RSSAC 31 - Dublin Ireland - 27 July 2008

notes: Matt Larson & Daniel Karrenberg

#### Attendees:

Anand Buddhdev
Jeff Herman
Matt Larson
Susanne Woolf
Daniel Karrenberg
Mark Kosters
Barbara Roseman
Gerry Sneeringer
Steve Crocker
Jun Murai

## Agenda

- 1. Welcome / Introductions (All)
- 2. Additional NS records for root-servers.net (Anand)
- 3. New TLDs sizing (Suzanne)
- 4. Fate of old root server prefixes (Suzanne)
- 5. VeriSign's DNSSEC root implementation update (Matt)
- 6. CAIDA update
- 7. DNSSEC readiness update (All operators)
- 8. Anycast & IPv6 status (All operators)
- 9. AOB
- 2. \* Add NS records for root-servers.net
- Barbara suggests a recommendation from RSSAC to ICANN asking that IANA do the implementation.
- Daniel and Anand to draft a recommendation and send to the RSSAC list.

Anand: we observe AAAA query storms to root name servers for root-servers.net RRs, the servers affected are those listed in the NS RRset for root-servers.net.

Proposal: add the remaining root name servers to the NS RRset for root-servers.net. We would like RSSAC to take it from here, e.g. recommend this step to ICANN/IANA.

Matt: This change would have to go through the same process that root zone changes go through. A statement from RSSAC recommending this would be useful. Barbara: RSSAC statement useful. Very careful coordination.

### Discussion.

Conclusion: no objections to move forward, Anand will draft a request and send to the list, including a summary of Piet Barber's analysis.

# 3. \* New TLDs impact to the root zone (Suzanne)

ICANN has taken action on GNSO policies regarding new gTLDs. Potentially there could be a significant number of new TLDs authorized. ... RSSAC has provided input on this in the past. Given that this very public step was taken Suzanne asks whether RSSAC has any more advice or statements on this issue.

Barbara: this has been studied in terms of the IANA processes. IANA anticipates any large number of additions will cause more updates to the zone information; i.e. there will be a lot more changes than have previously processed at any one time. This is mainly a management problem.

Daniel: some root name server operators are not concerned and request ICANN/IANA to be kept informed closely on developments and be asked to confirm that they can deal with the order of magnitude.

Barbara: likely to occur at same time as IDN TLDs. timeline: RFP beginning of 2009, indication of demand shortly after that. Expectation is that more information will be available by March 2009. Additions expected in 2009 but not before mid 2009.

discussion on different tracks for IDN TLDs .... rules for those still in the air, [discussion mainly FYI]

### Discussion:

Suzanne: have been asked more questions lately because people have made a big public fuss about ICANN board of directors going forward with new TLD policy in Paris. Another step along a multi-year path. Not clear how many new TLDs will be involved. Main point has been to automate and mechanize and make less of a "beauty contest" than in the past.

Process to date has been careful to take technical considerations into account. Have asked different constituencies how many is too many, how much is too much. Given that this very public step has been taken recently, if RSSAC has any comments to provide, now would be a good time.

Barbara Roseman: We've looked at this from a resource point of view--will there be significant impact to IANA? Biggest impact will be in first round, because there will be pressure to have everything go live at the same time in the root. Mostly a management issue, not a technical issue. We anticipate that with any large number of additions--even 20-50--there will be a significant increase in the number of day-to-day updates to the zone. Operationally it's not a big deal, but we don't know what kind of stability issues.

Matt: What stability issues?

Barbara: A lot more changes than we've implemented at any one time. But, we often do big updates. It's not unprecedented to have a lot of updates, just unusual.

Daniel: Some Root ops have said in the past that we don't foreseen any problems for a moderate number of additions, but we would like to be kept informed about what's going on. Obviously once the orders of magnitude become clear in the ICANN process, would be good to get communication from ICANN in the spirit of good communication and cooperation.

Barbara: It's anticipated that many of these TLDs are likely to include IDN TLDs. The goal is to not introduce new gTLDs unless we can introduce IDN TLDs at the same time for equity issues. It's likely we'll have a lot of cooperation.

Suzanne: What is the timeline for when people expect that to be clearer?

Barbara: Draft of RFP meant to be posted by the end of this calendar year. Actual adopted RFP in Q1 2009. Some sense in number of applicants shortly after that. Around March IETF meeting, we will have some information, but I don't know how solid.

Daniel: Is the intention to have a fairly mechanical process? Shorter timeline than what we're used to?

Barbara: First time, maybe not, but still shorter. The idea is to have a more routinized process, not a more mechanized or automated process. Might not move more quickly in the decision-making state, but more quickly in the implementation stage. Likely to happen in 2009.

Jun: Clarify IDN relationship?

Barbara: Two IDN tracks being discussed. One for ccTLDs who want an IDN version of the domain. On a "fast track". Second track is part of new gTLDs, will accept IDN TLDs as regular applications. Likely to see ccTLD and gTLD IDNs at the same time. Rules not complete. IDN TLD expansion is dependent on results of IDNA in this meeting. Won't do new gTLD track until IDN track is absolutely established.

Suzanne: What I'm hearing is that all that RSSAC can say is that we know progress to date and look forward to being kept up to date.

- Suzanne will report this discussion to ICANN in her capacity as our liaison. She will circulate the exact wording on the mailing list before proceeding.
- 4. \* Old/retired root name server addresses
- \* Fate of retired root server prefixes

Based on an incident earlier this year, it's raised a question about what happens to old prefixes.

Daniel: I recall that RSSAC issued a recommendation for old addresses that called for not answering queries.

Mark Kosters: That was not a unanimous position of RSSAC.

Steve: There's an SSAC report on a similar topic of old addresses.

Mark Kosters: I disagreed with turning off DNS service. We have no idea as a community why those old IP addresses are still getting traffic. We need to figure out what is going on before we turn these things off.

Could there be a tipping point where people "zero in" and cause some sort of meltdown? That's a worst-case solution. But we don't know the cause and resources to figure it out.

Barbara: Would be helpful if the root operators themselves could reach a consensus about the intended use of former root server prefixes.

Steve Crocker: I've gotten comments asking if doesn't this scenario represent a very serious governance issue? Background question is, is the machinery capable of dealing with the issue?

Discussion.

Gerry: I see moving D out of 128.8/16 to a dedicated allocation adds stability D will never be anycast as is.

Conclusion: Tacit agreement that RSSAC should make a recommendation in order to reduce governance FUD. Suzanne volunteered to draft something and send it around to the list.

11. aob (interlude ;-)

Matt reports that the root name server operators will make root-servers.ORG SSL hardened by accepting donation of a CERT by VSGN. 5. \* VeriSign's DNSSEC root implementation update (Matt) There is now a signed root zone created by VSGN https://webroot.verisignlabs.com/ has the details and the trust anchor. 6. skipped 7. operational update (All operators) Α DNSSEC: yes anycast: not currently anycasted, small scale anycasting planned IPv6: @ 2 sites B not present C not present D D: DNSsec Ready; Anycast thoughts, but renumbering comes first; v6 connectivity to be addressed when we do the v4 renumbering E not present DNSSEC: yes Anycast: 2 more nodes added, 44 total Turned up V6 at any location with connectivity, 18 sites G DNSSEC: yes Anycast: nothing today, but plans 5 sites by end of 2008 IPv6: no info, not anytime soon Η H: DNSSEC ready, anycast investigating, IPv6 since 2001 Ι DNSSEC: yes Anycast: added 1 or 2 sites since last meeting: Qatar,

Colombo, Sri Lanka IPv6: Trying. Native IPv6 provider has operational issues, expect real soon now. J DNSSEC: yes Anycast: added 10 sites since last mtg, total 51 IPv6: 2 sites K DNSSEC capable 17 instances, 5 global, rest local 7 IPv6 instances, 2 global  $\mathbf{L}$ DNSSEC ready no addtl instances, 2 total both ready IPv6 but not connected Μ DNSSEC ready, (not NSEC3) no addl instances, 6 clusters in 4 cities IPv6: 4 clusters IPv6 connected, 1 (Seoul) happening soon Crocker asks: is NSEC3 critical at root level? short answer: no

Next meeting Sunday before Minneapolis. Matt in charge of local arrangements.

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