

Name Trip - RSSAC Caucus Sponsored IETF 106 Trip

Traveler's Name - Russ Mundy

Trip Dates - 14 - 23 November 2019

Report Date - 23 December 2019

1. Describe the purpose(s) and outcome(s) of the trip in sufficient detail.

- Purpose: participate in RSSAC Caucus meeting, DNS related IETF Working Groups meetings and engage in related 'hallway discussions' with particular emphasis on how IETF DNS specifications and designs may impact the RSS over time.

- Outcomes: the information bandwidth provided by participating in person in an IETF meeting has the very significant benefit to the Caucus participant and (hopefully) to the Working Groups that the traveler participates in as a result of the two way communications. In addition to the direct interactions with other WG participants, the traveler also is able to better learn how they can be more effective WG participants in the future for both mail list and in person interactions.

2. Describe the details of your attendance and activities, including sessions attended, presentations, and contributions.

Following are the meetings and Working Groups I participated in:

- RSSAC Caucus meeting
- Extensions for Scalable DNS Service Discovery
- Application Behavior Considering DNS
- Domain Name System Operations
- DNS Private Exchange

The full meeting agenda along with links to the materials for the meetings are available here:

<https://datatracker.ietf.org/meeting/106/agenda>

Overall, the majority of presentations and discussions deal with portions of the DNS ecosystem that involve resolver operators and end users rather than operators of authoritative servers such as the RSS.

There is a significant amount of ongoing discussions related to various approaches to broaden and increase the use of encryption of DNS transport mechanisms - this is best exemplified by DoH & DoT protocols but other encrypted transports are also being discussed, e.g., QUIC. At this point, the expected usage scenarios are mostly between end systems and some recursive resolver somewhere on the Internet.

As with many other protocols designed by the IETF, the usage scenarios envisioned by the protocol designers are not followed by either (or both) implementors and deployers in the actual Internet. At this point in time, impacts on the RSS will be minimal from the current privacy activities being discussed in the IETF since they are focused on the end-system/recursive resolver portion of the DNS ecosystem. I see it as a possibility that the RSS might see some variations in query patterns as a secondary impact as end user queries shift from different recursive resolvers than those that they are currently using.

My prognostication for some type of direct impact on the RSS is most likely to result from the Application Behavior Considering DNS discussions. Some of the discussions in the meeting and in some of the Internet-Drafts may result in some additional requirements for authoritative servers. I think that it is also possible that if there are significant changes in end user application requirements and an evolution of requirements for authoritative servers, it is possible that the evolved authoritative requirements might impact the RSS.

3. Explain specific plans for follow-up activities in the RSSAC Caucus to enhance and continue the impact of the trip.

Ongoing participation in IETF WGs and relevant BoFs by RSSAC Caucus members will continue to be important for Caucus members to keep updated on IETF activities and to influence the outcomes of IETF WGs. I currently follow the relevant mail lists and expect to continue to participate in them in the future.

Russ Mundy