



SSAC Public Report Work Plan for 2010 September 2010

What is the SSAC?

The Security and Stability Advisory Committee advises the ICANN community and Board on matters relating to the security and integrity of the Internet's naming and address allocation systems. This includes operational matters (e.g., matters pertaining to the correct and reliable operation of the root name system), administrative matters (e.g., matters pertaining to address allocation and Internet number assignment), and registration matters (e.g., matters pertaining to registry and registrar services such as WHOIS). SSAC engages in ongoing threat assessment and risk analysis of the Internet naming and address allocation services to assess where the principal threats to stability and security lie, and advises the ICANN community accordingly.

Introduction

This is one of a series of reports on SSAC activities. These are divided into two types of reports. The first is a report on the SSAC Work Plan of activities and progress that appear in the first and third quarters of each year. The second is a report of SSAC activities at ICANN meetings. These will coincide with the three ICANN meetings.

This report, **SSAC Public Report on the Work Plan for 2010**, is divided into the following sections: **Revised Work Plan for 2010** and **Work Completed in 2010**.

The first section, **Revised Work Plan for 2010**, describes the ideas and preliminary work to develop specific work products. This is perhaps the most important section of this report because it provides notice of issues on the horizon.

The SSAC generates three types of work products: Reports, Advisories and Comments. Reports cover substantial projects. Advisories are shorter and may be produced more quickly. Comments are usually responses to queries from staff or to documents posted for formal response. For a list of published SSAC documents see: <http://www.icann.org/en/committees/security/ssac-documents.htm> and SSAC presentations see: <http://www.icann.org/en/committees/security/ssac-presentations.htm>.

SSAC Reports, Advisories and Comments are generally publicly available. Occasionally, specific matters require confidentiality. Such projects are treated accordingly. The SSAC often considers security incidents or matters disclosed in confidence to committee members (e.g., a security vulnerability, an emerging threat to the DNS, or information relating to a security incident).

Discussions and ongoing work within the SSAC are thus typically conducted in private until complete, or until the need for confidentiality has lapsed. SSAC members participate in an individual capacity and do not represent the organizations that employ them. SSAC member biographies and statements of interest are posted here: <http://www.icann.org/en/committees/security/biographies-07jul10-en.htm>.

Feedback on the content, process and format of this report are welcome. Full information on the SSAC and its completed reports is on the ICANN web site at <http://www.icann.org/committees/security>. This report is suitable for general distribution and will also be available on the SSAC web site.

Steve Crocker,
Chair, Security and Stability Advisory Committee

Work Plan for 2010

SSAC Recommendations on the Stability of the Root Level of the Domain Name System (DNS) -- In February 2009, the ICANN Board requested SSAC and RSSAC to co-ordinate a technical and operational study to consider the potential impact on the stability of the root level of the Domain Name System (DNS) when IPv6 address records, IDN (Internationalized Domain Name) top level domains (TLD), other new TLDs, and new resource records to support DNS security (DNSSEC) are added to the root zone. In September 2009, SSAC began consideration of the Root Scaling Study Team's (RSST) report, *Scaling the Root: Report on the Impact on the DNS Root System of Increasing the Size and Volatility of the Root Zone*. See <http://www.icann.org/en/committees/dns-root/root-scaling-study-report-31aug09-en.pdf>. An accompanying report, *Root Scaling Study: Description of the DNS Root Scaling Model* released on 1 October 2009 (the "TNO report") provided a quantitative modeling of the root zone to simulate scenarios relevant to the root scaling study. See <http://www.icann.org/en/committees/dns-root/root-scaling-model-description-29sep09-en.pdf>. The SSAC has reviewed both reports and is considering recommendations to provide to the ICANN Board of Directors in 2010 prior to decisions on the introduction of new TLDs.

Additional Studies: The SSAC recommendations may include suggestions for additional studies on systemic effects of more data in the DNS.

Registrant Guide to Protecting Domain Name Registration Accounts – In August 2009 the SSAC published SAC040, *Measures to Protect Domain Registration Services Against Exploitation or Abuse*. See <http://www.icann.org/en/committees/security/sac040.pdf>. In 2010 the SSAC will produce a companion report that is more prescriptive for registrants. For example, the report might suggest specific steps registrants could take to protect a valuable domain name against malicious abuse.

Orphaned DNS Records – Orphaned DNS records are name server records that exist in delegation, but whose parent domain names no longer exist. The issue of concern is that orphaned DNS records can be maliciously abused. The SSAC has formed a Work Party to study this issue and develop possible recommendations.

SSAC Comments on Security-Related Issues – The SSAC is considering whether to provide Comments to ICANN on operational failover provisions for TLD registries that fail and on the report by JAS Communications LLC: "IANA Process for Implementing Root Zone Change Requests: Review and Assessment of Risk Management Strategy and Comparison of Implementation Options" posted on 19 April 2010. See <http://www.icann.org/en/reviews/iana/iana-root-zone-process-review-16jun10-en.pdf>.

IPv6 Support in Commercial Firewalls – In October 2007 the SSAC published SAC020, *A Survey of IPv6 Support in Commercial Firewalls*. See <http://www.icann.org/en/committees/security/sac021.pdf>. The report surveyed the commercial firewall market for Internet Protocol Version 6 (IPv6) service availability. The SSAC began a survey of IPv6 support among commercial firewalls in May and continues to solicit responses. While there have been many responses from business users of commercial firewalls, the SSAC would like to gather additional responses on commercial firewalls.

SSAC Operational Procedures -- In response to the review of the SSAC conducted by the Board Governance Committee of the ICANN Board of Directors, the SSAC has committed to initiate various improvements to its procedures that will be incorporated into the SSAC Operational Procedures, to be finalized and published in 2010.

SSAC Retreat – The SSAC meets annually to discuss issues of security and stability. The next retreat is planned for 20-22 October 2010 in Arlington, Virginia. Topics may include the security of the Domain Name System (DNS), registrant protection, and issues related to e-crime, WHOIS and internationalized registration data, and internationalized domain names.

Internationalized Registration Data Working Group (IRD-WG) -- SSAC members are participating in this joint GNSO-SSAC Working Group that is studying the feasibility and suitability of introducing display specifications to deal with the internationalization of registration data. The Working Group plans to produce a set of recommendations for consideration at the ICANN meeting in Cartagena, 5-10 December 2010.

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Work Plan for 2010, Continued

Collaboration with the ICANN Community -- SSAC members are carrying forward work from various deliverables (SAC026, SAC033, SAC038, SAC040) into the Generic Names Supporting Organization (GNSO) through participation in the Registration Abuse Policies Working Group, as well as the Registrar Accreditation Agreement (RAA) Drafting Team (DT) where numerous SAC040 measures are being considered. See: https://st.icann.org/reg-abuse-wg/index.cgi?registration_abuse_policies_working_group and https://st.icann.org/raa-related/index.cgi?joint_alac_gnso_wg_and_at_large_workspace_on_raa_related. SSAC work products also are being considered by staff at GNSO request, including an inventory of Whois service requirements. SAC037 is the catalyst and basis for 2010 work on internationalizing registration data. See above.

Collaboration with Advisory Groups -- SSAC support staff are participating in advisory groups tasked with assessing and developing further programs described in two ICANN explanatory memoranda, including the High Security TLD and Zone File Access Advisory Groups. See <http://www.icann.org/en/topics/new-gtlds/hstld-program-en.htm> and <http://www.icann.org/en/topics/new-gtlds/zone-file-access-en.htm>.

SSAC Public Meeting at the ICANN Meeting in Cartagena, 5-10 December 2010 – The SSAC is planning a regular public session to be held at the ICANN meeting in Cartagena to discuss work completed and in progress.

Workshop on DNS Security at the ICANN Meeting in Cartagena, 5-10 December 2010 – The SSAC is planning two events in coordination with the DNSSEC Deployment Initiative to be held at the ICANN meeting in Cartagena, Colombia the week of December 6-10, 2010. One is the regular DNSSEC session, tentatively planned for Wednesday, 8 December, that has been a part of ICANN meetings for several years and has provided a forum for both experienced and new people to meet, present and discuss current and future DNSSEC deployments. The other session, in cooperation with the ccNSO Technical Working Group, is an Introduction to DNSSEC Basics intended for people who are not yet familiar with what DNSSEC is and how it works and feel it's time to get acquainted. This will take place on Monday, 6 December, during the afternoon session of the ccNSO TechDay.

Work Completed in 2010

SSAC Public Report: Work Plan for 2010 (February 26, 2010) – See: <http://www.icann.org/en/committees/security/ssac-activity-report-26feb10-en.pdf>. This Report describes the SSAC Work Plan for 2010. These are the ideas and preliminary work to develop specific project plans. It also includes a list of those work products that were produced in 2009.

SSAC Public Report: SSAC Activities at ICANN Meeting 7-12 March 2010, Nairobi, Kenya (February 26, 2010) – See: <http://www.icann.org/en/committees/security/ssac-activity-report-nairobi-26feb10-en.pdf>. This Report describes the SSAC meetings scheduled at the ICANN meeting in Nairobi, Kenya as well as the meeting related to the SSAC or to the security and stability of the Internet.

SSAC Public Report: SSAC Activities at ICANN Meeting 21-25 June 2010, Brussels, Belgium (July 2010) – See <http://www.icann.org/en/committees/security/ssac-activity-report-jul10-en.pdf>. This Report describes the SSAC meetings scheduled at the ICANN meeting in Brussels, Belgium as well as the meeting related to the SSAC or to the security and stability of the Internet.

Internationalized Registration Data Working Group Presentation at the ICANN meeting in Brussels, Belgium (24 June 2010) -- The Working Group provided a presentation on approaches for discussion on 24 June at the ICANN meeting in Brussels, Belgium. See <http://brussels38.icann.org/meetings/brussels2010/presentation-ird-whois-24jun10-en.pdf>.

Zone File Access Strategy Proposal (13 May, 2010) – The Zone File Access Advisory Group, in which the SSAC participates, produced a Strategy Proposal. See <http://www.icann.org/en/topics/new-gtlds/zfa-strategy-paper-12may10-en.pdf>. The proposal presents the group's recommendation of a scalable, uniform implementation model for zone file access in new gTLDs and encourages existing TLD operators to adopt the model.

Workshops on DNS Security at the ICANN meeting in Nairobi, Kenya (10 March 2010) and Brussels, Belgium (23 June 2010) – The SSAC held workshops in coordination with the DNSSEC Deployment Initiative at the ICANN meeting in Nairobi, Kenya on 10 March 2010 and Brussels, Belgium on 23 June 2010.