

# Outsourcing Home Network Authoritative Naming Service

`draft-ietf-homenet-front-end-naming-delegation-04.txt`

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# Log

- We received a request to address case where a network has multiple candidates to host the hidden master.
  - Previous version assumed the CPE hosts the Hidden master.
- “Scope of the Document” section:
  - CPE hosting the hidden master is unique and in case multiple candidate CPE, an election must be performed.
  - CPE in document performs all operation, but these operations (building the zone, signing ...) may be distributed between different nodes.
    - CPE is considered distributed,
    - Communications are considered implementation issue

# Next Step

- We are planning to replace:
  - CPE by “Homenet Naming Authority” to avoid further confusion.
  - Mention HNA results from an election when there are multiple HNA candidates
- We are also planning to more clearly position the architecture in the naming eco-system (see questions)

# Q1: How the different naming systems are supposed to co-exist

- The different naming systems are DNS-SD, mDNS and DNS.
- The document does not consider this issue as specific to outsourcing the zone:
  - Architectures only considers the outsourcing the DNS zone
  - Outsourcing is orthogonal to any mechanisms that considers interactions between mDNS-DNS-SD and DNS

# Q1: How the different naming systems are supposed to co-exist (text)

- **[Section 7.3](#). Guidance and Recommendations:**
  - The Homenet Zone is expected to host public information only. It is not the scope of the DNS service to define local home network boundaries. Instead, local scope information is expected to be provided to the home network using local scope naming services. mDNS [[RFC6762](#)] DNS-SD [[RFC6763](#)] are two examples of these services. Currently mDNS is limited to a single link network. However, future protocols are expected to leverage this constraint as pointed out in [[RFC7558](#)].

## Q2: How information gets from hosts to the internal DNS master

- The document does not consider this issue as specific to outsourcing the zone:
  - DHCP may provide IP addresses, FQDNs and build the Zone
  - Hosts may update the zone on the hidden master
  - HNCP, mDNS, DNS-SD mechanisms may also be considered.

# Q2: How information gets from hosts to the internal DNS master (text)

- **[Section 4.1](#). Architecture Overview**

- How the Homenet Zone is built is out of the scope of this document. The CPE may host or interact with multiple services to determine name-to-address mappings, such as a web GUI, DHCP [[RFC6644](#)] or mDNS [[RFC6762](#)]. These services may coexist and may be used to populate the Homenet Zone. This document assumes the Homenet Zone has been populated with domain names that are intended to be publicly published and that are publicly reachable. More specifically, names associated with services or devices that are not expected to be reachable from outside the home network or names bound to non-globally reachable IP addresses **MUST NOT** be part of the Homenet Zone.

# Q3: How users can specify which hosts are *\*not\** published into the public DNS

- The document does not consider this issue as specific to outsourcing the zone:
  - Interaction of the end user via a GUI
  - Recommend not publishing non DNS i.e local scope names
  - Use local scope resolution for local scope names.



# Q3: How users can specify which hosts are **\*not\*** published into the public DNS (text)

- **[7.3. Guidance and Recommendations](#)**

- As documented in [Section 7.2](#), it is RECOMMENDED to avoid different views. If network administrators choose to implement multiple views, impacts on devices' resolution SHOULD be evaluated. As a consequence, the Homenet Zone is expected to be an exact copy of the Public Homenet Zone. As a result, services that are not expected to be published on the Internet SHOULD NOT be part of the Homenet Zone, local-scope addresses SHOULD NOT be part of the Homenet Zone, and when possible, the CPE SHOULD sign the Homenet Zone. The Homenet Zone is expected to host public information only. It is not the scope of the DNS service to define local home network boundaries. Instead, local scope information is expected to be provided to the home network using local scope naming services. mDNS [[RFC6762](#)] DNS-SD [[RFC6763](#)] are two examples of these services. Currently mDNS is limited to a single link network. However, future protocols are expected to leverage this constraint as pointed out in [[RFC7558](#)].

Thank You!