

Report from the RSSAC October 2019 Workshop

29 October 2019

The Root Server System Advisory Committee (RSSAC) held its eighth workshop from October 1 to 3, 2019, hosted by Verisign, Inc. and supported by the Internet Corporation for Assigned Names and Numbers (ICANN). Twelve root server operator (RSO) organizations, four liaisons to the RSSAC, four RSSAC Caucus members, and one ICANN research fellow attended the workshop. The RSSAC workshop also featured remote participation to facilitate broader RSSAC Caucus attendance.

The primary purpose of this workshop was to advance the work of the Root Server System (RSS) Metrics Work Party. A high-level summary of these activities follows.

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 resolvers. In addition to developing metrics for the RSS, the work party has been asked to define related metrics that can provide measurements to determine that minimum requirements are being met by individual RSOs.

At the workshop, the participants first discussed and agreed on the general requirements for a measurement system such as the number, location, and connectivity requirements of measurement points, as well as other considerations for a measurement system.

The participants then discussed and refined a set of metrics for individual root servers and the RSS. For individual root servers, these metrics include:

- the availability of a root server over different transports,
- the response latency for a root server over different transports,
- whether or not a root server serves correct responses, and
- the amount of time it takes to publish new versions of the root zone by a root server.

For the RSS, these metrics include:

- the availability of the RSS,
- the response latency of the RSS, and
- the response correctness of the RSS.

For each of the metrics, the participants also reached preliminary agreements on minimum thresholds. Finally, the participants discussed and reached preliminary agreement on a set of recommendations for the document.

Conclusion

The RSSAC looks forward to receiving the report from the RSS Metrics Work Party by the end of 2019. The RSSAC would like to express its gratitude to ICANN for supporting its October 2019 workshop, to Verisign for hosting it, and to all individuals involved for their efforts in making it a success.

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Approved by the RSSAC on 29 October 2019