Glue Is Not Optional DNS Referral Glue Requirements

draft-ietf-dnsop-glue-is-not-optional-04 IETF 113 Andrews, Huque, Wouters, Wessels

Summary of changes since -02

- Clarified scope to focus only on name server responses, and not zone/registry data.
- Removed any discussion of promoted / orphan glue.
- Use "referral glue" on the assumption that other types of glue may be defined in the future.
- Sibling glue can be optional. Only require TC=1 when all in-domain glue RRs don't fit.
- Avoid talking about requirements for UDP/TCP specifically, and talk more generically about message size constraints regardless of transport.

Not About Registries

"Note that this document only clarifies requirements of name server software implementations. It does not place any requirements on data placed in DNS zones or registries."

Orphan / Promoted Glue

• References to orphan or promoted glue have been removed.

"Glue" vs "Referral Glue"

- Based on some DPRIVE discussions, seems like the concept of glue could be expanding?
 - See e.g., draft-schwartz-ds-glue
- Should this document talk about "referral glue"?
- Or perhaps define "glue" to mean only addresses of NS records (below zone cut, etc.)
- Also, where to define glue?
 - here?
 - DNS terminology update?

Sibling Glue Optional

"This document clarifies that when a name server generates a referral response, it SHOULD include all available glue records in the additional section. If after adding all in-domain glue records, not all sibling glue records fit due to message size constraints, the name server is NOT REQUIRED to set TC=1."

UDP/TCP vs Transports Generically

• OLD

If message size constraints prevent the inclusion of all glue records in a UDP response, ...

... the client SHOULD use TCP to retrieve the full response.

• NEW

If message size constraints prevent the inclusion of all in-domain referral glue records, ...

... the client SHOULD use another transport to retrieve the full response.

Outstanding Issues

- Glue vs referral glue
- Where to define glue

Discussion