Report from the RSSAC April 2019 Workshop

4 June 2019

The Root Server System Advisory Committee (RSSAC) held its seventh workshop from April 23 to 25, 2019, hosted by Verisign, Inc. and supported by the Internet Corporation for Assigned Names and Numbers (ICANN). Twelve root server operator (RSO) organizations, three liaisons to the RSSAC, and four RSSAC Caucus members attended the workshop.

The primary purpose of this workshop was to advance the work of Root Server System (RSS) Metrics Work Party. The RSSAC also discussed several matters related to its proposed governance model for the RSS from RSSAC037. A high-level summary of these activities follows.

RSO Independence

During the ICANN Board workshop in January 2019, the RSSAC Co-Chairs met with the ICANN Board Chair, the ICANN President and CEO, several other ICANN Board members and ICANN executives. The ICANN President and CEO requested advice on what the ICANN community needs to know to preserve RSO independence in any future governance model. The RSSAC has since been developing advice documenting RSO independence from an organizational, financial, architectural and engineering design, network operations and administration perspective.

At the workshop, the RSO Independence document was discussed and editorial comments were received. Comments were integrated into the document and discussed during a second session. Small edits were made and the tone of the document was fine tuned to prepare the document for final review by the end of the workshop. On May 17, the RSSAC published this document as RSSAC042.¹

RSO Funding

A slide deck and the beginnings of a funding model were developed and presented to the RSSAC. The RSSAC also developed funding related questions for each RSO to answer on whether an RSO is capable of or wishes to receive funding.

The discussion about funding for RSOs raised and answered several questions. It became apparent that there will not be a single funding model, but rather many funding models. It also became increasingly obvious that each RSO needs to negotiate their own funding model and Service Level Agreement or Memorandum of Understanding accordingly. The RSSAC hopes to develop a template for multiple funding models to further the financial discussion at ICANN65.

Root Server System Metrics

The RSS Metrics Work Party is tasked with developing a document to define system-wide, externally verifiable metrics which demonstrate that the RSS is online and is serving correct and timely responses to end users. In addition to developing metrics for the RSS, the work party has been asked to define related metrics for individual RSOs that can provide measurements to determine that minimum requirements are being met by individual RSOs.

¹ https://www.icann.org/en/system/files/files/rssac-042-17may19-en.pdf

The workshop provided the opportunity for an extended set of work party meetings that resulted in substantial progress. Although there are many details yet to be discussed and defined, the current set of metrics being considered are latency of responses, availability of responses, correctness of responses, staleness of information, and a derived measure of running capacity.

The set of metrics may change as the work party develops the details, but these metrics currently appear to meet the work party's purpose and could provide useful information to the implementation of RSSAC037 as defined by the ICANN community. The work party aims to complete this assignment by August 2019.

Conclusion

The RSSAC had a productive workshop, and in the near term plans to publish a document on RSO Independence and longer term RSS Metrics once the work from the formal work party is complete. The RSSAC would like to express its gratitude to ICANN for supporting its April 2019 workshop, to Verisign for hosting it, and to all individuals involved for their tireless efforts in making it a success.