draft-wirelela-deleg-requirements

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(WiReLeLa, for any who hadn't already puzzled out the draft name)

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The Basics

Submitted -00 on 8 July:
https://datatracker.ietf.org/doc/draft-wirelela-deleg-requirements/00/

Proposed a basic framework of Hard Requirements vs Soft Requirements

- Hard: strictly required of any proposals
- Soft: desired features to address the problem space

Asked for and received feedback on dd@ietf.org

Seeking adoption by this working group

Initial Hard Requirements

- DELEG must not disrupt the existing registration model of domains.
- DELEG must not change current namespace semantics. ← More later
- DELEG must not negatively impact most DNS software. This is intentionally a bit vague with regard to "most".
- DELEG must be able to secure delegations with DNSSEC.
- DELEG must support updates to delegation information with the same relative ease as currently exists with NS records.

Initial Soft Requirements

- DELEG should facilitate using new DNS transport mechanisms.
- DELEG should make clear the details for contacting a Service Access Point.
- DELEG should minimize transaction cost in its usage.
- DELEG should enable an operator to manage DNS service more completely.
- DELEG should allow for mapping to the conventional NS-based delegation.
- DELEG should be easily extensible, much like EDNS(0).
- DELEG should support an in-band means for the child to signal to the parent that parent-side records related to the child should be updated.

Writing Style

Deliberately pithy, to focus in on the core design values.

Aimed to make it easily digestible.

Didn't presuppose a specific solution.

Could add more rationale for each point, if the group desires.

The Semantics of Semantics

Originally:

```
DELEG must not change current namespace semantics.  The nameserver(NS)
record type will continue to define the delegation of authority between a
parent zone and a child zone exactly as it has for decades .
```

First sentence could be read as basically nullifying this group.
Intent was that *existing* aspects of the pre-DELEG ecosystem work exactly as is.

Proposed:

```
DELEG must be backwards compatible with the existing ecosystem. Legacy zone
data must function identically with both DELEG-aware and DELEG-unaware
software. Nameserver(NS)records will continue to define the delegation of
authority between a parent zone and a child zone exactly as they have.
```

Child to Parent Backtalk

Currently:

`DELEG should support an in-band means for the child to signal to the parent`

Put in as a soft requirement because it had been mentioned in brainstorming.

Aligned with the general issue of parent/child relationships.

Anticipated that it might be controversial to include in requirements.

Could well be addressed through Generalized DNS Notifications in dnsop.

The question: as a soft requirement, it isn't mandatory anyway, but should delete?

Document Development

Currently at https://github.com/moonshiner/draft-wirelela-deleg-requirements

Issues and Pull Requests welcome.

Anticipate moving to a DELEG WG repository if adopted.

Next Steps

Per the charter, "This is expected to be published as an informational RFC."

We beseech thee, O DELEG delegates, pray adopt our draft.

~ finis ~

Extra Slides

CARVING DNS INTO CONCEPTUAL COMPONENTS (MODELS)

- Where does DELEG fit?
- What are the boundaries?