Program Committee

• Markus Travaille, SIDN
• Simon McCalla, Nominet
• Russ Mundy, Cobham
• Steve Crocker, Shinkuro, Inc.
• Julie Hedlund, ICANN
Agenda

1. Capsule View of Deployment:
   Steve Crocker, Co-Chair, DNSSEC Deployment Initiative

2. Panel Discussion: DNSSEC Adoption -- Best Practices on the Stimulation of the Deployment of DNSSEC in ccTLD and gTLD’s
   Moderator: Markus Travaille, SIDN; Panelists: James Bladel, GoDaddy; Matt Mansell, Mesh Digital/Domain Monster; Pavel Tuma, CZ.NIC; Lance Wolak, Public Interest Registry; and Chris Wright, AusRegistry
Agenda, Cont.

3. Incidents and Responses: Roy Arends, Nominet UK
4. DNSSEC Lessons Learned: Roland van Rijswijk, SURFnet
5. DNSSEC Tool Development:
   • Open Source Tools, Russ Mundy, Co-Chair, DNSSEC Deployment Initiative
   • DNSSEC for Humans, João Damas, Internet Systems Corporation (ISC)

Moderator: Simon McCalla, Nominet UK; Panelists: Ondrej Filip, CZ NIC; Matt Larson, VeriSign; Richard Lamb, ICANN; Ram Mohan, Afilias; Rickard Bellgrim, Internet Infrastructure Foundation (.SE); João Damas, Internet Systems Corporation (ISC)
Agenda, Cont.

8. ISP Validation and Capability: Preparing for and Rolling Out DNSSEC: Jason Livingood, Comcast

9. Activities from the Region: Erick Iriarte Ahon, LACTLD; Ram Mohan, Afilias; Frederico Neves, NIC.br
Capsule View of Deployment
ccTLD DNSSEC Deployment
Mar 2010 through Dec 2011

Steve Crocker
Co-Chair, DNSSEC Deployment Initiative
ccTLD DNSSEC Adoption

Mar '10 Jun '10 Sep '10 Dec '10 Dec '11
Measurement of DNSSEC Uptake
Steve Crocker
Co-Chair, DNSSEC Deployment Initiative
Tracking DNSSEC Uptake

• TLDs are getting signed
• Registrars and Registrants – still very early
• Resolver software – reasonably good
• Resolvers in the field – early days
• Telia in Sweden, Comcast in the U.S. are leaders
• Actual Validation – very early days
Actual Validation

• A number resolvers are automatically requesting signed responses.
• Only some of the answers are actually validated.
• From the authoritative name server’s perspective, is there a way to tell which requests for signed answers are likely to be actually validated?
• Yes. Look at the requests for the keys.
Measuring Requests for Keys

• Need regular measurement in place in multiple places. This is in progress in multiple TLDs.

• Shinkuro working with PIR & Afilias re .ORG.

• The following slides show fraction of total queries and answers that are for keys.
  • Multiple locations, a couple of samples from each.
  • Each sample is 30 to 40 minutes, tens of millions of queries.
“Results”

• DNS key queries are in the range of 1/100 of 1% or less.
• Some variation with geography.
• Measurable changes over time.
• Actual usage is obviously quite small, BUT
• There is actual usage and it’s measurable.
Responses containing org DNSKEY

- yyz
- sea
- mia
- hkg
- ams
Onward!
Panel Discussion
DNSSEC Adoption -- Best Practices on the Stimulation of the Deployment of DNSSEC in ccTLD and gTLD’s

Markus Travaille, SIDN, Moderator
Topics for Discussion

1. Demand for DNSSEC domains from domain owners
   • Benefits for domain owners?
   • How to market these benefits and create a business case?

2. Visibility of DNSSEC for internet users
   • How to improve this?
   • Role of software vendors?

3. Business case for DNSSEC validation
   • Tools to reduce complexity?
   • How to avoid unnecessary support calls?
   • Validation at the client as a solution?
Incidents and Responses
Roy Arends, Nominet UK
DNSSEC Lessons Learned
Roland van Rijswijk, SURFnet
DNSSEC Tool
Development: Open Source Tools
Russ Mundy, Co-Chair
DNSSEC Deployment Initiative
DNSSEC Tool Development: DNSSEC for Humans
João Damas, ISC
Panel Discussion
DNSSEC Implementation Approaches -- Experiences and Best Practices on the Variety of DNSSEC Deployments Around the World

Simon McCalla, Nominet UK
Moderator
Topics for Discussion

The panelists will debate and discuss four key questions, the various merits of each approach, and how these might apply to different sized organizations and their position in the DNSSEC ‘chain of trust’:

1. What is the high-level design of your DNSSEC implementation (tools & technologies)?
2. How did you implement and introduce DNSSEC into your live environment?
3. What were the challenges you faced during implementation?
4. What were the lessons you learned from the experience?
ISP Validation and Capability: Preparing for and Rolling Out DNSSEC

Jason Livingood
Comcast
Activities from the Region

Erick Iriarte Ahon, LACTLD
Ram Mohan, Afilias
Frederico Neves, NIC.br
Thank you and questions