# Exploring Replacements for WHOIS –
# A Next Generation
# Registration Directory Service (RDS)

EWG Workshop with the ICANN Community
Monday, 24 March, 2014

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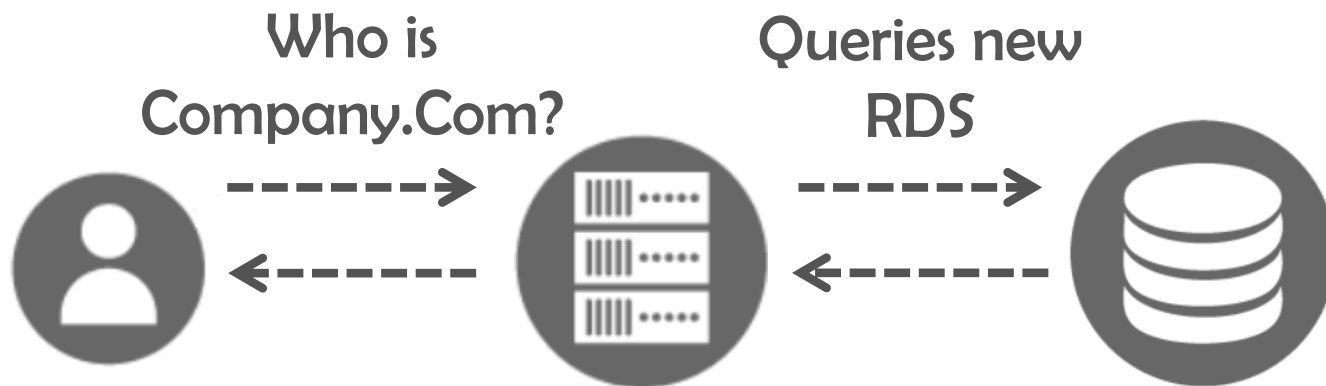NO. 49
23-27 MARCH 2014
Singapore

# RDS Workshop Agenda

- Recent Activity and Plans

- Community Input on
  RDS Risk and Benefits

- Q&A

# What is the RDS?

**Who is Company.Com?**

**Queries new RDS**

Domain Name: company.com
Organization: Company Inc.

Street: 100 Corporate Parkway
City: Mountain View
State/Province: CA
Postal Code: 94043
Country: US
Phone: +1.6501234567

Email: dns-admin@company.com
.......etc.......

Returns public, verified accurate information about Registrant

To authorized users, may also return gated data

**Video on EWG's Public Wiki**
https://community.icann.org/pages/
viewpage.action?pageId=40175189

# Recent EWG Progress

- Status Update Report Nov 2013
  - Dialog with Community at ICANN 48
  - Public Comment closed 28 February
- Research Phase Jan-Feb 2014
  - Whois Data Validation/Verification ccTLD Practices Survey and Commercial Services RFI
  - RDS User Accreditation RFI
  - RDS Model Cost Comparison
  - Whois Privacy/Proxy Service Provider Practices Questionnaire

# EWG Plans

- EWG reconvened in Singapore to review research results & comments

- RDS Risk Survey launched to gather input on potential risks and benefits

- All inputs to be carefully considered as EWG refines RDS recommendations

- EWG is scheduled to deliver its final report to the ICANN Board in June 2014

- Report will serve as focused input to on-going policy development

# RDS Risk Survey

- **Why:** This survey is a chance to tell the EWG about risks and benefits that the RDS might have for YOU.

- **Who:** You are invited to participate if you PROVIDE OR USE Whois data.

- **Results:** Findings will be used to refine recommendations to reduce risks and as input to a full risk assessment.

**http://tiny.cc/risk-ewg-survey**

# Process

- Gather broad community input via on-line survey and interactive webinars

- Findings and preliminary analysis will be included in the EWG's final report

- If ICANN pursues RDS implementation, a formal risk assessment would

  - Analyze identified possible risks

  - Rank and prioritize them

  - Assess their impacts and interactions, and

  - Identify steps to reduce risk.

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# Invitees include…

- Natural Person (Individual) Registrants
- Legal Person (Business) Registrants
- Proxy Service Providers
- Protected Registrants
- Domain Name Registrars
- Domain Name Registries
- Third-Party Whois Providers
- Internet Technical Staff
- On-Line Service Providers
- Individual Internet Users
- Business Internet Users
- Internet Researchers
- Intellectual Property Owners
- Law Enforcement Agencies
- Operations/Security Incident Investigators

*ANYONE who may be impacted by the proposed RDS can respond to this survey*

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# Participants are asked about...

- Possible risks and benefits that RDS implementation could have:

  ○ **Technical:** Changes to processes that use or provide registration data today,

  ○ **Legal or Financial:** Changes to costs and legal considerations associated with registration data,

  ○ **Operational:** Changes in speed of access to or availability of registration data, and

  ○ **Security or Privacy:** Changes that could affect the privacy of domain name registration data.

- Ways to reduce risks or increase benefits.

# Example: Potential Risks

Using all four columns below, please:

- Select ALL Security or Privacy Risks that potentially impact YOU.
- Select TWO (2) risks that could have the biggest impact on you.
- Select TWO (2) risks most likely to occur.
- Select ANY newly-introduced RDS risk that is not already a known Whois risk.

You are encouraged to add to these examples by describing other risks using rows h-j.

| Potential Security or Privacy Risks | Might impact you? | Two most impactful? | Two most likely? | New with RDS? |
|---|---|---|---|---|
| a) My registration data might be more vulnerable to external attack. | ☐ | ☐ | ☐ | ☐ |
| b) My registration data might be more accessible to law enforcement. | ☐ | ☐ | ☐ | ☐ |
| c) I might be required to provide a valid email address to register a gTLD domain. | ☐ | ☐ | ☐ | ☐ |
| d) I might have to declare that I am a legal or natural person to register a gTLD domain. | ☐ | ☐ | ☐ | ☐ |
| e) Other Security or Privacy Risk (describe below) | ☐ | ☐ | ☐ | ☐ |
| f) Other Security or Privacy Risk | ☐ | ☐ | ☐ | ☐ |

EXAMPLES

PLEASE ADD YOUR OWN!

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# Example: Potential Benefits

6) Using all four columns below, please:
- Select ALL Technical Benefits that potentially impact YOU.
- Select TWO (2) benefits that could have the biggest impact on you.
- Select TWO (2) benefits most likely to occur.
- Select ANY newly-introduced RDS benefit that is not already a known Whois benefit.

You are encouraged to add to these examples by describing other benefits using rows f-h.

| Potential Technical Benefits | Might impact you? | Two most impactful? | Two most likely? | New with RDS? |
|---|---|---|---|---|
| a) My registration data might be easier to maintain. | ☐ | ☐ | ☐ | ☐ |
| b) Registration data that I access might be more accurate. | ☐ | ☐ | ☐ | ☐ |
| c) Access to registration data might be more uniform and consistent. | ☐ | ☐ | ☐ | ☐ |
| d) I might have better access to gated data that I really need. | ☐ | ☐ | ☐ | ☐ |
| e) I might no longer be required to provide port 43 public whois access. | ☐ | ☐ | ☐ | ☐ |
| f) Other Technical Benefit (describe below) | ☐ | ☐ | ☐ | ☐ |
| g) Other Technical Benefit | ☐ | ☐ | ☐ | ☐ |

EXAMPLES

PLEASE ADD YOUR OWN!

# Tell us what you think!

- Please take this opportunity to identify possible positive and negative impacts on YOU as a USER or PROVIDER of Whois data

- Successful risk assessment ultimately depends on broad stakeholder input

- Two ways to share your insights
  - Interactive Webinars – early April
  - On-line Survey – closes May 15

**http://tiny.cc/risk-ewg-survey**

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# Questions? Comments?

# Background Material

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# What is the RDS?

- Next-Generation
  Registration Directory Service (RDS)
  - Clean-slate approach
  - Based on analysis of
    users, purposes, and data needs

- Recommended paradigm shift
  - Abandon one-size-fits-all WHOIS approach
  - Replace with a new purpose-driven system to improve privacy, accuracy & accountability

# Public Access to Some Registration Data
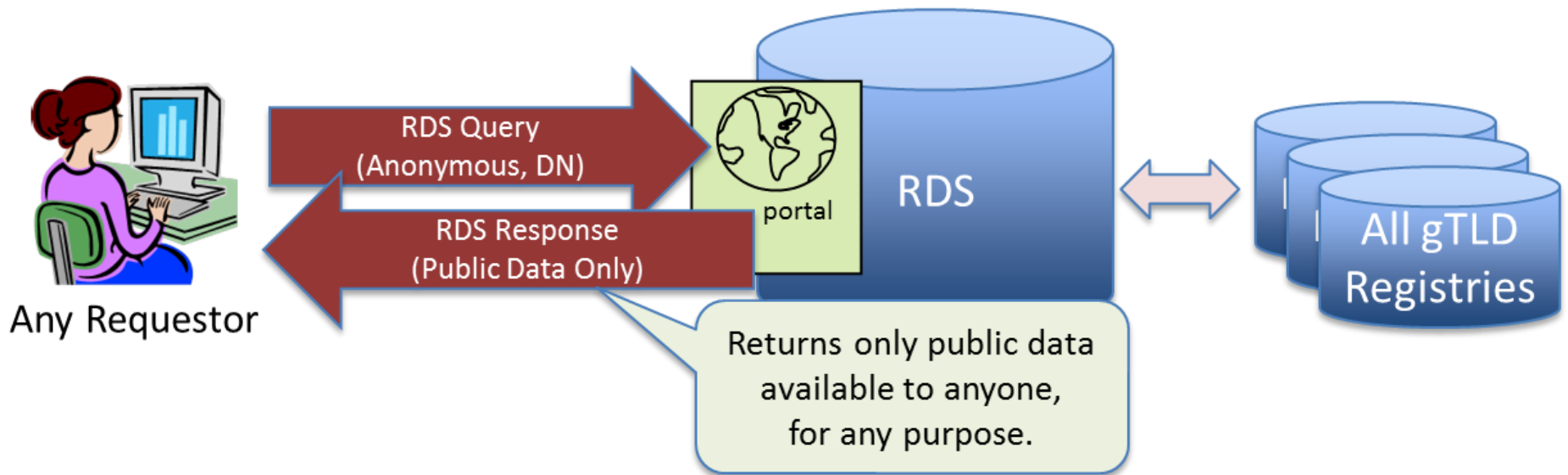


- **Purpose-based disclosure**
- **Public Access to minimum set**
- **Gated Access to other data…**

# Gated Access to More Sensitive Registration Data
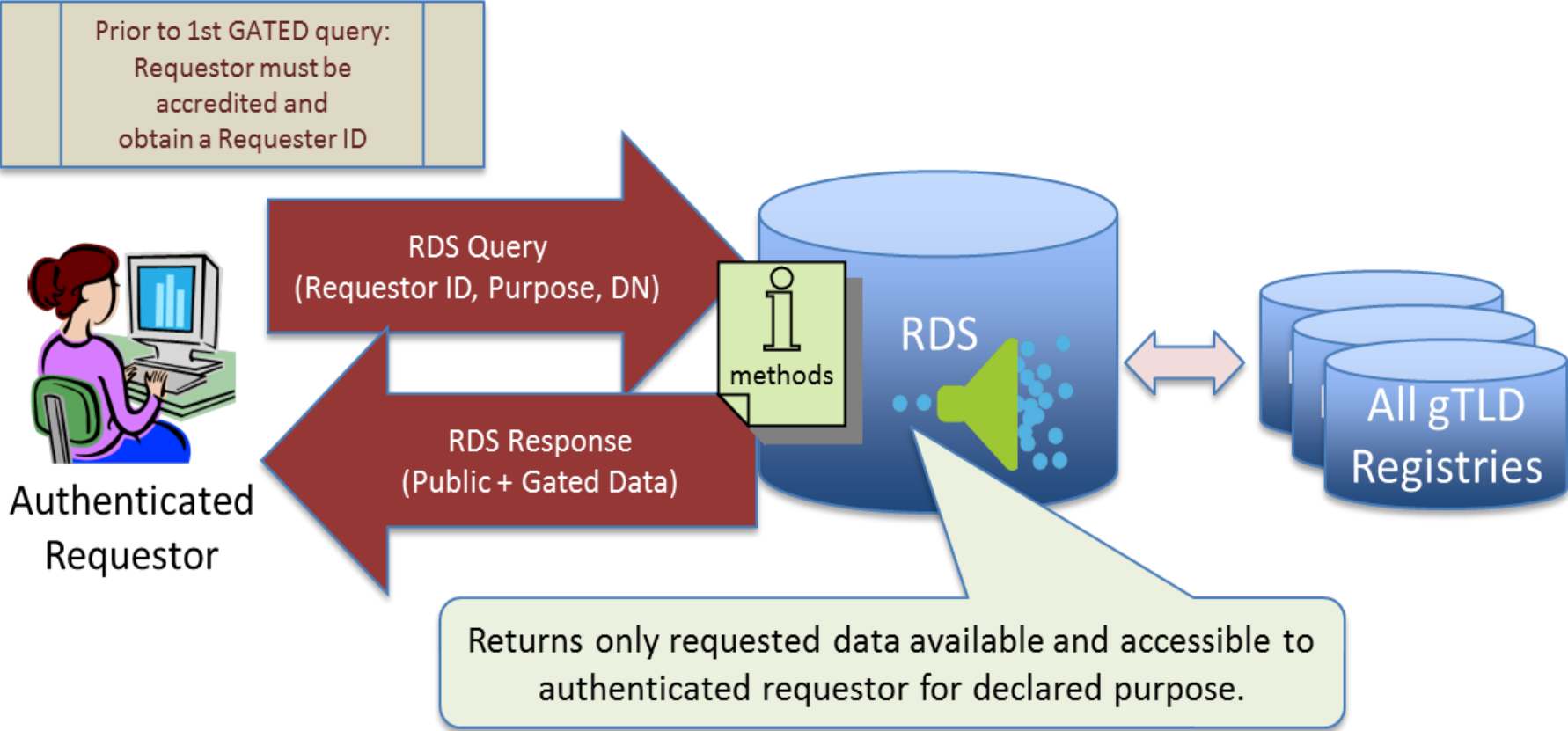
# Sample RDS Record

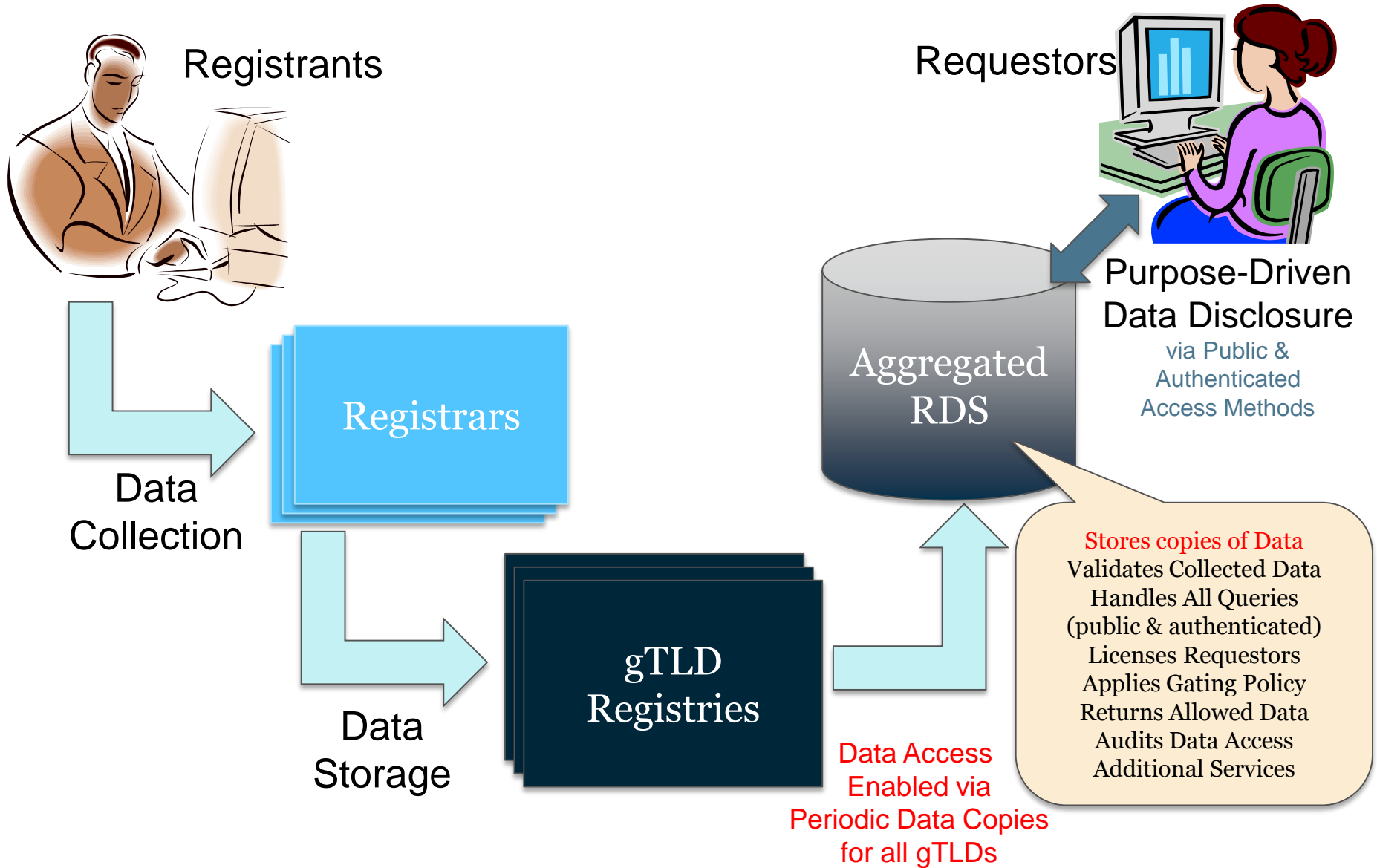| Registry or Registrar Source | Registrant Source | Optional Role Based Contacts |
|---|---|---|
| **Registration Status** | **Domain Name** | Contact Name |
| DNSSEC Delegation | **Name Server** | Contact Role |
| **Client Status** | Registrant Name | Contact ID |
| **Server Status** | **Registrant Type** | Contact Organization |
| **Registrar** | **Registrant Contact ID** (issued by RDS-accredited Validator) | Contact Street |
| Reseller | Registrant Organization | Contact City |
| **Registrar Jurisdiction** | Registrant Company Identifier | Contact State/Province |
| **Registry Jurisdiction** | **Registrant Email** | Contact Postal Code |
| **Registration Contract Language** | Registrant Street | Contact Country |
| **Creation Date** | Registrant City | Contact Phone |
| Original Registration Date | Registrant State/Province | Contact Phone Ext |
| **Registrar Registration Expiration Date** | Registrant Postal Code | Contact Email |
| **Updated Date** | Registrant Country | Contact Fax |
| **Registrar URL** | Registrant Phone | Contact Fax Ext |
| **Registrar IANA Number** | Registrant Phone Ext | Contact SMS |
| **Registrar Abuse Contact Email** | Registrant Fax | |
| **Registrar Abuse Contact Phone** | Registrant Fax Ext | |
| **URL of the Internic Complaint Site** | Registrant SMS | |

**KEY**: **Bold Elements Always Public/**Rest May Be Gated

Shaded Optional to Collect/Rest mandatory to Collect

# Possible Models: Aggregated RDS



Registrants

Requestors

Data Collection

Registrars

Data Storage

gTLD Registries

Aggregated RDS

Purpose-Driven Data Disclosure
via Public & Authenticated Access Methods

Data Access Enabled via Periodic Data Copies for all gTLDs

Stores copies of Data
Validates Collected Data
Handles All Queries
(public & authenticated)
Licenses Requestors
Applies Gating Policy
Returns Allowed Data
Audits Data Access
Additional Services

# Possible Models: Federated RDS



Registrants

Requestors

Data Collection

Data Storage

Registrars

gTLD Registries

Federated RDS

Purpose-Driven Data Disclosure
via Public & Authenticated Access Methods

Data Access Enabled via Queries relayed in Real-Time for all gTLDs

Obtains Data in Real-Time
Validates Collected Data
Handles All Queries
(public & authenticated)
Licenses Requestors
Applies Gating Policy
Returns Allowed Data
Audits Data Access
Additional Services

# Additional Resource Links

- Buenos Aires Public Session Recording
  http://buenosaires48.icann.org/en/
  schedule/wed-rds

- Initial Report Announcement
  http://www.icann.org/en/news/announcements/
  announcement-3-24jun13-en.htm

- Status Update Report Announcement
  http://www.icann.org/en/news/announcements/
  announcement-11nov13-en.htm

- Public Research Page
  https://community.icann.org/display/WG/
  EWG+Public+Research+Page

- Public Comments Page
  http://www.icann.org/en/groups/other/
  gtld-directory-services/share-24jun13-en.htm