Survey Respondent Profile Susan Prosser

1. Which of the following terms best describes your status as a respondent to this survey?

(Please provide, where applicable, an indication of the size of your organization, either the number of employees or staff, or the number of members):

Size (Employees/Members)

[ ]   Commercial business user
[ ]   Non-commercial organization user
[ ]   Governmental organization user
[ ]   Individual or household user
[ ]   Domain name registrar and/or registry
[ ]   Internet access provider or network operator
[ ]   Other:

2. From which region/location do you reside? (**Added 23 JAN 2012 in response to R8-2,Q4**)
[ ]   Create drop down list of countries

3. Have you registered any domain names?   yes   no

If "yes":
a. How many ccTLD (country-code Top Level Domains, i.e.: .de, .au,
.co.uk) domain names have you registered: _____ b. How many gTLD (generic Top Level Domains, ie:
.com, .info .biz) domain names have you registered: _____

3. What was the general purpose of your registration:
[ ] commercial
[ ] governmental
[ ] personal
[ ] noncommercial organization
[ ] other

4. How often do you use the WHOIS service on average?
[ ]   never
[ ]   occasionally
[ ]   weekly
[ ]   once or twice a day
[ ]   many times a day

5. How do you access the WHOIS information?
[ ]   Website interfaces
[ ]   Direct server queries

6. Which of the following most accurately describes the use of WHOIS that is most important to you or your organization:
[ ]   To determine if a specific domain name is unregistered/available?
[ ]   To find out the identity of a person or organization who is
responsible for a domain name or web site I have encountered while using the Internet
[ ]   To support technical operations of ISPs or network
administrators, including tracing sources of spam or denial of service attacks
[ ]   To identify the owner of a domain name for consumer protection
or intellectual property protection purposes
[ ]   To gather names and contact information for marketing purposes
[ ]   To support government law enforcement activities (other than

intellectual property)
[   ]   Other (please briefly describe):

Added 6 FEB 2012 – Stephan Van Egmond
Do you maintain a WHOIS service for a registrar, registry operator, and RIR?
[ ] no
[ ] yes

If yes, do you use WHOIS servers that are:
[ ] completely written in-house
[ ] open-source, with customizations
[ ] open source without customizations
[ ] closed source

Please name the open or closed-source server you use, if applicable:

_____

Steven van Egmond (Updated 6 FEB 2012)
R-1: Provide a publicly accessible and machine parsable list of domain names or IP locations of WHOIS servers operated by ICANN accredited registrars and gTLD registry operators and ccTLDs operators.

1. The inventory of WHOIS requirements identifies the need for a publicly-accessible and machine-parsable list of domain names or IP locations of WHPOIS servers operated by registrars, registry operators, and RIRs.

Do you have a direct use for this use case?
[ ] we use pre-existing WHOIS tools and libraries and thus don't directly use such a list.
[ ] we have written our own WHOIS clients and would use such a list [ ] we have written our own WHOIS clients and would not use such a list

[ ] We do not have a use case for such a feature.
[ ] We do have a use case.

Details: _____

2. The inventory of requirements suggests a number of possible approaches for WHOIS service discovery. Please identify your favorite:

[ ] a naming convention (such as WHOIS.nic.TLD) [ ] the use of SRV records [ ] the use of CNAME records (the 'WHOIS' command line tool looks up TLD.WHOIS-servers.net)

Comments: _____

Michael Young
R-2: Define a standard query structure that clients can implement and that all gTLD registries and ICANN accredited registrars will support.

Q1:

Do you have an interest in creating a standardized query structure for RDDS servers?

    a) Yes

    b) No

    c) Indifferent

Q2:

What areas of benefit does query standardization affect for you? Pick one or more.

    a) Operational cost savings

    b) Easier access to data

    c) Higher accuracy responses to queries

    d) Query support in multiple languages

Q3:

Select the single most important of the Q2 elements to you

    a)   b) c) d)

Q4:

Assuming you can fully identify IDN registrations in Punycode/ascii, is native multiple language support important to you for RDDS queries?

    a) Yes

    b) No

    c) Indifferent

Q5: (Possible Duplicate****)

Where does standardization of "searchable RDDS" queries, meaning the ability to search on attributes or linked data elements such as "street name" or "postal code" rank on a scale of 1 to 5. 1 being least important and 5 being most important.

1   2   3   4   5

Cintra Sooknanan
R-3: Define a standard data structure for WHOIS responses. The data structure would contain and uniquely identify the data elements that must be returned in a manner that assures there is no ambiguity across elements, correct syntax, and correct semantics.

1. Do you support a standard, formal, extensible data structure and schema for WHOIS responses? [YES/NO]

2. Should the data structure allow for interpretation or output of WHOIS responses to non-English or non-Latin languages? [YES/NO]

    2.1 If Yes should this interpretation or output of WHOIS responses be based on localization of the client software? [YES/NO]

    2.1.1   If No please recommend with reasons another more suitable mechanism for this interpretation or output of WHOIS responses

        [OPEN ANSWER]

3. Should the data structure be flexible for humans to interpret? [YES/NO]

4. Should the data structure be flexible for programs to parse? [YES/NO]

5. Should the data structure be XML based? [YES/NO]

    5.1   If No please recommend with reasons another more suitable data structure
    [OPEN ANSWER]

Cintra Sooknanan
R-4: Define a set of standardized error messages and standard handling of error conditions.
Examples of useful error messages include queries exceeding the limit, no records found, unable
to process query, etc.

1. Do you support standardized error messages for the WHOIS System? [YES/NO]

2. Do you support standardized handling of error conditions within the WHOIS System? [YES/NO]

3. Please detail the most common error conditions within the WHOIS System [OPEN ANSWER]

Susan Prosser
R-5: Allow users to submit not only domain names as arguments to search functions but other registration data elements as well.

1. Do you need to search WHOIS records by data elements *other* than domain name?

[ ] Yes (displays 1.a section below)   [ ] NO (ends question, does not display any additional information)

[ ] Other: Free input form

1.a YES -> Please rate 1-6 below on the importance of specific data elements to be searchable*

understanding without standardized WHOIS data input format, not all elements will be supplied or available in standard format equally across all TLD's.

Domain Name
Name Servers
Domain Registration Dates
Contact Name
Contact Email
Contact Address

There are other factors to consider in opening up this search option. From here, we could go into further questions about type of search options

2. Do you need Include (AND), Exclude (NOT) or Either (OR) search parameter options?

(example: search XYZ.com AND Donald Duck reports only exact match of XYZ.com if Donald Duck is on the record)

[ ] YES [ ] NO

[ ] Other: Free input form

3. Do you need the ability to search by wild card? [ ] YES [ ] NO

(example: search XYZ*.com searches for registered domains starting with 'XYZ' in the domain name that are available on the database being searched)

[ ] YES [ ] NO

[ ] Other: Free input form

4. Do you need the ability to search in native language, non-ASCII / Latin alphabet format? [ ] YES [ ] NO

(example: search using Arabic, Cyrillic, Tamil or other scripts)

[ ] YES [ ] NO

[ ] Other: Free input form

Avri Doria (Updated 6 FEB 2012**)**
R-6a: Adopt a structured data model for WHOIS data that provides extensibility and changeability properties. Employ a formal data schema language such as XML to describe the characteristics of the structured data.

i) In order to improve the WHOIS service capabilities, we need for data to be extensible

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

ii) In order to improve WHOIS capabilities, we need for the data that is required to be changeable over time.

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

iii) A formal definition of WHOIS Data is needed

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree

5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

iv)   A formal modeling language such as XML should be used to create a data model for WHOIS

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

v)   Work on such a model should be done by ICANN

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

vi)   Work on such a model should include the IETF

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

vii)   WHOIS data collection techniques should insure that data is entered in a defined format

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

viii)   WHOIS data collection techniques should allow for some fields to made mandatory, but the policy as to which are mandatory is Policy decision

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

ix)   WHOIS data collection techniques should require that all fields be made mandatory

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

Avri Doria (Updated 6 FEB 2012)
R-6b: Consider extending the currently defined set of registration data elements to include: alternative forms of contact than the contacts currently collected; information that discloses the history or "pedigree" of a domain; and additional registration service provider contact information.

 i) The current "one size fits all" model for WHOIS data is sufficient for today's WHOIS needs

   1. Strongly Disagree
   2. Mostly Disagree
   3. Don't have an opinion either way
   4. Mostly Agree
   5. Strongly Agree

   Question is relevant:

   1. Strongly Disagree
   2. Mostly Disagree
   3. Don't have an opinion either way
   4. Mostly Agree
   5. Strongly Agree

   Additional comment: (144 Character entry with possibility of picking a previously given entry)

 ii) The current "one size fits all" model for WHOIS data is sufficient for tomorrow's WHOIS needs

   1. Strongly Disagree
   2. Mostly Disagree
   3. Don't have an opinion either way
   4. Mostly Agree
   5. Strongly Agree

   Question is relevant:

   1. Strongly Disagree
   2. Mostly Disagree
   3. Don't have an opinion either way
   4. Mostly Agree
   5. Strongly Agree

   Additional comment: (144 Character entry with possibility of picking a previously given entry)

 iii) It should be possible to include other forms of contact information for WHOIS

   1. Strongly Disagree
   2. Mostly Disagree
   3. Don't have an opinion either way
   4. Mostly Agree
   5. Strongly Agree

   Question is relevant:

   1. Strongly Disagree
   2. Mostly Disagree

3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

iv)   It should be possible to collect contact information using a local address format for WHOIS

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

v)   It is appropriate to include social media contact information as one method of WHOIS contact

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

vi)   Information should be included on the history or "pedigree" of the domain, such as previous owner.

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

vii)   Any Historical or "pedigree" information, such as previous owner, should be restricted to a single previous owner.

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Question is relevant:

1. Strongly Disagree
2. Mostly Disagree
3. Don't have an opinion either way
4. Mostly Agree
5. Strongly Agree

Additional comment: (144 Character entry with possibility of picking a previously given entry)

Steven Metalitz
R-7

Observation 1. The inventory document states that "staff will coordinate with the IRD WG to see that its recommendations are included in an updated inventory when those recommendations are made available." (page 24) I'd welcome input from staff on the status of such inclusion and how this should affect our survey.

Observation 2. The IRD WG, in which I am a participant, issued an interim report in November 2010 and sought public comment on two preliminary recommendations and several optional models for internationalizing WHOIS registrant data. See http://gnso.icann.org/issues/ird/ird-wg-final-report-15nov10-en.pdf , at pages 13-16 (models for internationalizing data), and 21-22 (preliminary recommendations). Almost all the comments (which are summarized at http://forum.icann.org/lists/ird-wg-report/msg00008.html) focused on the optional models, rather than on the preliminary recommendations. The preliminary recommendations are as follows. These might well be suitable for addressing in our survey, but I am unclear about their status.

Preliminary Recommendation (1): The IRD-WG discussed a preliminary recommendation for a WHOIS service in the IDN environment:
1. WHOIS clients (both port 43 and web) must be able to accept a user query of domain name in either U-label or A-label format;
2. WHOIS clients must be able display result of queries in both U- and A-label for the domain names; and
3. WHOIS responses should include variants of an IDN label in the response as well.

Preliminary Recommendation (2): The IRD-WG discussed the idea that the domain registration data elements should be considered separately, with specific recommendations for how each data element should be internationalized. The IRD-WG offers preliminary recommendations for the following data elements:
1. WHOIS services should return both A-label and U-label representation for the given IDN domains queried;
2. WHOIS services should return both A-label and U-label representations for nameserver names (to the extent that such information is available);
3. WHOIS services should always make sponsoring registrar information available in USASCII7; and
4. WHOIS services should always return the exact EPP27 status code for Registration Status

Observation 3. The IRDWG posted a draft final report last October and is now finalizing its final report. The recommendations in this final report are entirely different from those in the interim report and (in my opinion) not suitable for inclusion in this survey, as they are strictly procedural in nature. In draft form (and this draft has not been finally approved by the IRDWG), they are:

Recommendation 1: ICANN staff should develop, in consultation with the community, a data model for domain registration data. The data model should specify the elements of the registration data, the data flow, and a formal data schema that incorporates the standards that the working group has agreed on for internationalizing various registration data elements. This data model should also include tagging information for language/scripts.

Recommendation 2: The GNSO council and the SSAC should request a common Issue Report on translation and transliteration of contact information. The Issue Report should consider whether it is desirable to translate contact information to a single common language or transliterate contact information to a single common script. It should also consider who should bear the burden and who is in the best position to address these issues. The Issue Report should consider policy questions raised in this document and should also recommend whether to start a policy development process (PDP).

Recommendation 3: ICANN staff should work with the community to identify a DNRD Access Protocol that meets the needs of internationalization, including but not limited to the work products resulting from recommendations 1 and 2, and the requirements enumerated in this report.

Steven van Egmond, Cintra Sooknanan (Updated 6 FEB 2012)
R-8.1. Define an authentication framework for WHOIS that is able to accommodate anonymous access as well as verification of identities using a range of authentication methods and credential services.
The inventory of WHOIS requirements identifies a need for authenticating WHOIS users (whether a person or a computer system) in order to provide elevated access rights, and to rate-limit incoming connections to ensure the WHOIS service isn't overloaded. Rate limiting becomes dramatically more complex in the ipv6 scenario.

1. If you have a use case for lawful, elevated access rights to WHOIS data?

[ ] no
[ ] yes, as a law-enforcement officer
[ ] yes, as a member or staffer of my jurisdiction's judiciary [ ] yes, due to provisions of the law in my jurisdiction [ ] yes; as an employee of a registry, registry operator or registrar [ ] yes, for other reasons.

2. If your access rights are circumscribed (e.g. only to particular TLDs) please describe the constraints you operate under.

[ ] no constraints for elevated access
[ ] elevated access is constrained to a certain TLD [ ] elevated access is constrained to a subset of TLDs [ ] elevated access to a list of domains regardless of TLD

3. Is this elevated access right to be granted to automatic computer systems, or people carrying out a task?

[ ] computer systems
[ ] people
[ ] both

4. Describe your preferred approach for providing authenticated, elevated access rights, if you have one.

[ ] no preference
[ ] SSL certificates
[ ] VPN
[ ] private IP address
[ ] other

Michael Young, Cintra Sooknanan
R-8.2: Implement an authorization framework that is capable of providing granular (per registration data object) permissions (access controls).

Q1

Assuming these features are fully configurable and not mandatory to operate the system, do you feel that RDDS should have a standardized permissions framework for both RDDS users (those querying the data) and for the data elements itself (meaning certain RDDS users may see more or less data depending on their permission level – i.e. permission level A may see a registrant's address but permission level C may only see the registrant's name.)

a) **Yes**
b) **No**
c) **Indifferent**

Q2

Do you believe that it would be technically and operationally useful to have all RDDS users, even in open and anonymized RDDS services have to make use of a login credential during the query process?

a) **Yes**
b) **No**
c) **Indifferent**

Tell us why:

Comment Box

Q3

Where do you see granulated access to RDDS on a 1 to 5 scale of importance, 1 being the least important and 5 being the most important.?

1   2   3   4   5

Q4

Is granulated access to RDDS data a requirement in support of local laws in your operating jurisdiction?

    a) Yes
    b) No

Wendy Seltzer
R-8.3: Define a framework and baseline set of metrics that can accommodate future policy development for auditing of WHOIS access.
1. What elements of WHOIS access should be available for audit?
[rank on a 1-3 scale: should not collect, somewhat interesting, should collect)]
* Requester IP address
* Method of access (web, 3d party web service, port 43, bulk, other)
* Requesting user-agent
* Name of requester
* Domain name requested
* Date and time
* Response
* Other (please explain)

2. Does collection or use of any of these elements raise privacy or confidentiality concerns?
if so, which

To whom should access to audit data be available?
* The registrant
* The registrar
* ICANN
* 3d parties
* The public
* Other (please explain)

3. If you have use cases for audit of WHOIS access, please describe:

What metrics would be useful? (please describe) (possibly give examples, such as rate of access, number of requests/requester, number of requests/domain, most frequent requesters)

Paul Brigner, Don Blumenthal
R-9: All new TLDs should operate a thick WHOIS. Consistent with these recommendations for future WHOIS, new or legacy registries should consider evolving to a thick WHOIS.
Adopt a thick WHOIS for all new gTLDs. Consistent with these recommendations for future WHOIS services, new or legacy registries could consider evolving to a thick WHOIS.

This item largely has been overtaken by events because of the terms of the new gTLD Applicant Guidebook. However, room exists for some questions that might be beneficial to successful applicants, as well as the operator of the existing thick registries and legacy thick registries.

What is the generally accepted architecture of thick registries.

To what extent does this architecture meet the requirements of registries and their registrars.

What mechanisms would be required to move from a thin to a thick registry

What data provided by registrants could be made available through a thick registry, including items not currently provided.

What mechanisms could be implemented to allow queries on fields other than domain name.

What are the advantages and disadvantage of using domain names as search keys? Of tokens?

R-10 - Paul Brigner, Don Blumenthal
A WhoWas service could be provided by all registries. This is another example of data that could complement existing registration data as we described in section 4.6.

What kind of detail could be offered in a WhoWas. What would a system of codes involve.

What data elements could be incorporated in a WhoWas system that would be more expansive than a current VeriSign model. For a thick registry. For a thick registry.

What mechanisms would be necessary to assemble and provide reasons for changes in domain ownership.

What data retention period is required to maintain a meaningful WhoWas

What mechanisms or systems might be available to restore data if it is not readily available.

Steven Metalitz
R-11: Registrars and registries should provide and publish abuse point of contact information as an element of a domain registration record. There are several ways this could be supported; for example, registrars could populate the current sponsoring registrar contact information with an abuse point of contact rather than a general purpose business contact; alternatively, an abuse identifier that serves as an index into a publicly accessible table of abuse points of contact could be added to a registration record. These are further examples that demonstrate the utility of adopting an extensible data structure and formal schema.

R-11. It has been proposed that registries and registrars publish abuse point of contact information as an element of a domain name registration record. This means that responses to WHOIS queries about domain names would contain some information about an abuse point of contact at the registry to which the domain name registration pertains, and at the registrar which sponsors the particular registration.

A. In general, how important do you think it is that <u>registries</u> be required to include an abuse point of contact in results returned to WHOIS queries to that registry?

> 3= very important
>
> 2= somewhat important
>
> 1= not important

B.   In general, how important do you think it is that <u>registrars</u> be required to include an abuse point of contact in results returned to WHOIS queries to that registrar?

> 3= very important
>
> 2= somewhat important
>
> 1= not important

C.   If an abuse point of contact is identified as part of WHOIS query results, please identify the ways in which you believe such a point of contact would be most valuable to you.

Use of abuse point of contact	Very important	Somewhat important	Not important
Reporting false or inaccurate WHOIS data			
Reporting suspected malicious activity associated with the domain name			
Reporting violations of legal rights associated with the domain name			
Reporting technical problems associated with the domain name			

Other uses			

(If you checked "other uses" as very important or somewhat important, please state the use.)

D. Several different methods have been suggested for displaying the abuse point of contact. Please indicate which you prefer.

Method of displaying abuse point of contact	Strongly prefer	Somewhat prefer	No preference/don't care	Somewhat oppose this method	Strongly oppose this method
Abuse point of contact could be added to current registrar or registry contact information in WHOIS results					
Abuse point of contact substituted for current registrar or registry contact information in WHOIS results					
WHOIS results include a link to or index into a publicly accessible table of abuse points of contact					

Michael Young
Regarding the compilation, RySG added the following requirements:
- **Ensuring consistency of data between registries and registrars (for thin registries).**
- **Accommodating privacy services in a manner that effectively provides access to information**
- **Mitigating impacts to SLAs (Service Level Agreements) and EPP (Extensible Provisioning Protocol) commands in migrations from thin to thick WHOIS data.**