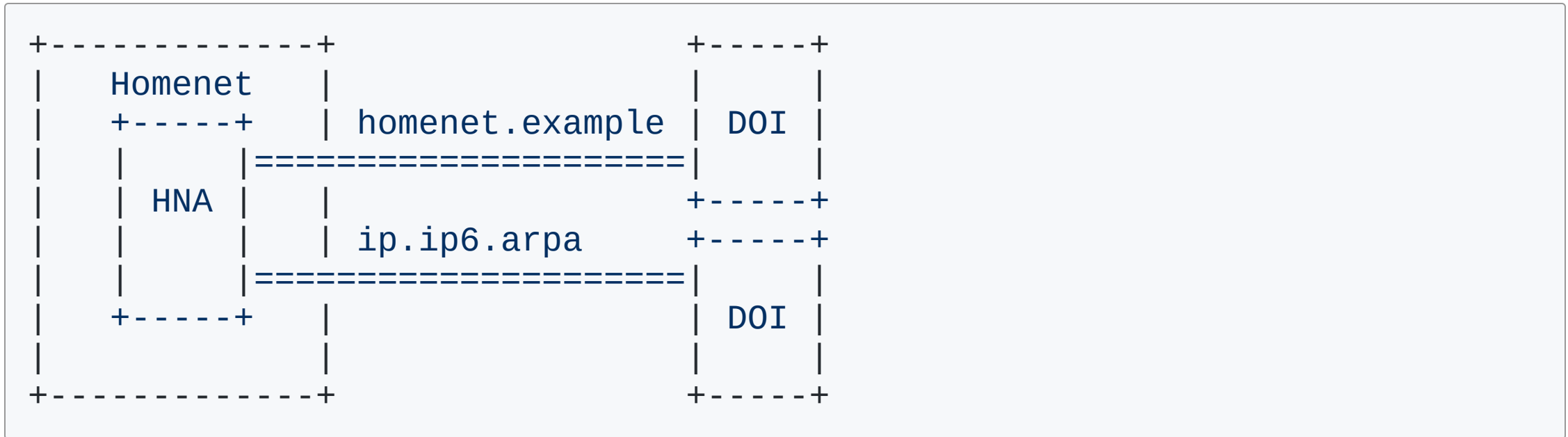


DNS Outsourcing Infrastructure and DHCP options

-front-end-naming-delegation, -naming-architecture-dhc-options

Daniel Migault, Michael Richardson, Ray Hunter

DNS Outsourcing Infrastructure (DOI) enables a third party to host the DNS zone associated to the homenet



forward zone `homenet.example`

- maybe handled by the ISP given that CPE, network are already being assigned names

reverse zone `ip.ip6.arpa`, `ip4.in-addr.arpa`

- handled by the ISP

[-front-end-naming-delegation](#) describes this architecture.

- current specification is pretty stable, and we are waiting for experimentations feedbacks to finalize it.

ISPs have a **special** place in this eco-system

- handling ip.ip6.arpa
- already assigning names to homenets
- (sometime) provide / manage the CPE

[-naming-architecture-dhc-options](#) details a mechanism that uses DHCP to help/ease interaction between the CPE (HNA) and the ISP.

Previously version

DHCP Client

DHCP Server

DHCP Request ----->

OPTION_PUBLIC_KEY

-----> DOI

ORO(OPTION_REGISTERED_DOMAIN

OPTION_DIST_MASTER

OPTION_REVERSE_DIST_MASTER)

<----- DHCP Response

OPTION_PUBLIC_KEY was expected to be considered by the DOI to configure the authentication of the HNA to the DOI.

While the DHCP Server may provide different outputs based on inputs, DHCP server is not expected to upstream for configurations its inputs.

OPTION_PUBLIC_KEY could become an optional hint used by the ISP, but the feed back we received so far is that it is not needed.

- The current specification removes the OPTION_PUBLIC_KEY

Thanks!