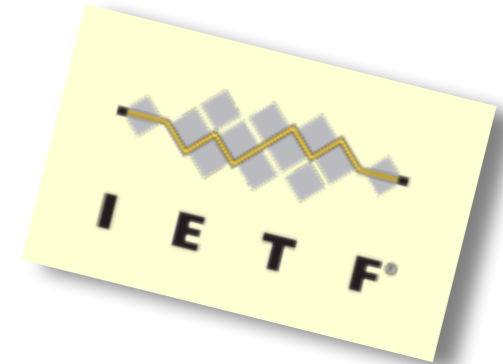


# WEIRDS

## A Status Update



Olaf M. Kolkman  
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**a status update**

**WEIRDS WG Chair**

**With Murray  
Kuchewary**

**who also provided a  
lot of content**

**WHOIS Today**

*protocol perspective*

**RFC 812**

**Connect to the service host**

**TCP: service port 43 decimal**

**NCP: ICP to socket 43 decimal, establishing two 8-bit connections**

**Send a single "command line", ending with <CRLF>.**

**Receive information in response to the command line. The server closes its connections as soon as the output is finished.**

in other words:  
ask a single question  
you receive one free-form answer

**Updated by  
RFC 3912**

**(but still the same)**

# Example

```
$ 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
  open.nlnetlabs.nl      2001:7b8:206:1::53
  open.nlnetlabs.nl      213.154.224.1
  omval.tednet.nl
```

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

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query

How  
context dependent

names

numbers

How:  
Unstructured

registration  
data

What:  
Policy and context  
dependent

# WHOIS

## SHORTCOMINGS

No differential service

Not internationalized

No structured response syntax

Not standard redirection capability

Except 'RWHOIS' with RIRs

No Bootstrap

Law enforcement vs General public

奥拉夫 科尔克门

Automation difficult

For more specific information:  
go elsewhere

Where should I ask anyway

# What and How

*How:  
the method of data  
delivery*

Protocol



*What:  
the content of the data*

Policy

Community  
RIRs CCTLDs  
ICANN local

# WEIRDS

*Web Extensible Internet Registration Data Service*

- WEIRDS WG chartered to deliver a protocol that supports:
  - Internationalization
  - A specific reply syntax
  - Redirection
  - Authentication (allowing differential service)
  - Over HTTP
  - Same mechanism for names vs. numbers
  - No special client knowledge

**Standardize the 'How'**

**With a 'core What'  
that can be extended**

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/abuse>  
or  
<http://whois.example.net/domain/example.com/contacts/registrants>

# Deliverables

*the current plan*

| DUE      | DELIVERABLE                             |
|----------|---|
| Done     | draft-ietf-weirds-using-http            |
| Done     | draft-ietf-weirds-rdap-sec              |
| Jan 2014 | draft-ietf-weirds-rdap-query            |
| Jan 2014 | draft-ietf-weirds-json-response         |
| Jan 2014 | draft-ietf-weirds-redirects             |
| Jan 2013 | draft-ietf-weirds-object-inventory      |
| Feb 2014 | Draft describing bootstrapping protocol |



# Major Issues 1

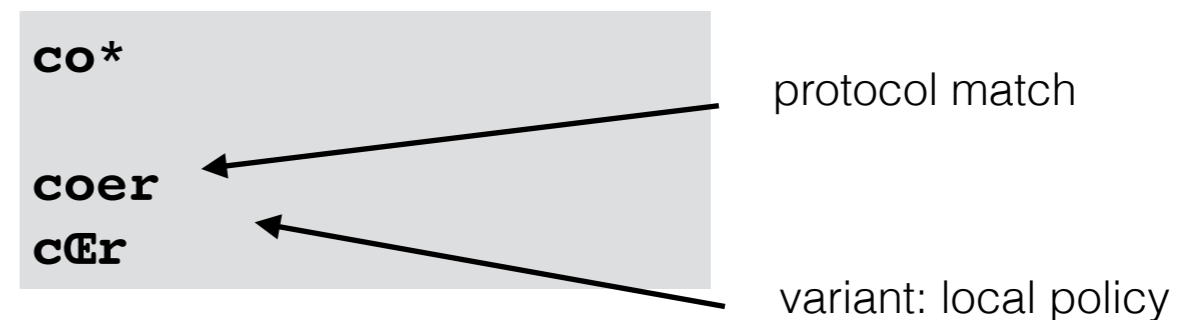
CURRENT THOUGHTS  
CONVERGING

- Search
  - Search patterns
  - I18N issues related to string comparison
  - Boolean logic, paging, and other features.

Partial Prefix  
Matching

UTF8  
(with case folding for  
plain ASCII)

Local policy on  
what matches  
exactly



# Major Issues 2

CURRENT THOUGHTS  
NO EMERGING CONSENSUS

- Bootstrapping
  - Names or Numbers
  - Other Entities
  - Scraping or Querying

Use IANA

Use Heuristics

Use DNS

Potentially not standardize  
(experimental/informational)

# Minor Issues

**Redirect**

**Depends on  
bootstrap**

**Being Restful**

**Well- Known URI**

**URI - Template**

**Object Inventory**

**'Complete'?**

# The Good News

- Running Code
  - Rough Consensus
- Interoperability  
tests

**5 Servers**

**2 Names**

**2 Numbers**

**1 Names and  
Numbers**



# Coordinates

- <http://tools.ietf.org/wg/weirds>
- General Discussion: [weirds@ietf.org](mailto:weirds@ietf.org)
- To Subscribe:  
<https://www.ietf.org/mailman/listinfo/weirds>
- Archive:  
<http://www.ietf.org/mail-archive/web/weirds/>
- Specifics:  
<https://datatracker.ietf.org/meeting/88/materials.html>