

Matters Related to WHOIS

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Introduction

WHOIS is Vital for Effective E-Commerce

E-Commerce figures are steadily moving up and off the charts. A study by the University of Texas' Center for Research in Electronic Commerce, which was sponsored by Cisco Systems and cited by the U.S. Department of Commerce in its report entitled The Emerging Digital Economy II, indicates that 1998 total e-commerce (business-to-business plus business-to-consumer) was \$102 billion.⁽¹⁾ The Department of Commerce itself, has stated:

The Internet plays an important role in a much larger number of transactions than those completed online. In addition to the shoppers who choose items online, but pay for them off-line, the Internet is an important source of research that influences off-line ordering and purchasing, particularly for big ticket items such as autos.

The heightened importance of e-commerce has increased the demands on the part of copyright and trademark owners to search domain name registries. Copyright owners increasingly are using the Internet to promote, market, license and distribute legitimate copyrighted materials. At the same time, copyrighted works are easily copied, distributed and publicly performed over the Internet without authorization. Trademark owners have experienced a recent spate of conflicts between domain names and trademarks. Searches of domain name registrant data are typically done through the WHOIS system⁽²⁾.

A WHOIS search allows copyright owners to identify the site operator and/or the Internet service provider that is hosting the infringing materials or transmitting the infringing activities in order to identify online infringers for enforcement or licensing purposes. Trademark owners undertake WHOIS searches in an attempt to avoid possible conflicts, as well as to cure an unauthorized and confusing use of their mark. Such nefarious uses often lead to consumer confusion, thereby resulting in lost sales and goodwill that is typically associated with a mark.

Finally, WHOIS is a useful tool for consumers seeking to identify online merchants, the source of unsolicited e-mail, and so forth.

Prior to the accreditation of 90 plus new registrars by the Internet Corporation for Assigned Names and Numbers ("ICANN"), Network Solutions, Inc. ("NSI") stood alone as the registrar of generic top-level domain names ("gTLDs"). While not perfect, the old NSI WHOIS system assisted in the identification of online copyright infringers and helped trademark owners police their marks in cyberspace. The inclusion of WHOIS obligations in the accreditation agreements for new registrars was also a positive step. However, in practice, with the changes to the old NSI WHOIS system, the addition of new registrars and the ever increasing use of country code top-level domains ("ccTLDs"), it appears that the use of the WHOIS has become more difficult for intellectual property owners and consumers. This trend must be reversed if the healthy growth of electronic commerce is to be encouraged.

The Intellectual Property Constituency ("IPC") believes that a complete and uniform WHOIS system is essential to the protection of intellectual property rights and the prevention of consumer confusion. The IPC supports the position that there be one or more multi-faceted WHOIS sites that can carry out searches across all registries and registrars. We believe that ICANN has thus far shared this view, as evidenced by the treatment of WHOIS in applicable documents such as the registrar accreditation and registry agreements. However, as this paper will explain, in order to properly ensure consumer protection and the protection of intellectual property rights, there may be a need to enhance the existing functionality of WHOIS. In addition, we will explore the need for a centralized WHOIS system. Finally, we will offer suggestions as to what intellectual property owners would like to see in a WHOIS system.

The Agreements

There are two major ICANN related agreements which make reference to the WHOIS system. The first is the ICANN Registrar Accreditation Agreement. The second is the Registry Agreement between NSI and ICANN, which was drafted and signed as part of the tripartite agreements between ICANN, NSI, and the U.S. Government.

The Individual Registrar Databases

In Section II (F) of the Registrar Accreditation Agreement, accredited registrars must provide "Public Access to Data on SLD Registrations." This is to be done at the Registrars expense and be made available to the public free of charge. The data available shall consist of the following elements as contained in Registrar's database:

- a. The name of the SLD being registered and the TLD for which registration is being requested;
- b. The IP addresses of the primary nameserver and secondary nameserver(s) for the SLD;
- c. The corresponding names of those nameservers;
- d. The identity of Registrar (which may be provided through Registrar's website);
- e. The original creation date of the registration;
- f. The expiration date of the registration;
- g. The name and postal address of the SLD holder;
- h. The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the technical contact for the SLD; and
- i. The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the administrative contact for the SLD.

The IPC applauds the inclusion of the WHOIS data provision in the Registrar Accreditation Agreement. However, not all of the separate registrar WHOIS sites have the same capabilities. Only NSI, for example, allows you to search by exact domain name, domain name owner, contact name owner, handle, and IP address. Yet, the functionality of even the NSI system should be improved to meet the needs of copyright and trademark owners, as well as consumers. When searching by domain name owner, for example, you only get the first 50 "hits." In addition, there is no function that allows you to search for additional "hits" or to know the total number of "hits." Therefore, there is no way to get a complete listing for a domain name registrant who has registered more than 50 domain names with NSI. For all of the others, you are limited only to exact domain names. This can prove frustrating, especially if an intellectual property owner is attempting to police a mark for infringing violations or to determine whether a particular individual has developed a pattern of cybersquatting or piratical activities.

In addition, the WHOIS databases fail to provide certain basic searching tools that would make WHOIS an effective database. None of the existing WHOIS services provide the ability to search using "boolean" logic. This simple feature, which each accredited registrar should be required to provide for free under the accreditation agreement, permits truncated searches of the domain name registration database. If, for example, Coca-Cola wanted to search WHOIS for infringement of the Coca-Cola mark, boolean logic, would permit it to search for domain names beginning with the word "Coca." Another basic search feature would enable users to search combinations of words or trademarks (e.g. "Bell" and "GTE").

Finally, a number of registrars may not be complying with their WHOIS-related obligations under the accreditation agreement. Many have not designated a contact point to which evidence of false or fraudulent contact data may be supplied, and few have taken steps to cancel registrations based on bogus contact data. The WHOIS sites of some registrars are not even readily ascertainable. IPC is pleased to learn that ICANN intends to acquire a compliance review capability with respect to accredited registrars, and we urge ICANN to give this initiative high priority.

The Registry WHOIS and Determining the Need for a Centralized System

Paragraph 9 of the "Agreements" section of the ICANN and NSI Registry Agreement contains three subparagraphs. Subparagraph A calls for the creation of an NSI registry site, which, in response to input of an SLD name, shall report at least the following data elements in response to queries: (a) the SLD name registered, (b) the TLD in which the SLD is registered; (c) the IP addresses and corresponding names of the primary nameserver and secondary nameserver(s) for such SLD, (d) the identity of the sponsoring Registrar, and (e) the date of the most recent modification to the domain name record in the registry database.

Subparagraph C calls for "the development and operation of a capability that provides distributed free public query-based (web and command-line) access to current registration data implemented by registrars providing for capabilities comparable to WHOIS." The Agreement further states that "NSI as registry shall cooperate and, if reasonably determined to be necessary by ICANN (considering such possibilities as remedial action by specific registrars), provide data from the

registry database to facilitate the development of a centralized service providing equivalent functionality in a manner established by a Consensus Policy."

The IPC submits that the NSI registry site, <http://www.nsiregistry.com>, satisfies the qualifications of Subparagraph A of Paragraph 9 of the Registry Agreement. The question then becomes whether the distributed WHOIS system now in place is acceptable or whether the "centralized service" which is referred to in Subparagraph C is necessary. The answer, we believe, is for ICANN to monitor very carefully the success of the distributed system over a specified period of time and determine whether in fact there is a need for a centralized system.

Some members of the IPC have suggested that there does in fact already exist evidence signaling the need for a centralized system. Before the introduction of competition in gTLD registration services, it was possible to go to one site (NSI) to obtain fully featured searches of relatively current and accurate WHOIS data for all gTLD registrations. This is no longer the case. There appears to be no site from which all registrar WHOIS files can be thoroughly searched, although there are a number of sites that search across some subset of registrars. The registry WHOIS site will only tell you if the exact name you seek is registered and provide you with the name of the registrar. Finally, the problem is compounded by the inaccessibility of WHOIS databases in some ccTLDs.

Users of WHOIS must frequently jump from registrar site to registrar site to obtain data, which very often is neither reliable or accurate. The data for some registrars is not entered promptly -- for some registrars, the data is badly out of date and cannot be relied upon to determine whether a domain name is in fact available and whether the domain name information is accurate.

What Would We Like to See

The IPC has taken the liberty of drawing up a list of minimum requirements for a properly distributed WHOIS system or, if ICANN deems it to be necessary, a centralized mechanism. In presenting this list, the IPC also agrees to work with ICANN in the development of the type of system we propose.

(1) One or more WHOIS sites capable of searching across all registrars and registries, including the ccTLDs. On that site we want to be able to search by:

domain name

registrant

registrant address (to cover a situation where an individual or entity uses multiple identities for a registrant name)

contact (administrative, zone, technical, and billing)

handle

IP address

e-mail address

(1a) A mandatory feature should be a combined search. For example, a search by owner and year of registration. It could be helpful in determining whether there has been a pattern of conduct in the registration of domain names that would be indicative of cybersquatting or piratical activities.

(2) The site should tell us:

domain name

registrar

creation and other relevant dates (including application, expiration, and transfer dates)

ownership history, including whether the administrative or technical contacts were changed

servers

name, address, telephone, and e-mail address of registrant

contact information for administrative, billing and technical contacts

application and renewal status

(3) The site should be updated promptly.

(4) Data should be presented in a consistent format in whatever registry it comes from.

(5) There should be a link from the registrar or registry name to their particular site so that any specific policy may be easily accessed, and contact points identified for complaints concerning false or absent contact data.

(6) Each registrar to employ automated mechanisms to filter out obviously inaccurate contact data submitted by registrants (e.g. four digit U.S. zip code).

IPC's Response to Privacy Concerns

The IPC recognizes rights of privacy as being important. At the same time, however, the IPC considers that privacy concerns should not overshadow the need of intellectual property owners and consumers for a transparent WHOIS system through which the identity of domain name owners may be learned. These were the same conclusions reached by WIPO in their final report on the domain name process, titled The Management of Internet Names and Addresses: Intellectual Property Issues. (3) ICANN has adopted as similar policy, as reflected in the ICANN Statement on Registrar Accreditation (adopted on 3/4/99). Furthermore, a transparent WHOIS system is not incompatible with existing data protection laws, which do not restrict the dissemination of information such as domain name registrant contact data pursuant to contractual agreement or on the basis of an overriding public interest, such as consumer protection or law enforcement.

The IPC does support strong sanctions against those who use information made available through WHOIS for non-legitimate purposes, such as "spamming."

Conclusion

Reliable, current, and multi-faceted WHOIS sites that allow accurate and full-featured searching across all registries and registrars will help ensure the protection of copyrights and trademarks in cyberspace, as well as simultaneously protect the interests of consumers who use the Internet to make important purchasing decisions. The IPC encourages ICANN to consider improvements to the WHOIS systems as more and more registrars become active and as the debate over new gTLDs continues to evolve. Finally, the IPC believes that as a precondition to participation in the domain name system ("DNS"), administrators of any new gTLDs should be required to establish a WHOIS database that contains complete and reliable contact information, and to make that database accessible on a free, prompt, and unrestricted basis.

We look forward to engaging in a dialogue with others in the ICANN community and working towards a mutually agreeable end.

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This paper was prepared in anticipation of the ICANN meeting in Cairo, Egypt and discussed in detail during the recent IPC meeting in Arlington, Virginia, USA on February 25, 2000. This paper reflects the author's best efforts to capture the essence of the discussions during the IPC's February 2000 meeting, taking into account all views within the IPC expressed at the February meeting.

Endnotes

1. See, A. Barua, J. Shutter, & A. Whinston, "The Internet Economy Indicators," Initial report results issued June 10, 1999 (<http://www.internetindicators.com>); see also, The Emerging Digital Economy II (<http://www.ecommerce.gov/ede/chapter1.html>).
2. United States Department of Commerce, The Emerging Digital Economy II(<http://www.ecommerce.gov/ede/chapter1.html>).
3. Footnote 61 of the Final Report states: "We do not consider that any valid analogy exists for the issues posed by this question. Some argued that anonymity is permitted with respect to telephone listings and that this provided an appropriate precedent for a domain name registration. We do not consider the situations to be comparable. A telephone number facilitates connectivity with one other person, unless a group consents to dial into, or by linked to, a conference call. The telephone is a unimedium. A domain name gives global connectivity and allows for multimedia transmissions."