RDAP, by the WEIRDS WG

Registry Data Access Protocol

Web Extensible Internet Registry Data Service Working Group
Introduction

- HTTP-based
- Local extensions
- Names and Numbers
- Query and Response defined

Web
Extensible
Internet Registry
DataService
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## RDAP vs WHOIS

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>WHOIS</th>
<th>RDAP</th>
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</thead>
<tbody>
<tr>
<td>Extensible for registry-specific data</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Structured query and response format</td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td>International character set support</td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td>Authorization and Authentication</td>
<td></td>
<td>✅</td>
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<tr>
<td>Redirection to authoritative sources</td>
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<td>✅</td>
</tr>
<tr>
<td>Lightweight transactional protocol</td>
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<td>✅</td>
</tr>
<tr>
<td>Data dictionary for core data</td>
<td></td>
<td>✅</td>
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<tr>
<td>Read-only protocol</td>
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<td>✅</td>
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</table>
Key Benefits

- Internationalization support (IDNs, UTF-8)
- Standardization of queries and responses
- Authorization and Authentication support
  - Differential service levels for, eg, LEA
- Redirection to authoritative sources
  - http://rdap.org/ presents single query point for:
    - APNIC, ARIN, Lacnic, CentralNIC, and Verisign
- These are *technical* challenges for WHOIS
Policy Enablement

- RDAP *enables* policy decisions, but does not make them
  - Which data must be presented in a result?
  - What (class of) user can view data?
  - How frequently may a user ask for data?
  - What languages/scripts should be supported?
  - What search terms are permitted?
Data Quality

- RDAP does not alter data
  - RDAP defines how to transport and frame data
- Data quality projects are orthogonal to RDAP
  - contact verification processes continue
- RDAP is constrained by existing data
  - Addresses will be structured where possible
  - But unstructured as a fallback!
RIR Cooperative Work

• NRO Engineering Coordination Group
  – Meets face to face at IETFs
  – Teleconferences as needed
  – E-mail list for more frequent communication

• WEIRDS is a collaborative outcome of the ECG
  – Survey of RIR WHOIS systems
  – Common model for data and API
  – Outcome taken to IETF for standardization
History

2010: ARIN & RIPE deploy RESTFul WHOIS services

2011: ARIN & LACNIC submit initial draft to IETF

November 2011: BoF session at IETF 82

May 2012: Working Group chartered

March 2012: Working Group formation requested at IETF 83

August 2012: Unified Names & Numbers draft submitted

March 2013: Base HTTP draft enters final stages of editing
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Open Source Initiatives

• Open Source development, CNNIC+ICANN partnership
  – http://www.restfulwhois.org/
  – Target completion: December 2013

• Open Source 43+80 server, lead by RIPE NCC
  – To be made available this year
  – Target completion: August 2013
Summary

• Key benefits are technical
  – I18n, structure, authentication

• Policy enabling technology, not policy making

• Cooperative work by names and numbers
Thank you

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