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 0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.c.f.ip6.arpa.)

* 86400 IN BULK PTR
  [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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