

Security & Stability Advisory Committee Public Meeting

28 June 2012



PRAGUE



Agenda

- 8:00 to 8:15 am Overview -- Patrik Fältström, SSAC Chair
- 8:15 to 8:40 am SAC054: SSAC Report on Domain Name Registration Data Model - Jim Galvin, SSAC Vice Chair
- 8:40 to 8:50 am Tracking Outcomes from SSAC Publications - Ram Mohan, SSAC Liaison to the ICANN Board
- 8:50 to 9:00 am Questions/Discussion

Overview

- Security and Stability Advisory Committee
- Formed in 2001-2002
 - Decision to start: late 2001
 - First Operation: early 2002
- Provides guidance to ICANN Board, Supporting Organizations and Advisory Committees, staff and general community
- Guidance areas are related to ICANN's mission, DNS, addressing, etc.

SSAC Charter/Mission

The role of the Security and Stability Advisory Committee ("SSAC") is to advise the ICANN community and Board on matters relating to the security and integrity of the Internet's naming and address allocation systems.

See: <http://www.icann.org/en/committees/security/charter-15sep11-en.htm>

SSAC Membership

- Members as of 16 March 2012: 38
- Changes in 2012:
 - 2 New Members and 1 Departing Member
- Changes in 2011:
 - 4 New Members and 4 Departing Members
- Changes in 2010:
 - 5 New Members and 5 Departing Members
 - ICANN Bylaws change appointing members to staggered terms of 1, 2, and 3 years, which necessitates an Annual Review Process to reappoint members when their terms end

Recent Publications

Published in 2012:

- [SAC054] SSAC Report on the Domain Name Registration Data Model
- [SAC053] SSAC Report on Dotless Domains
- [SAC052] SSAC Advisory on Delegation of Single-Character Internationalized Domain Name Top-Level Domains
- SSAC Comment on the ICANN FY13 Budget: Impact on SSAC Productivity
- SSAC Comment on the ICANN Draft Roadmap to Implement SAC 051

Published in 2011:

- [SAC051] SSAC Report on WHOIS Terminology and Structure
- [SAC050] SSAC Advisory on DNS Blocking - Benefits Versus Harms
- [SAC049] DNS Zone Risk Analysis
- [SAC048] SSAC Comment on the Definition of Orphan Glue
- [SAC047] SSAC Comment on the ICANN gTLD Registry Transition Processes Model

2012 Work Plan

Current Work Parties/Working Groups/ Committees

- Membership Committee
- Internationalized Registration Data Working Group (IRD-WG)
- Domain Name System (DNS) Security and Stability Analysis Working Group (DSSA-WG)
- Board DNS Risk Management Framework Working Group
- Impact of DNS Blocking Work Party
- Root Key Rollover Work Party

2012 Work Plan, Cont.

- **Public Meetings and Collaboration**
 - Regular meetings with law enforcement agencies
 - Briefings to Supporting Organizations and Advisory Committees at ICANN meetings
 - Briefings with other community groups as requested
- **Other Work Parties Identified for Future Work:**
 - Public interest (No Fee) Domain Holding Pen
 - Security and Stability Issues Relating to New gTLDs
 - Deployment of IPv6 in addition to IPv4



SSAC Report on Domain Name Registration Data Model

Jim Galvin

What is it?

- The Domain Name Registration Data (DNRD) model is a straw man registration data model for community discussion and consideration and as a basis for further development
 - It takes into consideration existing data requirements from gTLD registrar and registry agreements, escrow agreements, and ongoing work on internationalized registration data requirements, and some ccTLD data requirements.
 - It makes *no policy assertions*.

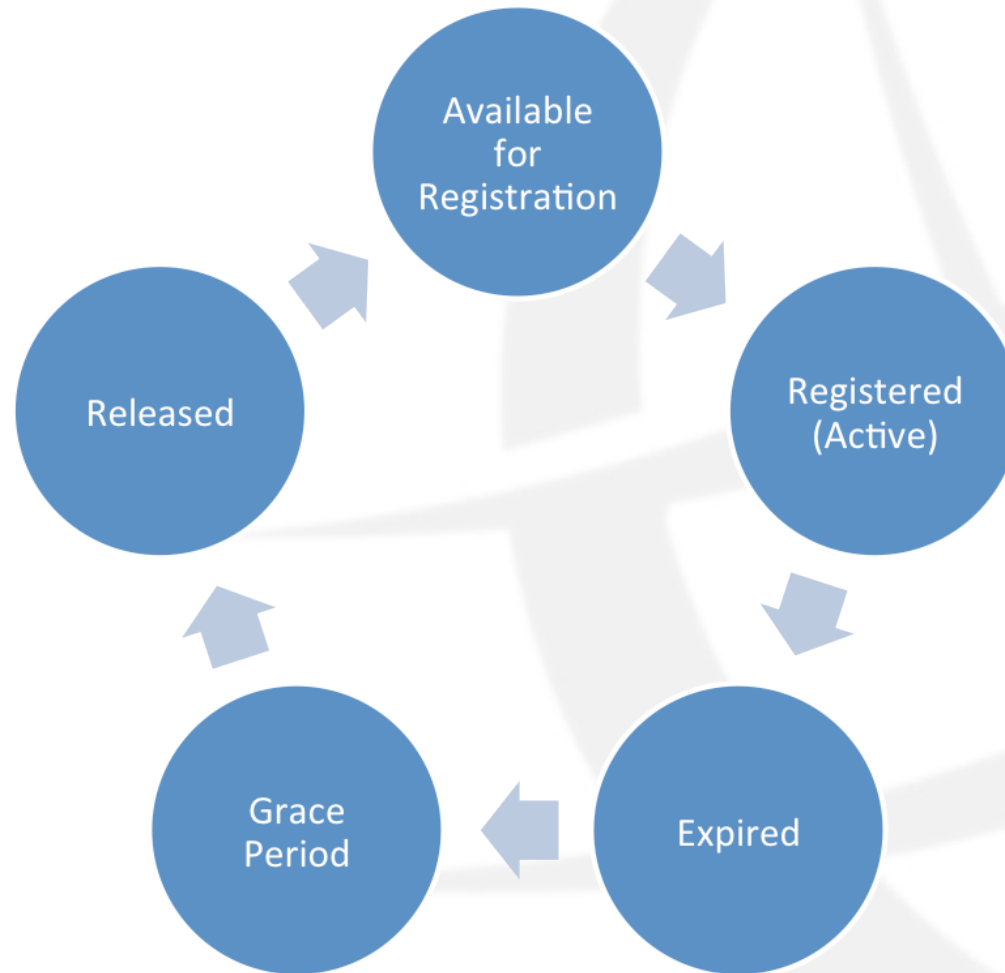
Why it is important?

- There is currently no uniform data model that exists for DNRD and this unduly complicates data submission, handling, exchange, and access
- A standards-based, structured, and extensible data model could:
 - Address the variability in DNRD-DS representation
 - Improve the user experience for internationalized registration data (Final Report of the Internationalized Registration Data Working Group and the WHOIS Review Team Draft Final Report)

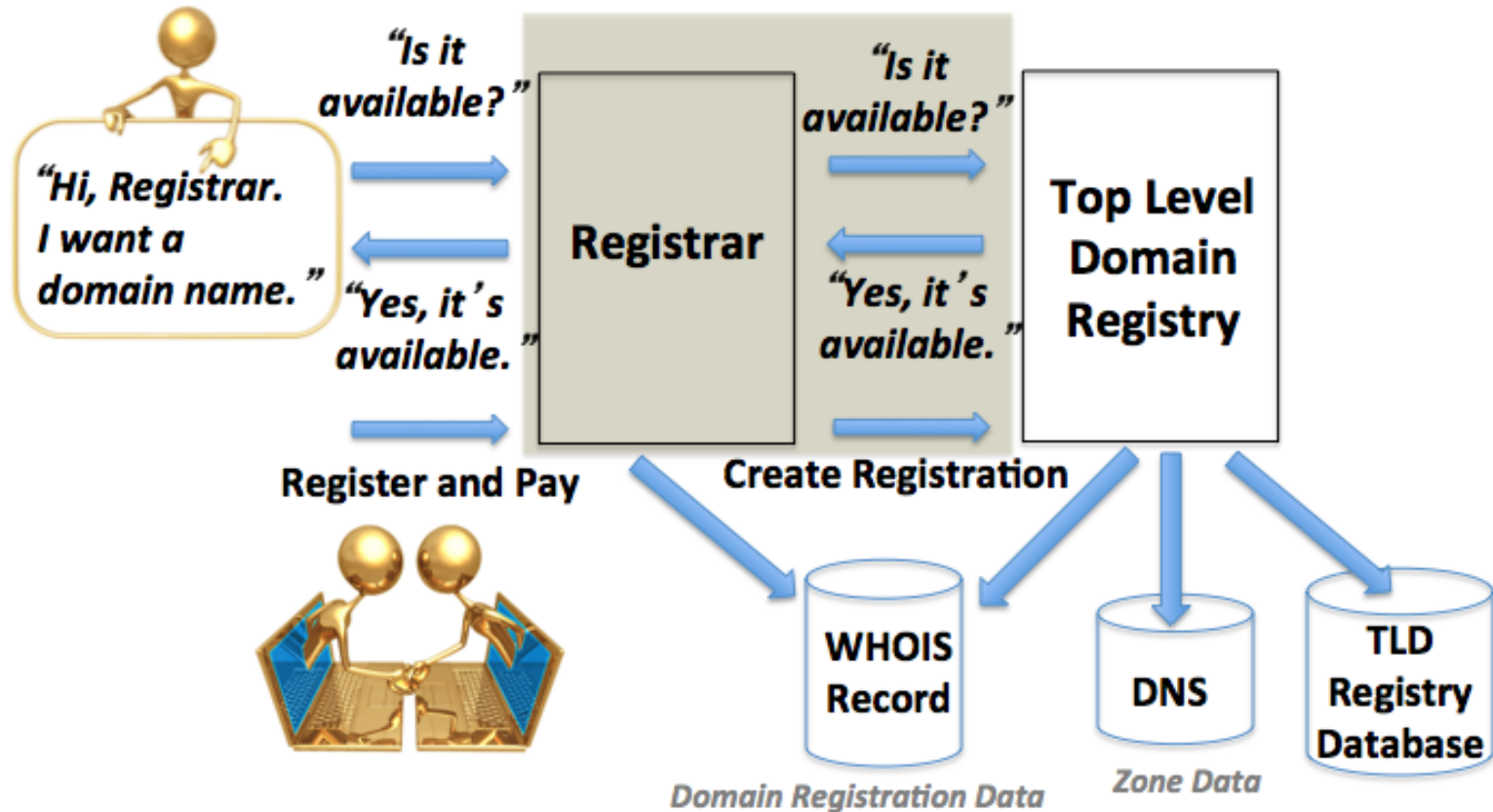
Methodology

- Document the life cycle of a domain name from registration to release
- Enumerate data elements that are needed to support the life cycle

Life Cycle of a typical Domain Name



Life Cycle: Domain Registration



What is the Data Model?

- Enumeration of Data Elements (Descriptive Model)
- Data Profile: implements the data model
 - Detailed Data elements
 - Attributes: format, minimum/maximum length, language tags, cardinality, etc.
 - Profile parameters: Character encoding, mark up language, protocol used to access the data
 - Additional rules
- Relationship: one data model, but could have multiple data profiles (e.g. profile for DNRD-DS, profile for escrow)

Recommendations

- The SSAC invites all ICANN SOs/ACs and in particular registry and registrar stakeholder groups to
 - Consider this data model and comment on its completeness and
 - Comment on the utility of the model in furthering the definition of a directory service for domain name registration data as outlined in SAC 033 and SAC 051.

Potential Issues

The ccTLD and gTLD data models are different. It will be a challenge to harmonize the two models.

Next Steps

- One of WHOIS Review Team's recommendations is for ICANN to convene a working group to determine the data model.
- The SSAC is meeting with community members to explain the model and answer questions.



SSAC Outcomes Implementation Status

Goals

- To understand if the work the SSAC is doing is having the “intended effect”
- To improve SSAC work practices based on measuring outcomes of our existing work

What is the “Intended Effect”?

- Are we providing advice in the areas outlined in the SSAC Charter; and
- Is our advice being used by the ICANN community
 - Supporting Organizations
 - The Board of Directors

SSAC Work Results in Substantive Board Resolutions

- 2003: Message from SSAC to ICANN Board on SiteFinder contributed to the Board Decision on this issue
- 2009:
 - SAC 037 resulted in the creation of joint GNSO-SSAC Working Group on internationalized Registration Data
 - SAC 041 (along with SAC 006, SAC 015, SAC 032) resulted in Board action banning DNS redirection and synthesized DNS responses in new TLDs
- 2010: SAC 045 resulted in changes to the draft applicant guidebook.
- 2011*: SAC 047, 48 resulted in changes to the draft applicant guidebook. *(not through Board resolutions)

Implementation Status

- #1: Create an additional link on the SSAC web site table (document category) showing where each focus area/ category falls in the Charter. **Status: Completed**
- #2: Create a new web page on the SSAC web site tracking actions resulting from SSAC documents published since 2009. **Status: Completed**
- #3: Survey ICANN constituencies (GNSO, CCNSO, ALAC, GAC) to determine if and how they have used our papers to build any of their documents. **Status: In Development**
- #4: Review Google link statistics periodically for each document. **Status: In Development.**

Revised Document Categories including Links to Charter Tasks

SSAC Reports and Advisories | listed according to study category

By Issue Date and Number | By Category and Charter Task

Addressing: Charter Tasks 1 and 2

Report #	Document	Year	Type
SAC043	SSAC Comment on the JAS Report on the IANA Process for Implementing Root Zone Change Requests and on the IANA Explanatory Memoranda	2010	Comment
SAC021	Survey of IPv6 Support Among Commercial Firewalls	2007	Report
SAC012	SSAC Comments to the ICANN Board of Directors on Proposed Global Policy for Allocation of IPv6 Address Space	2006	Comment
SAC004	Securing The Edge	2002	Report

DNS (Domain Name System) Abuse: Charter Tasks 1, 2, and 5

Report #	Document	Year	Type
SAC048	SSAC Comment on the Orphan Glue Records in the Draft Applicant Guidebook	2011	Comment
SAC045	Invalid Top Level Domain Queries at the Root Level of the Domain Name System	2010	Report
SAC041	Recommendation to Prohibit Use of Redirection and Synthesized Responses by New TLDs	2009	Advisory
SAC032	Preliminary Report on DNS Response Modification	2008	Advisory

New link to charter, tasks are listed for each category

Board
ALAC
ASO
ccNSO
GAC
GNSO
IETF
NRO
NomCom
RSSAC
SSAC
Charter
Discussions
Documents
Documents by Category and Charter Task
Presentations
Projects

SSAC Outcomes Table

Publication Title, Date, and Link	Outcomes
SSAC Comment on the ICANN FY13 Budget: Impact on SSAC Productivity (08 June 2012) English [PDF]	Publication
SSAC Comment on the ICANN Draft Roadmap to Implement SAC 051 (05 April 2012) English [PDF]	Publication; See ICANN Community Wiki Board Resolution for additional outcomes
[SAC053]: SSAC Report on Dotless Domains (23 February 2012) English [PDF]	Publication
[SAC052]: SSAC Advisory on Single-Character Internationalized Domain Name Top-Level Domains (31 January 2012) English [PDF]	Publication in response to Board Resolution;
[SAC051]: SSAC Report on WHOIS Terminology and Structure (19 September 2011) English [PDF]	Publication; See ICANN Community Wiki Board Resolution for additional outcomes
[SAC050]: DNS Blocking: Benefits Versus Harms – An Advisory from the Security and Stability Advisory Committee on Blocking of Top Level Domains at the Domain Name System (14 June 2011) English [PDF]	Publication
[SAC048]: SSAC Comment on the Orphan Glue Records in the Draft Applicant Guidebook (12 May 2011) English [PDF]	Publication; Changes to the new gTLD Draft Applicant Guidebook
[SAC047]: SSAC Comment on the ICANN gTLD Registry Transition Processes Model (15 April 2011) English [PDF]	Publication; Changes to the new gTLD Draft Applicant Guidebook
[SAC046]: Report of the Security and Stability Advisory Committee on Root Scaling (6 December 2010) English [PDF]	Publication in response to Board Resolution; See ICANN Community Wiki Board Resolution for additional outcomes
[SAC045]: Invalid Top Level Domain Queries at the Root Level of the Domain Name System (15 November 2010 with corrections) English [PDF]	Publication; See ICANN Community Wiki Board Resolution for additional outcomes
[SAC044]: A Registrant's Guide to Protecting Domain Name Registration Accounts (05 November 2010) English [PDF]	Publication
SAC043]: SSAC Comment on the JAS Report on the IANA Process for Implementing Root Zone Change Requests and on the IANA Explanatory Memoranda (5 October 2010) English [PDF]	Publication
[SAC042]: SSAC Comment on the Root Scaling Study Team Report and the TNO Report (17 December 2009) English [PDF]	Publication in response to Board Resolution; See ICANN Community Wiki Board Resolution for additional outcomes

SSAC Outcomes Detail -- ICANN Community Wiki

2008-02-15 - SSAC Reports on Domain Name Front Running, Fast Flux, DNSSEC, and WHOIS

Added by [Naveed Tahir-Kheji](#), last edited by [Naveed Tahir-Kheji](#) on May 13, 2011 ([view change](#)) [Translate](#) [show comment](#)

- **Category:** gTLDs
- **Topic:** Domain Name Front Running, Fast Flux, DNSSEC, and WHOIS
- **Board meeting date:** 15 February 2008
- **Resolution number:** 2008.02.15.07, 2008.02.15.08
- **URL for Board minutes/resolution:** <http://www.icann.org/en/minutes/resolutions-15feb08.htm>
- **Status:** Completed

Summary

Board accepts five SSAC reports; directs staff to bring the reports to the attention of interested parties; and directs staff to refer the reports' recommendations to ICANN's policy development and operational-planning processes.

Text

Whereas, ICANN's [Security and Stability Advisory Committee](#) (SSAC) has recently published [five important documents](#) including

- (1) a study ([SAC 023](#)) that analyzed the use of WHOIS services by spammers;
- (2) a comprehensive report ([SAC 024](#)) on Domain Name Front Running summarizing SSAC's study of 120 complaints submitted by Internet users;
- (3) a Fast Flux and DNS Advisory Report ([SAC 025](#)) that explains how criminals use botnets to operate illegal web sites, and how they exploit DNS and registration services to make their illegal activities difficult to locate and shut down;
- (4) a statement ([SAC 026](#)) to ICANN and the community identifying actions that are required to accelerate DNSSEC deployment, and
- (5) a comment ([SAC 027](#)) to the GNSO regarding the future of WHOIS.

Questions?

