

# **BULK DNS Resource Records**

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draft-woodworth-bulk-rr

# \$GENERATE is GREAT!

but ...

- It can not be transferred intact
- Other records can break the expansion
- It is not really suitable for **large** scale
- It is not standard across all DNS implementations

# Real World Needs

- Transfer zones with abbreviated records intact
- Requests have already been made for /96 (larger to come)
- Patterns which are not broken by singletons (CNAME)
- Lower memory requirements for larger patterns (1M +)
- Zone compatibility with customer's software (non-bind)

# BULK Looks Like

BULK records have a REGEX “feel” and offer REGEX-esque backreferences

## **EXAMPLES (for IPv6 /96 reverse):**

*( ASSUME: \$ORIGIN 0.c.f.ip6.arpa. )*

```
* 86400 IN BULK PTR (  
    [0-f] . [0-f] . [0-f] . [0-f] . [0-f] . [0-f] . [0-f] . [0-f]  
    pool-W- $\${1}$ - $\${2}$  .  $\${3}$ - $\${4}$  .  $\${5}$ - $\${6}$  .  $\${7}$ - $\${8}$  . example.com .  
    )
```

- OR -

```
- 86400 IN BULK PTR - pool-W- $\${*}$  . example.com .
```

# Why BULK?

- Standards based solution (no more hacks)
- Eliminate singleton collisions (broken deployments)
- Simple to use syntax for DNS administrators
- Can act *like* a bind \$GENERATE yet can easily AXFR
- Can *only* exist where other resource records do not
- Can easily manage over 18 quintillion PTR records  
(18,446,744,073,709,551,616 +)
- Natively Supports DNSSEC

# Contact (VCard)

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