



Whois Working Group Backgrounder

STATUS OF THIS DOCUMENT

This is the Whois Working Group Background Information document prepared by ICANN staff and finalized on 27 April, 2007.

SUMMARY

This document collates information regarding relevant work to date by ICANN's Generic Names Supporting Organisation (GNSO). It is essential reading for members – both participants and observers – of the Whois Working Group created by the GNSO Council to further develop policy recommendations on Whois.

1 INTRODUCTION

This document collates information regarding relevant work to date by ICANN's Generic Names Supporting Organisation (GNSO). It is essential reading for members - both participants and observers - of the Whois Working Group created by the GNSO Council to further develop policy recommendations on Whois.

For queries about anything in this document, please email maria.farrell@icann.org.

2 BACKGROUND

WHOIS issues are being addressed through the Generic Names Supporting Organisation's (GNSO's) policy development process (PDP), which includes numerous opportunities for public review and comment, and results in non-binding recommendations to ICANN's Board. The GNSO is now nearing the end of its PDP on various Whois issues.

The GNSO Council voted on 28 March, 2007 to create a Whois Working Group with a broad, balanced and representative membership to take the output of the WHOIS task force and carry out further work to address concerns raised by the community and seek to reach greater consensus around improvements to the WHOIS service.

The Whois Working Group is expected to achieve a balance between providing contact information adequate to facilitate timely resolution of any problems that arise in connection with the Registered Name, and the need to take reasonable precautions to protect the data about any identified or identifiable natural person from loss, misuse, unauthorized access or disclosure, alteration, or destruction.

On 28 March, 2007, the GNSO Council voted to pass the following resolution, creating this WG;

"The GNSO Council resolves:

- 1) To acknowledge the completion of the Whois TF work and note we have received and discussed their report, and thank the task force for their work
- 2) To create a working group of affected stakeholders:
 - including GNSO constituency, law enforcement and community participants,
 - whose work is to be completed within 120 days
 - that will work to examine the issues raised with respect to the policy recommendations of the task force and make recommendations concerning how those policies may be improved to address these issues, namely:

- a. define the roles, responsibilities, and requirements of the operational point of contact, and what happens if they are not fulfilled.
- b. how legitimate interests will access registration data no longer published via Whois,
- c. whether a distinction should be made between the registration contact information published based on the nature of the registered name holder (for example, legal vs. natural persons) or its use of the domain name.”

3 WHOIS HISTORY

Whois Policy Development Process (PDP)

The GNSO is approaching the end of a policy development process (PDP) on Whois to fulfill terms of reference agreed in June 2005. The Terms of Reference are to make policy recommendations to the ICANN Board on:

1. The purpose of the Whois service
2. The purpose of the Whois contacts (ie Registered Name Holder, technical contact, and administrative contact) and the purpose for which the data is collected.
3. Which data should be available for public access, and determine how to access data that is not available for public access.
4. How to improve the process for notifying a registrar of inaccurate data, and how to improve the process for correcting inaccurate data.
5. How to deal with any conflicts between the requirements of ICANN agreements, and local or national privacy laws

Regarding Term of Reference #1, the purpose of Whois, the GNSO Council considered the work of the Whois Task Force and passed the following resolution on 12 April, 2006:

“The GNSO Council recommends that the WHOIS task force use the following definition: *“The purpose of the gTLD Whois service is to provide information sufficient to contact a responsible party for a particular gTLD domain name who can resolve, or reliably pass on data to a party who can resolve, issues related to the configuration of the records associated with the domain name within a DNS nameserver.”* as a working definition to allow the task force to proceed on terms of reference (2), (3), and (4).”

The GNSO Council intends to revisit the definition of the purpose of Whois in the light of the work of the Whois Task Force and the Whois Working Group.

Regarding Term of Reference #5, a Policy on conflicts between Whois requirements and local or national privacy laws was developed by the GNSO and approved by the Board on 10 May 2006. A draft Procedure for Handling Whois Conflicts with Privacy Law has

been published on the ICANN website at (http://gnso.icann.org/issues/whois-privacy/whois_national_laws_procedure.htm).

Regarding Terms of Reference 2, 3 and 4, see the following section on the Whois Task Force.

3.1 WHOIS TASK FORCE, 2005-2007

The Whois Task Force was chaired by Jordyn Buchanan and had the following members:

Chair: Jordyn Buchanan (formerly of the Registry and Registrar Constituencies/appointed by Council as independent expert, without voting status; reelected as chair)

Commercial and Business Users Constituency

David Fares
Marilyn Cade
Sarah Deutsch

Internet Service Providers and Connectivity Providers Constituency

Tony Harris
Greg Ruth
Maggie Mansourkia

Intellectual Property Constituency

Steve Metalitz
Niklas Lagergren
Ute Decker

Non-Commercial Users Constituency

Milton Mueller
Robin Gross

Registrars Constituency

Paul Stahura
Ross Rader
Tom Keller
Tim Ruiz (alternate)

Registry Constituency

David Maher
Ken Stubbs
Simon Sheard

Appointed by Council as independent expert with voting rights:

Avri Doria

At Large Advisory Committee Liaison (non-voting)

Wendy Seltzer
Bret Fausett

The task force finalised its work and submitted a Final Report (REF) to the GNSO Council in March, 2007.

The Task Force reached agreement on the following points:

Many registrants do not understand the meaning or purpose of the different Whois contacts (billing contact, administrative contact, technical contact).

If changes are made to the Whois service, awareness-raising for registrants will be needed.

New mechanisms to restrict some contact data from publication should be adopted to address privacy concerns.

The Task Force Policy Recommendation, i.e. the OPoC recommendation, was supported by a simple majority of Task Force constituency members:

- Registry Constituency
- Registrar Constituency
- Non Commercial User Constituency
- Nominating Committee appointee.

The Policy Recommendation was also supported by the non-voting At Large liaison to the Task Force.

The Policy Recommendation was not supported by the following constituencies:

- Commercial and Business User Constituency
- Intellectual Property Constituency
- Internet Service Providers and Connectivity Providers Constituency

The Final Task Force Report on Whois Services was created by the Whois Task Force and submitted to the GNSO Council on 12 March, 2007. The Task Force Report and Staff Discussion Points on Potential Implementation Issues are available at <http://icann.org/announcements/announcement-16mar07.htm>. The GNSO Council met to consider the WHOIS task force report on Saturday 25 March 2007, and also met with the Government Advisory Committee. Various concerns were raised regarding some of the recommendations in the report, and subsequently the GNSO Council met on Wednesday 28 March and decided to form a working group to attempt to resolve some of the issues raised. The former Whois Task Force has completed its work and the Whois Working Group is directed to develop this work as set out in this Charter.

4 EXISTING WHOIS CONTRACTUAL OBLIGATIONS

This section outlines the existing obligations of registries, registrars and registrants with regard to WHOIS. The full text of the contracts creating these obligations is available in appendix to this document.

4.1 REGISTRIES

In the gTLDs, specifically .COM, the "Registry Operator's Whois service is the authoritative Whois service for all second-level Internet domain names registered in the .com top-level domain and for all hosts registered using these names. This service is available to anyone. It is available via port 43 access and via links at the Registry Operator's web site and is updated daily." (See full description of Registry Whois for .COM in appendix to this document.)

The Registry Operator has to provide bulk access to up-to-date data on domain name and nameserver registrations on a daily basis. The specifications for how this data is provided are described fully in appendix to this document: ".COM Whois Specifications") and include the following:

- A. Domain file - domainname, servername for each nameserver, registrarID, and updated date.
- B. Nameserver file - each IP address, registrarID, and updated date.
- C. Registrar file - registrars sponsoring registered domains and nameservers. For each registrar: registrarid, registrar address, registrar telephone number, registrar e-mail address, whois server, referral URL, updateddate and the name, telephone number, and e-mail address of all the registrar's administrative, billing, and technical contacts.

4.2 REGISTRARS

Regarding Whois, the RAA requires registrars to provide three kinds of access to Whois information; web-based query access, Port 43 access (see 'useful terminology' for an explanation of port 43) and bulk access.

In summary, registrars are required to do the following in relation to Whois:

- Provide or sub-contract to provide a free, public, query-based access to data on all their active registered names.
- Publish in that Whois service the following data for each registered name:
 - Registered name
 - Names of primary and secondary name servers
 - Identity of registrar
 - Creation and expiration dates of the registration

- Name and postal address of the registered name holder
- Name, postal address, email address, telephone number of both the technical and the administrative contact for the registered name
- Tell the registered name holder the purpose for the collection of any personal data and its intended recipients, and how to access and correct the data
- Take reasonable precautions to protect personal data from loss, misuse, unauthorized access or disclosure, alteration, or destruction
- Only sell registrations to customers who consent to providing contact information (which need not be their personal contact information) to be published in the Whois service
- Abide by applicable laws and governmental regulations

Readers of this background document need to familiarise themselves with the entirety of the RAA provisions regarding Whois, in appendix to this document.

4.3 REGISTRANTS

The RAA requires registered name holders (registrants) to:

- Provide accurate and reliable contact data and update them as required
- Respond within 15 days to registrar inquiries about the accuracy of the contact data

5 SAMPLE WHOIS RECORD

This is a sample of Whois output in response to a query. Whois records can be searched at the registrar, registry, and also through dedicated Whois services that combine Whois outputs.

The Whois query below was for icann.org and was sent to <http://www.internic.org/whois.html>

Domain ID:D2347548-LROR
Domain Name:ICANN.ORG
Created On:14-Sep-1998 04:00:00 UTC
Last Updated On:05-Feb-2004 17:42:44 UTC
Expiration Date:07-Dec-2011 17:04:26 UTC
Sponsoring Registrar:Register.com Inc. (R71-LROR)
Status:DELETE PROHIBITED
Status:RENEW PROHIBITED
Status:TRANSFER PROHIBITED
Status:UPDATE PROHIBITED
Registrant ID:C4128112-RCOM
Registrant Name:(ICANN) Internet Corporation for Assigned Names and Numbers
Registrant Organization:Internet Corporation for Assigned Names and Numbers (ICANN)
Registrant Street1:4676 Admiralty Way, Suite 330
Registrant Street2:
Registrant Street3:
Registrant City:Marina del Rey
Registrant State/Province:CA
Registrant Postal Code:92092
Registrant Country:US
Registrant Phone:+1.3108239358
Registrant Phone Ext.:
Registrant FAX:+1.3108238649
Registrant FAX Ext.:
Registrant Email:icann@icann.org
Admin ID:C4128112-RCOM
Admin Name:(ICANN) Internet Corporation for Assigned Names and Numbers
Admin Organization:Internet Corporation for Assigned Names and Numbers (ICANN)
Admin Street1:4676 Admiralty Way, Suite 330
Admin Street2:
Admin Street3:
Admin City:Marina del Rey
Admin State/Province:CA
Admin Postal Code:92092
Admin Country:US
Admin Phone:+1.3108239358
Admin Phone Ext.:
Admin FAX:+1.3108238649

Admin FAX Ext.:
Admin Email:icann@icann.org
Tech ID:C1-RCOM
Tech Name:Domain Registrar
Tech Organization:Register.Com
Tech Street1:575 8th Avenue
Tech Street2:11th Floor
Tech Street3:
Tech City:New York
Tech State/Province:NY
Tech Postal Code:10018
Tech Country:US
Tech Phone:+1.9027492701
Tech Phone Ext.:
Tech FAX:+1.9027495429
Tech FAX Ext.:
Tech Email:domain-registrar@register.com
Name Server:RIP.PSG.COM
Name Server:NS.ICANN.ORG
Name Server:A.IANA-SERVERS.NET
Name Server:SEC3.APNIC.NET
Name Server:C.IANA-SERVERS.NET
Name Server:B.IANA-SERVERS.ORG
Name Server:SEC1.APNIC.NET

5 OPOC RECOMMENDATION

5.1 SUMMARY

OPOC (Operational Point of Contact) was submitted by the Registrar Constituency and further developed by the whole Task Force between January-October, 2006.

OPOC's objective is to deal with the issue that "the amount of data that ICANN requires registrars to display in the Whois is facilitating all sorts of undesirable behaviours like renewal scams, data-mining, phishing, identity theft, and so on." It aims to do this by "rationalizing the Whois data output and implement a new contact type called the 'Operational Point of Contact'".

OPOC removes the current administrative and technical contacts and requires registrants to designate an Operational Point of Contact. In the case of an issue with the domain name, the OPOC would contact the registrant.

OPOC includes a mechanism for notifying and correcting inaccurate Whois data. It does not include any new mechanism for access to data not published in Whois.

5.2 PUBLIC COMMENTS ON OPOC

The public comments period on the preliminary report that included OPOC ran from 24 November, 2006 to 15 January, 2007. ICANN staff made a comprehensive summary of the public comments in section 7 of the Final Task Force Report on Whois Services.

Staff summarized directions for development of OPOC were raised in the public comments:

- The OPOC should have contact information for the registrant.
- The OPOC should ensure contact with the registrant in a defined and short period of time.
- OPOCs should have specified responsibilities for passing communications, including legal notifications, to the registrant.
- There need to be clear, consistent, timely and predictable procedures for obtaining access to unpublished data.

5.3 FULL TEXT OF OPOC RECOMMENDATION

Implementing an Operational Point of Contact

There are four main areas of consideration dealt with by this proposal;

1. The type of contact data published by Registrars via Whois
2. The type of contact data published by Registries via Whois
3. The mechanism by which inaccurate data is dealt with and corrected
4. The mechanism by which prospective gaining registrars obtain the underlying contact information from prospective losing registrars at the time of domain name transfers.

This proposal pre-supposes that 1) domain name contact data not be available through any sources other than those discussed by this proposal, unless by Registrars, and in that case at the Registrar's option, and that 2) regardless of the information displayed, that the domain name contact data collected by registrars remain as specified in the RAA ("Underlying Whois Contact Data").

Scope

This proposal encompasses the Whois services (commonly referred to as "port 43 whois" and "web whois" or "port 80 whois") operated by all ICANN accredited registrars and all gTLD registries (including .aero, .biz, .com, .coop, .info, .jobs, .museum, .name, .net, .org, .pro and .travel as of January 18., 2006).

Purpose of the Points of Contact

1. Purpose of the Registered Name Holder

The registered name holder is the individual or organization that registers a specific domain name. This individual or organization holds the right to use that specific domain name for a specified period of time, provided certain conditions are met and the registration fees are paid. This person or organization is bound by the terms of the relevant service agreement with the Registry operator for the TLD in question.

2. Purpose of the Administrative and Technical Contacts

Under this proposal, the administrative and technical contacts would no longer be displayed within the Whois system. As a result, they would no longer have a purpose within the context of Whois.

3. Purpose of the Operational Point of Contact

This proposal introduces the Operational Point of Contact, which would be collected by registrars and displayed in response to Whois queries regarding specific domain names. The purpose of the operational point of contact is to resolve, or to reliably pass on data to resolve, operational issues relating to a domain name. At a minimum, this must include the resolution of issues relating to the configuration of the records associated with the domain name within a DNS nameserver. The operational point of contact may also be capable of resolving additional types of issues based on an agreement with the registered name holder to do so.

4. Notifying Registrants of the Purpose of the Points of Contact

ICANN will develop a user guide describing the various contacts and the changes in information provided as part of the Whois service. This guide should provide information for both registrants as well as users of the Whois service. At the time the registrar sends its annual Whois Data Reminder Policy notice to each registrant, it must include a link to the ICANN-developed guide on the purpose of each contact.

The Type of Contact Data Published by Registrars;

Accredited Registrars will publish three types of data pertaining to the domain name registration in their respective gTLD Whois repositories;

1. The name of the Registered Name Holder
2. The country and state/province of the Registered Name Holder
3. The contact information for the primary operational point of contact (oPOC), which must include, but is not limited to;
 1. The contact name of the oPOC
 2. The contact address of the oPOC
 3. The contact telephone number of the oPOC
 4. The contact email address of the oPOC
4. The date of the initial registration of the domain name (creation date)
5. The date of the expiration of the current term of the domain name (expiry date)
6. The following registry level data:
 1. The Registered name
 2. The identity of the Sponsoring Registrar
 3. The URI of the authoritative Whois server
 4. All authoritative nameserver names associated with the domain name registration record
 5. The status of the Registered Name (LOCK, HOLD, EXPIRED, or any other Registry specified value)

Registrars must allow a Registrant to provide a minimum of two operational points of contact. As a condition of registration, Registrants must provide a minimum of one operational point of contact. If a Registrant provides a second operational point of contact, the Registrar must publish this data via whois. If the Registrant has not specified a second operational point of contact, the Registrar is not obligation [ad: obligated] to publish a null or empty record via the Whois service. Registrars may choose to allow

Registrants to specify additional operational points of contact beyond the second operational point of contact. If the Registrant exercises this option, the Registrar must publish these additional records in the record of delegation for the domain name in question in a manner consistent with the publication of multiple nameservers in other areas of this same record.

This proposal does not require the publication of any additional data; however Registrars may choose to provide additional data at their discretion.

The Type of Contact Data Published by Registries;

gTLD Registries will publish a limited data set concerning each Registered Name. Registries must not publish or provide any additional data. This Registry Level data is solely limited to;

1. The Registered name
2. The identity of the Sponsoring Registrar which shall consist of separate fields indicating;
 3. the Registrar Name and;
 4. the corresponding IANA Registrar Identification Number
 5. The URI of the authoritative Whois server
 6. All authoritative nameserver hostnames and corresponding IP addresses associated with the domain name registration record
 7. The status of the Registered Name (LOCK, HOLD, EXPIRED, or any other Registry value specified in the EPP RFC)
 8. The date of the initial registration of the domain name (creation date)
 9. The date of the expiration of the current term of the domain name (expiry date)

Correcting Inaccurate Whois Data;

In addition to preserving the existing requirement for Accredited Registrars to promptly update registration records when a Registered Name Holder provides them with updated information, Registrars must also positively respond to notices of alleged inaccuracies in a timely manner. Specifically, when a Registrar receives notice of an alleged inaccuracy in the whois record for a particular domain name;

1. the Registrar must notify the Operational Point of Contact or the Registered Name Holder in a timely manner.
2. The oPOC or the Registered Name Holder must correct the alleged inaccuracy or defend the accuracy of the data, also in a timely manner.
3. If the oPOC or the Registered Name Holder does not update the contact record with corrected information within this time period, the Registrar must either place the domain name on "hold" or revoke the registration.
4. Before accepting the new information, the Registrar must verify that the oPOC or the Registered Name Holder is contactable using the new email address provided.
5. If the basis for the original complaint of inaccurate data included data elements other than the e-mail address, the Registrar must take reasonable steps to validate corrections to these other data elements before accepting them.

A standardized mechanism should be used to convey notices of alleged inaccuracy from the internet community and distribute them to the relevant registrar.

Facilitating Inter-registrar Domain Name Transfers

In order to ensure continued domain name portability, Registrars must continue to be able to transfer detailed contact records between one another at the request of the Registered Name Holder or oPOC. Therefore, this proposal recommends that the Sponsoring Registrar must make the data outlined in section 3.3.1 of the RAA be made available to the prospective gaining registrar upon request for the purpose of confirming the Registrant/oPOC identity and validating the authenticity of the domain name transfer request. This proposal further recommends that this mechanism be augmented, when appropriate, by the use of EPP AUTH-INFO tokens/codes.

Finally, this proposal recommends that the existing Inter-registrar Transfer policy be amended to recognize the authority of the Operational Point of Contact and sunset that of the Administrative, Technical and Billing Contacts.

5.4 SAMPLE WHOIS RECORD UNDER OPOC

Below is an illustration of a Whois record as the contact details would appear when a registrant designates an OPoC. The registrant (Jordyn Buchanan, the chair of the previous Whois Task Force) name, state and country appear, but the registrant contact details are replaced with those of the operational point of contact.

Example : jordyn.info

Registrant:

Jordyn A. Buchanan



California, US

Domain name: jordyn.info

Operational Contact

Register.com domain-registrar@register.com

575 Eighth Avenue

New York, NY 10018

US

+1.9027492701 Fax: +1.2125949876

5.5 ICANN STAFF DISCUSSION POINTS ON OPOC

This is an excerpt of a staff document produced for informational purposes of the GNSO on 15 March, 2007. It was created by the policy and operations departments of ICANN and represents staff's consideration of the potential implementation aspects of the OPoC recommendation.

Role of the OPoC

The scope of the OPoC's role is not completely clear. The proposal aims to define the OPoC's role broadly enough so that different business models can apply. This leaves open some questions that might be considered:

- What contact data (registrant, admin, tech) is the OPOC obliged to release, to whom, and under what circumstances?
- What 'availability' characteristics should the OPOC have, and what escalation mechanisms might be required if these are not met?
- What characterizes the "registration relationship" between an OPOC and a registrant? i.e. it may be advisable to spell out that the OPOC, as an agent, has no rights regarding the domain name.
- Is it the case that the OPoC does not have a claim to the name when it expires? It is conceivable that if the OPoC has a preferential path to registering an expiring name itself, this may create a conflict of interest with the registrant. This might be avoided if the proposal stated that expiring names must be deleted from the registry and made available to the first party that attempts to register them through the normal process.

Recent experience with registrars has highlighted consumer protection issues for registrants regarding the use of privacy services. It is possible that a registrant that lists a registrar privacy service as their OPOC may increase the difficulty of transferring names to another registrar, or losing their domains altogether in the event of registrar failure. OPoC may exacerbate the risk to registrants of concealing the identity of the registered name holder. Privacy services may have risks, and not just benefits, for registrants.

If a name is hidden through a service of this kind, it is possible that no one aside from the provider of the privacy service can identify the customer. Therefore, data escrow may be insufficient to protect that data. In making a choice to use a proxy/privacy service, customers should be aware of balancing privacy against access to data.

- Is the intent of the OPOC to protect the registrant's privacy only or has the issue of "continuity of registration" been considered also? If the latter, can the OPOC be delegated the responsibility to see that registered names are renewed?
- Can safeguards be put in place to ensure registrants do not lose their registrations because of circumstances arising from an inability to show rights to a name through the Whois?

Technical and administrative contacts

- The OPoC proposal states "Under this proposal, the administrative and technical contacts would no longer be displayed within the Whois system."
- When and over how long a period would the administrative and technical contacts be phased out in favour of the OpoC?
- What will happen to a registration if a registrant does not assign an OPoC? Will the admin contact automatically be assigned as the OPoC?
- What provisions might be made for organizations that prefer to have a separate tech contact and admin one? i.e. if they use two OPoCs, how might they indicate which is for what purpose?

Purpose of the contacts - user guide

The OPoC Proposal requires ICANN staff to prepare a user guide to the contracts and changes in information provided.

- It may be helpful for registrants if further information about the expected use of the OPoC was available, for example use cases that illustrate how different business models may provide OPoC services.

Registry Whois

The OPoC proposal requires registries to provide registry Whois data that is “solely limited to” a limited set of data that is generically referred to as ‘thin Whois’. The proposal “pre-supposes that 1) domain name contact data not be available through any sources other than those discussed by this proposal, unless by Registrars, and in that case at the Registrar’s option”.

Currently, the various registries operating in the gTLD space offer both ‘thin’ and ‘thick’ Whois, depending on their business model or the communities they serve in the case of sponsored TLDs. ICANN has not previously required a single type of Registry Whois.

- Is a ‘one size fits all’ approach to Registry Whois both necessary and consistent with ICANN’s competition and choice objective?
- If all gTLD registries were obliged to change their operations, when and over what period would this requirement be introduced?
- What provision, if any, would be made for the costs of changeover? Would sponsored TLD registries be required to change their operations?
- What, if any, would the impact be on the information registries collect from registrars?

Requiring registries to only operate ‘thin Whois’ may have unintended consequences on consumer protection and stability in the case of a business or operational failure of a registrar. In the event of registrar failure, a thick registry can enable the availability of information to allow the continuation of registrar services. It is not unforeseeable that a registrar failure might also be accompanied by incomplete registrar data escrow.

- What are the possible consequences of ‘thin registries’ on consumer protection for registrants in the case of registrar failure?

Dealing with inaccurate data

The procedure for dealing with inaccurate data notifications appears to require the registrar to contact the registrant each time the registrar receives a query about the accuracy of Whois data. A rote process for responding each notice, without a role for some registrar judgment may create difficulties because of the nature of a significant portion of WDPRS requests. For example, if multiple requests are repeatedly sent regarding the same registration, an OPoC would appear to be obliged to respond to each one or risk having the registration suspended or even deleted.

The 2006 WDPRS report produced by ICANN registrar liaison staff shows that of the 3,568 individuals who submitted WDPRS requests during 2005, “the top 20 contributing individuals accounted for over 59% of the 51,664 reports.” In addition, the report noted that “it appears that a handful of users of the WDPRS have intentionally filed redundant

complaints without allowing the registrar or registrant an opportunity to take action.” ICANN staff has noted that a minority of users are abusively filing multiple reports and effectively “spamming the system and the registrars subject to its automated processes”.

- Further attention may need to be given to the provisions in the OPoC proposal for dealing with inaccurate data in order to prevent unintended consequences of abusive data inaccuracy reports.

Transfers

The OPoC proposal recommends that “the existing Inter-registrar Transfer policy be amended to recognize the authority of the Operational Point of Contact and sunset that of the Administrative, Technical and Billing Contacts”.

- Is staff expected to propose amendments to the Transfer Policy and initiate a new PDP?
- It may be advisable to consider the effect of the OPoC on the operation of the Transfer Policy to avoid creating incentives or opportunities for transfer abuses. For example, if the OPoC is also the losing registrar in a transfer, this proposal may give that registrar increased opportunity to avoid cooperating with the transfer.

Jurisdiction

Under the OPoC proposal, the name, country and state/province of the registrant would be published in Whois, at least in part to allow third parties to determine the jurisdiction of the registrant.

- Information sufficient to indicate a registrant’s jurisdiction may in some countries require more detailed geographic information such as city or county.
- This jurisdiction consideration may run counter to the privacy objective of the proposal and might need to be considered further.

Opoc Proposal: Framework for further discussion

Further discussion of the OPoC Proposal might usefully focus on the scope and responsibilities of OPoCs’ potential role(s), implications for gTLD registries and for consumer protection, and the implementation issues raised above.

6 REFERENCES

These references are the basic legal and policy documents referred to throughout this background paper. Readers of the background paper are strongly encouraged to familiarise themselves with these documents.

Government Advisory Committee Principles regarding gTLD WHOIS Services, March 2007: <http://gac.icann.org/web/communiques/gac27com.pdf>

Proposed Changes to the Whois Service; ICANN Staff Discussion Points, 15 March, 2007:
<http://gnso.icann.org/issues/whois/staff-discussion-points-whois-final-15mar2007.htm>

Final Task Force Report on Whois Services:
<http://gnso.icann.org/issues/whois-privacy/whois-services-final-tf-report-12mar07.htm>

The Preliminary Task Force Report on Whois Services
<http://gnso.icann.org/issues/whois-privacy/prelim-tf-rpt-22nov06.htm>

Public comments on Preliminary Task Force Report on Whois Services archive:
<http://forum.icann.org/lists/whois-services-comments>

Registrar Accreditation Agreement:
<http://www.icann.org/registrars/ra-agreement-17may01.htm>

All ICANN registry agreements:
<http://www.icann.org/registries/agreements.htm>

All previous Whois related work is gathered at:
<http://gnso.icann.org/issues/whois-privacy/>

7 GLOSSARY OF WHOIS TERMINOLOGY

Whois

According to RFC 3912 of the IETF (<http://www.ietf.org/rfc/rfc3912.txt>), "WHOIS is a TCP-based transaction-oriented query/response protocol that is widely used to provide information services to Internet users. While originally used to provide "white pages" services and information about registered domain names, current deployments cover a much broader range of information services. The protocol delivers its content in a human-readable format."

ICANN's agreements with gTLD registrars and gTLD registries require them to provide WHOIS service via three mechanisms: port 43, web-based access, and bulk access. See also the ICANNWiki description of Whois: <http://icannwiki.org/WHOIS>

RAA (The Registrar Accreditation Agreement)

The Registrar Accreditation Agreement (RAA) spells out which data is collected and how it is used by registrars. Registrar Accreditation Agreement, <http://www.icann.org/registrars/ra-agreement-17may01.htm>, is the agreement that sets out the obligations of ICANN-accredited registrars.

Regarding Whois, the RAA requires registrars to:

Provide at its expense an interactive web page and a port 43 Whois service providing free public query-based access to up-to-date (i.e., updated at least daily) data concerning all active Registered Names sponsored by Registrar for each TLD in which it is accredited. The data elements are designated by an ICANN-adopted specification or policy. Until ICANN changes this specification or policy, this data consists of the following elements:

- o Registered name
- o Names of primary and secondary name servers
- o Identity of registrar
- o Creation and expiration dates of the registration
- o Name and postal address of the registered name holder
- o Name, postal address, email address, telephone number of both the technical and the administrative contact for the registered name

Tell the registered name holder the purpose for the collection of any personal data and its intended recipients, and how to access and correct the data

Take reasonable precautions to protect personal data from loss, misuse, unauthorized access or disclosure, alteration, or destruction

Only sell registrations to customers who consent to providing contact information (which need not be their personal contact information) to be published in the Whois service

Abide by applicable laws and governmental regulations

The RAA requires registrants to:

Provide accurate and reliable contact data and update them as required

Respond within 15 days to registrar inquiries about the accuracy of the contact data

Port 43 access to Whois

Port numbers are an identifier that an application uses to address a specific process or protocol on a servers.

For example when we type http: in a browser we are indicating that the traffic is destined for port 80 at the url.

So, <http://www.icann.org> can also be written as <http://www.icann.org:80> or www.icann.org:80

https is port 443,

whois is port 43

Further information on port numbering and use:

<http://www.iana.org/assignments/port-numbers>

The Registrar Accreditation Agreement requires registrars to make the Whois database freely accessible to the public via a web query-based system called port 43.

Registry Whois

Whois services made available by specific registries for the domain names that they are authoritative for. Registry Whois often do not provide the comprehensive contact information that Registrar Whois services do, but they usually contain contact information for the Sponsoring Registrar. Note that the payload provided to the client by the Registry is not standardized between Registries and may vary based on the model employed by the Registry.

http://icannwiki.org/Registry_Whois

Thick registry

A registry in which all of the information associated with registered entities, including both technical information (information needed to produce zone files) and social information (information needed to implement operational, business, or legal practices), is stored within the registry repository.

http://icannwiki.org/Thick_Registry

Thin registry

A registry in which some element of the social information associated with registered entities is distributed between a shared registry and the registrars served by the registry.

http://icannwiki.org/Thin_Registry

ICANN Consensus policy

A 'consensus policy' has a specific legal meaning within ICANN. ICANN's [agreements](http://www.icann.org/general/agreements.htm) with accredited registrars and with gTLD registry operators require compliance with various specifically stated procedures and also with "consensus policies." Sponsors and registry operators of sponsored TLDs may be required to comply with consensus policies in some instances. A gTLD consensus policy is created by a completed policy development process (PDP)

developed through the GNSO and adopted by the ICANN Board. To date, two consensus policies, i.e. policies that create a compliance requirement for registries and registrars, have been implemented: the Whois Data Reminder Policy (<http://www.icann.org/registrars/wdrp.htm>) and the Whois Marketing Restriction Policy (<http://www.icann.org/registrars/wmrp.htm>).

8 REGISTRAR ACCREDITATION AGREEMENT

The Registrar Accreditation Agreement (RAA) sets out the obligations of registrars and of ICANN in many areas. The following excerpt shows what registrars' obligations are with regard to gTLD Whois.

"3.3 Public Access to Data on Registered Names. During the Term of this Agreement:

3.3.1 At its expense, Registrar shall provide an interactive web page and a port 43 Whois service providing free public query-based access to up-to-date (i.e., updated at least daily) data concerning all active Registered Names sponsored by Registrar for each TLD in which it is accredited. The data accessible shall consist of elements that are designated from time to time according to an ICANN adopted specification or policy. Until ICANN otherwise specifies by means of an ICANN adopted specification or policy, this data shall consist of the following elements as contained in Registrar's database:

3.3.1.1 The name of the Registered Name;

3.3.1.2 The names of the primary nameserver and secondary nameserver(s) for the Registered Name;

3.3.1.3 The identity of Registrar (which may be provided through Registrar's website);

3.3.1.4 The original creation date of the registration;

3.3.1.5 The expiration date of the registration;

3.3.1.6 The name and postal address of the Registered Name Holder;

3.3.1.7 The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the technical contact for the Registered Name; and

3.3.1.8 The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the administrative contact for the Registered Name.

The appendix to this Agreement for a particular TLD may state substitute language for Subsections 3.3.1.1 through 3.3.1.8 as applicable to that TLD; in that event the substitute language shall replace and supersede Subsections 3.3.1.1 through 3.3.1.8 stated above for all purposes under this Agreement but only with respect to that particular TLD.

3.3.2 Upon receiving any updates to the data elements listed in Subsections 3.3.1.2, 3.3.1.3, and 3.3.1.5 through 3.3.1.8 from the Registered Name Holder, Registrar shall promptly update its database used to provide the public access described in Subsection 3.3.1.

3.3.3 Registrar may subcontract its obligation to provide the public access described in Subsection 3.3.1 and the updating described in Subsection 3.3.2, provided that Registrar shall remain fully responsible for the proper provision of the access and updating.

3.3.4 Registrar shall abide by any ICANN specification or policy established as a Consensus Policy according to Section 4 that requires registrars to cooperatively implement a distributed capability that provides query-based Whois search functionality across all registrars. If the Whois service implemented by registrars does not in a reasonable time provide reasonably robust, reliable, and convenient access to accurate and up-to-date data, the Registrar shall abide by any ICANN specification or policy established as a Consensus Policy according to Section 4 requiring Registrar, if reasonably determined by ICANN to be necessary (considering such possibilities as remedial action by specific registrars), to supply data from Registrar's database to facilitate the development of a centralized Whois database for the purpose of providing comprehensive Registrar Whois search capability.

3.3.5 In providing query-based public access to registration data as required by Subsections 3.3.1 and 3.3.4, Registrar shall not impose terms and conditions on use of the data provided, except as permitted by policy established by ICANN. Unless and until ICANN establishes a different policy according to Section 4, Registrar shall permit use of data it provides in response to queries for any lawful purposes except to: (a) allow, enable, or otherwise support the transmission by e-mail, telephone, or facsimile of mass, unsolicited, commercial advertising or solicitations to entities other than the data recipient's own existing customers; or (b) enable high volume, automated, electronic processes that send queries or data to the systems of any Registry Operator or ICANN-Accredited registrar, except as reasonably necessary to register domain names or modify existing registrations.

3.3.6 In addition, Registrar shall provide third-party bulk access to the data subject to public access under Subsection 3.3.1 under the following terms and conditions:

3.3.6.1 Registrar shall make a complete electronic copy of the data available at least one time per week for download by third parties who have entered into a bulk access agreement with Registrar.

3.3.6.2 Registrar may charge an annual fee, not to exceed US\$10,000, for such bulk access to the data.

3.3.6.3 Registrar's access agreement shall require the third party to agree not to use the data to allow, enable, or otherwise support the transmission by e-mail, telephone, or facsimile of mass, unsolicited, commercial advertising or solicitations to entities other than such third party's own existing customers.

3.3.6.4 Registrar's access agreement shall require the third party to agree not to use the data to enable high-volume, automated, electronic processes that send queries or data to the systems of any Registry Operator or ICANN-Accredited registrar, except as reasonably necessary to register domain names or modify existing registrations.

3.3.6.5 Registrar's access agreement may require the third party to agree not to sell or redistribute the data except insofar as it has been incorporated by the third party into a value-added product or service that does not permit the extraction of a substantial portion of the bulk data from the value-added product or service for use by other parties.

3.3.6.6 Registrar may enable Registered Name Holders who are individuals to elect not to have Personal Data concerning their registrations available for bulk access for marketing purposes based on Registrar's "Opt-Out" policy, and if Registrar has such a policy, Registrar shall require the third party to abide by the terms of that Opt-Out policy; provided, however, that Registrar may not use such data subject to opt-out for marketing purposes in its own value-added product or service.

3.3.7 Registrar's obligations under Subsection 3.3.6 shall remain in effect until the earlier of (a) replacement of this policy with a different ICANN policy, established according to Section 4, governing bulk access to the data subject to public access under Subsection 3.3.1, or (b) demonstration, to the satisfaction of the United States Department of Commerce, that no individual or entity is able to exercise market power with respect to registrations or with respect to registration data used for development of value-added products and services by third parties.

3.3.8 To comply with applicable statutes and regulations and for other reasons, ICANN may from time to time adopt policies and specifications establishing limits (a) on the Personal Data concerning Registered Names that Registrar may make available to the public through a public-access service described in this Subsection 3.3 and (b) on the manner in which Registrar may make such data available. In the event ICANN adopts any such policy, Registrar shall abide by it.

3.4 Retention of Registered Name Holder and Registration Data.

3.4.1 During the Term of this Agreement, Registrar shall maintain its own electronic database, as updated from time to time, containing data for each active Registered Name sponsored by it within each TLD for which it is accredited. The data for each such registration shall include the elements listed in Subsections 3.3.1.1 through 3.3.1.8; the name and (where available) postal address, e-mail address, voice telephone number, and fax number of the billing contact; and any other Registry Data that Registrar has submitted to the Registry Operator or placed in the Registry Database under Subsection 3.2.

3.4.2 During the Term of this Agreement and for three years thereafter, Registrar (itself or by its agent(s)) shall maintain the following records relating to its dealings with the Registry Operator(s) and Registered Name Holders:

3.4.2.1 In electronic form, the submission date and time, and the content, of all registration data (including updates) submitted in electronic form to the Registry Operator(s);

3.4.2.2 In electronic, paper, or microfilm form, all written communications constituting registration applications, confirmations, modifications, or terminations and related correspondence with Registered Name Holders, including registration contracts; and

3.4.2.3 In electronic form, records of the accounts of all Registered Name Holders with Registrar, including dates and amounts of all payments and refunds.

3.4.3 During the Term of this Agreement and for three years thereafter, Registrar shall make these records available for inspection and copying by ICANN upon reasonable notice. ICANN shall not disclose the content of such records except as expressly permitted by an ICANN specification or policy.

3.5 Rights in Data. Registrar disclaims all rights to exclusive ownership or use of the data elements listed in Subsections 3.2.1.1 through 3.2.1.3 for all Registered Names submitted by Registrar to the Registry Database for, or sponsored by Registrar in, each TLD for which it is accredited. Registrar does not disclaim rights in the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and Subsections 3.3.1.3 through 3.3.1.8 concerning active Registered Names sponsored by it in each TLD for which it is accredited, and agrees to grant non-exclusive, irrevocable, royalty-free licenses to make use of and disclose the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and 3.3.1.3 through 3.3.1.8 for the purpose of providing a service or services (such as a Whois service under Subsection 3.3.4) providing interactive, query-based public access. Upon a change in sponsorship from Registrar of any Registered Name in a TLD for which it is accredited, Registrar acknowledges that the registrar gaining sponsorship shall have the rights of an owner to the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and 3.3.1.3 through 3.3.1.8 concerning that Registered Name, with Registrar also retaining the rights of an owner in that data. Nothing in this Subsection prohibits Registrar from (1) restricting bulk public access to data elements in a manner consistent with this Agreement and any ICANN specifications or policies or (2) transferring rights it claims in data elements subject to the provisions of this Subsection.

3.6 Data Escrow. During the Term of this Agreement, on a schedule, under the terms, and in the format specified by ICANN, Registrar shall submit an electronic copy of the database described in Subsection 3.4.1 to ICANN or, at Registrar's election and at its expense, to a reputable escrow agent mutually approved by Registrar and ICANN, such approval also not to be unreasonably withheld by either party. The data shall be held under an agreement among Registrar, ICANN, and the escrow agent (if any) providing that (1) the data shall be received and held in escrow, with no use other than verification that the deposited data is complete, consistent, and in proper format, until released to ICANN; (2) the data shall be released from escrow upon expiration without renewal or termination of this Agreement; and (3) ICANN's rights under the escrow agreement shall be assigned with any assignment of this Agreement. The escrow shall provide that in the event the escrow is released under this Subsection, ICANN (or its assignee) shall have a non-exclusive, irrevocable, royalty-free license to exercise (only for transitional purposes) or have exercised all rights necessary to provide Registrar Services."

Registrars are also obliged to submit the following data to the relevant registry when a name is registered. This provision isn't specifically related to Whois, but has a bearing on OPoC:

"3.2 Submission of Registered Name Holder Data to Registry. During the Term of this Agreement:

3.2.1 As part of its registration of Registered Names in a TLD as to which it is accredited, Registrar shall submit to, or shall place in the Registry Database operated by, the Registry Operator for the TLD the following data elements:

3.2.1.1 The name of the Registered Name being registered;

3.2.1.2 The IP addresses of the primary nameserver and secondary nameserver(s) for the Registered Name;

3.2.1.3 The corresponding names of those nameservers;

3.2.1.4 Unless automatically generated by the registry system, the identity of the Registrar;

3.2.1.5 Unless automatically generated by the registry system, the expiration date of the registration; and

3.2.1.6 Any other data the Registry Operator requires be submitted to it.

The appendix to this Agreement for a particular TLD may state substitute language for Subsections 3.2.1.1 through 3.2.1.6 as applicable to that TLD; in that event the substitute language shall replace and supersede Subsections 3.2.1.1 through 3.2.1.6 stated above for all purposes under this Agreement but only with respect to that particular TLD."

9 .COM WHOIS SPECIFICATIONS

These specifications are set out in appendix to the .COM agreement of 1 March, 2006.

"Public Whois Specification

Registry Operator's Whois service is the authoritative Whois service for all second-level Internet domain names registered in the .com top-level domain and for all hosts registered using these names. This service is available to anyone. It is available via port 43 access and via links at the Registry Operator's web site. It is updated daily.

To use Registry Whois via port 43 enter the applicable parameter on the command line as illustrated below:

- * For a domain name: whois "domain verisign.com"
- * For a registrar name: whois "registrar Go Daddy Software, Inc."

* For a nameserver: whois " DNS3.REGISTER.COM" or whois "nameserver 216.21.234.72"

By default, Whois performs a very broad search, looking in all record types for matches to your query in these fields: domain name, nameserver name, nameserver IP address, and registrar names. Use keywords to narrow the search (for example, 'domain root'). Specify only part of the search string to perform a "partial" search on domain. Every domain starting with the string will be found. A trailing dot (or dots) after your text or the partial keyword indicates a partial search. For example, entering 'mack.' will find "Mack", "Mackall", "Mackay", and so on.

To use Registry Whois using the web interface:

- * Go to www.verisign-grs.com
- * Click on the appropriate button ("domain," "registrar" or "nameserver")
- * Enter the applicable parameter:
 - o Domain name including the TLD (e.g., [verisign-grs.com](http://www.verisign-grs.com))
 - o Full name of the registrar including punctuation, "Inc.", etc. (e.g., America Online, Inc.)
 - o Full host name or the IP address (e.g., ns1.crsnic.net or 198.41.3.39)
- * Click on the "submit" button.

For all registered second-level domain names in .com, information as illustrated in the following example is displayed, where the entry parameter is the domain name (including the TLD):

```
Domain Name: VERISIGN-GRS.COM
Registrar: NETWORK SOLUTIONS, LLC.
Whois Server: whois.networksolutions.com
Referral URL: http://www.networksolutions.com
Name Server: NS1.CRSNIC.NET
Name Server: NS2.NSIREGISTRY.NET
Name Server: NS3.VERISIGN-GRS.NET
Name Server: NS4.VERISIGN-GRS.NET
Status: REGISTRAR-LOCK
Updated Date: 20-oct-2004
Creation Date: 08-sep-2000
Expiration Date: 08-sep-2008
```

>>> Last update of whois database: Wed, 2 Feb 2005 07:52:23 EST<<<

For all ICANN-accredited registrars who are authorized to register .com second-level domain names through Registry Operator, information as illustrated in the following example is displayed, where the entry parameter is the full name of the registrar (including punctuation, "Inc.", etc.):

```
Registrar Name: SAMPLE REGISTRAR, INC. DBA SAMPLE NAMES
Address: 1234 Any Way, Anytown, VA 20153, US
Phone Number: 703-555-5555
Email: registrar-agent@samplenames.net
```

Whois Server: whois.registrar.samplenames.com
Referral URL: www.registrar.samplenames.com
Admin Contact: Jane Doe
Phone Number: 703-555-5556
Email: janedoe@samplenames.com
Admin Contact: John Smith
Phone Number: 703-555-5557
Email: johnsmith@samplenames.com
Admin Contact: Domain Name Administrator
Phone Number: 703-555-5558
Email: dns-eng@samplenames.com
Billing Contact: Petranella Jones
Phone Number: 703-555-5559
Email: pjones@samplenames.com
Technical Contact: Harry Nerd
Phone Number: 703 555-6000
Email: harrynerd@samplenames.com
Technical Contact: Harry Nerd II
Phone Number: 703-555-6001
Email: harrynerd@samplenames.com

>>> Last update of whois database: Wed, 2 Feb 2005 07:52:23 EST <<<

For all hosts registered using second-level domain names in .com, information as illustrated in the following example is displayed, where the entry parameter is either the full host name or the IP address:

Server Name: DNS.MOMINC.COM
IP Address: 209.143.112.34
Registrar: BULKREGISTER, LLC.
Whois Server: whois.bulkregister.com
Referral URL: http://www.bulkregister.com

>>> Last update of whois database: Wed, 2 Feb 2005 07:52:23 EST <<<

Whois Provider Data Specification

Registry Operator shall provide bulk access to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the Registry TLD on a daily schedule, only for purposes of providing free public query-based access to up-to-date data concerning domain name and nameserver registrations in multiple TLDs, to a party designated from time to time in writing by ICANN. The specification of the content and format of this data, and the procedures for providing access, shall be as stated below, until changed according to the Registry Agreement.

Content

The data shall be provided in three files:

A. Domain file. One file shall be provided reporting on the domains sponsored by all registrars. For each domain, the file shall give the domainname, servename for each nameserver, registrarid, and updateddate.

B. Nameserver file. One file shall be provided reporting on the nameservers sponsored by all registrars. For each registered nameserver, the file shall give the servename, each ipaddress, registrarid, and updateddate.

C. Registrar file. A single file shall be provided reporting on the registrars sponsoring registered domains and nameservers. For each registrar, the following data elements shall be given: registrarid, registrar address, registrar telephone number, registrar e-mail address, whois server, referral URL, updateddate and the name, telephone number, and e-mail address of all the registrar's administrative, billing, and technical contacts.

Format

The format for the above files shall be as specified by ICANN, after consultation with Registry Operator.

Procedures for Providing Access

The procedures for providing daily access shall be as mutually agreed by ICANN and Registry Operator. In the absence of an agreement, the files shall be provided by Registry Operator sending the files in encrypted form to the party designated by ICANN by Internet File Transfer Protocol.

Whois Data Specification – ICANN

Registry Operator shall provide bulk access by ICANN to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the .com TLD on a daily schedule, only for purposes of verifying and ensuring the operational stability of Registry Services and the DNS.. The specification of the content and format of this data, and the procedures for providing access, shall be as stated below, until changed according to the Registry Agreement.

Content

The data shall be provided in three files:

A. Domain file. One file shall be provided reporting on the domains sponsored by all registrars. For each domain, the file shall give the domainname, servename for each nameserver, registrarid, and updateddate.

B. Nameserver file. One file shall be provided reporting on the nameservers sponsored by all registrars. For each registered nameserver, the file shall give the servename, each ipaddress, registrarid, and updateddate.

C. Registrar file. A single file shall be provided reporting on the registrars sponsoring registered domains and nameservers. For each registrar, the following data elements shall be given: registrarid, registrar address, registrar telephone number, registrar e-mail

address, whois server, referral URL, updateddate and the name, telephone number, and e-mail address of all the registrar's administrative, billing, and technical contacts.

Format

The format for the above files shall be as specified by ICANN, after consultation with Registry Operator.

Procedures for Providing Access

The procedures for providing daily access shall be as mutually agreed by ICANN and Registry Operator. In the absence of an agreement, an up-to-date version (encrypted using a public key supplied by ICANN) of the files shall be placed at least once per day on a designated server and available for downloading by ICANN by Internet File Transfer Protocol."