

## **RSSAC Caucus Meeting Notes at IETF98**

26 March 2017 | 15:30 - 17:00 CDT 20:30 - 22:00 UTC

Chicago, USA

### **Attendance**

Jaap Akkerhuis

Roy Arends

Ray Bellis

Ramanou Biauou

John Bond

Bruce Crabill

Brian Dickson

Michael Elkins

Wes Hardaker

Ashley Heineman

Paul Hoffman

Hiro Hotta

Shumon Huque

Kevin Jones

Howard Kash

Akira Kato

Lars-Johan Liman

Declan Ma

Terry Manderson

George Michaelson

Keith Mitchell

Russ Mundy

Rao Naveed Bin Rais

Colin Petrie

Kaveh Ranjbar

Karl Reuss

Shinta Sato

Yuji Sekiya

Arturo Servin

Davey Song

Ondřej Surý

Brad Verd

Paul Vixie

Matt Weinberg

Duane Wessels

Kevin Wright

ICANN Staff:  
Andrew McConachie  
Kathy Schnitt  
Steve Sheng  
Carlos Reyes

### **Call to Order**

Brad Verd called the meeting to order at 15:30 CDT.

### **Welcome and Introductions**

Member of the Caucus introduced themselves (names and affiliations) to each other.

### **Review Agenda**

Brad Verd reviewed the agenda. No additions were suggested.

### **Caucus Engagement**

Brad reviewed the Cadence of RSSAC Caucus meetings (every even numbered IETF and every ICANN Annual General Meeting). He sought feedback from RSSAC Caucus whether this is a good pace. No feedback was given.

### **October 2016 Workshop**

Brad Verd gave an update on the RSSAC workshop occurring at University of Maryland in September 2016. The workshop report is published as RSSAC025.<sup>1</sup>

### **Recent Publications**

*History of the Root Server System (RSSAC023)*.<sup>2</sup> This document includes a chronological history of the development the root server system, from its beginning in the 80s to present day. It is a very nice read. If you have not read it.

*Key Technical Elements of Potential Root Operators (RSSAC024)*.<sup>3</sup> The key technical element describes as a starting point the technical requirements a potential root server operator has to meet. There are five categories in addition to RSSAC001 and RFC7720. They are design, experience and networking, diversity, documentation, and miscellaneous. This is one piece in a larger picture of working on root server system evolution.

*RSSAC Lexicon (RSSAC026)*: The purpose of this document is to increase the understanding of terms used commonly when discussing the root server system to the broader ICANN community. It is meant to be living document.

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<sup>1</sup> See <https://www.icann.org/en/system/files/files/rssac-025-04nov16-en.pdf>.

<sup>2</sup> See <https://www.icann.org/en/system/files/files/rssac-023-04nov16-en.pdf>.

<sup>3</sup> See <https://www.icann.org/en/system/files/files/rssac-024-04nov16-en.pdf>.

Paul: I am wearing my head as author of the DNSOP terminology document. This RSSAC document contains a bunch of very useful terms that is not defined in the terminology document. It also has no conflicts with the DNSOP terminology document. I have suggested to DNSOP that if people like this document that we could pull in those terms directly so that they all appear in the document, or we could at least point to the document. One thing worries me is that this is a living document?

Brad: What I mean by living document is that there may be new terms added to the document.

Paul: OK, I am less worried about that if the definition of the existing terms are not changed. If people like that idea, please voice it on DNSOP.

### **Update from Membership Committee**

Matt Weinberg provided an update from the membership committee that comprised of Paul Vixie, Jim Martin and myself. One of the questions the membership committee have is what criteria we should use to evaluate the caucus applications. We developed three. They are 1) DNS Community experience, 2) DNS knowledge, meaning operational knowledge of the DNS with focus on root servers, 3) commitment to participate. Finally, we have also developed a criterion for continual membership: participate and a continued desire to participate. We have outlined some of these in a document and will send to the caucus.

The time has come to evaluate whether to have caucus members stay in Caucus in perpetuity or after some time of inactivity, they will be let go.

Brad: Let me add quickly. This goes back to previous Caucus and engagement, we have something like 80 members in the Caucus. We want to make sure everyone is engaged.

Terry M: Thanks, folks. When you do the survey please add a question: "Do you want to be in the Caucus?"

Matt: We will update the RSSAC page to include what I talked about. We had some applications that were incomplete, we want more than that in the future.

**ACTION ITEM: Matt to update the RSSAC webpage regarding caucus requirements and also send it to the caucus.**

### **Document Collaboration Tools**

Steve Sheng presented some thoughts about document collaboration tools. There are two problems staff see:

- First, as the RSSAC Caucus further develops, currently there is no platform for members to find out who is on the caucus, information on the current working

groups (including charter, members, status, latest documents), and information on when / how to join calls and working groups.

- Second, there is ad-hoc platform for working groups / staff to share background papers, test scripts, meeting minutes, action items and versions of the document. Most of these are passed around in emails.

The need is to develop a repository and/or work party collaboration solution for RSSAC Caucus. Some the basic requirements are:

*For The Caucus repository:* should at a minimum be able contain up to date information on

- Caucus members and their statements of interests
- Information on current working groups: charter, members, status, latest version of the document
- Integrated calendar on when and how to join calls
- Information on how to join working groups

*For the work party collaboration solution:* should at a minimum contain

- A shared storage that is accessible by working group members and staff to share background papers, test scripts, teleconference minutes and action items, versions of documents.
- A document collaboration solution to enable effective collaboration on documents.

Brian: Some of the work parties need to test beds or test environments. It would be useful to add this as part of the requirement.

Arturo: This would be very helpful not only to RSSAC Caucus. But to work party members as well, because I had to miss a few meetings for one of the work party, and when I come back I feel many things have happened, and I don't know how to keep track of it or how to find out.

Duane: We have used Google docs for some of the work parties. I am concerned that some of the links can still be accessible, or by other people. Have you given some sense on should these be made available to the whole RSSAC Caucus? To just the work party? To the world?

Steve: My quick thought is the default should be RSSAC Caucus, unless work party wants more (or less) restrictions.

Steve: Are there any volunteers to help staff to 1) refine the requirements a bit, 2) test the tools and be the ones that use the tools? The goal is to develop something quickly instead of a long requirements phase.

<A few raised their hands>

**ACTION ITEM: STAFF to create a mailing list for the volunteers to work on the RSSAC Caucus tools development and begin the work.**

## **Work Parties & Work Products**

### *Root Server Naming Scheme*

John: This doc has been in the works for about a year. We have a doc now, with a lot of good content. We have swayed a bit from the initial ask from RSSAC. So there are a couple of things that we still need to work on. We have a meeting tomorrow, and one on Tuesday. So we can bang out a response to make this doc more useful.

### *Anycast Instances*

Kaveh: The genesis of the anycast instances is RSSAC workshop 2 and 3. There were some questions that the RSSAC had. These 4 questions are: 1) given state of current tech what is maximum latency? this example is to mention the questions are not really as written. Should we even measure latency or not? If not then they will propose something. 2) Will adding more instances make the system more resilient? More instances, and security consequence of more instances. The core is what is the level of cooperation to place instances?

Kaveh: This is Interesting work, and the basis of more future work, if you want to contribute please let me know. We are mostly on track with the work, a call in a week, and a call in another week.

Paul H: I'm on the RSN WP. That was RSSAC asked the Caucus. Is that similar here? Did the RSSAC ask the Caucus to look into this?

Kaveh: Yes, the doc will be sent to Caucus for a first version, after feedback it will be send to the RSSAC.

Paul H: So the intention is to publish this as a RSSAC document?

Kaveh: Yes.

Paul H: That has not been clear in other documents (e.g. the RSN).

Brad: RSSAC the committee wrote the Statement of Work. These were questions from the community or RSSAC. But all the docs will eventually get the Caucus review and be published as RSSAC docs.

Paul H: To be clear, we're at IETF and some of the docs become RFCs, and some do not.

John B: More a comment than a question. I fear it will have the same problems as the RSN WP. Lots of work party members but not many contributors. If you're gonna be on the WP, commit to it.

Brad: That's where some of the questions come from.

Kaveh: I agree with John. In almost all cases, at the end it is 1-2 people that write it and others just wordsmith.

Colin: A question on process, in the IETF new drafts come out. And sometimes these get more attention. Maybe we could do things like that for working groups.

Kaveh: Next week I will send an update to the entire Caucus.

**ACTION ITEM: Kaveh to send an update to the RSSAC Caucus on ancast work party.**

George: About the naming document, there is a quality of question about the naming doc. The question come to, do you like the normative qualities of the doc? But the Caucus doesn't really have that. That's not what the Caucus does. There are people actually asking, what is actually happening? signing, etc. If the doc doesn't have a recommendation, some folks will be critical. I'm not sure there is an answer.

Terry: I wanted to highlight with the RSN. That's a recommendation to the ICANN Board, not to root operators. They will probably pass it to the Root Zone Evolution Review Committee (RZERC), after some Caucus work. Some of the discussions are that the root operators are digging their heels in. I actually kinda disagree, I think it is RSSAC's role in advising the community and the Board on what should be done.

Paul V: I would like to pile on. Root ops are part of RSSAC, which is part of the Caucus, and they have voices and can be heard. This is not a democracy we don't get to vote against the recommendations of the community.

Russ: One thing. The title of the doc is technical considerations of the root server naming scheme. And the thing about people in this room, is they're technical. But in the ICANN world that is not always. There will also be SSAC discussions about the doc, who knows what they will say. There will be other orgs beyond SSAC and RSSAC that will look at the results of this. But this is foundational work, this is the basis, that should drive the technical decisions.

## **Potential Work**

### *Anonymizing Queries and Statistics*

Liman mentioned that for RSSAC002 data collection by the root operators. A number of them are bound by privacy constraints. And the idea that RSSAC should provide advice on that. Maybe in a predictable way. We would actually like to hear from people who

consume the data. If we want to anonymize we want to hear from researchers. Who use the data. What things to think about? etc.

Keith: DNS-OARC is actually about to embark on a survey about DNS privacy and data.

Brad: I hope we can get in alignment with that so as to prevent reinvent of the wheel.

Paul H: You also need to hear from the groups that demand privacy. They are also a bigger driver. Our fear of those people, especially if they have the capability to sue us or throw us in jail. I'm not saying they will understand the technical parts, or be able to do it, but they should be in the conversation as well.

Brian D: One thing about anonymizing the data, is to make sure that the things of variable sizes that the original length be preserved as a separate quantity.

Liman: Please join the WP.

**ACTION: RSSAC finalize the statement of work on *Anonymizing Queries and Statistics* and send to the Caucus.**

#### *How Things Work*

Brad mentioned that another question that RSSAC usually have to spend time to inform people is how things actually work.

#### *Tools (e.g., analyzing RSSAC002 data)*

Wes Hardaker mentioned about some effort going underway for analyzing RSSAC002 data. A Github repo has been set up. The purpose is to promote and reuse of libraries. Wes also mentioned this is not like standard RSSAC Caucus work with defined start and end date. This will be an ongoing effort.

Duane: We had some perl code.

Andrew: I wrote some code with programming language R getting the statistics and draw some graphs.

Duane: Steve talked about storing codes. We have several work party now have codes. This sounds like another place to store code.

Steve: Yes: We can consider the possibility a github to store Caucus Codes by documents.

Keith: DNS-OARC also have a codebase with DNS-OARC.

Wes: Can non-DNS OARC members access the code base or the data for RSSAC002?

Keith: It can certainly have access to the codebase, and also contribute.

**ACTION ITEM: Wes to discuss with Keith about having the git hub repo at DNS-OARC.**

**ACTION ITEM: Staff to look into using github to store other RSSAC Caucus work party codebase.**

### **Call for work**

Brad: Potential additional work coming are: 1) what is the impact of a caching? 2) why 13? 3) What should be SLAs be potential root server operators?

George: Another one is to explore the understanding the MTU, MSS and fragmentation behavior of all instances of the roots, in IPv6 and IPv4.

Paul H: Some data collection to see the impact of various recent protocols. E.g. the impact of qname minimization to queries to the root servers, the other is aggressive NSEC.

Paul V: If the RSSAC002 v3 does not contain enough details that can help answer these questions, we should revise RSSAC002 to v4.

**ACTION ITEM: Staff to keep a running of list of topics suggested by the caucus.**

### **Discuss Previous Work Parties**

Brad asked if there were feedback on previous work parties. What worked, what didn't and needs to be improved.

John said that the RSN work party was the first one that does not have a RSSAC exec member. So we deviated a bit. Terry said that we had a document shepherd for each Caucus work. But clearly that did not work. We are working on fixing it.

### **Any Other Business**

No other business was raised.

### **Adjournment**

The RSSAC Caucus concluded its meeting without objections at 16:57 CDT.