Background and Status of Implementation

Transition from thin to thick for .COM, .NET and .JOBS
Incl. Legal Review

Consistent Labeling and Display of Whois Output for all gTLDs

10 min

50 min

30 min
Background and Status of Implementation
Background

  http://gnso.icann.org/en/group-activities/active/thick-whois

- Policy Recommendations adopted by the ICANN Board in Feb. 2014  
  http://www.icann.org/en/groups/board/documents/resolutions-07feb14-en.htm#2.c

- Two expected outcomes (policy recommendation #1)  
  - Transition from thin to thick WHOIS for .COM, .NET and .JOBS  
  - Consistent labeling and display for all gTLDs per Spec 3 RAA 2013

- Decoupling of implementation of the two outcomes in line with Implementation Considerations (Final Report of Thick WHOIS PDP)
Policy Recommendations vs. Outcomes

1. The provision of thick Whois services, with a consistent labeling and display as per the model outlined in specification 3 of the 2013 RAA, should become a requirement for all gTLD registries, both existing and future.

2. Consideration of input provided in Public Comments before Board Resolution.

3. As part of the implementation process, a legal review of law applicable to the transition of data from a thin to thick model not already been considered in the EWG memo is undertaken.

Outcomes:

- Consistent Labeling and Display of Whois Output for all gTLDs as per Spec 3 of 2013 RAA
- Transition from thin to thick for .COM, .NET and .JOBS
Thick Whois, Consistent Labeling & Display

- Domain Name Registrations include two sets of data
  - Data associated with the domain name
  - Data associated with the registrant and its contacts

- Thin vs. Thick Registration Model
  - Thin model: the Registry manages the domain data only
  - Thick model: the Registry manages the domain data & stores the registrant data
  - The Consistent Labeling & Display part of the Thick Whois Policy adds the registrar-specific data to the Thick Registration Model

<table>
<thead>
<tr>
<th>.COM Registrar Whois Output</th>
<th>.COM Registrar Whois Output</th>
<th>.COM Registrar Whois Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain Name: ICANN.COM</td>
<td>Domain Name: ICANN.COM</td>
<td>Domain Name: ICANN.COM</td>
</tr>
<tr>
<td>Registrar: GODADDY.COM, LLC</td>
<td>Registry Domain ID: 2346839_DOMAIN_COM-VRSN</td>
<td>Registry Registrar ID:</td>
</tr>
<tr>
<td>Sponsoring Registrar IANA ID: 146</td>
<td>Registrar WHOIS Server: whois.godaddy.com</td>
<td>Registrant Contact Information (+)</td>
</tr>
<tr>
<td>Whois Server: whois.godaddy.com</td>
<td>Registrar URL: <a href="http://www.godaddy.com">http://www.godaddy.com</a></td>
<td>Registrar Admin ID:</td>
</tr>
<tr>
<td>Referral URL: <a href="http://registrar.godaddy.com">http://registrar.godaddy.com</a></td>
<td>Registrar Registration Expiration Date: 2023-10-19T03:59:59Z</td>
<td>Admin Contact Information (+)</td>
</tr>
<tr>
<td>Name Server: A.IANA-SERVERS.NET</td>
<td>Registrar: GoDaddy.com, LLC</td>
<td>Registry Tech ID:</td>
</tr>
<tr>
<td>Name Server: B.IANA-SERVERS.NET</td>
<td>Registrar IANA ID: 146</td>
<td>Tech Contact Information (+)</td>
</tr>
<tr>
<td>Name Server: C.IANA-SERVERS.NET</td>
<td>Registrar Abuse Contact Email: <a href="mailto:email@godaddy.com">email@godaddy.com</a></td>
<td>Name Server: NS.ICANN.ORG</td>
</tr>
<tr>
<td>Name Server: NS.ICANN.ORG</td>
<td>Registrar Abuse Contact Phone: +1.480-624-2505</td>
<td>Name Server: A.IANA-SERVERS.NET</td>
</tr>
<tr>
<td>Status: clientDeleteProhibited</td>
<td>Domain Status: clientTransferProhibited</td>
<td>Name Server: B.IANA-SERVERS.NET</td>
</tr>
<tr>
<td>Status: clientRenewProhibited</td>
<td>Domain Status: clientUpdateProhibited</td>
<td>Name Server: C.IANA-SERVERS.NET</td>
</tr>
<tr>
<td>Status: clientTransferProhibited</td>
<td>Domain Status: clientRenewProhibited</td>
<td>DNSSEC: unsigned</td>
</tr>
<tr>
<td>Status: clientUpdateProhibited</td>
<td>Domain Status: clientDeleteProhibited</td>
<td></td>
</tr>
<tr>
<td>Updated Date: 19-oct-2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation Date: 14-sep-1998</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expiration Date: 19-oct-2023</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Registry Registrant ID:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
On balance, the Thick Whois Final Report concluded that there are more benefits than disadvantages to requiring thick Whois for all gTLDs, such as:

- Improved response consistency
- Improved access to Whois data (registry vs. registrars accessibility)
- Improved stability (increased availability in case of failure)
- More copies of escrowed data in the event of a failure
- No overly burdensome cost impact on providers of Whois data
- More level playing field for competition between registry provider

## Recent Activity

### Transition from thin to thick WHOIS for .COM, .NET, .JOBS

- Release of Legal Review Memo on June 8 (Review of Law Applicable to the Transition of Data from a Thin to Thick Whois Model as per Policy Recomendation #3)

### Consistent Labeling and Display of WHOIS Output for all gTLDs

- Revised Impact Impact Assessment released and discussed with IRT at ICANN 52. No subsequent feedback received from IRT.
- IPT development of implementation plan (synchronized with other relevant initiatives) delayed due to impact of RDAP on RDDS landscape

Current documentation available at: [https://community.icann.org/display/TWCPI/Documentation](https://community.icann.org/display/TWCPI/Documentation)
Current Timeline Assumptions

2015

- Legal Review
- Implementation of transition by affected parties
- Design of implementation plan with experts from affected parties (Incl. Public Comment period)
- Design of Implementation plan (incl. Public Comment period)
- Consistent labeling & display of Whois output for all gTLDs as per RAA 2013

2016

- Transition from thin to thick Whois of .COM, .NET, .JOBS
- Implementation of policy by affected parties

2017
Transition from thin to thick for .COM, .NET and .JOBS
Recommendation #3 of the GNSO Council Consensus Policy Recommendations on Thick Whois adopted by the Board on 7 February 2014 (the “Thick Whois Policy”) required:

“As part of the implementation process, a legal review of law applicable to the transition of data from a thin to thick model not already been considered in the EWG memo is undertaken, and due consideration is given to potential privacy issues that may arise from the discussions on the transition from thin to thick Whois, including, for example, guidance on how the long-standing contractual requirement that registrars give notice to, and obtain consent from, each registrant for uses of any personally identifiable data submitted by the registrant should apply to registrations involved in the transition. Should any privacy issues emerge from these transition discussions that were not anticipated by the WG and which would require additional policy consideration, the Implementation Review Team is expected to notify the GNSO Council of these so that appropriate action can be taken.”
Legal Review: Scope

- General survey of EU data protection laws which serve as a basis for many data protection laws around the world
- Survey to examine whether there are any significant concerns not already identified or addressed in the EWG Memo or the Thick Whois Final Report
- Implementation considerations about the transition to thick Whois for discussion by the IRT
Legal Review: Legal Considerations

- In some countries, Registrars may need to establish a ‘lawful basis’ for:
  - Disclosure of Registrants’ personal data to the Registry
  - Transfer of such data to another country

- Registrant Consent may constitute a lawful basis, and may be the most suitable approach, despite some possible implementation challenges:
  - In certain jurisdiction there exist the right to revoke consent
  - The validity of consent as “freely given” may be challenged

- Legitimate Interests can be an alternative basis, if with greater challenges:
  - Security, stability and resiliency of the Internet would be legitimate
  - However, additional steps would need to be taken to address data transfer requirements. These may require DPA approval and have other constraints

- Additional options to address transfer of data could be:
  - Privacy/proxy services
  - Thick Whois with data localized in region subject to restrictions

(1) To assist with the legal analysis, ICANN engaged Bird & Bird, a Leading international law firm with a highly regarded International Privacy & Data Protection Group
Registrant Consent is likely to be the most expedient way of addressing the transition to thick Whois

Where conflict exists between local privacy laws and thick Whois requirements, ICANN’s Procedure for Handling WHOIS Conflicts with Privacy Laws is available to contracted parties.

Contracted parties may wish also to consider requesting amendments to or waivers from specific contractual requirements.

Registration Data Access Protocol (RDAP) could be a means of mitigating conflicts, in particular thanks to its redirection feature:
- Whois look up would appear thick even if all data is not stored with the Registry
- Consistency with Policy Recommendation #1 may be questioned
Legal Review: RDAP redirection

Jurisdiction **Allowing Transfer** of Registration Data

- All Registration Data transferred at time of Registration (or as part of transition)

Registar → Registry

RDAP-based RDDS

(1) Requests Registration Data

(2) Returns Full Registration Data

RDDS End-User

Registry

RDAP-based RDDS

(2) Returns Redirection and/or Domain Data + Reference to Registar RDAP Server

(3) Request Additional Registration Data

(4) Returns Registrant + Registrar Data

Jurisdiction **Not Allowing Transfer** of Registration Data

- All Registration Data not transferred at time of Registration (or as part of transition)

Registry → Registar

RDAP-based RDDS
Next Steps

- **Discuss Implementation considerations and open questions**
  - Registrant Consent requirements applicable to transfer of data
  - Handling of conflicts with Privacy laws
  - Consistency with Policy recommendation of RDAP to mitigate conflicts
  - Channel for transfer of data for existing registrations
  - Timeline for transfer of data
  - Supporting measure to assist stakeholders with the transition

- **Work out implementation details** with Group of experts from affected Parties
  - 12 volunteers representing 10 registrars joined the IRT in dec. 2014
  - Potential bi-weekly meetings if appropriate

- **Aim to deliver**:
  - Initial Draft Implementation Plan by September 2015
  - Final implementation Plan by end of 2015 including public comments
Consistent Labeling and Display of Whois Output for all gTLDs
Conclusions of last IRT Meeting (ICANN 52)

- **Revised Impact Assessment**
  - Interpretation of “consistent labeling and display” as requiring the consistent **display of all the required Output fields**, including:
    - Registrar Abuse Contact
    - Reseller Information
  - Distinction of **High and Low Impacts** (distributed vs. local developments)
  - **Development of an EPP Extension** required for implementation of high impacts (est. 6 additional months)

- **Synchronization of implementation** with other relevant initiative (as per earlier IRT Feedback):
  - Low Impact with **Whois Clarifications**
  - High Impact with **RDAP**
### Conclusions of last IRT Meeting (ICANN 52)

**ICANN 52**
- **6 months**
  - Implementation by Contracted Parties
  - Whois Clarifications Effective Date

**IETF RFCs Published**
- **6 months**
  - Operational Profile Definition
- **12 months**
  - Implementation of RDAP by Ry/Rr

**Finalization of Implementation Plan**
- **12 months**
  - Ry/Rr Systems Update (Low/Med. Impact Requirements)
  - Inclusion of CL&D Requirements to RDAP Operation Profile
  - Update to EPP Standard (High Impact requirements)
  - Ry/Rr EPP Systems Update
  - TW CL&D Policy Effective Date

**AWIP + Whois Clarifications (Assumption)**
- **6 months**

**RDAP (Assumption)**
- **6 months**

**Thick WHOIS Consistent Labeling & Display**
- **6 months**

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**Timeline Details**

- October (Oct), November (Nov), December (Dec), January (Jan), February (Feb), March (Mar), April (Apr), May (May), June (Jun), July (Jul), August (Aug), September (Sep), October (Oct), November (Nov), December (Dec)
- 2014, 2015, 2016
New developments since ICANN 52

- **Whois Clarifications Advisory**
  
  - Published 27 April 2015
  - Effective 31 January 2016
  - Only applies to New gTLDs and 2013 RAA signatories
  - CL&D Implementation unable to catch up with timeline of the advisory contrary to what was initially anticipated

- **The Registration Data Access Protocol (RDAP) is entering the landscape**
  
  http://datatracker.ietf.org/wg/weirds/documents/
  - RFCs 7480-7484 published on 25 March
  - ICANN GDD initiated development of implementation plan and is currently engaging the community
  - Implementation by contracted parties could start in 2016
The impact of RDAP: Definitions

- **Registration Data Access Protocol (RDAP)**
  - Refers to the new protocol defined in RFCs 7480 to 7485
  - It is meant to replace the WHOIS protocol as the reference access protocol to domain name registration data (in addition to IP address registration data)

- **The term Whois is overloaded (see SAC051), it can mean**
  - The WHOIS protocol defined in RFC 3912 (Port-43) used to access domain name registration data (and IP address registration data)
  - The actual domain name registration data
  - The overall Registration Data Directory Service

- **Registration Data Directory Service (RDDS)**
  - Refers to the overall domain name registration data directory service as defined in RA Specification 4 and 2013 RAA Specification 3
  - Specification mandate distribution of Data over WHOIS Port 43 and a Web interface (HTML rendering of WHOIS Port 43 output in practice)
  - “Until ICANN requires a different protocol”
The impact of RDAP: End-user view

Whois

rdg.afilias.info/whois/domain/icann.info

Domain Name: ICANN.INFO
Domain ID: D1050750-LRMS
Creation Date: 2001-10-08T16:33:16Z
Updated Date: 2014-10-08T22:21:20Z
Registry Expiry Date: 2015-10-08T16:33:16Z
Trademark Name: ICANNReserved
Sponsoring Registrar: Afilias Ltd. (R145-LRMS)
Sponsoring Registrar IANA ID: 700023
WHOIS Server:
Referral URL:
Domain Status: inactive -- http://www.icann.org/epp#inactive
Registrar ID: C2283145-LRMS
Registrar Name: Internet Corporation for Assigned Names and Numbers
Registrar Organization: ICANN
Registrar Street: 4676 Admiralty Way
Registrar Street: Suite 330
Registrar City: Marina Del Rey
Registrar State/Province: CA
Registrar Postal Code: 90292-6601
Registrar Country: US
Registrar Phone: +1.2137065700
Registrar Phone Ext: +1.2137065701
Registrar Fax Ext: +1.2137065701
Registrar Email: support@afilias.info
Name Server:
Name Server:
Name Server:
Name Server:
Name Server:
Name Server:
Name Server:
Name Server:
Name Server:
Name Server:
Name Server:
Name Server:
DNSSEC: Unsigned

RDAP

rdg.afilias.info/rdap/domain/icann.info

{
   "entities": [
      {
         "links": [
            {
               "href": "http://rdg.afilias.info/rdap/entity/C2283145-LRMS",
               "rel": "self",
               "type": "application/rdap+json",
               "value": "http://rdg.afilias.info/rdap/entity/C2283145-LRMS"
            }
         ],
         "objectClassName": "entity",
         "roles": [
            "registrant"
         ],
         "vcardArray": [
            "vcard",
            {
               "version": "4.0",
               ""fn": "Internet Corporation for Assigned Names and Numbers"
            }
         ]
      }
   ]
}
Consistent Labeling & Display - without RDAP

End-Users of Registration Data Distribution Services (RDDS)

Presentation Layer

Web-based Directory Service (HTML rendering of WHOIS Port 43 in practice)

WHOIS Protocol (Port 43)

Registration Data Layer

Require transfer to and storage by registries

Require all outputs to be consistent with Spec 3 RAA

Consistent Labeling and Display

Thick Whois Consensus Policy

Registration

Domain Name Data

Registrant & Contacts Data

Registrar-Specific Data
Consistent Labeling & Display - with RDAP

Thick Whois Consensus Policy
Consistent Labeling and Display

Rely on RDAP Requirements for consistency
Require transfer to and storage by registries

End-Users of Registration Data Distribution Services (RDDS)

RDAP Implementation Requirements (Operational Profile)
Web-based Directory Service (Updated ?)
RDAP Protocol

Domain Name Data
Registrant & Contacts Data
Registrar-Specific Data

Presentation Layer
Registration Data Layer
CL&D Implementation to only affect RDAP Output, no changes to WHOIS Port 43

CL&D Implementation Plan dependent on RDAP
- RDAP consistency with Policy Recommendation #1?
- Future of Web-based Directory service Requirements?
- RDAP Deployment Timeline

EPP Extension development for Registrar Registration Expiration Date and Reseller Information
- Current effort ongoing at IETF: https://datatracker.ietf.org/doc/draft-zhou-eppext-reseller-mapping/
- Missing the Registrar Registration Expiration Date
- Involvement of ICANN Staff upon release of CL&D Final implementation plan

Collaboration of Registrars (indirectly affected) in transferring relevant data to registries for existing registrations and non-EPP data
- Channels and efficiency measures
- Any foreseeable issues not already identified
CL&D Implementation – Timeline (Est.)

- **ICANN 52**: GDD Summit
- **ICANN 53**: Draft Implementation Plan
- **ICANN 54**: Public Comments on Draft Implementation Plan
- **ICANN 55 (A)**: Final Implementation Plan
- **ICANN 56 (B)**: CL&D Low Impact Implementation
- **ICANN 57 (C)**: CL&D EPP Extension Development

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**RDAP Operational Profile Development (incl community Input)**

**Implementation of RDAP by Registries and Registrars**

**Thick WHOIS Consistent Labeling & Display**

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2015

- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sep
- Oct
- Nov
- Dec

2016

- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sep
- Oct
- Nov
- Dec

2017

- Jan
- Feb
- Mar
Overall Timeline – Current Estimate

- **ICANN 52**
- **ICANN 53**
- **GDD Summit**
- **ICANN 54**
- **ICANN 55 (A)**
- **ICANN 56 (B)**
- **ICANN 57 (C)**

**RDAP Operational Profile Development (incl community Input)**

**Implementation of RDAP by Registries and Registrars**

**Draft Implementation Plan**

- **Public Comments on Draft Implementation Plan**
- **Final Implementation Plan**

**CL&D Low Impact Implementation**

**CL&D EPP Extension Development**

**CL&D High Impact Implementation**

**Design of implementation plan with experts from affected parties (Incl. Public Comment period)**

**Transition from thin to thick for .COM, .NET & .JOBS**

**Legal Review**

**Implementation of transition by affected parties**

### Timeline

- **2015**
- **2016**
- **2017**