

WEIRDS

Web Extensible Internet Registration Data Service

Working Group Update

Olaf Kolkman

olaf@NLnetLabs.nl

(working group co-chair, with Murray Kucherawy)

Acknowledgements:

Andy Newton and Steve Sheng

(I shamelessly copied from their decks)

WEIRDS Context

Whois

```
whois -h whois.sidn.nl nlnetlabs.nl
Domain name: nlnetlabs.nl
Status:      active
```

```
Registrar:
  Prolocation B.V.
  Populierlaan 3B
  2282KX RIJSWIJK ZH
  Netherlands
```

```
DNSSEC:      yes
```

```
Domain nameservers:
  ns3.domain-registry.nl      2001:7b8:206:1::53
  open.nlnetlabs.nl          213.154.224.1
  open.nlnetlabs.nl
  omval.tednet.nl
```

```
Record maintained by: NL Domain Registry
```

```
Copyright notice
[ redacted for size ]
```

query

How
context
dependent

names

numbers

registration
data

How:
Unstructured

What:
Policy and
context
dependent

What and How

*Make How more
structured and
standardize it*

Protocol



*Enable What to be
context and
regulatory specific*

Policy

Community
RIRs CCTLDs
ICANN local

Chartered to...!

Create a 'how' that allows for various decisions about 'what'

- Standardize a single data framework
- Deliver objects encapsulated in that framework over a RESTful service over HTTP
- Generally following the requirements from CRISP (RFC3707) but...

Chartered to... II

- producing a simple, easy-to-implement protocol, supporting internationalized registration data and, specifically for name registries, capturing the needs of internationalized domain names in the data model.
- possibility of differential service based on client authentication

GET URI
returns
a JSON data structure

RESTful?

- Representational State Transfer
- GET, PUT, POST, DELETE
- Resources represented by URIs
- On top of HTTP it provides you readily available libraries to do things like
<http://whois.example.com/ip/192.0.2.0/operator/contacts/abuseor>
<http://whois.example.net/domain/example.com/contacts/registrants>

Deliverables

<i>Deliverable</i>	<i>Due</i>	<i>Status</i>
draft-ietf-weirds-using-http	Feb 2013	WG last Call ends April 10
draft-ietf-weirds-rdap-sec	Apr 2013	
draft-ietf-weirds-rdap-query	June 2013	
draft-ietf-weirds-json-response	Sep 2013	
draft-ietf-weirds-redirectds	Dec 2013	

*Other documents are
being adapted
(search and
object inventory)*

Major Issues

- Internationalization (I18N) issues related to returned data.
- vCard for JSON (jCard)
- Federated Authentication
- Search
 - Search patterns
 - I18N issues related to string comparison
 - Boolean logic, paging, and other features.

vCard for JSON

'Easy Issue'

- Transfer address information between entities is a well known problem
- vCard spec solves that, multiple protocols want that available in JSON
- IETF chartered: jcardcal (delivery before next IETF)

II8N

- Steve Sheng reported on his comparison requirements from the *Internationalized Registration Data Working Group Final Report* against the WEIRDS specs.
- Preliminary findings: WEIRDS spec provide the framework for implementing the recommendations

This benefits from more expert eyes

Fields	Internationalize?	Output Standard
Domain Names	YES	Both A-label and U-label
Name Server Names	YES	Both A-label and U-label
Sponsoring Registrar	NO	US-ASCII
Telephone/fax	N/A	ITU.T E 164
Email	YES	RFC 6531
Registration Status	N/A	Exact EPP status where applicable
Dates	N/A	RFC 3339
Entity Names and Addresses	YES	Local languages/scripts

Search

So far WEIRDS does
Query/Response

- Issues
 - Sub-string searches
 - Prefix, suffix, mid-string, all
 - Unicode equivalences and matching
 - Boolean operators for multi-field searches
 - Paging support
- Direction seems to be: keep it simple
 - Prefix match on existing fields

Rough Consensus & Running Code Implementations

- rdap.org
- [apnic \(http://www.apnic.net/apnic-info/whois_search/about/rdap\)](http://www.apnic.net/apnic-info/whois_search/about/rdap)
- [centralnic \(https://www.centralnic.com/registry/labs/rdap\)](https://www.centralnic.com/registry/labs/rdap)
- [cnnic \(http://rdap.restfulwhois.org\)](http://rdap.restfulwhois.org)
- [Lacnic \(http://restfulwhoisv2.labs.lacnic.net/restfulwhois/\)](http://restfulwhoisv2.labs.lacnic.net/restfulwhois/)

Please Contribute

- After 2 BOFs the working group was chartered in June 2012
- Had 3 WG meetings (IETF 84-86)
- Active mailing list
- Please Write, Review, and/or Implement

Coordinates

- <http://tools.ietf.org/wg/weirds>
- General Discussion: weirds@ietf.org
- To Subscribe:
<https://www.ietf.org/mailman/listinfo/weirds>
- Archive:
<http://www.ietf.org/mail-archive/web/weirds/>