

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
```

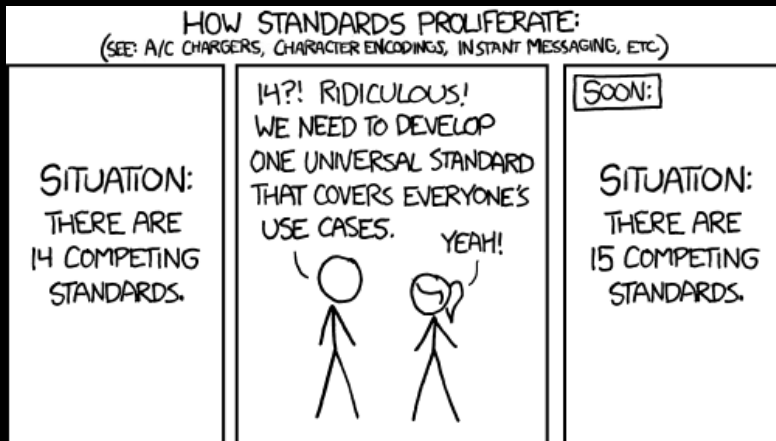
```
@ IN A    192.0.2.1
```

```
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



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?