CRISP Overview and Update

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Outline

- Background and Overview
- Details of IRIS
- Differences between WHOIS and IRIS
- The Future

Background and Overview

- CRISP is an IETF working group
  - Standardise protocol for domains, numbers, etc.
- Replacement for WHOIS
  - Find authoritative servers
  - Structured queries
  - Well-defined schema for replies
  - Standard error conditions
  - Data integrity
  - Client authentication
  - Referrals

Details of IRIS

- Client/Server protocol, with versioning
- XML-based
- Profiles are defined
  - **dreg covers domain names**
  - **areg covers IPv4/IPv6 addresses & AS numbers**
- Client side referrals (like non-recursive DNS)
- Service location is profile-dependent
- Entity identifiers allow globally unique naming
- Client authentication helps mining prevention, etc.

Differences between WHOIS and IRIS

- IRIS client that understands **areg required**
- **No information only useful to maintainers**
  - **MNTNER, IRT, “mnt-by:”, “mnt-lower:”, etc.**
  - **“notify:”, “mnt-nfy:”, “upd-to:”, etc.**
  - **Changed information is only a date**
- **No routing information**
  - **“import:”, “export:”, “default:” in AS numbers**
  - **ROUTE and INET-RTR types**
  - **Sets types, AS-SET, ROUTE-SET, etc.**

Example

```
aut-num:        AS30720
[redacted]
admin-c:        HVEN1-RIPE
tech-c:         HVEN1-RIPE
mnt-by:         DLW-MNT
[redacted]
changed:        [redacted]
source:         [redacted]
```

The Future

- IETF Activities
  - Mature and finalise **areg draft**
  - **Move areg to standards-track RFC**
- **Server Prototype to test technology**
  - **Using Verisign reference implementation**
  - **Proxy to WHOIS server**
- **Client author outreach**