



ANAME: Address-specific DNS Name Redirection (draft-ietf-dnsop-aname)

Peter van Dijk
Senior PowerDNS Engineer
with Evan Hunt and Anthony Eden



Why ANAME?

```
$ORIGIN example.com.
@ IN SOA ...
@ IN NS ns1
@ IN A 192.0.2.1
www IN CNAME example.com.my-cdn.example.net.
```

Current solutions

- 1. CNAME at apex
- 2. CNAME flattening
- 3. cron updates
- 4. ALIAS or ANAME from various commercial operators
- 5. ALIAS in open source PowerDNS auth

Creating a single standard

HOW STANDARDS PROLIFERATE: (SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC.)

SITUATION: THERE ARE 14 COMPETING STANDARDS.

14?! RIDICULOUS! WE NEED TO DEVELOP ONE UNIVERSAL STANDARD THAT COVERS EVERYONE'S USE CASES. YEAH!

SOON:

SITUATION:

THERE ARE

15 COMPETING

STANDARDS.

Usage

```
$ORIGIN example.com.
@ IN SOA ...
@ IN NS ns1
@ IN ANAME example.com.my-cdn.example.net.
www IN CNAME example.com.my-cdn.example.net.
```

Remember CNAME?

```
;; QUESTION SECTION:
;www.example.com. IN A

;; ANSWER SECTION:
www.example.com. IN CNAME example.com.my-cdn.example.net.
example.com.my-cdn.example.net. IN A 198.51.100
```

Compare ANAME

```
;; QUESTION SECTION:
;example.com. IN A

;; ANSWER SECTION:
example.com. 86400 IN ANAME example.com.my-cdn.example.net.
example.com. 86400 IN A 198.51.100
```

Concerns

- DNSSEC
- · loops
- GSLB
- TTL limiting/counting down

Next steps

- get some code running
- restructure the draft (separate primary and secondary auth behaviour)
- more examples
- figure out what to do with IPv23

Questions?

Questions? Comments?