



Joint Whois / CRISP

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Outline

- Introduction / Problem Statement
- Joint Whois
 - Possible Approaches
 - Proposed Solution
 - Limitations
- CRISP
 - What is CRISP
 - Problems and solvers
 - What has been done till now
 - What are the next steps
 - Call for participation

Introduction: The Question

- Question:
How do I find out information about an IP address?
- Answer:
Look at a web page at IANA.
Then maybe try ARIN.
Or RIPE NCC.
APNIC?
LACNIC???
Afrinic?!??!

Introduction: An Example

- ERX of 131.0.0.0/8 currently in process
 - Transfer of pre-RIR registrations to appropriate RIR
- **131.178.0.0/16** LACNIC
 - Instituto Tecnológico y de Estudios Superiores de Monterrey
- **131.179.0.0/16** ARIN
 - University of California, Los Angeles
- **131.180.0.0/16** RIPE NCC
 - Technische Universiteit Delft
- **131.181.0.0/16** APNIC
 - Queensland University of Technology

Mission Statement

Create a system that gives the best possible answers to queries about Internet Number Resources.

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Joint Whois: Possible Approaches

- Input: IPv4 address, IPv6 address, or AS number
- Each RIR could mirror all others
 - Not all RIRs currently have mirroring
 - Schema conversion is heavy and imperfect
- Referrals
 - Must be server-side
 - Like domain referrals in RIPE Database



Joint Whois: Proposed (Short-Term) Solution

- New, referral-only, Whois server: `joint.ripe.net`
- Web-based queries will use this
- NRO server



Joint Whois: Limitations

- Server-side referrals
- Limited client query options
- Differing schemas, presentation format, etc.
- No client authentication

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What is CRISP

- Cross-Registry Internet Service Protocol
- Basically, a replacement for whois protocol
- A query-only protocol
- Ongoing work at IETF
- The long term solution

Problems & Solvers

- Whois protocol itself is not very well defined
- The whois databases are
 - disparate
 - distributed over the globe
 - there is no standard way of 'linking' them
 - query specifications are different
 - data representations/schemas are different
- Participants in the work are
 - RIRs, domain registries and other players in the game

What has been done

- CRISP requirements as an Internet-Draft (soon to become an Informational RFC) **draft-ietf-crisp-requirements-06** by Andy Newton
- CRISP requirements for Internet Resource Numbers **draft-ietf-crisp-internet-resource-number-req-00** by Ginny Listman

What has been done 2

CRISP requirements for Internet Resource Numbers

- Mining prevention
- Level of access
- Minimal technical reinvention
- Standard and extensible schemas
- Entity referencing
- Decentralisation
- Protocol and schema versioning

What has been done 3

- Design decision: XML will be the information exchange format (both ways, client ↔ server)
- IRIS (Internet Registry Information Service) has been chosen as the protocol
`draft-ietf-crisp-iris-core-04`
- more Internet-Drafts to define data types
- see
`http://www.ietf.org/html.charters/crisp-charter.html` for more info and pointers

Some details

- Referrals will be client-side
 - as opposed to server-side in Joint-whois
- Service location?
 - An NRO CRISP server?
(NRO: Number Resource Organisation)

What is NCC doing

- Participating in the CRISP WG at IETF
- Helping out in defining the requirements for internet resource numbers
- Experimenting

What are the next steps

- Push core CRISP draft to RFC track
- Finalise Internet Resource Number Requirements for CRISP
- Finalise IRIS specification,
- Finalise data types specifications,
- Publish them as RFCs



Call for participation

- This will be an important change
- We need your participation and help
- Please visit
<http://www.ietf.org/html.charters/crisp-charter.html>
- Join the mailing list
 - send mail to
ietf-not43-request@lists.verisignlabs.com
 - “subscribe” in message body

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Questions

