Replacing WHOIS

Jay Daley .nz
Long history of effort

- Various IETF efforts
  - RFC 1834, WHOIS++, 1995
  - RFC 2167, RWHOIS, 1997
  - RFC 3707, CRISP/IRIS, 2004

- SSAC has had a lot to say about WHOIS
  - SAC003, WHOIS recommendations, 2002
  - SAC027, WHOIS studies, 2008
  - SAC023, WHOIS source for spam, 2007
  - SAC051, WHOIS terminology, 2011
What’s wrong with WHOIS?

◊ No standardisation of data:
   ◊ What data should be represented in WHOIS
   ◊ How the data is represented
   ◊ Problems:
     ◊ Hinders computer readability
     ◊ Hinders comparisons of outputs

◊ No standardisation of protocol features
◊ Advanced queries (e.g. registrar data)
◊ Error messages
What’s wrong with WHOIS?

- Internationalisation is missing:
  - Tell client character set of response
  - Allow client to specify character set
  - Support for non-US characters in gTLD WHOIS
  - Some ccTLDs have ways around this
    - .dk uses “--charset=latin-1” or “--charset=utf-8”
    - no use “-c utf-8”
    - .jp uses “/e” to switch from ISO-2022-JP to ASCII
  - But these are not standard
What’s wrong with WHOIS?

Access control
- IP address management is common
  - Rate limiting / block list / allow list
- No standard notification of a block

Authentication
- Password access to bulk / sensitive data
- Advanced search features
  - e.g. registrant name

ICANN Dakar 2011
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Very different services

1. Public lookup of the "public register" details
   - WHOIS

2. Controlled access to public register with enhanced search facilities
   - Many offer as part of dispute process

3. Controlled access to public register for availability checks
   - Limited data needed here

4. Controlled access to "private register"
   - Law enforcement
Terminology

- **Domain Name Registration Data** *(DNRD)*
  - Data supplied by registrants

- **DNRD Directory Service** *(DNRD-DS)*
  - Service that WHOIS provides

- **DNRD-DS Data** *(DNRD-DSD)*
  - Data that WHOIS provides (subset of registration data)

- **DNRD Access Protocol** *(DNRD-AP)*
  - Technical protocol to access the service
Current work

- Internationalised Registration Data WG
  - Final report now out
  - Recommendations:
    - ICANN community to define DNRD (data)
    - GNSO/SSAC to discuss common language/script?
    - ICANN community to redefine DNRD-AP (WHOIS)

- IETF WEIRDS
  - Looking at replacing DNRD-AP
  - Very much driven by RIR experience
Any questions?

Jay Daley .nz
jay@nzrs.net.nz