Implications for Users

• Behavior of DNS for some end users and private networks changes:
  • String that root system once returned NXDOMAIN now resolves; and
  • Resolvers continue recursive resolution with unpredictable results.
Finding

• Any new TLD registry operator may experience unanticipated queries and some TLDs may experience a non-trivial load of unanticipated queries if the label it chooses corresponds to TLDs that have historically seen queries.
Recommendations

1. Promote a general awareness of the potential problem:
   - Study invalid TLD query data at the root level of the DNS; and
   - Encourage hardware and software vendors to fix programming errors causing invalid TLD queries.
2. Prohibit the delegation of certain TLD strings as per RFC 2606:
   • Coordinate with Internet community (e.g., IAB) to define criteria for expanding prohibited strings in successors to RF2606.
SSAC Review:
Registry Transition Program

Jim Galvin,
Afilias
Background, Terminology

Objective of program is to protect registrants by ensuring registry services are operational to the greatest extent possible.

Terminology:

- Registry operator
- Emergency registry operator
- Successor registry operator
Critical Registry Functions

• Transition processes must consider:
  • DNS Resolution;
  • Properly signed zone (when DNSSEC present);
  • Shared Registry System (SRS), usually via EPP;
  • Registration data publication service, usually via WHOIS; and
  • Registry Data Escrow.
Questions the SSAC is Studying

- What does it mean to protect the registrant?
- What is the risk being addressed?
- What are the priorities for a transition?
  - DNS resolution services are critical;
  - DNSSEC operations are critical;
  - NS changes may be critical;
  - Changes to existing registration data are less important; and
  - Creating and deleting domain names are less important.
What Triggers a Transition?

- What exactly is downtime?
- What is the threshold for an emergency?
- Why are all existing triggers technical?
  - Business triggers could be considered as part of contractual relationship (perhaps an audit).
What Is The Basis for a Transition?

• Do all registries need to be saved?
• What if the decision is wrong? How do you stop it? How do you appeal?
• What is the process for acting on an emergency when delay is intolerable?
Questions Relating to Processes

- Process seems to suggest existing operator is excluded once transitioned away.
- Can critical functions be transitioned separately?
- Can we distinguish levels of harm and use that to drive priorities?
Questions Regarding Emergency Operators

- Emergency operators are not permitted to accept billable transactions:
  - Need for exceptions to act on security incidents, orders from law enforcement, etc.
- Should there be a regular audit of successor and emergency registry operators?
  - Need to ensure they continue to have available the infrastructure necessary if needed?
Affect of Transition on DNSSEC

• There must be a lower bound on signature lifetimes and related values to ensure time transition.
• Need a key rollover when registry operator is changed.
• Is moving to unsigned during the transition a sensible idea?
Data Escrow?

- Need to audit data escrow for quality.
- Do we need to use the latest escrow deposit or do we audit back to find the best one?
- Is all critical information in the escrow? DNSSEC signing information?
Issue Requiring Further Study

- Should have a testing process with a full failover except that the NS record is not changed.
- Restoring DNS resolution services needs to be the number one priority, but this requires DNS zone files to be escrowed separately.
- Registrant must keep the name during transition; need to check lock-down.
Next Steps for the SSAC

• The SSAC Work Party will prepare a report;
• The SSAC members will review the report; and
• The goal is to publish the report, if approved by the SSAC, prior to the March 2011 ICANN meeting.
Internationalized Registration Data Working Group (IRD-WG) Interim Report

Steve Sheng, ICANN
IRD-WG Objectives

• How to internationalize domain registration data?
• How to specify how to internationalize the WHOIS protocol?
Issues Discussed So Far

• Is the WHOIS Protocol Able To Support Internationalized Registration Data?
• Capabilities Needed for Directory Services in the IDN Environment.
• Query and Display of IDN variants.
• Models to internationalize contact data.
Recent Developments & Next Steps

• Interim report published in 6 UN languages for public comment: http://www.icann.org/en/public-comment/#ird;

• Public session in Cartagena on 09 December, 9:30-11:00 am, Barahona 3: http://cartagena39.icann.org/node/15309;

• IRD-WG will review comments and deliberate on the models for internationalizing registration data;

• Discuss remaining issues; and

• IRD-WG Issues final report.
Implementation of SSAC Improvements

Steve Crocker, Chair, SSAC
Background

• 2009:
  • ICANN Board appointed an SSAC Review Working Group (WG);
  • SSAC review WG engaged in extensive consultations with the community and produced a draft report on 18 Sept 2009 followed by a Public Comment period; and
• 29 Jan 2010: The SSAC review WG released its final report.
SSAC Review WG Report

Highlights

• Maintain fundamental identity;
• Plan for and publish activities;
• Adopt a confidentiality policy.
• Appoint members for 3-year renewable, staggered terms;
• Remove task area one in the SSAC Charter; and
• Establish procedure to remove disruptive members or Chair.
SSAC Improvements Status

• 16 Nov 2010: SSAC published Operational Procedures that implement most recommendations;

• 05 Aug 2010: Board approved ICANN Bylaws changes for SSAC member terms to be staggered with roughly 1/3 of the terms up for renewal each year; and
SSAC Improvements Status

• 10 Dec 2010: Board may vote on Bylaws changes to remove task area one from the SSAC charter and disruptive or underperforming members or Chair.
Thank You and Questions