Next-Generation RDS to replace WHOIS

Beginner's Tutorial: Background on the Issue

Agenda

1. Why are we here?
2. What is WHOIS?
3. Past efforts to address concerns about WHOIS
4. What is the Next-Gen RDS?
5. What questions will this PDP address?
6. Where can I learn more?

Why are we here?

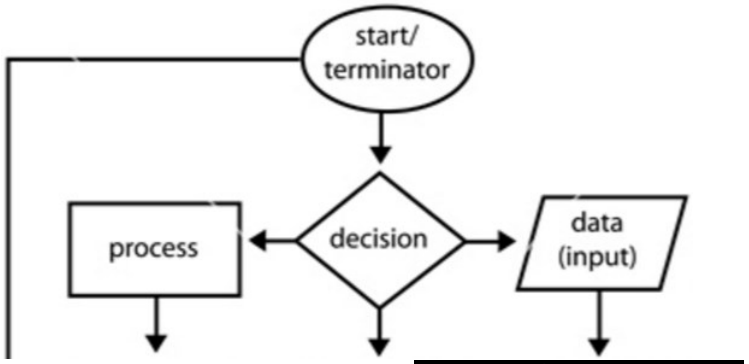
This PDP was launched to overcome deadlock

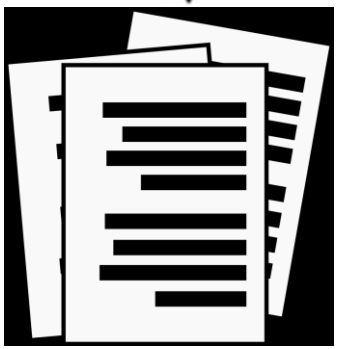
- WHOIS was created in the 80s to identify & contact those responsible for operation of Internet network resources
- After nearly 15 years of GNSO task forces, working groups, workshops, surveys & studies, the ICANN community has been unable to reach consensus on comprehensive WHOIS policy reforms

- In response to the 2012 WHOIS Policy Review Team's Final Report, the ICANN Board launched the RDS PDP & the Expert Working Group (EWG) to inform it
- The EWG was tasked with taking a fresh approach by redefining the purpose of gTLD registration data & then proposing a new model for gTLD Registration Directory Services to address accuracy, privacy & access issues

Using preparation to help the PDP succeed

- Following delivery of the EWG's 2014 Final Report, the ICANN Board reaffirmed its request for this PDP & adopted a Process Framework to structure this effort
- In accordance with PDP rules, staff prepared a new Issue Report detailing the questions to be addressed by this PDP & suggesting a PDP WG charter
- Following Public Comment on the Issue Report, the GNSO Council formally adopted a Charter to launch this Working Group





What is WHOIS?

Terminologies

- WHOIS is an overloaded term, it could mean:
  - Registration data
  - Access protocol (WHOIS protocol)
  - Directory Service

- It is best to use individual terms

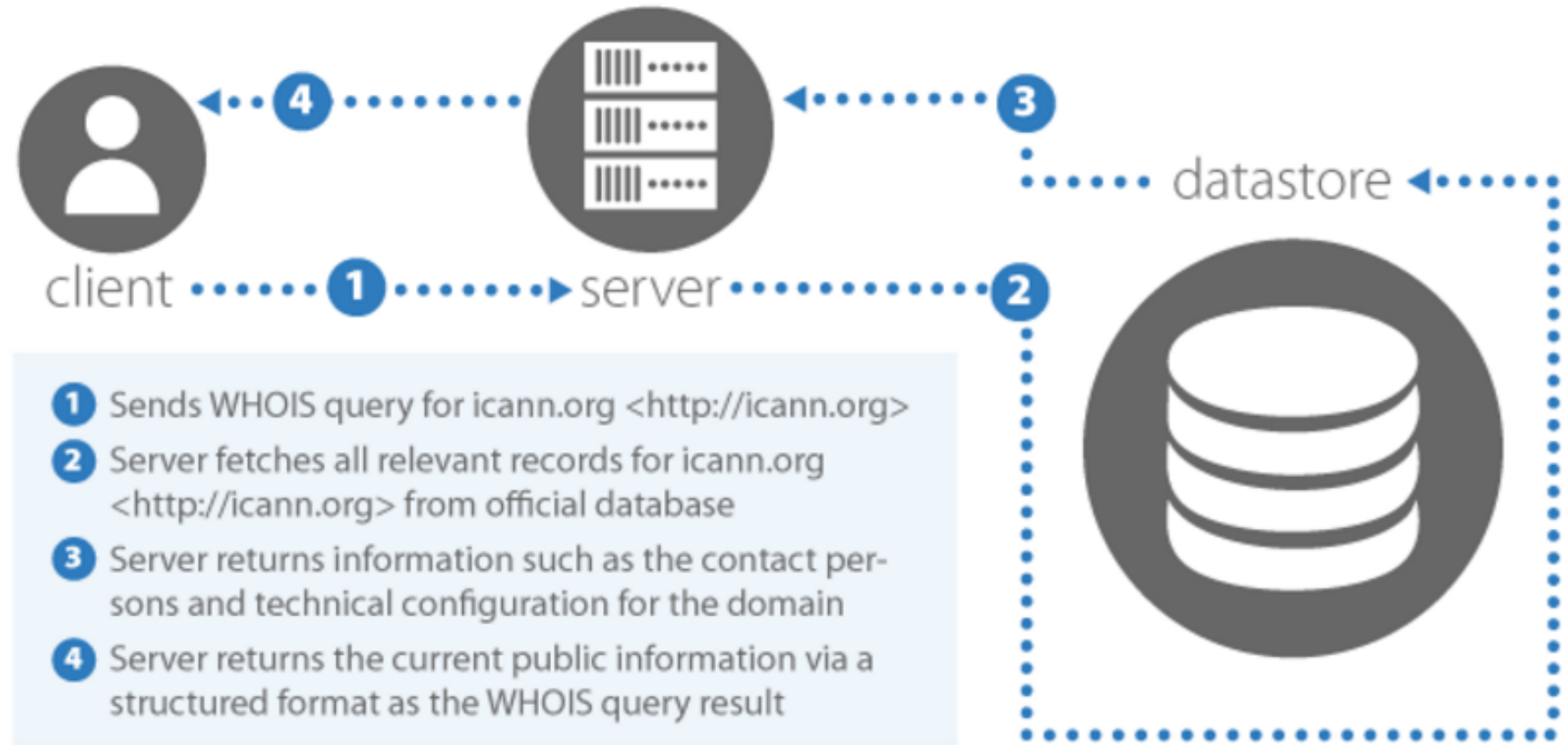
ICANN WHOIS

Origin of WHOIS Protocol & Policies

- WHOIS started in 1982, when the Internet Engineering Task Force (IETF) published a protocol for a directory service for ARPANET users. Initially, the directory listed contact information requested of anyone transmitting data across the ARPANET.
- As the Internet grew, WHOIS began to serve the needs of different stakeholders such as registrants, law enforcement, intellectual property & trademark owners, businesses & individual users - but the protocol remained largely unchanged.
- Through the Affirmation of Commitments (AOC), ICANN is committed to "enforcing its existing policy relating to WHOIS, subject to applicable laws. Such existing policy requires that ICANN implement measures to maintain timely, unrestricted & public access to accurate & complete WHOIS information, including registrant, technical, billing, & administrative contact information."

ICANN WHOIS

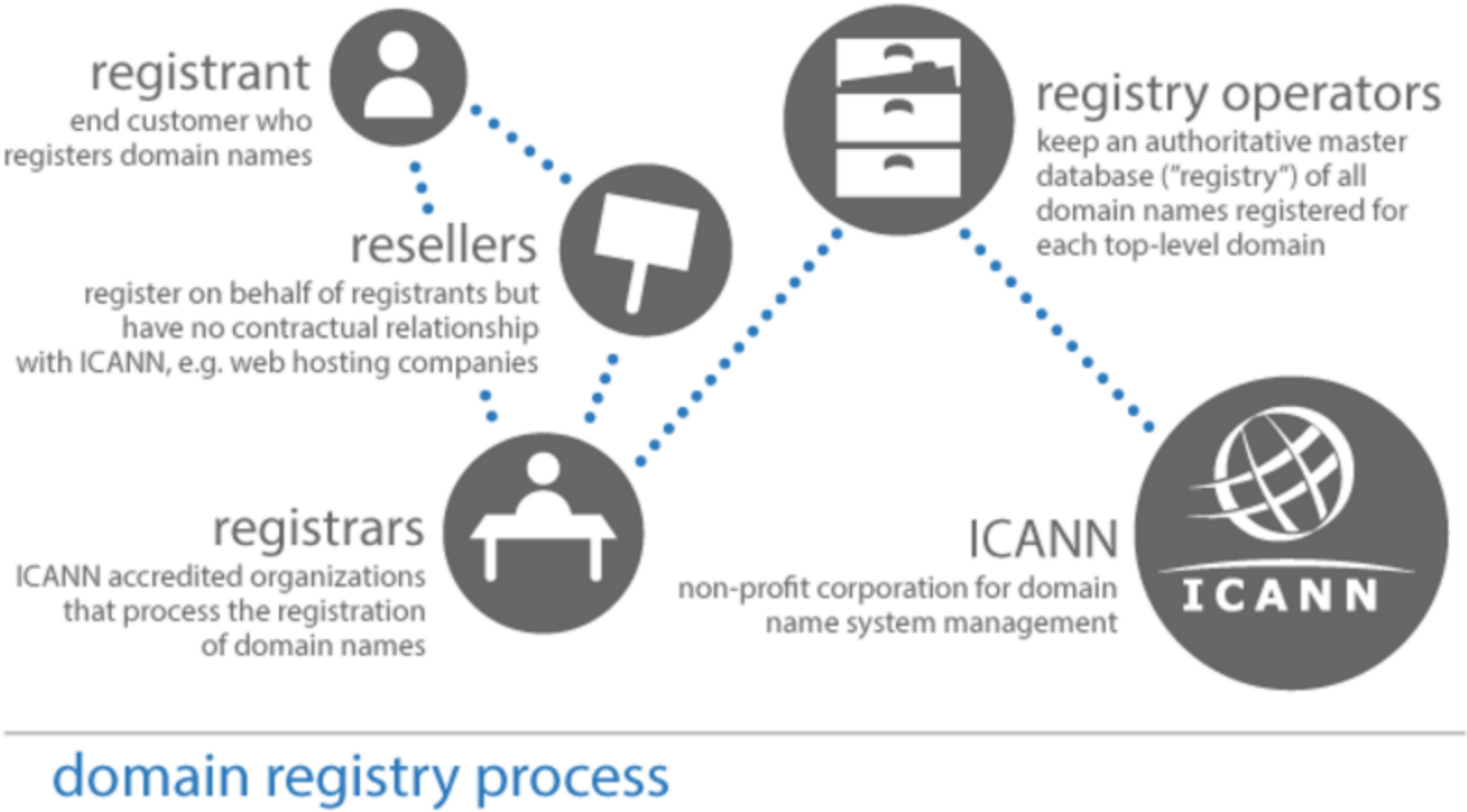
How WHOIS works



WHOIS Query

Who runs WHOIS?

WHOIS services are provided by registrars & registries for the domain names that they sponsor. Access to this distributed network of independent databases is provided in two ways – through a free web page & through a free Port 43 service



domain registry process

What data is returned by WHOIS?

Showing results for: ICANN.ORG

Original Query: icann.org

Contact Information

Registrant Contact
Name: Domain Administrator
Organization: ICANN
Mailing Address: 12025 Waterfront Drive, Los Angeles California 90094-2536 US
Phone: +1.4242171313
Ext:
Fax: +1.4242171313
Fax Ext:
Email: domain-admin@icann.org

Admin Contact
Name: Domain Administrator
Organization: ICANN
Mailing Address: 12025 Waterfront Drive, Los Angeles California 90094-2536 US
Phone: +1.4242171313
Ext:
Fax: +1.4242171313
Fax Ext:
Email: domain-admin@icann.org

Tech Contact
Name: Domain Administrator
Organization: ICANN
Mailing Address: 12025 Waterfront Drive, Los Angeles California 90094-2536 US
Phone: +1.4242171313
Ext:
Fax: +1.4242171313
Fax Ext:
Email: domain-admin@icann.org

Registrar

WHOIS Server:
URL: http://www.godaddy.com
Registrar: GoDaddy.com, LLC
IANA ID: 146
Abuse Contact Email:
Abuse Contact Phone:

Status

Domain Status: clientDeleteProhibited
https://www.icann.org/epp#clientDeleteProhibited
Domain Status: clientRenewProhibited
https://www.icann.org/epp#clientRenewProhibited
Domain Status: clientTransferProhibited
https://www.icann.org/epp#clientTransferProhibited
Domain Status: clientUpdateProhibited .....

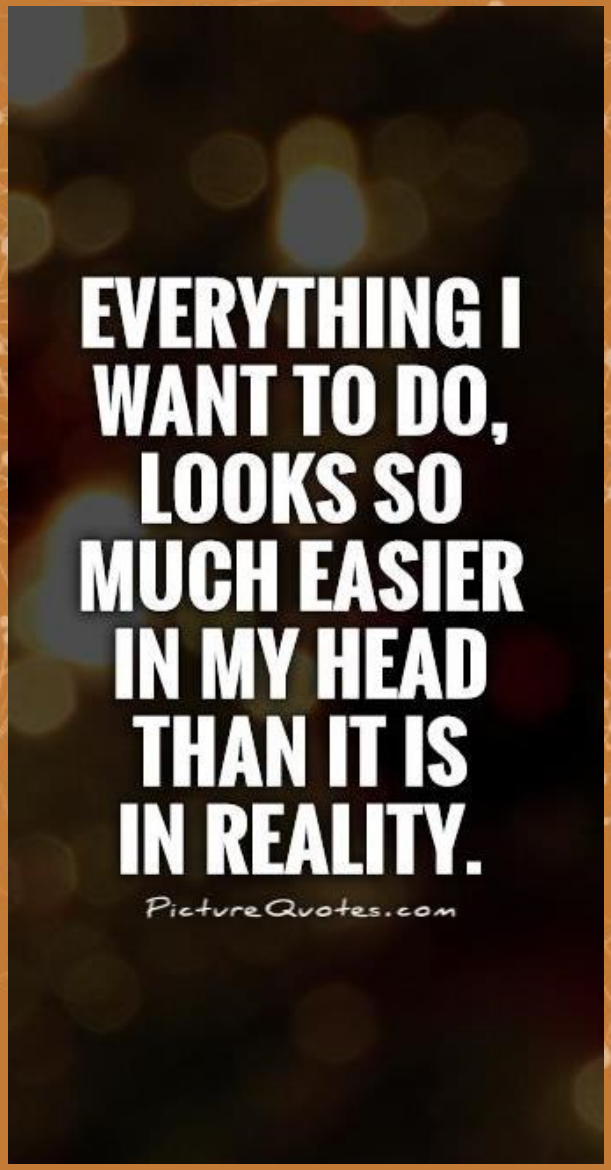
To query your own domain name, visit https://whois.icann.org/

WHOIS policies & implementation

- WHOIS policy recommendations are created & refined by the ICANN community through its Supporting Organizations (SOs) & influenced by Advisory Committees (ACs) in a "bottom-up" open & transparent process.
- WHOIS policies & governing documents include:
  - WHOIS Data Reminder Policy (WDRP)
  - Restored Name Accuracy Policy (RNAP)
  - WHOIS Marketing Restriction Policy (WMRP)
  - Thick WHOIS Policy Development
  - Translation & Transliteration of Contact Information
  - Registry Agreements (RIA)
  - Registrar Agreements (RAA)
  - ICANN Procedure for Handling Conflicts with Privacy Law

Visit https://whois.icann.org for links & to learn more

Past efforts to address concerns about WHOIS



Many concerns have emerged over the years

- The issues & concerns within the WHOIS debate are varied, reflecting the diversity of the many ICANN stakeholders who collect, maintain, provide or use WHOIS today. Common concerns include…

Accuracy

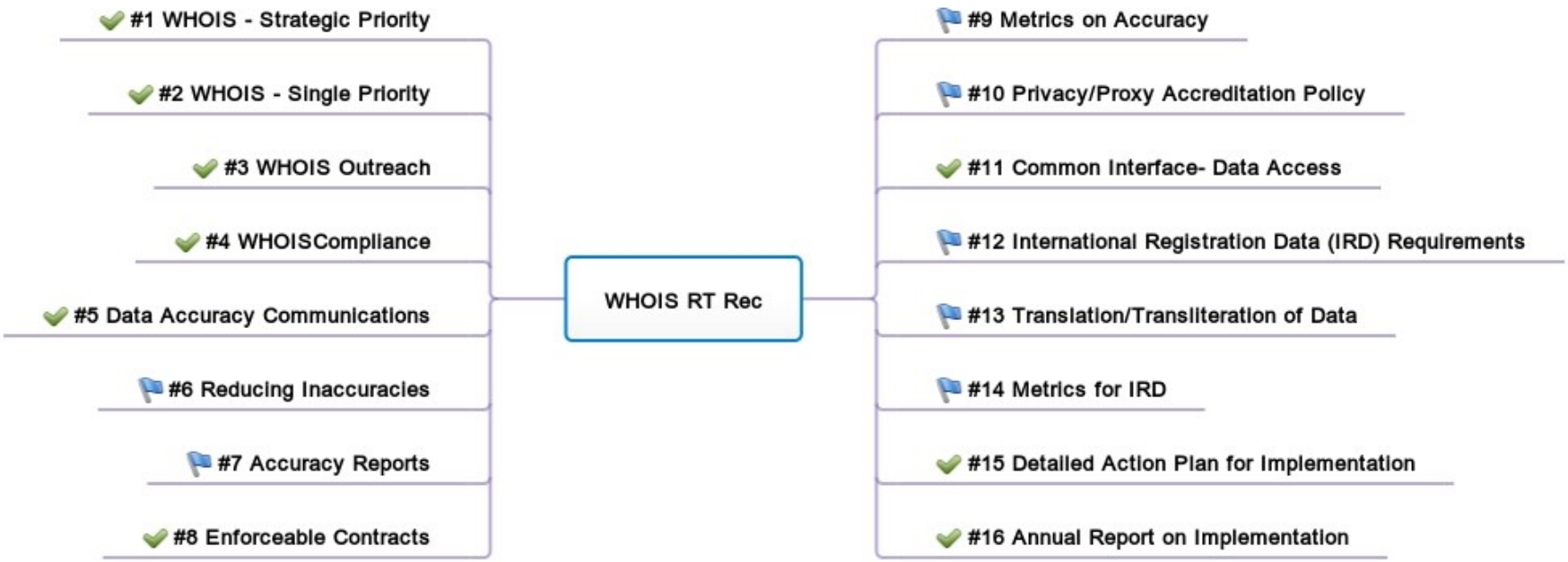
…AND MORE…

Differing views on how to address concerns

- WHOIS protocol & domain name registration data have been a constant topic of ICANN policy discussion, PDPs, review teams & studies
- In 2003, the first WHOIS Task Force identified two key questions: improving data accuracy & avoiding data abuse
  - Leading to new consensus policies: WDRP & WMRP
- In 2007, a WHOIS Task Force was tasked with defining the purpose of WHOIS & contact data & making recommendations about access, accuracy, & resolution of differences in applicable laws & regulations
  - Unable to reach consensus on Operational Point of Contact (OPoC)
  - Leading to many WHOIS Studies to help inform fact-based debate…

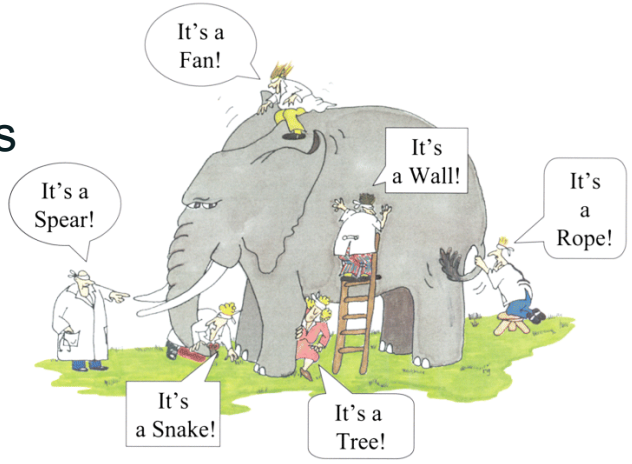
In 2010-2012, a policy review was conducted

- The WHOIS Policy Review Team (WHOIS RT) was established to review the extent to which ICANN's WHOIS policy & implementation is effective, meets the legitimate needs of law enforcement, & promotes consumer trust
- In its May 2012 Final Report, the WHOIS RT made 16 recommendations, now being implemented by ICANN:



SSAC Response: Blind Men & an Elephant

- ICANN's Security and Stability Advisory Committee (SSAC) reviewed 2012 WHOIS RT recommendations
- In SAC055, they found that further work should be undertaken prior to implementing WHOIS RT recommendations, concluding that:
  - It is critical that ICANN develop a policy defining the purpose of domain name registration data
  - ICANN should create a committee to develop registration data policy that defines the purpose of domain name registration data
  - ICANN should defer other activity directed at find a "solution" to "the WHOIS problem" until registration data policy is developed & accepted



Based on the 2012 WHOIS RT Report & SAC055, the ICANN Board decided to pursue a 2-prong approach: (1) Enhancing WHOIS policy & (2) A Next-Gen RDS PDP

Related Policy & Implementation Efforts

- In addition to past efforts, the following GNSO PDP & implementation efforts are now underway to improve the legacy WHOIS system
  - 2013 Registration Accreditation Agreement WHOIS requirements
  - A new WHOIS Accuracy Reporting System
  - Other WHOIS Program improvements, including whois.icann.org, a consolidated WHOIS lookup tool & a WHOIS Primer
  - Thick WHOIS Policy Implementation
  - GNSO PDP on Privacy & Proxy Services Accreditation Issues (PPSAI)
  - GNSO PDP on Translation & Transliteration of Contact Information
  - ICANN Procedures for Handling Conflicts with National Law

More Key Inputs to this PDP

- In addition to these GNSO policy development & implementation efforts, there are many other important contributions to the WHOIS policy debate
  - GAC Communiques regarding WHOIS, especially the 2007 GAC Principles regarding gTLD WHOIS Services
  - Article 29 Data Protection Working Party Letters, dating back to 2003
  - Further WHOIS Studies
  - Registration Data Access Protocol (RDAP) standards
  - Extensible Provisioning Protocol (EPP) standards

See https://community.icann.org/display/gTLDRDS/Additional+Key+Inputs for links to all of these inputs, further summarized in the Next-Gen gTLD RDS to Replace WHOIS Final Issue Report

What is the Next-Generation gTLD Registration Directory Service (RDS)?

In 2012, the ICANN Board resolved to

- Launch a new effort to redefine the purpose of collecting, maintaining, & providing access to gTLD registration data, & consider safeguards for protecting data, as a foundation for a new gTLD policy & contractual negotiations, as appropriate
- Prepare an Issue Report on the purpose of collecting & maintaining gTLD registration data & on solutions to improve accuracy & access to gTLD registration data, as part of a Board-initiated GNSO PDP
- These efforts are collectively known as the:

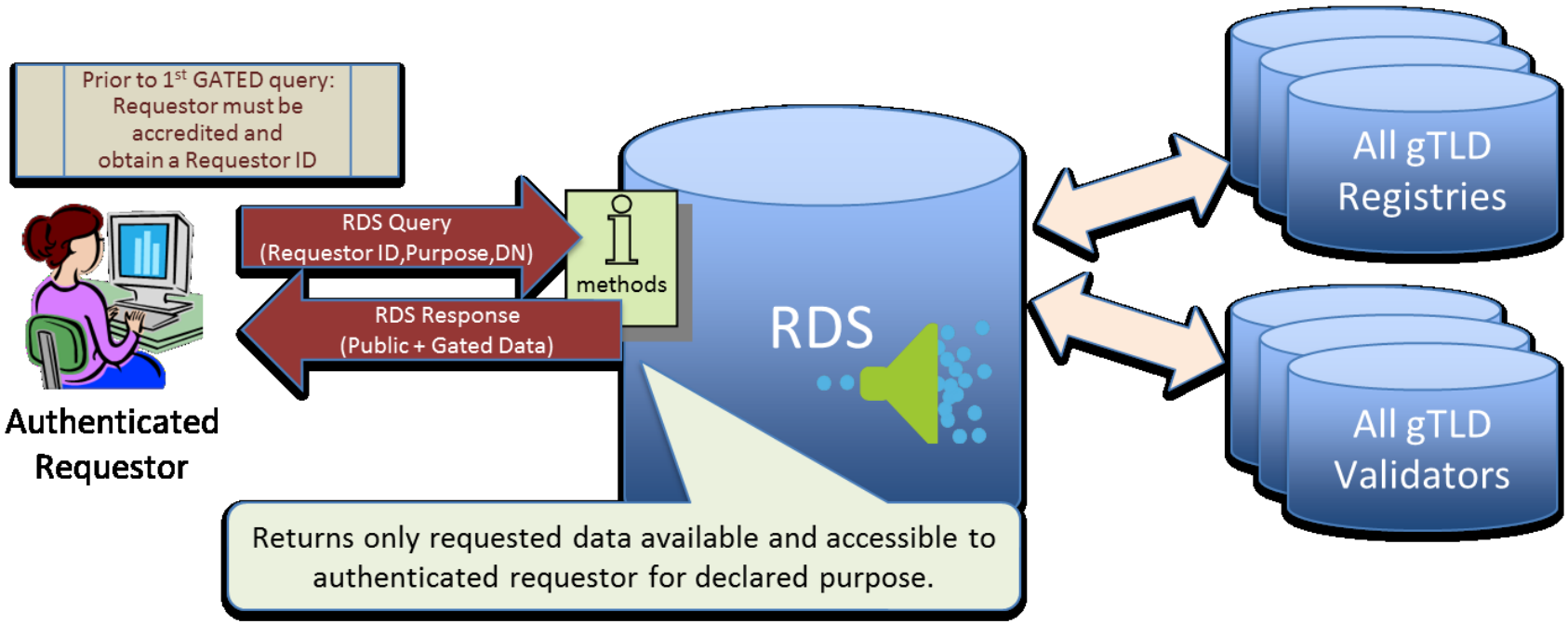
Next-Generation gTLD
Registration Directory Services
to Replace WHOIS
(Next-Gen RDS)

What did the EWG recommend?

- At the ICANN CEO's request, this group of volunteers worked together for 15 months to re-examine & define the purpose of collecting & maintaining gTLD registration data, consider how to safeguard that data, & propose a Next-Generation RDS to better serve the global Internet community
- After considering past WHOIS work, community inputs, & new research findings, the EWG recommended that
  - Today's WHOIS model of giving every user the same anonymous public access to (often inaccurate) gTLD registration data be abandoned
  - In favor of a new system…

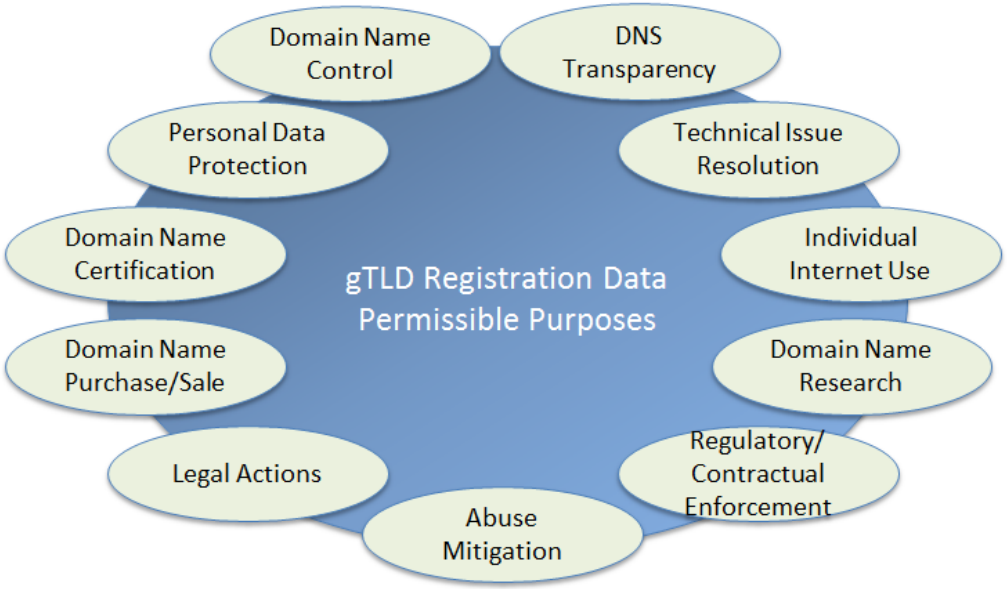
The EWG's suggested RDS would

- Strike a balance between accuracy, access, & accountability
- Collect, validate & disclose registration data for permissible purposes only
- Leave minimum data publicly available
- Safeguard the rest through a new paradigm: purpose-driven gated access…



This RDS is described by 180 principles

- Users & Purposes
- Gated Access
- Privacy & Data Protection
- Data Quality
- Data Elements
- Compliance & Accountability
- Implementation Model
- Cost
- Risks & Benefits



- To reconcile diverse community views & inform its recommendations, the EWG conducted further research into contentious areas, attempting to strike a workable balance & achieve consensus

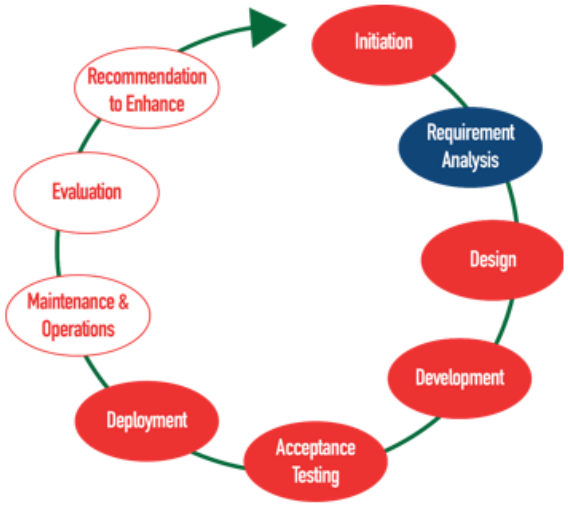
How does this relate to the RDS PDP?

- The EWG's RDS principles & other outputs are intended to inform the RDS PDP WG as it examines in detail the many areas that must be addressed by a new policy framework to support a Next-Generation RDS
- Available materials include
  - EWG Final Report
  - EWG RDS FAQs & Video FAQs
  - EWG RDS Tutorial (June 2014) & Webinars
  - EWG Research Reports
  - EWG Member Individual Statements & Blogs, including a dissent statement

- As directed by the ICANN Board, these materials should serve as a foundation for the PDP – *along with other relevant inputs enumerated in the Final Issue Report & obtained through ICANN community outreach*

What questions will this PDP address?

During the first phase



- The PDP WG should, **at a minimum**, attempt to reach consensus on the following questions:
  - **What are the fundamental requirements for gTLD registration data?** When addressing this, the PDP WG should consider, at a minimum, *users and purposes and associated access, accuracy, data element, and privacy requirements*
  - **Is a new policy framework and next-generation RDS needed to address these requirements?**
    - **If yes, what cross-cutting requirements must any next-generation RDS address**, including *coexistence, compliance, system model, and cost, benefit, and risk analysis requirements*
    - **If no, does the current WHOIS policy framework sufficiently address these requirements?** If not, what revisions are recommended to the current WHOIS policy framework to do so?

Specific questions to consider

As part of its deliberations, consider *at a minimum*:

1. **Users/Purposes** – who should have access & why?
2. **Gated access** – what steps should be take to control data access for each user/purpose?
3. **Data accuracy** – what steps should be taken to improve data accuracy?
4. **Data elements** – what data should be collected, stored, disclosed?
5. **Privacy** – what steps are needed to protect data and privacy?
6. **Coexistence** – what steps should be taken to enable next-generation RDS coexistence with and replacement of the legacy WHOIS system?
7. **Compliance** – what steps are needed to enforce these policies?
8. **System model** – what system requirements must be satisfied by any next-generation RDS implementation?
9. **Cost** – what costs will be incurred and how must they be covered?
10. **Benefits** – what benefits will be achieved and how will they be measured?
11. **Risks** – what risks do stakeholders face and how will they be reconciled?

For example, Users/Purposes

During Phase 1

The PDP WG will consider whether gTLD registration data should continue to be accessible for any purpose, or whether data should be accessible only for specific purposes. If the WG recommends the latter, it should also recommend permissible users and purposes.

Phase 1 produces fundamental requirements for registration data, allowing the WG to determine if these requirements are met by WHOIS or should instead be met by a Next-Gen RDS

If the PDP proceeds, during Phase 2

The WG designs detailed policies to satisfy requirements established in Phase 1. For example, the WG might define data elements accessible for each permissible user and purpose recommended above.

If the PDP proceeds, during Phase 3

The WG creates implementation and coexistence guidance for each policy. For example, in the WG might explore possible Terms of Service for permissible users and purposes and identify implementation challenges that must be overcome.

Informed by Key Inputs for each Question

See https://community.icann.org/display/gTLDRDS/Questions - for example, Users/Purposes – Key Inputs:

To answer the question "**Who should have access to gTLD registration data and why?**" the PDP should be informed by available inputs dealing with purpose, including:

Available Inputs – Hyperlinked
WHOIS Task Force Final Report (2007)
WHOIS Policy Review Team Final Report (2012)
SAC055: WHOIS Blind Men and an Elephant Report (2012)
GAC Communiqués regarding WHOIS (2007-2015), especially • GAC Principles Regarding gTLD WHOIS Services (2007)
Article 29 Data Protection Working Party Letters (2003-2014)
EWG Recommendations for a Next-Generation RDS, especially • Section 3, Users and Purposes • Annex C, Example Use Cases • Annex A, Board Questions • EWG Tutorial Pages 17-20, 37-41 • EWG FAQs 9-12, 67 • Video FAQ "Is my purpose supported by the RDS?" • Statements/Blogs by Perrin and Samuels
Process Framework for a PDP on Next-Generation RDS, especially • 3-Phase Approach detailed on Page 9, Row 1

See also Public Comments on Issue Report for input to be considered by PDP WG.

Where can I learn more?

Available Resources

- RDS PDP WG Wiki Workspace
  https://community.icann.org/display/gTLDRDS/Next-Generation+gTLD+Registration+Directory+Services+to+Replace+Whois
- WG Charter
  https://community.icann.org/display/gTLDRDS/WG+Charter
- Questions, mapped to Key Inputs
  https://community.icann.org/display/gTLDRDS/Questions
- Background Documents
  https://community.icann.org/pages/viewpage.action?pageId=56986688
- Additional Key Inputs
  https://community.icann.org/display/gTLDRDS/Additional+Key+Inputs
- Public Comments on Issue Report
  https://community.icann.org/display/gTLDRDS/Public+Comments+on+Issue+Report

Questions?

Acronyms

Acronym	
AC	Advisory Committee
AOC	Affirmation of Commitments
EPP	Extensible Provisioning Protocol
EWG	Expert Working Group
GNSO	Generic Names Supporting Organization
gTLD	Generic Top Level Domain
IETF	Internet Engineering Task Force
IRD	International Registration Data
OPoC	Operational Point of Contact
P/P	Privacy/Proxy
PDP	Policy Development Process
PPSAI	Privacy & Proxy Services Accreditation Issues
RAA	Registrar Accreditation Agreements
RDAP	Registration Data Access Protocol (RDAP)
RDS	Registration Directory Service
RIA	Registry Agreements
RNAP	Restored Name Accuracy Policy
RT	Policy Review Team
SO	Supporting Organization
SSAC	Security and Stability Advisory Committee
WDRP	WHOIS Data Reminder Policy
WMRP	WHOIS Marketing Restriction Policy