# Next-Generation gTLD Registration Directory Service (RDS) to replace WHOIS PDP WG

Handout for Working Group Call Tuesday 21 November 2017



#### **Proposed Agenda**

- 1. Roll Call/SOI Updates
- 2. Building block plan for answering "Purpose" charter question
- 3. Deliberate on Technical Issue Resolution as a legitimate purpose for collecting, maintaining, and providing access to registration data
- 4. Confirm action items and proposed decision points
- 5. Confirm next WG meeting: Wednesday, 29 November at <u>06:00 UTC</u>



### Plan for answering "Purpose" charter question

- Take building-block approach, deliberating on each purpose one-by-one
  - 1. First, agree whether this specific purpose should be considered legitimate for collecting some registration data and why
  - 2. Next, identify data elements required to support this specific purpose
    - a) Which data may already be collected for another purpose?
    - b) Which data may need to be collected for this purpose?
  - 3. Add any data elements identified to the set of registration data elements potentially made accessible through the RDS
    - For now, defer discussion of collection conditions or access controls which might be applied to each data element
- Note that any agreement on legitimacy of one purpose does not preclude additional purposes being agreed as legitimate for the same or other data



E F Purpose Y
ABCD Purpose X

G Purpose Z
E F Purpose Y
A B C D Purpose X

X requires {A,B,C,D}

Y requires {A,B,E,F}

Z requires {A,B,E,G}



### Technical Issue Resolution as a starting point

- Today, we will start with Technical Issue Resolution and deliberate:
  - A. Is this a legitimate purpose for collecting registration data? Why?
    - Identify criteria: What makes a purpose legitimate?
    - Test Technical Issue Resolution drafted by DT1 against criteria
    - Reach agreement on legitimacy of this purpose
  - B. Which data elements are required to support this purpose?
    - Review data elements identified by DT1 for this purpose
    - Identify criteria: What makes data collection legitimate?
    - Test Technical Issue Resolution data elements against criteria
    - Reach agreement on data to be collected for this purpose
  - c. Which users may wish to access to that data via the RDS?
- Continue deliberating on other possible purposes for data collection one-by-one
  - Any possible purpose which the WG agrees is not a <u>legitimate purpose for data</u> <u>collection</u> may still be agreed upon as <u>legitimate for access to data collected for</u> <u>other compatible purpose(s)</u>
  - Please <u>do not assume</u> that any data elements the WG may agree to collect for any purpose(s) <u>will or will not be public</u> – this will be expressly deliberated upon later



### **Technical Issue Resolution – Intro by DT1**

<u>Definition:</u> Information collected to enable contact of the relevant contacts to facilitate tracing, identification and resolution of incidents related to services associated with the domain name by persons who are affected by such issues, or persons tasked (directly or indirectly) with the resolution of such issues on their behalf.

User	Purpose	Example Use Cases	Rationale for registration data access
Internet users affected by technical issues or those tasked with technical issue resolution on their behalf	Technical Issue Resolution	Contact to resolve problems with website, hosting, email service, etc.	Facilitate contact with domain contact (individual, role or entity) who can help resolve technical or operational issues with Domain Name (e.g., DNS resolution failures, email delivery issues, website functional issues, compromised hosting)



#### **Technical Issue Resolution – Intro by DT1**

#### Tasks:

- Compromised hosting
- Email not working / Issue with mail servers
- Identifying the hosting provider / registrar
- Problem with DNS hosting e.g. you can't access a website (name doesn't resolve) nameservers not responding.
- Website offline

NOTE: resolving technical issues often involves data associated with multiple domain names, e.g., domain, mail domain, nameserver domain, specific service used domain.



### **Technical Issue Resolution – Intro by DT1**

#### Data:

- Technical Contacts (whoever they may be)
- Registrant contacts
- Nameservers
- Server Status
- Expiry data

#### Sample Users:

- Abuse responder / reporter
- IT professionals
- Internet users (for the purposes of reporting an issue to the domain / website operator?)

Are there any clarifications necessary to understand this purpose before we can begin deliberating on this purpose?



#### Is Technical Issue Resolution a legitimate purpose?

- Identify criteria: What makes a purpose legitimate? For example:
  - O Does it support ICANN's mission?
  - o Is it specific?
  - o Is it explained in a way that registrants can understand?
  - Does it explain to registrants what their data will be used for?
  - o Is it necessary for the fulfilment of a contract?
  - o Is the use proportional?
  - Does it strike a fair balance between all interests concerned (public or private) and the data subject's rights and freedoms?
  - Other?
- Test Technical Issue Resolution (as drafted by DT1) against criteria
  - Information collected to enable contact of the relevant contacts to facilitate tracing, identification and resolution of incidents related to services associated with the domain name by persons who are affected by such issues, or persons tasked (directly or indirectly) with the resolution of such issues on their behalf.
- Reach agreement(s) on legitimacy of Technical Issue Resolution as a purpose for registration data collection



#### Data elements required to support this purpose?

- Review data elements identified by DT1 for this purpose
  - Technical Contacts (whoever they may be)
  - Registrant contacts
  - Nameservers
  - Server Status
  - Expiry data

Note: Example WHOIS record is on Slide 10 for easy reference

- Identify criteria: What makes data collection legitimate? For example:
  - O Why is each data element necessary?
  - O What are the consequences of not collecting each data element?
- Test Technical Issue Resolution data elements against criteria
- Reach agreement(s) on data elements to be collected for this purpose
  - Must be collected vs. may be collected



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

Registrar Registration Expiration Date: 2010-10-08T00:44:59Z

Registrar: EXAMPLE REGISTRAR LLC

Registrar IANA ID: 5555555

Registrar Abuse Contact Email: email@registrar.tld Registrar Abuse Contact Phone: +1.1235551234

Reseller: EXAMPLE RESELLER<sup>1</sup>

Domain Status: clientDeleteProhibited<sup>2</sup> Domain Status: clientRenewProhibited Domain Status: clientTransferProhibited

Registry Registrant ID: 5372808-ERL<sup>3</sup>

Registrant Name: EXAMPLE REGISTRANT<sup>4</sup>

Registrant Organization: EXAMPLE ORGANIZATION

Registrant Street: 123 EXAMPLE STREET

Registrant City: ANYTOWN
Registrant State/Province: AP<sup>5</sup>
Registrant Postal Code: A1A1A1<sup>6</sup>

Registrant Country: AA

Registrant Phone: +1.5555551212

Registrant Phone Ext: 1234<sup>7</sup> Registrant Fax: +1.5555551213

Registrant Fax Ext: 4321

Registrant Email: EMAIL@EXAMPLE.TLD

Registry Admin ID: 5372809-ERL<sup>8</sup>

Admin Name: EXAMPLE REGISTRANT ADMINISTRATIVE Admin Organization: EXAMPLE REGISTRANT ORGANIZATION

Admin Street: 123 EXAMPLE STREET

Admin City: ANYTOWN
Admin State/Province: AP
Admin Postal Code: A1A1A1

Admin Country: AA

Admin Phone: +1.5555551212

Admin Phone Ext: 1234 Admin Fax: +1.5555551213

Admin Fax Ext: 1234

Admin Email: EMAIL@EXAMPLE.TLD

Registry Tech ID: 5372811-ERL9

Tech Name: EXAMPLE REGISTRANT TECHNICAL Tech Organization: EXAMPLE REGISTRANT LLC

Tech Street: 123 EXAMPLE STREET

Tech City: ANYTOWN
Tech State/Province: AP
Tech Postal Code: A1A1A1

Tech Country: AA

Tech Phone: +1.1235551234

Tech Phone Ext: 1234
Tech Fax: +1.5555551213

Tech Fax Ext: 93

Tech Email: EMAIL@EXAMPLE.TLD

Name Server: NS01.EXAMPLE-REGISTRAR.TLD<sup>10</sup> Name Server: NS02.EXAMPLE-REGISTRAR.TLD

DNSSEC: signedDelegation

URL of the ICANN WHOIS Data Problem Reporting System: http://wdprs.internic.net/

>>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<



### **Confirm action items and decision points**



21 November WG Call Meeting Materials: <a href="https://community.icann.org/x/KgByB">https://community.icann.org/x/KgByB</a>

Next call: Wednesday, 29 November 2017 at 06:00 UTC



Name	Single-Sentence Definition
Technical Issue Resolution	Information collected to enable contact of the relevant contacts to facilitate tracing, identification and resolution of incidents related to services associated with the domain name by persons who are affected by such issues, or persons tasked (directly or indirectly) with the resolution of such issues on their behalf.
Academic or Public Interest Research	Information collected to enable use of registration data elements by researchers and other similar persons, as a source for academic or other public interest studies or research, relating either solely or in part to the use of the DNS.
Domain Name Management	Collecting the required information to create a new domain name registration and ensuring that the domain registration records are under the control of the authorized party and that no unauthorized changes, transfers are made in the record.
Individual Internet Use	Collecting the required information of the registrant or relevant contact in the record to allow the internet user to contact or determine reputation of the domain name registration.



Name	Single-Sentence Definition
Domain Name Certification	Information collected by a certificate authority to enable contact between the registrant, or a technical or administrative representative of the registrant, to assist in verifying that the identity of the certificate applicant is the same as the entity that controls the domain name.
Domain Name Purchase/Sale	Information to enable contact between the registrant and third-party buyer to assist registrant in proving and exercising property interest in the domain name and third-party buyer in confirming the registrant's property interest and related merchantability.
ICANN Contractual Enforcement	Information accessed to enable ICANN Compliance to monitor and enforce contracted parties' agreements with ICANN.
Regulatory Enforcement	Information accessed by regulatory entities to enable contact with the registrant to ensure compliance with applicable laws.



Name	Single-Sentence Definition
Legal Actions	Includes assisting certain parties (or their legal representatives, agents or service providers) to investigate and enforce civil and criminal laws, protect recognized legal rights, address online abuse or contractual compliance matters, or to assist parties defending against these kinds of activities, in each case with respect to all stages associated with such activities, including investigative stages; communications with registrants, registration authorities or hosting providers, or administrative or technical personnel relevant to the domain at issue; arbitrations; administrative proceedings; civil litigations (private or public); and criminal prosecutions.
Criminal Activity/ DNS Abuse – Investigation	Information to be made available to regulatory authorities, law enforcement, cybersecurity professionals, IT administrators, automated protection systems and other incident responders for the purpose of enabling identification of the nature of the registration and operation of a domain name linked to abuse and/or criminal activities to facilitate the eventual mitigation and resolution of the abuse identified: Domain metadata (registrar, registration date, nameservers, etc.), Registrant contact information, Registrar contact Information, DNS contact, etc



Name	Single-Sentence Definition
Criminal Activity/ DNS Abuse – Notification	Information collected and made available for the purpose of enabling notification by regulatory authorities, law enforcement, cybersecurity professionals, IT administrators, automated protection systems and other incident responders of the appropriate party (registrant, providers of associated services, registrar, etc), of abuse linked to a certain domain name registration to facilitate the mitigation and resolution of the abuse identified: Registrant contact information, Registrar contact Information, DNS contact, etc
Criminal Activity/ DNS Abuse – Reputation	Information made available to organizations running automated protection systems for the purpose of enabling the establishment of reputation for a domain name to facilitate the provision of services and acceptance of communications from the domain name examined: Domain metadata (registrar, registration date, nameservers, etc.), Registrant contact information, Registrar contact Information, DNS contact, etc



#### ICANN's Mission (As amended 1 October 2016)

#### **Section 1.1. MISSION**

- (a) The mission of the Internet Corporation for Assigned Names and Numbers ("ICANN") is to ensure the stable and secure operation of the Internet's unique identifier systems as described in this Section 1.1(a) (the "Mission"). Specifically, ICANN:
- (i) Coordinates the allocation and assignment of names in the root zone of the Domain Name System ("DNS") and coordinates the development and implementation of policies concerning the registration of second-level domain names in generic top-level domains ("gTLDs"). In this role, ICANN's scope is to coordinate the development and implementation of policies:
- For which uniform or coordinated resolution is reasonably necessary to facilitate the openness, interoperability, resilience, security and/or stability of the DNS including, with respect to gTLD registrars and registries, policies in the areas described in Annex G-1 and Annex G-2; and
- That are developed through a bottom-up consensus-based multistakeholder process and designed to ensure the stable and secure operation of the Internet's unique names systems.
- The issues, policies, procedures, and principles addressed in Annex G-1 and Annex G-2 with respect to gTLD registrars and registries shall be <u>deemed to be within ICANN's Mission.</u>

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#### ICANN's Mission (As amended 1 October 2016)

#### **ANNEX G-1**

The topics, issues, policies, procedures and principles referenced in Section 1.1(a)(i) with respect to gTLD registrars are:

- issues for which uniform or coordinated resolution is reasonably necessary to facilitate interoperability, security and/or stability of the Internet, registrar services, registry services, or the DNS;
- · functional and performance specifications for the provision of registrar services;
- registrar policies reasonably necessary to implement Consensus Policies relating to a gTLD registry;
- resolution of disputes regarding the registration of domain names (as opposed to the use of such domain names, but including where such policies take into account use of the domain names); or
- restrictions on cross-ownership of registry operators and registrars or resellers and regulations and restrictions with respect to registrar and registry operations and the use of registry and registrar data in the event that a registry operator and a registrar or reseller are affiliated.

Examples of the above include, without limitation:

- principles for allocation of registered names in a TLD (e.g., first-come/first-served, timely renewal, holding period after expiration);
- prohibitions on warehousing of or speculation in domain names by registries or registrars;
- reservation of registered names in a TLD that may not be registered initially or that may not be renewed due to reasons reasonably related to (i) avoidance of confusion among or misleading of users, (ii) intellectual property, or (iii) the technical management of the DNS or the Internet (e.g., establishment of reservations of names from registration);
- maintenance of and access to accurate and up-to-date information concerning registered names and name servers;
- procedures to avoid disruptions of domain name registrations due to suspension or termination of operations by a
  registry operator or a registrar, including procedures for allocation of responsibility among continuing registrars of the
  registered names sponsored in a TLD by a registrar losing accreditation; and
- the transfer of registration data upon a change in registrar sponsoring one or more registered names.



#### ICANN's Mission (As amended 1 October 2016)

#### **ANNEX G-2**

The topics, issues, policies, procedures and principles referenced in Section 1.1(a)(i) with respect to gTLD registries are:

- issues for which uniform or coordinated resolution is reasonably necessary to facilitate interoperability, security and/or stability of the Internet or DNS;
- functional and performance specifications for the provision of registry services;
- security and stability of the registry database for a TLD;
- registry policies reasonably necessary to implement Consensus Policies relating to registry operations or registrars;
- · resolution of disputes regarding the registration of domain names (as opposed to the use of such domain names); or
- restrictions on cross-ownership of registry operators and registrars or registrar resellers and regulations and restrictions
  with respect to registry operations and the use of registry and registrar data in the event that a registry operator and a
  registrar or registrar reseller are affiliated.

Examples of the above include, without limitation:

- principles for allocation of registered names in a TLD (e.g., first-come/first-served, timely renewal, holding period after expiration);
- prohibitions on warehousing of or speculation in domain names by registries or registrars;
- reservation of registered names in the TLD that may not be registered initially or that may not be renewed due to reasons reasonably related to (i) avoidance of confusion among or misleading of users, (ii) intellectual property, or (iii) the technical management of the DNS or the Internet (e.g., establishment of reservations of names from registration);
- maintenance of and access to accurate and up-to-date information concerning domain name registrations; and
- procedures to avoid disruptions of domain name registrations due to suspension or termination of operations by a
  registry operator or a registrar, including procedures for allocation of responsibility for serving registered domain names
  in a TLD affected by such a suspension or termination.

