DNAME Status Update

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What is DNAME (RFC 2672)

```
owner ttl class DNAME target
    example.com. DNAME example.net.
```

- Class independent
- Redirect all queries like CNAMEs from <bla>.owner to <bla>.target
- CNAME synthesized for older resolvers
- Redirect a subtree of domain names

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Issue Overview
(Next up: proposals)

- Discussion in other docs
  - RFC 3363 gives ip6 rev. recommendations
- Use as delegation tool
  - Apex not redirected
  - MX,NS hostnames
  - PTR hostnames
  - Not a zone-cut
- DNSSEC
  - NSEC bit reminder
  - NSEC3 hashing costs

- DNAME RR always in reply
- CNAME RR TTL longer
- Signaling of understanding (RFC 2672: 'EDNS v.1')
  - Name compression
- CIDR blocks in-addr.arpa.
- Wildcard dname (rfc4592)
- Corner cases
  - Resynthesis CNAMEs in caches

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Issue List <1>

- [3.3] DNAME Discussions in Other Documents
  - 4592 : no DNAME at wildcards
  - 3363 (ip6 reverse tree) still recommends it
- [4.1] DNAME as Delegation Tool
  - Proposal: "Not possible".
- [4.2] DNAME Apex is not Redirected itself
  - Proposal: use as explanation of [4.1].
- [4.3] DNAME is Always Included in Outgoing Packets
  - Proposal: If no EDNS, exclude for compatibility.
    - Is this useful?

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Issue List <2>

- [4.4] MX and NS Records Require that the DNAME in their RDATA is Canonical

  – Proposal: Put in [4.1] explanation.

- [4.5] DNSSEC considerations

  – Proposal: "Please check DNAME bit in NSEC".

- [4.6] Signaling of DNAME Understanding

  – Input needed!

- [4.7] A DNAME is not a Zone-cut

  – Proposal: duplicate issue for [4.1], close.

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Issue List <3>

- [4.8] DNAME and CIDR Blocks in in-addr.arpa
  - Proposal: Out of scope, dropped(?)
- [4.9] Name Compression in RDATA
  - Depends on signaling resolution [4.6].
- [4.10] Synthesized CNAME TTL=0
  - Proposal: increase to allow caching, input needed!
- [4.11] Wildcarded DNAME
  - Proposal: disallow.

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Issue List <4>

- [4.12] NSEC3 and DNAME
  - Input needed!
- [4.13] PTR Records and DNAME
  - Proposal: "names under DNAME not canonical"
- [4.14] Corner cases
  - Should caches resynthesize a CNAME from the DNAME ?

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