

Registration Maintenance ! = Internet Speed

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Registration Communication matrix

Registry	EPP/homegrown	Registrar
Registrar	EPP/API	Reseller
Registrar/Reseller	API/WEB	Registrant
Registrant	API/WEB/Email	DNS OPERATOR
Registrar/Reseller		DNS Operator
Registry	NOT ALLOWED	Registrant
Registry	Registrar	Reseller

Food for thought

We have a **sacred cow**, conceptually, since the dawn of time, registrars have been granted full control of relaying & managing **ALL** registrant domain information to the registry.

No one stopped and asked when DNSSEC material was introduced if the registrar should manage this? Or **WHO** should manage this material? Or **IF** it should be the DNS Operator?

RFC5910 bingo, we all moved along and “assumed” it was the registrars responsibility and the registrars came back “hey!!! we don’t want to manage this *#%&”

Then we had DS or DNSKEY religion war, Key Relay, CDS, CSYNC, etc...

⇒ *All symptoms of a root cause.*

We need to change the model to support different authorization/delegation model for NS/DS/Glue, and a protocol to manage up the food chain.

Problem: from DNS Operators perspective

- A. Who to talk to for updates?
- B. How to talk to (A) ?
- C. How to find (A)?

For A. there are 4 choices

- Registrant (not realtime, unreliable)
- Registry (not allowed, no protocol)
- Registrar (can't always find it, no authorization)
- Reseller (can't find it, no authorization, no interface)

From Registrants perspective

Why bother me I'm paying you to run the system!!!!

From Registrars/Reseller's perspective:

I own the customer contact and only the customer is allowed to update information via me.

Registry Perspective:

We want to publish accurate information!!

Solution Space: make DNS operator visible

1. Understand third Party DNS operators play important role.
2. Find a way to authorize them to perform limited set of actions on Registrants behalf
⇒ AUTHORIZATION for NS/DS/glue changes

Solution space: Communication #1

Create a REST protocol that can:

- Authenticate Operator to R* entity
- has commands to change/check NS/DS/Glue
- has redirection up/down the R* chain
 - Registry <-> Registrar <-> Reseller
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Solution space: Communication

- Registry allowed to send EPP messages to Registrar with requests from DNS operator
- Registrar will feed information into normal internal change flow and issue EPP commands to update Registry.

Next steps

