



RSSAC and GWG Meeting

Fred Baker, RSSAC Chair | October 8, 2020

List of RSSAC Inputs to the GWG

- RSSAC037: A Proposed Governance Model for the DNS Root Server System (June 2018)
- RSSAC038: RSSAC Advisory on A Proposed Governance Model for the DNS Root Server System (June 2018)
- RSSAC047: RSSAC Advisory on Metrics for the DNS Root Servers and the Root Server System (March 2020)
- RSSAC049: RSSAC Statement on Joining the Empowered Community (April 2020)
- Proposed Memorandum of Understanding & Letter of Intent to GWG (October 2020)

Proposed Memorandum of Understanding & Letter of Intent to GWG

Background

- RSSAC 37/38 envisioned agreements for providing the root service
- In preparation for such eventuality, the root server operators via RSSAC discussed what a starting point would look like
- The RSSAC approved the document on 8 October 2020, and provided it as input to the Root Server System Governance Working Group (RSS GWG)
- The RSSAC expects to continue its dialog with the GWG, the ICANN Community, the ICANN Board and the Internet Architecture Board (IAB)

What did we learn in this process (challenges)

- *Not* all current RSOs would be able to sign contracts
 - Some would be able to sign **Letter of Intent** that specifies the root server operator's responsibilities and commitments without requiring services in return
 - Some would be able to sign **Memorandum of Understanding** that specifies services and commitments of both parties, but short of a contract
 - Some operators would be able to sign **contract**, commit to service levels, and offer additional services
- The RSSAC recommends the GWG and/or subsequent efforts takes such reality of current operators into consideration

What did we learn in this process (challenges)

- Relationship with ICANN
 - ICANN plays two key roles to enable the root server system: as IANA function operator and as root zone administrator (contracting root zone maintainer role to Verisign)
 - At this point, the root server operators do not know who the other signing party is. However, if that party is not ICANN, it is important to ensure ICANN is able and willing to continue these functions and agrees on the new set up (including commitments for funding).
- The RSSAC recommends a detailed legal analysis be conducted on the arrangements. The RSSAC suggested a few options

What did we learn in this process (challenges)

Funding Root Server Operations?

The RSSAC recommends:

1. Funding be made available to operators willing to sign a contract.
2. We assume the contract and funding be individually negotiated.
3. If when the funding becomes unavailable, root servers should continue to provide service, but default to MOU.

Outline of the MOU / LOI

1. Definitions
2. Mutual Understandings
3. Services
4. Service Levels
5. Commitments
6. Term
7. Remediation
8. Termination

Mutual Understandings (Section 2)

- Outlines the goal of the MOU
- Recognizes the root server operator and its functions
- Recognizes ICANN's role as the IANA Functions Operators and as the coordinator for the root zone management

Services (Section 3)

- Specifies the services provided by the Root Server Operator
 - Serves the IANA Root zone and “root-servers.net” zone in a stable and secure fashion without alteration.
 - Comply with relevant technical standards.
- To fill out: services that the Contract Co. provides.

Service Levels (Section 4)

- Specifies service level expectations for Root Server Operator in the areas of availability, response latency, correctness, and publication latency
- As a baseline, Root Server Operators agree to service level expectations defined in RSSAC047 (version 1) and its future revisions
- Additional metrics or higher thresholds may be negotiated with individual operators
- To fill out: What service does the contracting party provide? What are the expectations of those services?

Commitments (Section 5)

From the Root Server Operator:

- Abide by operating principles in RSSAC037
- Participate and collaborate in RSSAC and subsequent evolutionary bodies
- Meet the set of expectations defined in RSSAC documents and RFC 7720
- Comply with and implement published RSSAC advice
- Provide accurate and complete contact information and notify any changes to the contact information
- Share RSSAC002 statistics on non-discriminatory terms

Term (Section 6)

For proper operational planning, and in order to maintain the stability and interoperability of the DNS, the RSSAC recommends:

- Initial term of MOU be at least 60 months
- Automatic renewal under current term
- Term in perpetuity unless terminating conditions are triggered
- Root Server Operators have the option to negotiate new terms 12 months prior to expiration

Remediation (Section 7)

- The Root Server Operator is afforded the opportunity to remediate non-conformity
 - 30 days for falling below MOU/LOI performance
 - 14 calendar days for catastrophic technical shutdown
 - 48 hours for rogue behavior
- The Root Server Operator fails the remediation process if the RSO cannot restore the service within the remediation period or unable to reach an extension with the contracting party

Termination (Section 8)

The RSSAC recommends the Root Server Operator be *removed* from root source files if and when:

- The Root Server Operator voluntarily resigns to provide service and provides at least 120 days of notice of its intent
- The Root Server Operator fails to meet the performance requirements of MOU and failed the remediation process
- The Root Server Operator goes rogue and fails the remediation process
- The Root Server Operator suffers a catastrophic technical shutdown and fails the remediation process