

ICANN GNSO WHOIS Technical Requirements Survey

This survey aims to measure the level of support for various technical requirements outlined in the GNSO WHOIS service requirement report (<http://gns0.icann.org/issues/whois/whois-service-requirements-final-report-29jul10-en.pdf>).

A report will be produced and delivered to the GNSO Council, December 2012, describing the results of the survey and recommendations for next steps for the GNSO Council's consideration concerning the WHOIS service requirements.

The Generic Names Supporting Organization (GNSO) Council's WHOIS Survey Working Group (WSWG) invites the Internet community to participate in a survey designed around an inventory of WHOIS technical components. The survey aims to measure the level of support for various technical requirements outlined in the [WHOIS Service Requirements Report](#), as requested of ICANN Staff by the GNSO Council. The survey consists of 15 sections around 11 technical requirements, and it will be made available until 31 October 2012. Afterwards, the WSWG will produce a final report and deliver it to the GNSO Council toward the end of 2012. The report will describe the results of the survey and any agreed upon recommendations by the WG for the GNSO Council's consideration concerning WHOIS.

The survey is lengthy and therefore the option has been made available to **create an ID and return to the survey at a later time to complete it**. The survey tool will save all answers completed from the time the survey was last accessed. It is important that if the participant leaves the survey before submission or creation of an ID, the session may time-out with increased risk of losing answers.

Many sections of this survey will require a high degree of technical skill around WHOIS. If the participant feels that they may not understand a question or not possess the technical knowledge to answer it appropriately, then the participant is welcome to skip the question and move on to the next one. If completing the survey for an organization, the participant may wish to engage more technical personnel to help complete all sections of the survey.

The WSWG appreciates your participation and the working group looks forward to sharing the final results with the community. Please feel free to inform others about the availability of this survey to assist the working group with maximum participation.

For any questions or survey support, please write to policy-staff@icann.org.

There are 91 questions in this survey

Survey Respondent Profile

Background: This Section deals with the Survey Respondent Profile

1 [1] Which of the following terms best describes your use of WHOIS? *

Please choose **all** that apply.

- Commercial business user
- Non-commercial organization user
- Governmental organization user
- Individual or end user
- Domain name Registrar and/or Registry
- Internet access provider or network operator
- Other:

2 [12] What is the size of your organization?

Please choose **only one** of the following:

- Not Applicable
- 1-9
- 10-49
- 50-99
- 100-499
- 500-999
- 1,000-4,999
- 5,000+
- Do not know

In other words, what is the number of employees, staff or members in your organization?

3 [13] Where do you reside?

Please choose **only one** of the following:

- Afghanistan
- Albania
- Algeria
- Andorra
- Angola
- Antigua & Deps
- Argentina
- Armenia

- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bhutan
- Bolivia
- Bosnia Herzegovina
- Botswana
- Brazil
- Brunei
- Bulgaria
- Burkina
- Burundi
- Cambodia
- Cameroon
- Canada
- Cape Verde
- Central African Rep
- Chad
- Chile
- China
- Colombia
- Comoros
- Congo
- Congo (Democratic Rep)
- Costa Rica
- Croatia
- Cuba
- Cyprus
- Czech Republic
- Denmark
- Djibouti
- Dominica
- Dominican Republic
- East Timor
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Ethiopia
- Fiji
- Finland
- France
- Gabon
- Gambia
- Georgia
- Germany
- Ghana
- Greece

- Grenada
- Guatemala
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Honduras
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland (Republic)
- Israel
- Italy
- Ivory Coast
- Jamaica
- Japan
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Korea North
- Korea South
- Kosovo
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Macedonia
- Madagascar
- Malawi
- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Mauritania
- Mauritius
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Morocco
- Mozambique
- Myanmar, {Burma}
- Namibia
- Nauru

- Nepal
- Netherlands
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Norway
- Oman
- Pakistan
- Palau
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Poland
- Portugal
- Qatar
- Romania
- Russian Federation
- Rwanda
- St Kitts & Nevis
- St Lucia
- Saint Vincent & the Grenadines
- Samoa
- San Marino
- Sao Tome & Principe
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Swaziland
- Sweden
- Switzerland
- Syria
- Taiwan
- Tajikistan
- Tanzania
- Thailand
- Togo
- Tonga
- Trinidad & Tobago
- Tunisia
- Turkey
- Turkmenistan
- Tuvalu

- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- United States
- Uruguay
- Uzbekistan
- Vanuatu
- Vatican City
- Venezuela
- Vietnam
- Yemen
- Zambia
- Zimbabwe

4 [16] How many ccTLD (country-code Top Level Domains, i.e.: .de, .au, .co.uk) domain names have you registered?

Please choose **only one** of the following:

- 1-9
- 10-49
- 50-99
- 100-499
- 500-999
- 1,000-4,999
- 5,000+
- Do not know
- Not Applicable

5 [15] How many gTLD (generic Top Level Domains, ie: .com, .info .biz) domain names have you registered?

Please choose **only one** of the following:

- 1-9
- 10-49
- 50-99
- 100-499
- 500-999
- 1,000-4,999
- 5,000+
- Do not know
- Not Applicable

6 [17] What was the general purpose of your registration?

Please choose **all** that apply:

- Commercial
- Governmental
- Personal
- Noncommercial organization
- Not Applicable

The scope of domain registrations for this question is for your own use

7 [18]How often do you use the WHOIS service on average?

Please choose **only one** of the following:

- Never
- Occasionally
- Weekly
- Once or twice a day
- Many times a day

8 [19]How do you access the WHOIS information?

Please choose **only one** of the following:

- Website interfaces
- Direct server query access
- Both

Direct server query access means using command line text applications (for the non-technical think about DOS commands before Windows became available) or machine to machine communications.

9 [20]Which of these best describes the most beneficial use of WHOIS to you or your organization?

Please choose **all** that apply:

- To determine if a specific domain name is unregistered or available
- To find out the identity of a person or organization responsible for a domain name or web site
- 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)
- To monitor and manage groups of domains for self or on behalf of others
- Other:

Website interfaces includes an interface to Registry, Registrar or 3rd party sources

10 [21]Do you maintain a WHOIS service for a Registrar, Registry Operator or Regional Internet Registry?

Please choose **only one** of the following:

- Yes
- No

11 [22]If Yes, do you use WHOIS servers that are

Only answer this question if the following conditions are met:

° ((21.NAOK == "Y"))

Please choose **all** that apply:

- Closed source written in-house
- Open-source, with customizations
- Open source without customizations
- Closed source, third party

12 [23]Please name the open or closed-source server you use, if applicable

Only answer this question if the following conditions are met:

° ((21.NAOK == "Y"))

Please write your answer here:

13 [24]How did you become aware of the availability for this WHOIS Survey?

Please choose **all** that apply:

- WHOIS Survey Working Group Communications
- Webinar
- icann.org
- gns0.icann.org
- Email
- Stakeholder or Constituency meeting
- Word of Mouth at ICANN Community meeting
- Social Media – (Facebook, Twitter, etc)

14 [1900]If you have any other comments, suggestions, clarification you would wish to make about this section, please enter them here.

Please write your answer here:

R1 - Provision of a publicly accessible and machine parsable list of domain names

Requirement #1: This Section deals with the provision of a publicly accessible and machine parsable list of domain names or IP locations of WHOIS servers operated by ICANN accredited Registrars, gTLD Registry Operators and ccTLDs Operators

15 [111]The WHOIS Requirements Inventory identifies the need for a publicly-accessible and machine-parsable list of domain names or IP locations of current, operating Registry, Regional Internet Registry and Registrar WHOIS servers.

Do you have a direct need for this list of WHOIS servers?

Please choose **only one** of the following:

- No, use pre-existing WHOIS tools and libraries and thus don't directly need such a list
- Yes, have written our own WHOIS clients and would use such a list
- No, have written our own WHOIS clients and would not use such a list
- No, do not have a use case for a list of WHOIS servers
- Yes, we would use this list for the reason stated in the comment box
- No, we would not use this list for the reason stated in the comment box

Make a comment on your choice here:

16 [112]The inventory of requirements suggests a number of possible approaches for WHOIS service discovery. Please identify your favorite

Please choose **only one** of the following:

- 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)

Make a comment on your choice here:

WHOIS Discovery refers to the process of locating an authoritative operating WHOIS service that represent a given domain name.

A **Service record (SRV record)** is a specification of data in the [Domain Name System](http://en.wikipedia.org/wiki/Domain_Name_System) defining the location, i.e. the [hostname](#) and [port number](#), of servers for specified services.
http://en.wikipedia.org/wiki/SRV_record

A **CNAME record** or **Canonical Name record** is a type of [resource record](#) in the [Domain Name System](#) (DNS) that specifies that the [domain name](#) is an alias of another, canonical domain name.
http://en.wikipedia.org/wiki/CNAME_record

R2 - Definition of a Standard Query Structure

Requirement #2: This Section deals with the definition of a standard query structure that clients can implement and which all gTLD Registries and ICANN accredited Registrars will support. Standard Query refers to creating a consistent format/structure for asking a WHOIS service a question. A standard query structure allows a computer service to consistently interpret the questions submitted

17 [211] Do you have an interest in creating a standardized query structure for DNRD-DS servers?

Please choose **only one** of the following:

- Yes
- No

DNRD-DS means Domain Name Registration Data Directory Service. A newly defined terms by the SSAC in [SAC-051](#).

18 [212] Select the following benefits of query standardization. Pick one or more

Please choose **all** that apply:

- Operational cost savings
- Easier access to data
- Higher accuracy responses to queries
- Query support in multiple languages

19 [213] Of those selected previous question, please select the single most important of the items according to you.

Please choose **only one** of the following:

- Operational cost savings
- Easier access to data
- Higher accuracy responses to queries
- Query support in multiple languages

20 [214] Assuming you can fully identify IDN registrations in Punycode/ASCII, is native multiple language support important to you for DNRD-DS queries?

Please choose **only one** of the following:

- Yes
- No

An **internationalized domain name (IDN)** is an [Internet domain name](#) that contains at least one label that is displayed in software applications, in whole or in part, in a language-specific script or [alphabet](#), such as [Arabic](#), [Chinese](#), [Russian](#), [Tamil](#) or the [Latin alphabet](#)-based characters with [diacritics](#), such as [French](#). http://en.wikipedia.org/wiki/Internationalized_domain_name

[Punycode](#) is intended for the encoding of labels in the [Internationalized Domain Names in Applications \(IDNA\)](#) framework, such that these domain names may be represented in the [ASCII](#) character set allowed in the [Domain Name System](#) of the [Internet](#). <http://en.wikipedia.org/wiki/Punycode>

21 [215] Where does standardization of "searchable DNRD-DS" queries (being 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 Most Important and "5" being Least Important.]

Please choose **only one** of the following:

- 1
- 2
- 3
- 4
- 5

R3 - Definition of a standard data structure for WHOIS responses

Requirement #3: This Section deals with the definition of 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

"Standard data structure" refers to a standard format or structure of information provided by a WHOIS service in response to a submitted query (question).

22 [311] Do you support a standardized data structure and schema for WHOIS responses?

Please choose **only one** of the following:

- Yes
 No

Schema refers to the design or mapping of data elements in the WHOIS response.

23 [312] Do you support a formal extension framework order so that WHOIS implementers may add additional data elements to the standard data structure and schema for WHOIS responses?

Please choose **only one** of the following:

- Yes
 No

Extension framework/mechanism is a structure provided to allow future (new) data elements to be added in such a way that the integrity of the existing standard data structure remains.

24 [313] Should the data structure allow for interpretation or output of WHOIS responses to non-English or non-Latin languages/scripts?

Please choose **only one** of the following:

- Yes
 No

The visual display of WHOIS information in displayed characters (i.e. Cyrillic) other than Latin based

25 [314] If Yes should this interpretation or output of WHOIS responses be based on localization of the client software (should the response vary based on a location indicator provided by the client either by IP address or a flag submitted with the WHOIS query)?

Only answer this question if the following conditions are met:

° ((313,NAOK=="Y"))

Please choose **only one** of the following:

- Yes
 No

Localization of client software refers to a Whois client interacting with Internet users in local language other than English or Latin based character sets given the locality settings on a web browser or language of browser itself.

26 [315] If No please recommend (with reasons) another more suitable mechanism for interpretation or WHOIS responses

Only answer this question if the following conditions are met:

° ((313,NAOK=="N"))

Please write your answer here:

27 [316]Should the data structure be flexible to allow humans to interpret it (should it be directly human readable or require machine interpretation)?

Please choose **only one** of the following:

- Yes
- No

28 [317]Should the data structure be optimized to allow programs to parse it?

Please choose **only one** of the following:

- Yes
- No

"Parse" refers to a machine separating and comprehending singular data elements from a larger, structured block of information.

29 [318]Should the data structure be XML based

Please choose **only one** of the following:

- Yes
- No

Xtensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.
<http://en.wikipedia.org/wiki/XML>

30 [319]If No, please recommend with reasons another more suitable data structure

Only answer this question if the following conditions are met:

° ((318.NAOK == "N"))

Please write your answer here:

R4 - Definition of a set of standardized error messages and standard handling of error conditions

Requirement #4: This Section deals with the definition of a set of standardized error messages and standard handling of error conditions. Examples of useful error messages include number of queries exceeding the WHOIS server's limit, no records found, unable to process query, etc.

31 [411] Do you support the use of standardized error messages as output from the WHOIS System?

Please choose **only one** of the following:

- Yes
 No

Standardized error messages refers to a consistently formatted error message provided by a Whois service with a consistent meaning.

Error condition refers to a known type of or previously defined error encountered by the Whois Service or Whois client

32 [412] Please suggest examples of such standardized error messages

Please write your answer here:

33 [413] Do you support the use of standardized handling of error conditions within the WHOIS System?

Please choose **only one** of the following:

- Yes
 No

Error condition refers to a known type of or previously defined error encountered by the Whois Service or Whois client.

34 [414] Please suggest such error conditions within the WHOIS System

Please write your answer here:

Error condition refers to a known type of or previously defined error encountered by the Whois Service or Whois client.

R5 - Submitting WHOIS queries for domain names

Requirement #5: This Section deals with allowing users, when submitting WHOIS queries for domain names, to submit other related registration data elements as arguments to search functions. Registration data elements refers to known structured data elements in WHOIS services related to the domain name such as "Street" or "Registrar".

35 [511]

Should there be a way to search WHOIS records by data elements (other than domain name)?

Please choose **only one** of the following:

- Yes
 No
 Other

36 [512]

Please rate 1-7 below on the importance of specific data elements to be searchable

Only answer this question if the following conditions are met:

° ((511.NAOK == "-oth-" or 511.NAOK == "1"))

Please select between 1 and 7 answers

Please number each box in order of preference from 1 to 7

Please choose at least 1 item(s)

Please choose no more than 7 item(s)

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

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

37 [513] Is there a need to Include (AND), Exclude (NOT) or Either (OR) search parameter options?

Please choose **only one** of the following:

- Yes
 No
 Other

(example: search "XYZ.com AND Donald Duck" which results in WHOIS server reporting only exact match of XYZ.com if Donald Duck is on the record)

38 [514] Is there a need to search by wild card?

Please choose **only one** of the following:

- Yes
 No
 Other

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

39 [515] Is there a need to search in native language, non-ASCII / Latin alphabet format?

Please choose **only one** of the following:

- Yes
 No
 Other

Languages other than English or Latin character based. example: search using Arabic, Cyrillic, Tamil or other scripts

R6a - Adoption of a structured data model for WHOIS data

Requirement #6a: This section deals with the adoption of a structured data model for WHOIS data that provides extensibility and changeability properties. It employs a formal data schema language such as XML to describe the characteristics of the structured data. Properties also give the ability of the WHOIS data model to evolve from current data elements to new data elements while maintaining the integrity of the original data structures.

40 [611] In order to improve the WHOIS service capabilities, we need for data to be extensible

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

Make a comment on your choice here:

Extensible is said of a system (e.g., program, file format, programming language, protocol, etc.) designed to easily allow the addition of new features at a later date, e.g. through the use of hooks, an API or plug-ins.

41 [612] In order to improve WHOIS capabilities, we need for the required data elements to be changeable over time.

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

Make a comment on your choice here:

Required data elements are data elements required in WHOIS Services by virtue of policy or governing requirements.

42 [613] A formal definition of WHOIS Data is needed

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

43 [614]A formal modeling language such as XML should be used to create a data model for WHOIS

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

44 [615]Work on such a model should be done by ICANN

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

45 [616]Work on such a model should include the IETF

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

IETF - The Internet Engineering Task Force is an Internet focused technical standards body. <http://www.ietf.org/>

46 [617]WHOIS data collection techniques should insure that data is entered in a defined format

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Dont have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

Techniques the mechanisms by which WHOIS related data is gathered such as through Registries and in turn Registrars.

47 [618]WHOIS data collection techniques should allow for some fields to be made mandatory, mandatory fields are decided by Policy decision

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

Policy decision referring to requirements set by the Registry Operator or related governing bodies .

48 [619]WHOIS data collection techniques should require that all fields be made mandatory

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

R6b - Extending the currently defined set of registration data elements

Requirement #6b: Consider extending the currently defined set of registration data elements to include: alternative forms of contact than those currently collected; information that discloses the history or "Pedigree" of a domain; and additional registration service provider contact information

49 [621]The current "one size fits all" model for WHOIS data is sufficient for today's WHOIS needs

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

50 [622]The current "one size fits all" model for WHOIS data is sufficient for foreseeable WHOIS needs

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

51 [623]It should be possible to include other forms of contact information for WHOIS

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

52 [624]It should be possible to collect contact information using a local address format for WHOIS

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

53 [625]It is appropriate to include other forms of contact information (such as social media) as one method of WHOIS contact

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

54 [626]Information should be included on the history or “pedigree” of the domain, such as previous owner(s)

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

"pedigree of the domain" means a journaled history of parties on record as holding the domain

55 [627]Any Historical or “pedigree” information, such as previous owner, should be restricted to a single previous owner

Please choose **only one** of the following:

- Strongly Disagree
- Mostly Disagree
- Don't have an opinion either way
- Mostly Agree
- Strongly Agree
- Question does not matter

R7 - Internationalized Registration Data Requirements

Requirement #7: The current WHOIS protocol has not been internationalized. It has no mechanism for indicating the character set in use. Currently, IDN guidelines are sufficient for recording and displaying domain names; however, no standards or conventions currently exist that would make WHOIS service more accessible to users whose local languages cannot be represented in US7ASCII.

56 [711] Should WHOIS clients (both port 43 and web) be required to accept a user query of domain name in either U-label or A-label format?

Please choose **only one** of the following:

- Yes
 No

U-label meaning Unicode Label and A-label meaning ASCII Label, details at http://dn.icann.org/IDN_basics#The_two_forms_of_an_IDN_label

57 [712] Should WHOIS clients display results of queries in both U-label and A-label for the domain names?

Please choose **only one** of the following:

- Yes
 No

58 [713] Should WHOIS responses include variants of an IDN label in the response as well?

Please choose **only one** of the following:

- Yes
 No

Variant of an IDN label Means variations on a IDN registrations that are defined as being exactly equivalent in use or meaning regardless of visual differences. http://dn.icann.org/IDN_basics

59 [714] Should WHOIS services return both A-label and U-label representation for the given IDN domains queried?

Please choose **only one** of the following:

- Yes
 No

http://dn.icann.org/IDN_basics

60 [715] Should WHOIS services return both A-label and U-label representations for nameserver names (to the extent that such information is available)?

Please choose **only one** of the following:

- Yes
 No

Nameserver names are delegate DNS nameservers associated with the domain. http://en.wikipedia.org/wiki/Domain_Name_System

61 [716] Should WHOIS services always make sponsoring Registrar information available in US7ASCII?

Please choose **only one** of the following:

- Yes
 No

US7ASCII is an English or Latin based character set defined as US7ASCII. In this case "English or Latin based language" could be substituted for US7ASCII.

62 [717] And if so, should WHOIS services always return the exact EPP27 status code for Registration Status.

Only answer this question if the following conditions are met:
° ((716,NAOK == "Y"))

Please choose **only one** of the following:

- Yes
 No

EPP27 status code refers to defined status codes in the EPP protocol developed at the IETF versus Whois services returning a modified EPP status code non-compliant with the protocol. http://en.wikipedia.org/wiki/Extensible_Provisioning_Protocol

R8.1 - Defining an authentication framework for WHOIS

Requirement #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.

Elevated access rights means the ability to provide more extensive access to WHOIS data to a defined group of WHOIS users.

Rate limiting means the technical challenges of using traditional source-based IPv4 rate limiting methods in IPv6 networks.

63 [811] Should individuals, organizations or entities have a use case for lawful, elevated access rights to WHOIS data?

Please choose **all** that apply.

- No
- Yes, as a member of law-enforcement agency
- 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
- Other:

64 [812] If access rights to WHOIS were circumscribed (e.g. only to particular TLDs) please describe the constraints they should operate under.

Please choose **only one** of the following:

- No constraints for elevated access rights
- 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
- Indifferent

65 [813] Should this elevated access right to be granted to automatic computer systems, or people carrying out a task?

Please choose **only one** of the following:

- Computer systems
- People
- Both
- Indifferent
- None

'Automatic computer systems' mean computers that automatically and in some cases systematically submit large numbers of WHOIS queries.

66 [814] Describe your preferred approach for being authenticated/verified while engaging your elevated access rights, if you have one.

Please choose **only one** of the following:

- No preference
- SSL certificates
- Virtual Private Network (VPN)
- Private IP address
- Other:

Authenticated/verified - the method by which a WHOIS user identifies themselves to the WHOIS services as a special class or group of users.

67 [815] Should the WHOIS Service provide rate limiting to ensure the system is not overloaded?

Please choose **only one** of the following:

- Yes
- No
- Other:

R8.2 - Implementing an authorization framework

Requirement #8.2: Implement an authorization framework that is capable of providing granular (per registration data object) permissions (access controls). For example, the ability to allow select WHOIS clients to access specific contact elements (such as law enforcement being able to see registrant contact phone numbers).

Registration data object - a described mechanism by which selected WHOIS users can have access to certain WHOIS data elements as set by the WHOIS services operator.

68 [821] Assuming these features are fully configurable and not mandatory to operate the system (but rather determined by policy), do you feel that DNRD-DS should have a standardized permissions framework for both DNRD-DS users (those querying the data) and for the data elements itself (meaning certain DNRD-DS 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.)

Please choose **only one** of the following:

- Yes
 No
 Indifferent

Make a comment on your choice here:

DNRD-DS means Domain Name Registration Data Directory Service. A newly defined terms by the SSAC in [SAC-051](#).

69 [822] Do you believe that it would be technically and operationally useful to have all DNRD-DS users, even in open and anonymized DNRD-DS services have to make use of a login credential during the query process?

Please choose **only one** of the following:

- Yes
 No
 Indifferent
 Only in specific circumstances; please explain

Make a comment on your choice here:

70 [824] Where do you see granulated access to DNRD-DS on a 1 to 5 scale of importance? ["1" being the Most Important, "5" being the Least Important]

Please choose **only one** of the following:

- 1
 2
 3
 4
 5

71 [825]Is granulated access to DNRD-DS data a requirement in support of local laws in your operating jurisdiction?

Please choose **only one** of the following:

- Yes
- No

Granulated access is the restriction to designated data elements to users who are members of certain groups by role or affiliation.

R8.3 - Defining a framework and baseline set of metrics

Requirement #8.3: Define a framework and baseline set of metrics that can accommodate future policy development for auditing of WHOIS access.
Auditing of WHOIS access means the ability to periodically review what users have accessed a given WHOIS service.

72 [831]What elements of WHOIS access should be available for audit? [rank on a 1-3 scale: should not collect, somewhat interesting, should collect]

Please choose the appropriate response for each item:

	should not collect	somewhat interesting	should collect
Requester IP address	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Method of access (web, 3d party web service, port 43, bulk, other)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Requesting user-agent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Name of requester	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Domain name requested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Date and time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Response	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Requester IP address is the source IP address a WHOIS user is issuing a WHOIS request from.

Requesting user-agent is the WHOIS user or their agent directly.

73 [832]Does the collection or use of any of these elements raise privacy or confidentiality concerns?

Please choose **only one** of the following:

- Yes
- No

74 [833]If YES, Please comment

Only answer this question if the following conditions are met:

° ((832.NAOK == "Y"))

Please write your answer here:

75 [835]If you have additional use cases for auditing of WHOIS access, what additional auditable metrics would be useful? (For example, rate of access, number of requests/requester, number of requests/domain, most frequent requesters)

Please write your answer here:

Auditable metrics are Metrics that are tracked and reviewable at a later date.

R9 - New TLDs operating a thick WHOIS

Requirement #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. Thick WHOIS is a WHOIS service operated by the Registry Operator that contains authoritative and full WHOIS information.

The new gTLD Program adopted 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.

76 [911] Should standardized tools for Registries/Registrars be developed to move RDDS from a thin to a thick Registry?

Please choose **only one** of the following:

- Yes
- No

77 [912] What is a reasonable timeframe for a legacy registry to move from thin to thick RDDS?

Please choose **only one** of the following:

- 3 months
- 6 months
- 1 year
- 18 months
- Depends on the size of the Registry
- Never

R10 - Definition of a standard data structure for WHOWAS responses

Requirement #10: WHOWAS Service provides an automated capability for a customer (which may be either a Registrar or non-Registrar) to look up a domain name and receive a response with the registration history for the entire life of that domain name, which also includes the domain name, registration dates and Registrar of Record for each period of time. A WHOWASservice could be provided by all Registries.

78 [1011] Do you support a standard, formal, extensible data structure and schema for WHOWAS responses?

Please choose **only one** of the following:

- Yes
 No

79 [1012] Should all standard WHOIS data elements be included for WHOWAS responses?

Please choose **only one** of the following:

- Yes
 No

80 [1013] Should the data structure allow for interpretation or output of WHOWAS responses to non-English or non-Latin languages?

Please choose **only one** of the following:

- Yes
 No

81 [1014] If Yes, should this interpretation or output of WHOWAS responses be based on localization of the client software?

Only answer this question if the following conditions are met:

° ((1013.NAOK == "Y"))

Please choose **only one** of the following:

- Yes
 No

localization of the client software means - should the Whois client be set to a given language or locale, will that trigger a response in that given language?

82 [1016] If No please recommend with reasons another more suitable mechanism for this interpretation or output of WHOWAS responses

Only answer this question if the following conditions are met:

° ((1013.NAOK == "N"))

Please write your answer here:

83 [1015] Should the data structure be flexible for humans to interpret?

Please choose **only one** of the following:

- Yes
 No

84 [1017]

Should the data structure be XML based?

Please choose **only one** of the following:

- Yes
- No

85 [1019]If No please, recommend with reasons another more suitable data structure

Only answer this question if the following conditions are met:

° ((1017.NAOK == "N"))

Please write your answer here:

86 [1020]Should there be a limited retention period for WHOWAS?

Please choose **only one** of the following:

- Yes
- No

87 [1021]If Yes,what should be the retention range?

Only answer this question if the following conditions are met:

° ((1020.NAOK == "Y"))

Please choose **only one** of the following:

- 6 months
- 1 year
- 2 years
- 5 years
- Other, Please specify with reasonUSE: Text Field, limit 140 characters
- Duration is configurable

Make a comment on your choice here:

R11 - Registrars and Registries

Requirement #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.

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.

88 [1111] In general, how important do you think it is that registries be required to include an abuse point of contact in results returned to WHOIS queries to that Registry?

Please choose **only one** of the following:

- Very Important
 Somewhat Important
 Not Important

89 [1112] In general, how important is it that Registrars be required to include an abuse point of contact in results returned to WHOIS queries to that Registrar?

Please choose **only one** of the following:

- Very Important
 Somewhat Important
 Not Important
 Indifferent

90 [1113]

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.

Please choose the appropriate response for each item:

	Very Important	Somewhat Important	Not Important	Indifferent
General Use of abuse point of contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reporting false or inaccurate WHOIS data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reporting suspected malicious activity associated with the domain name	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reporting violations of legal rights associated with the domain name	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reporting technical problems associated with the domain name	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other uses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

91 [1114] Several different methods have been suggested for displaying the abuse point of contact. Please indicate which you prefer.

Please select between 0 and 1 answers

Please choose the appropriate response for each item:

	Strongly prefer	Somewhat prefer	No preference	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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abuse point of contact substituted for current Registrar or Registry contact information in WHOIS results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WHOIS results include a link to or index into a publicly accessible table of abuse points of contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please only select one answer per row.

Thank you for participating in this survey. For any questions, please write to policy-staff@icann.org.
1969-12-31 – 19:00

Submit your survey.
Thank you for completing this survey.