RSSAC Caucus Statement of Work
for Service Coverage of the Root Server System

07 August, 2018

Background

Since the inception of Anycast, Root Server Operators (RSOs) have struggled with where to best install servers. There are many aspects on the installation process, and there are many groups with varying opinions. The topology of the network is very complex and diverse, and for infrastructure services, international politics cannot be ignored.

The RSOs all have their own strategies for deploying servers, and they all, from time to time, receive criticism for their strategies for not deploying servers in "underserved areas". The term "underserved areas" is not well understood and in order to understand it better, the RSSAC hereby seeks guidance on root zone service coverage from the RSSAC Caucus.

Scope

The RSSAC Caucus Service Coverage Work Party will be asked to research service coverage of root servers within the following scope:

1. Explore the concept of accessibility to the Root Server System (RSS). What indicators, performance factors and coverage define adequate and/or inadequate service by the RSS? What factors influence the risk of service degradation or outage? What are the thresholds that define adequate service?

2. Suggest procedures and/or provide tools that can be used to determine poor service coverage areas, or areas susceptible to high risk of loss of service.

3. Identify poor service coverage areas. Given results from the two previous bullets, the RSSAC would appreciate assistance with identifying actual areas where the current RSS provides insufficient service.

4. Given the results from the full analysis, what recommendations would the RSSAC Caucus provide the RSOs and the Internet community to enhance the service coverage of the RSS.

Deliverable

The final draft of the "RSSACXXX: Considerations on Topological Diversity of Root Name Servers".

Date of Delivery

Final draft submitted to the RSSAC no later than 2019-03-31. Submission prior to the deadline is welcome.

Guidelines

The RSSAC requests that this work party first choose a leader, if the leader is an RSSAC member they will report progress on this work to RSSAC as appropriate. If the work party leader is not an RSSAC member, the work party's shepherd will report on the progress of this work. Lars-Johan Liman has agreed to be the shepherd for this work.

In the event the deadline will not be realized, the work party should inform RSSAC without undue delay and provide details of the work that cannot be completed by the deadline. RSSAC support staff will assist the working party deliberation of the work, including setting up a mailing list for the work party, arranging and supporting regular teleconference calls, taking notes of meetings, drafting background materials of the work, and serving as editors for documents if needed.