# Outsourcing Home Network Authoritative Naming Service

draft-ietf-homenet-front-end-naming-delegation

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#### draft status

Complete re-write of the document

Specification of the protocol between HNA / DM

Specifications are implemented (Ray)

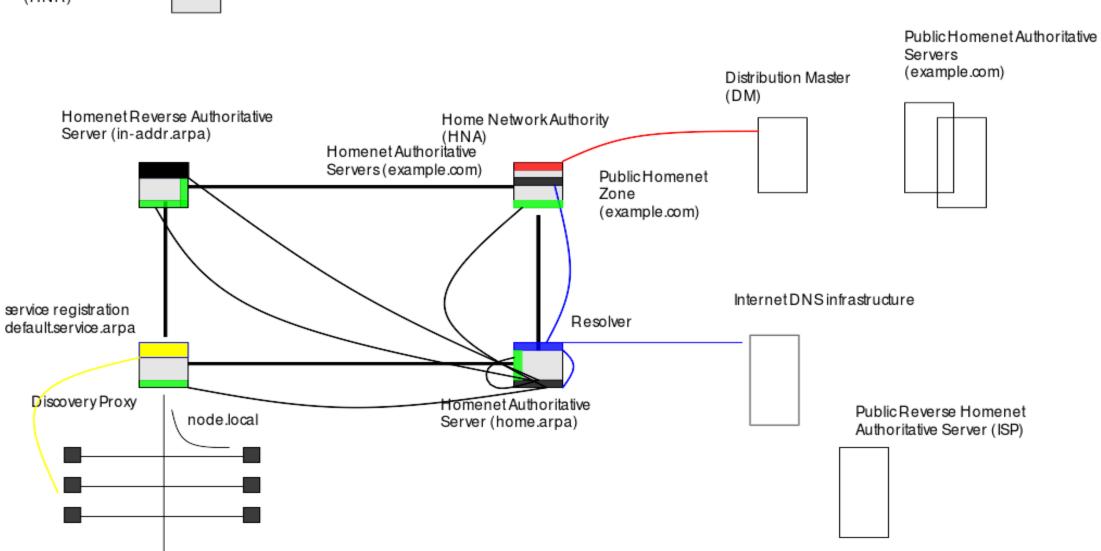
Concrete interests in deploying it

Next Step:

- review the text
- WGLC before next IETF

## high level view

Homenet Router (HNR)



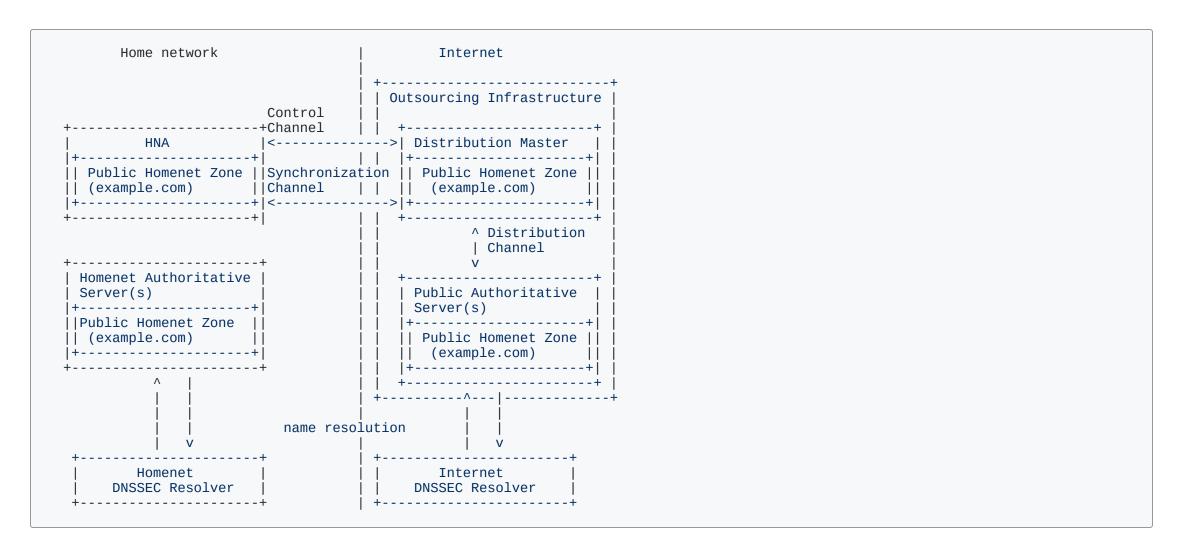
#### HNA

- signs the Public Homenet Zone
  - the key is likely generated by the HNA and kept secret
- authentication to the DM is performed using specific keys, certificates

#### Resolver can resolve example.com

- on the Public Homenet Authoritative Servers on the Global Internet
- on the Homnet Authoritative Servers
  - keep homent connectivity in case of network disruption
  - may be provided by the HNA or other HNR.

### scope



#### channels

control channel: to set the relation between HNA/DM

- Use DNS message to exchange information:
  - HNA retrieves AXFR responses from the DM (NS, AAAA, A, SOA)
  - HNA sends DNS updates to the DM (secondary, DS, STOP)

synchronization channel: (primary / secondary)

distribution channel

## securing the channels

control channel is authenticated / encrypted using TLS securing synchronization channel

- TLS
- Is it acceptable not to have it secured?
  - Public Homenet zone signed with DNSSEC

## deployment scenarii

provisioned CPE

- domain name
- authentication keys
- certificate

non provisioned CPE

ACME to generate a certificate with proof of possession of FQDN

