

**Summary of available and upcoming data points:**

**Upcoming ICANN Whois Data Accuracy Audit, planned for the 2007 calendar year.**

**<http://www.icann.org/whois/whois-data-accuracy-program-27apr07.pdf>**

The audit will include manual examinations of thousands of Whois data fields as well as testing to determine if ICANN Accredited Registrars are investigating and correcting Whois related contact details in response to inaccuracies reported through ICANN's Whois Data Problem Report System (WDPRS).

**Objectives:**

- to improve overall Whois data accuracy,
- to assess compliance with Registrar Accreditation Agreement requirements concerning Whois data accuracy, and
- to assess the effectiveness of the Whois data accuracy audit as a tool for improving data accuracy.

Each year ICANN will publish the findings from the Whois data accuracy audits and consider ways in which the audit process might be improved to meet the objectives set forth above.

**Audit Procedure:**

1. Domain name data will be obtained from registries and other parties to perform an independent assessment of Whois data accuracy.
2. Upon receiving domain name data, ICANN will randomly sample registered domain names from every active ICANN accredited registrar and attempt to verify the validity of Whois data for each name using independent sources. Where verification is not possible, ICANN will contact the registrant of record via email and request a response within a specific period of time.
3. Those registrants who do not respond to ICANN's email messages or whose Whois data fields are determined to contain inaccurate information will be reported to the registrar of record via WDPRS. (ICANN will use an alias business name during the WDPRS process to prevent special treatment of ICANN's correspondence.)
4. Consistent with WDPRS, after 45 days ICANN will examine the current Whois data for names that were previously believed to be inaccurate to determine if information was corrected, the domain name was deleted, or there was some other disposition.
5. ICANN will perform calculations to assess Whois accuracy of the sample analyzed and extrapolate those calculations to draw conclusions regarding the entire Whois universe, and report findings on its web site.
6. In future audits, ICANN will compare findings over time to help measure the program's effectiveness.

## Follow-Up

- The registrars that fail to take any action regarding the WDPRS reports filed concerning domain names registered through their companies will be notified of their failure to comply with Section 3.7.8 of the Registrar Accreditation Agreement (RAA), which requires registrars to take reasonable steps to investigate and correct contact details in response to any reported inaccuracy.
- These registrars will be requested to respond in five business days with details regarding why the inaccuracy was not addressed and how future cases will be handled to prevent such failures from recurring.
- ICANN will take appropriate action depending on the information contained in the responses received, consistent with its compliance escalation procedures.
- At the close of each audit period, ICANN will publish findings and an assessment of the usefulness of the audit.

**ICANN annual studies on the WHOIS Data Reminder Policy.** Since 2004, ICANN has issued an annual report on implementation of the WHOIS Data Reminder Policy. It is a statistical and narrative summary of experiences with the WDRP which describes the implementation status of the policy, registrar compliance, problems encountered and impact on the accuracy of Whois data. The report uses a variety of means to evaluate the effectiveness of the implementation of the WDRP, including results from an annual “Whois Data Reminder Policy Survey and Compliance Audit” that sent to all ICANN-accredited registrars.

- The following are key findings of the *2006 Report on Implementation of the Whois Data Reminder Policy*: <http://www.icann.org/whois/wdrp-report-30nov06.pdf>
  - 87% of ICANN-accredited registrars participated in the 2006 WDRP survey;
  - 303 more registrars responded in 2006 to the survey than in 2005, reflecting increased participation and a larger registrar marketplace;
  - Registrar compliance with the WDRP’s requirement to send registrants reminder notices has remained strong overall;
  - Compliance with the form and content requirements for reminder notices sent by registrars has improved, although there remains room for further improvement;
  - The inability of registrars to track responses to WDRP notices has hampered ICANN’s ability to measure the effectiveness of the policy.

**Annual review of ICANN Whois Data Problem Report System (WDPRS).** This system was developed by ICANN to receive and track complaints about inaccurate or incomplete Whois data. Individuals may notify ICANN by completing an online form, which is then forwarded to the registrar of record for action. After forty-five days, ICANN asks the complainant to recheck the Whois data and indicate whether the data was corrected other disposition. In 2007, the annual publication of a statistical summary of information gathered from the Whois Data Problem Report System (WDPRS) has

been incorporated into the WHOIS Data Accuracy and Availability Program described above.

- The 31 March 2006 WDPRS can be found at  
<http://www.icann.org/announcements/wdprs-report-final-31mar06.pdf>

**ICANN SSAC study on “Is the Whois service a source for email addresses for spammers?” presented at SSAC meeting, 25 June, 2007,**  
<http://sanjuan2007.icann.org/files/sanjuan/ssac-whois-study-25Jun2007.pdf>

- Study considered whether spammers use Whois to harvest the email addresses of registrants and whether certain measures were effective to decrease volumes of spam delivered to registrants
- The study concludes that:
  - spammers do harvest email addresses from Whois. However, the study does not claim that Whois is the only source of email addresses for spammers or the primary source of email addresses for spammers.
  - Registrants who subscribe to anti-abuse measures can reduce the volume of spam delivered to email addresses recorded in domain name registration records.
  - anti-spam measures provided with domain name registration services are effective in protecting email addresses that are only published in Whois from spam.
  - The combination of protected-Whois (uses measures that protect against automated collection of email addresses from Whois) and delegated-Whois (uses measures that avoid display of registrant’s email address, such as a third party or proxy) is the most effective way to prevent Whois address harvesting for spam.

**ICANN SSAC study on “Information Gathering Using Domain Name Registration Records” presented 28 September, 2006**  
<http://www.icann.org/committees/security/information-gathering-28Sep2006.pdf>

- This study focused on two aspects of Whois registrations: 1) the extent to which sufficient contact information is available to make individual contact with the registrant (is the information available and accurate?); and 2) based on information provided, determine the percentage of sampled registrants that are individuals, businesses, domain name businesses, domain name proxies or home operated businesses.

### **VRSN Domain Name Industry Briefs**

- June 2007 – total base of 128 million domain name registrations worldwide across all TLDs -- <http://www.verisign.com/static/042161.pdf>
- Tracks percentage growth rates for TLDs over previous years
- Tracks total number of registrations in .com and .net (69 million as of 1Q2007)

- Tracks total number of new registrations in .com and .net (7 million in 1Q2007)
- Tracks composition of new registration growth (percentage in ccTLDs, .com/.net, .org/.biz/.info/.name)
- Tracks number of DNS queries VRSN processes per day (average 30 billion/day in 1Q2007)
- Tracks percentage of new PPC registrations in .com and .net (domain name investors that register to generate ad revenue)
- Tracks registration renewal rates

**VRSN Domain Name Registrant Profile, Domain Name Industry Brief from August 2005**

<http://www.verisign.com/stellent/groups/public/documents/newsletter/031377.pdf>

- Reports that 75% of .com and .net domain names are registered by businesses, 22% were individuals (remaining 3% unknown). Also speculates about gender and registrations and tracks information about attitudes towards the Internet.

**U.S. Government Accountability Office Report: GAO 06-165 on the “Prevalence of False Contact Information for Registered Domain Names”, November 4, 2005.**

<http://www.gao.gov/new.items/d06165.pdf>

- GAO was asked to:
  1. determine the prevalence of patently false or incomplete contact data in the Whois service for the .com, .org, and .net domains;
  2. determine the extent to which patently false data are corrected within 1 month of being reported to ICANN; and
  3. describe steps the Department of Commerce (Commerce) and ICANN have taken to ensure the accuracy of contact data in the Whois database.
- Based on a survey of 900 domain names (300 each in .com, .net and .org), GAO concluded that 2.31 million domain names (5.14%) were registered with patently false data (data that appeared obviously and intentionally false) in one or more of the required contact information fields.
- GAO also found that 1.64 million (3.65%) were registered with incomplete data in one or more of the required fields. In total, GAO estimates that 3.89million domain names (8.65%) had at least one instance of false or incomplete data in required Whois fields.

**Center for Democracy and Technology study on the sources of spam entitled, “Why Am I Getting All this Spam? Unsolicited Commercial Email Research Six-Month Report,” March 2003.** <http://www.cdt.org/speech/spam/030319spamreport.shtml>. In 2002 CDT created hundreds of new email addresses, each used for a single purpose, then waited six months to see what kind of email those addresses received. The study found that the vast majority of spam received was delivered to email addresses that had been

posted in plaintext on the public web but reported only one spam message received by an address provided in the Whois database.

**Ben Edelman's 2002 analysis: Large-Scale Intentional Invalid WHOIS Data:  
A Case Study of "NicGod Productions" / "Domains For Sale"**

<http://cyber.law.harvard.edu/people/edelman/invalid-whois/>

- Conducts a case study of 2754 registrations of a single firm all of which included intentionally invalid Whois contact information. Edelman draws several possible conclusions. He notes that of registrants providing intentionally-invalid Whois contact information, at least some register and hold a large number of domains.

**FTC Study on email address harvesting, November, 2002** – FTC investigators “seeded” 175 Internet locations with 225 new “undercover” email addresses and tracked the resulting spam for a six-month period. The following chart summarizes harvesting by forum, <http://www.ftc.gov/bcp/online/edcams/spam/pubs/harvestchart.pdf>. The study found no instance of email harvesting from a domain name registration.

**WHOIS survey report, final draft posted June 2002,**

<http://www.dnso.org/dnso/notes/whoisTF/index-jun02.html>

Survey: <http://www.dnso.org/dnso/notes/whois-survey-en.html>

- The WHOIS Task Force conducted a web-based survey of Whois users in 2001 and issued a report in June, 2002 which analyzed over 3000 responses. This study, while very limited, is one of very few data points available that provide information about uses of Whois.
- Survey authors cautioned that the survey should not be viewed as statistically valid or definitive. That said, the survey does provide interesting information about the characteristics of users of Whois (for example how many are individuals or business entities), self-reported data on the reasons they used Whois, and users views and expectations about privacy, accuracy and the value of Whois data.