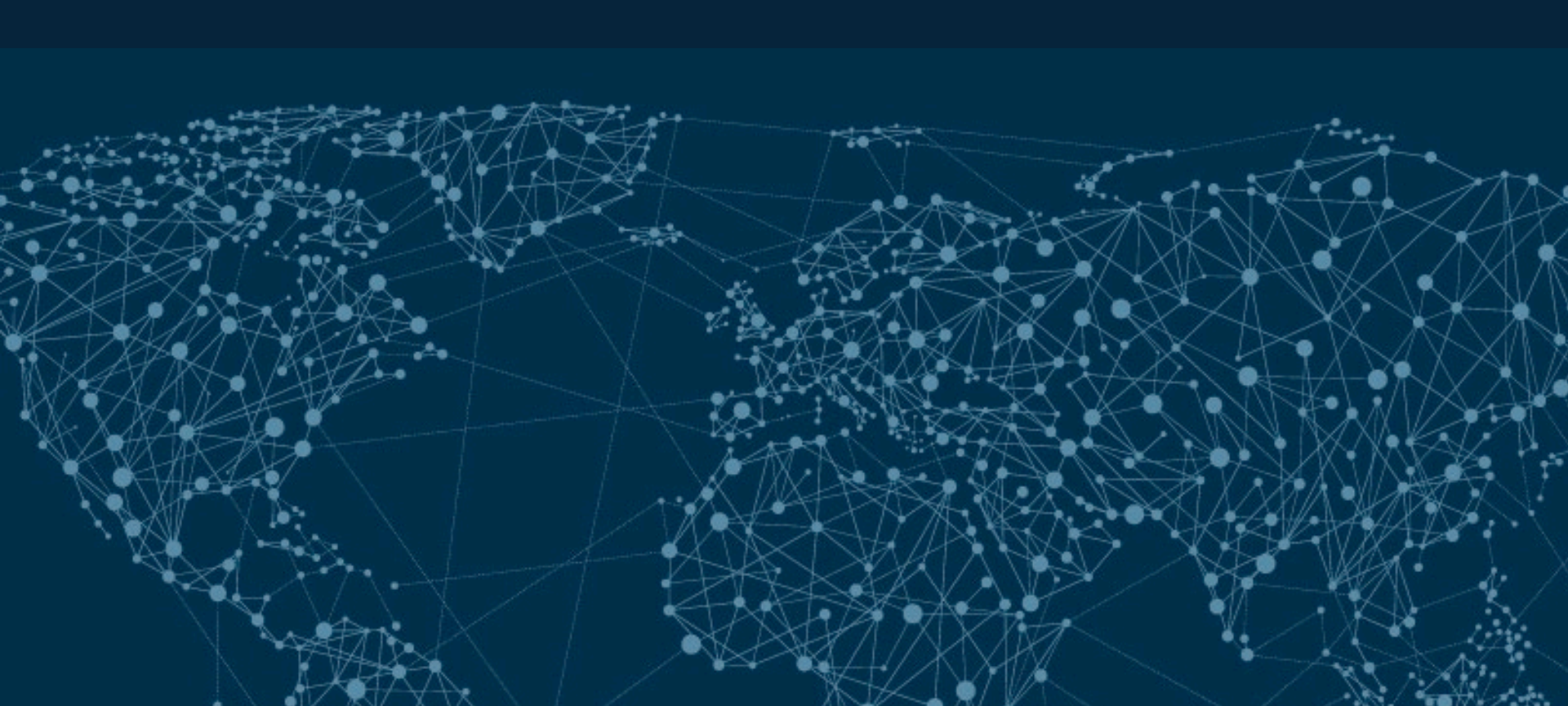ICANN|55
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RDAP Implementation

7 March 2016

Francisco Arias & Gustavo Lozano | ICANN 55 | 7 March 2016

Agenda

1 Introduction [10 min]

2 Differentiated Access [15 min]

3 Thick Whois *vs* Registrar's RDAP [20 min]

4 Registrar Registration Expiration Date [20 min]

5 Conclusion and Next Steps [10 min]

Introduction

History on Replacing the WHOIS Protocol

- SSAC's SAC 051 (19 Sep 2011): *The ICANN community should evaluate and adopt a replacement domain name registration data access protocol*

- Board resolution adopting SAC 051 (28 Oct 2011)

- Roadmap to implement SAC 051 (4 Jun 2012)

- RDAP community development within IETF WG began in 2012

- Contractual provisions in: .biz, .com, .info, .name, .org, 2012 Registry Agreement (new gTLDs), 2013 Registrar Accreditation Agreement

- RDAP Request for Comments (RFCs) published (Mar 2015)

- First draft gTLD RDAP profile mapping current contractual and policy obligations posted for public input (Sep 2015)

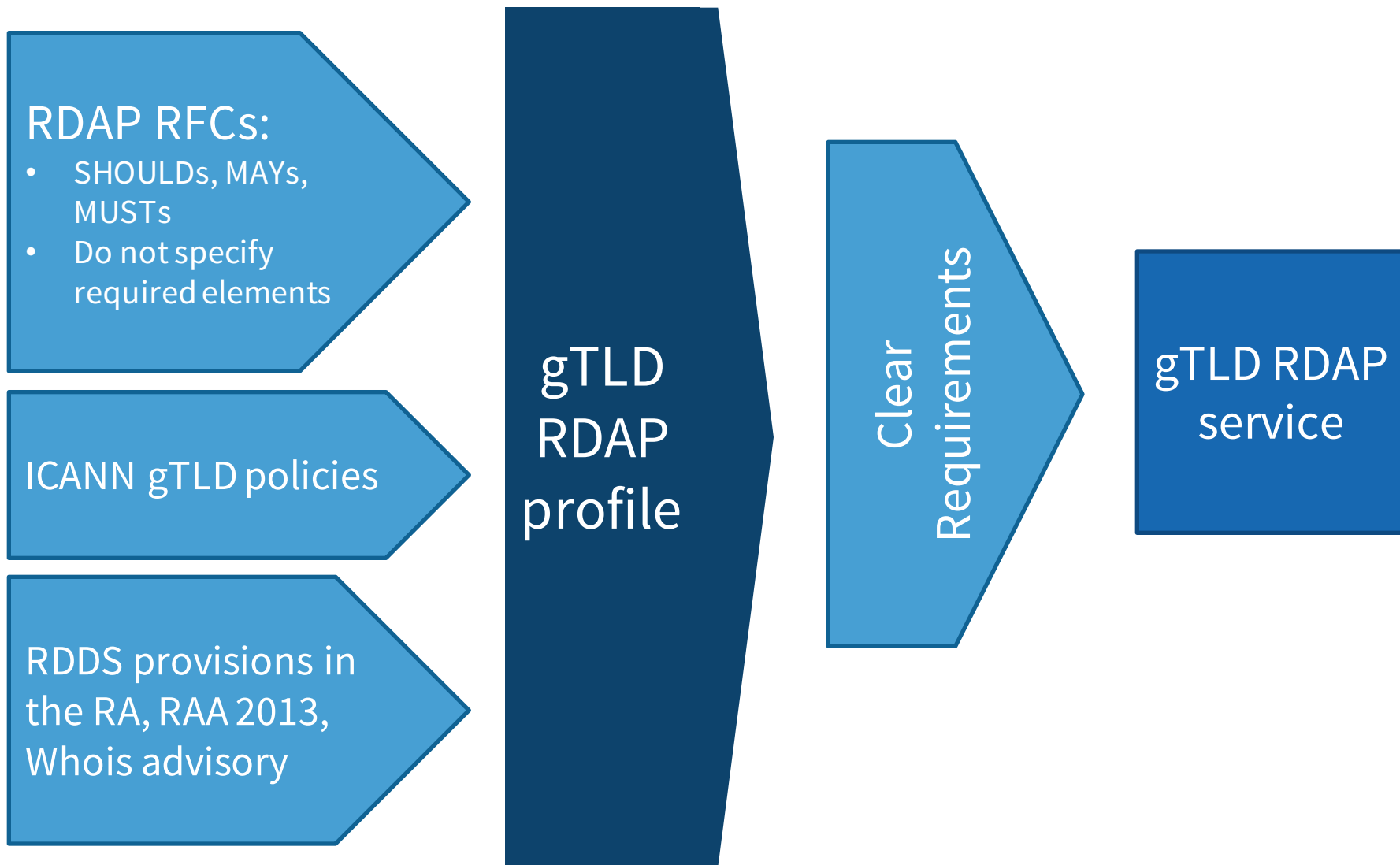- Second draft of gTLD RDAP profile posted for comment (3 Dec 2015)

RDAP

The Registration Data Access Protocol (RDAP) is a protocol designed to replace the existing WHOIS protocol and provides the following benefits:

⊙ Standardized query, response and error messages

⊙ Secure access to data (i.e., over HTTPS)

⊙ Extensibility (e.g., easy to add output elements)

RDAP

- ⊙ Bootstrapping mechanism to easily find the authoritative server for a given query

- ⊙ Standardized redirection/reference mechanism (e.g., from a thin registry to a registrar)

- ⊙ Builds on top of the well-known web protocol HTTP

RDAP

⊙ Internationalization support for registration data

⊙ Optionally enables differentiated access (e.g., limited access for anonymous users, and full access for authenticated users)

ICANN gTLD RDAP Profile

RDAP RFCs:
- SHOULDs, MAYs, MUSTs
- Do not specify required elements

ICANN gTLD policies

RDDS provisions in the RA, RAA 2013, Whois advisory

gTLD RDAP profile

Clear Requirements

gTLD RDAP service

Differentiated Access

Differentiated Access

- ⊙ Differentiated access refers to the functionality of showing different subsets of RDDS fields based on who is asking

- ⊙ Current draft gTLD RDAP profile allows for differentiated access for those with contracts that permit such feature or once there is a policy on the matter

- ⊙ As of today, only three gTLDs have a contract provision allowing RDDS with differentiated access

- ⊙ There is no existing policy covering differentiated access in RDDS

Differentiated Access

⦿ Key feedback raised by community members includes:

▶ The RDAP profile *"must include the feature set that will support differentiated access"* (**ALAC**)

▶ Differentiated access should be implemented by all new gTLDs but not be enabled until a contract change or consensus policy is in place (**IAB**)

⏸ Including a requirement for differentiated access for all gTLDs is premature given ongoing work in the community (**IPC**)

⚠ Concern by the potential deployment of RDAP prior to the completion of the RDS PDP (Neustar)

Differentiated Access

- ⊙ The Registration Directory Services (RDS) PDP has in scope the issue of access to registration data, including the potential for differentiated access

- ⊙ There is no timeline yet for when the new policy would be ready

  - ⊙ Timeline would likely be in the order of years

- ⊙ gTLD Registries currently have the option to request a change to their RDDS service to include such a feature in accordance with existing policies and procedures

Differentiated Access

Given the lack of policy or contractual provisions regarding differentiated access on RDDS:

⊙ ICANN is considering moving forward implementing RDAP without differentiated access as requirement for all gTLDs

Thick Whois vs Registrar's RDAP

Thick Whois *vs* Registrar's RDAP

The Registry Agreement requires a registry to publish data fields in RDDS for which the:

a. registry is authoritative, e.g.,:
   - ⊙ Creation date
   - ⊙ Sponsoring registrar
   - ⊙ Domain statuses

b. registrar is authoritative, e.g.,:
   - ⊙ Registrant contact information
   - ⊙ Administrative contact information
   - ⊙ Technical contact information

Thick Whois *vs* Registrar's RDAP

New RDDS fields for inclusion in registry's RDDS under discussion per Thick Whois policy (registrar is authoritative):

1. Registrar Registration Expiration Date
2. Registrar Abuse Contact Email
3. Registrar Abuse Contact Phone
4. Reseller

Implementing EPP extensions would be needed for a registry to provision some of these fields from the registrar

Thick Whois *vs* **Registrar's RDAP**

- Draft gTLD RDAP profile requires registrars to offer RDAP service for "thin registrations" (i.e., registrations in which the data of the registrant, administrative, or technical contact is not passed to the registry)

- Some registrars have commented that registrar's RDAP would be of temporary nature given that there is only three remaining thin-Whois gTLDs (.com, .jobs, and .net)

Thick Whois *vs* **Registrar's RDAP**

In order to allow RDDS users to continue to access these four fields:

A. Should registrars offer RDAP service?

B. Or, should registries show the four additional fields?

Registrar Registration Expiration Date

Registrar Registration Expiration Date

- RAA 2013 requires registrars to show the "Registrar Registration Expiration Date" which may be different from the Registry Expiration Date

- The draft Thick Whois Policy language requires the registry to show the Registrar Expiration Date in the registry's RDDS output

- Some community members have expressed the concern that showing both expiration dates may confuse RDDS users

Registrar Registration Expiration Date

Domain Name: EXAMPLE.TLD

Registry Domain ID: D1234567-TLD

Registrar WHOIS Server: WHOIS.example-registrar.tld

Registrar URL: http://www.example-registrar.tld

Updated Date: 2009-05-29T20:13:00Z

Creation Date: 2000-10-08T00:45:00Z

Registry Expiry Date: 2017-03-05T00:00:00Z

Registrar Registration Expiration Date: 2016-03-05T00:00:00Z

Registrar: EXAMPLE REGISTRAR LLC

Registrar IANA ID: 5555555

Registrar Abuse Contact Email: email@registrar.tld

Registrar Abuse Contact Phone: +1.1235551234

Reseller: EXAMPLE RESELLER1

Domain Status: clientDeleteProhibited

Domain Status: clientRenewProhibited

Domain Status: clientTransferProhibited

Registrar Registration Expiration Date

In order to allow RDDS users to continue to access both registry and registrar expiration dates:

A. Registry's RDDS shows both expiration dates including a link (similar to AWIP) that explains the meaning of each expiration date.

B. Registrars offer RDAP for thin and thick registrations. Registry's RDDS shows the Registry Expiry Date, and the registrar's RDDS shows the Registrar Expiration Date.

C. Something else?

Conclusion and Next Steps

Engage with ICANN

Thank You and Questions

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