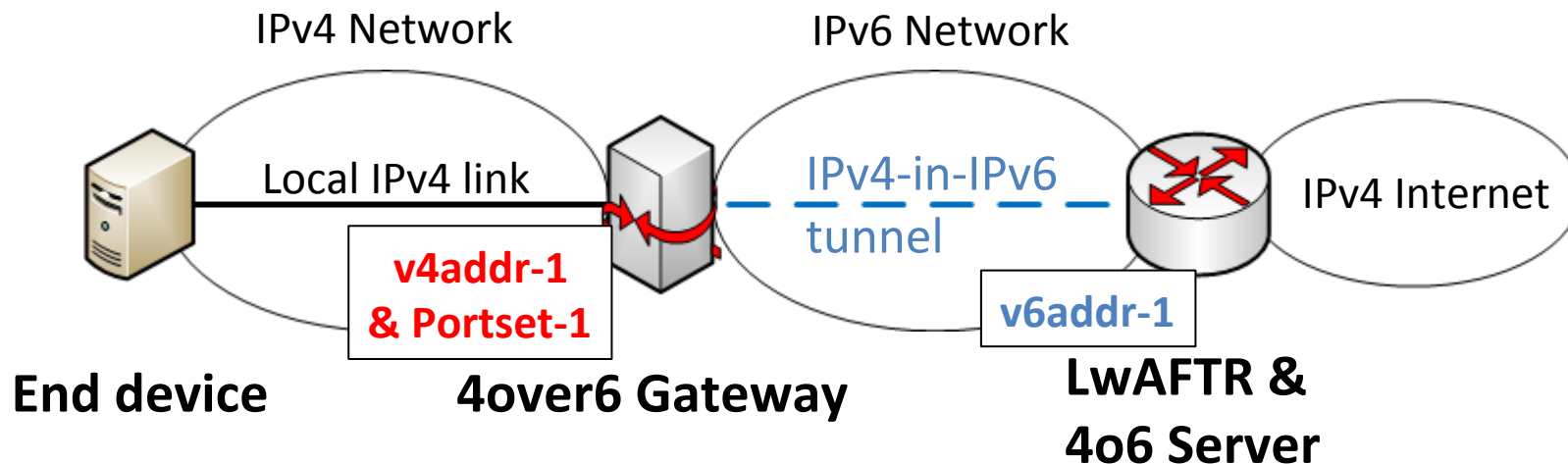
IETF 87 in Berlin, Jul. 2013

# GI-4over6 Scenario

- Typical Lw4over6 Scenario
  - IPv4 address and port set is provisioned to the lwB4
- GI-4over6 Scenario
  - IPv4 address and port set is provisioned to the device behind the 4over6 gateway (lwB4)

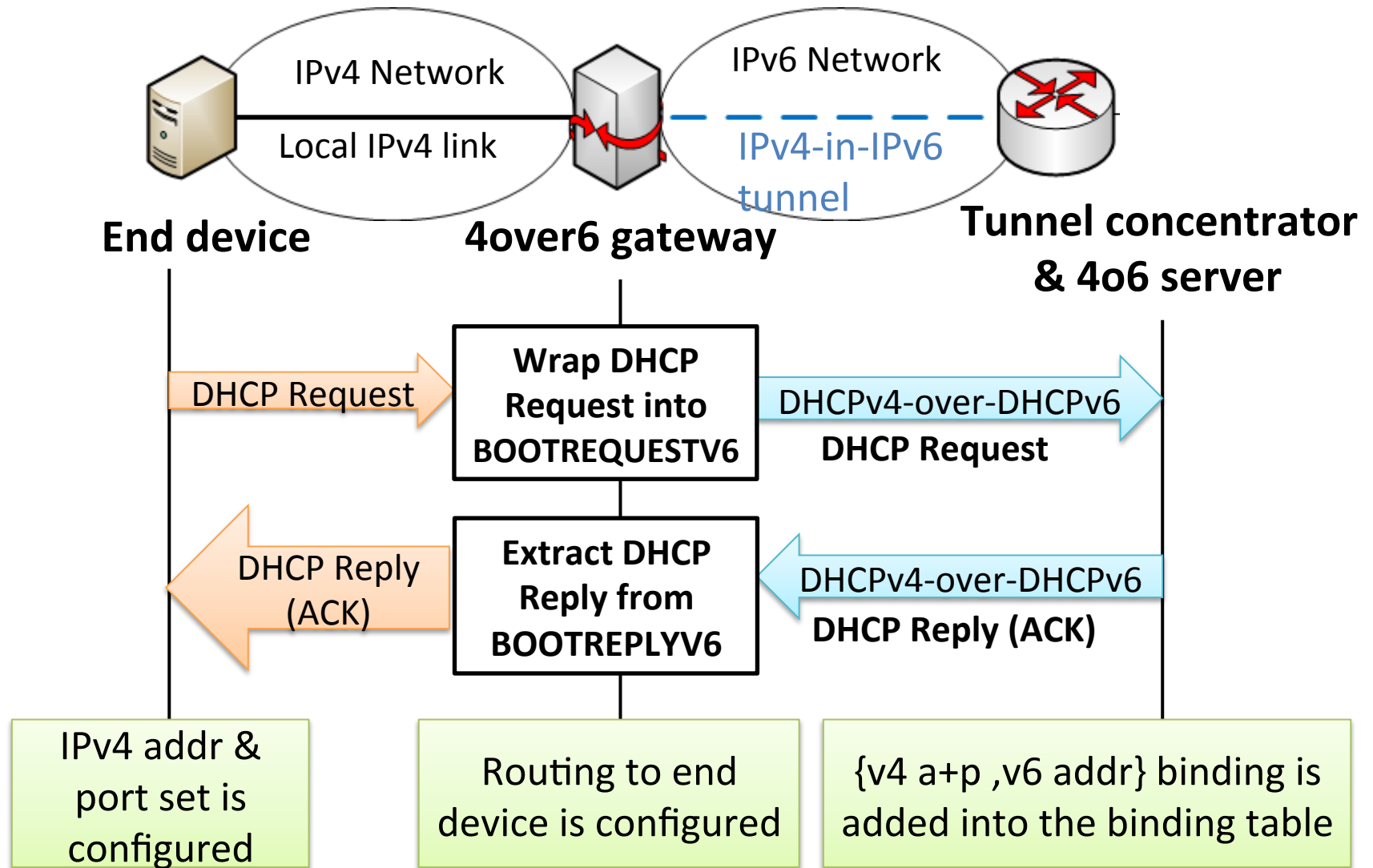


# Necessary Assumption



- Configuration on 4over6 Gateway in advance
  - Provisioned with tunnel endpoint addr - **v6addr-1** (DHCPv6)
  - Provisioned with an public IPv4 addr & port set – **v4addr-1 & Portset-1** (DHCPv4-over-DHCPv6)
- 4o6 Server is implemented on LwAFTR
- Multiple end devices behind the same 4over6 GW will not be provisioned with the same shared IPv4 address

# Control Plane Behavior



# Data Plane Behavior

- End device
  - Sends v4 packets using the v4addr & port set that it has been assigned
- 4over6 Gateway
  - Encapsulates outbound v4 packets & decapsulates inbound v4-in-v6 packets
  - Uses a routing table indexed by v4addr & port set to deliver inbound v4 packets
  - Performs no NAT44 function
- LwAFTR
  - No difference with the behavior of LwAFTR in original lw4over6

# Next Step

- Any interest to continue this work?
- Comments?