Progress report on Whois service requirement study

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Background: May 07 Council resolutions

Resolved,

• The GNSO Council requests that Policy Staff, with the assistance of technical staff and GNSO Council members as required, collect and organize a comprehensive set of requirements for the Whois service policy tools. These requirements should reflect not only the known deficiencies in the current service but should include any possible requirements that may be needed to support various policy initiatives that have been suggested in the past.

• The synthesis of requirements should be done in consultation with the SSAC, ALAC, GAC, the ccNSO and the GNSO and a strawman proposal should be prepared for these consultations. The Staff is asked to come back with an estimate of when this would be possible.
Goals

• To collect and organize a set of requirements for community consideration including
  – current service features identified as needing improvement
  – features to support various, past policy proposals
  – features recommended by ICANN SOs, ACs, community

• Prepare a strawman proposal for community consultations
  – GNSO, SSAC, ALAC, GAC, ccNSO and community at large
Current service requirements

• Compilation will include existing Whois requirements (RAA and registry agreements), e.g.,
  – Public query-based access to up-to-date WHOIS
  – Interactive web page for Whois query submission/display
  – Port 43 Whois service
  – Third-party bulk access
  – ...


Past policy initiatives

• Compilation will consider past efforts to improve Whois, for example
  – AT&T Internic, 1993
  – VeriSign, RWHOIS, 1994
  – Whois++, 1995
  – IETF CRISP Working Group
    • Federated Internet Registry Service (FIRS)
    • The Internet Registry Information Service (IRIS)
Recommendations from community

- Compilation will consider recent recommendations from SOs, ACs, and community at large, including
  - GNSO
  - ALAC, GAC, CCNSO and SSAC
  - Joint Project Agreements and Affirmation of Commitments
  - Comments resulting from new TLD consultations

_List is not exhaustive_
Sample study areas to consider

• Quality of domain registration data
• Whois service uniformity
  – Standard formats for queries, responses and error codes
• Registration data completeness
  – Framework to assure that data are available to accommodate and enable policy implementation
• “Internationalize” Whois
  – Standards for submission and display of registration data using characters from local languages and scripts
Quality of registration data

• Accuracy
  – Do registration data provide correct contact information?

• Authenticity
  – Do registration data accurately identify the registrant?

• Applicability
  – Are the data useful or relevant to the user or querying application

• Completeness
  – Are the currently collected data sufficient?

• Currency
  – Are all of the collected registration data current?
Whois service Uniformity

• Whois services evolved from a protocol that only required text and a CRLF
  – Queries and responses are Whois application or service provider dependent
  – Syntactic, semantic and content differences exist
• Lack of uniformity inhibits usage and innovation
  – Variability makes it difficult to automate Whois processing
  – Even human interpretation of Whois can be challenging
  – Private and proxy registrations add level of indirection
Registration data completeness

- Assure that registration records include all the data necessary to implement service features that enate from policy development

- Data schema
  - Extensible
  - Protocol-agnostic
  - Accommodates automation
Internationalized registration data

• No standard exists today for handling the submission and display of registration data from local languages and scripts

• Some Whois applications or services
  – May not support domain names in U-labels,
  – Cannot accept or display when characters from sets other than US-ASCII7 are used, and
  – Display in local encodings rather than Unicode, so terminals must be set to correct encodings beforehand.
Methodology

• Gathering service requirements from a review of past Whois work, or works where Whois service is relevant

• NOT gathering policy requirements, NOT recommending policy
  – Purpose of study is to assure that the data and supporting technology exist to enable policies developed via consensus policy process
Sources for inventory of requirements

• Data confidentiality and integrity (SSAC 027)
• Data schema (SSAC 033)
• “Quad-A” security framework (SSAC 033)
  – Authentication, Authorization, Auditing, Accuracy
• Thick Whois (new GTLD application guide book)
• Domain Whowas service (VeriSign, via RSEP)
• Multifactor authentication (VeriSign, via RSEP)
• Registrar Abuse PoC (Malicious conduct report)

Partial list
Project timeline

Nov 2009:
	Continue to review and compile current Whois requirements and recommended policy proposals that have been discussed in the past

December 2009:
	Complete strawman proposal

January 2010:
	Consultation with all SOs/ACs, incorporate input

February 2010:
	Draft report