

RSSAC and the Root Server System



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12 March 2019

What is RSSAC?

- The role of the Root Server System Advisory Committee (“RSSAC”) is to advise the ICANN community and Board on matters relating to the operation, administration, security, and integrity of the Internet's Root Server System.
- (This is a very narrow scope!)

- RSSAC is composed of
 - Appointed representatives of the root server operators
 - Alternates to these
 - Liaisons

- RSSAC Caucus
 - Body of volunteer subject matter experts
 - Members confirmed by RSSAC based on statement of interest

Root Zone vs. Root Server System

Root Zone

- The starting point: the list of TLDs and their nameservers
- Managed by ICANN, per community policy
- Compiled & distributed by the Root Zone Maintainer to all root server operators
- The database content in the root servers

Root Server System

- Responds with data from the root zone
- Currently distributed with 13 identities from over 1000 instances at physical locations worldwide
- Purely technical role to serve the root zone
- Responsibility of the root server operators

Definitions

- Root Server System (RSS)
 - The set of root servers that collectively implements the root service.

- Root Zone
 - The DNS zone with no parent at the top of the DNS hierarchy. It contains all information needed to find TLDs.

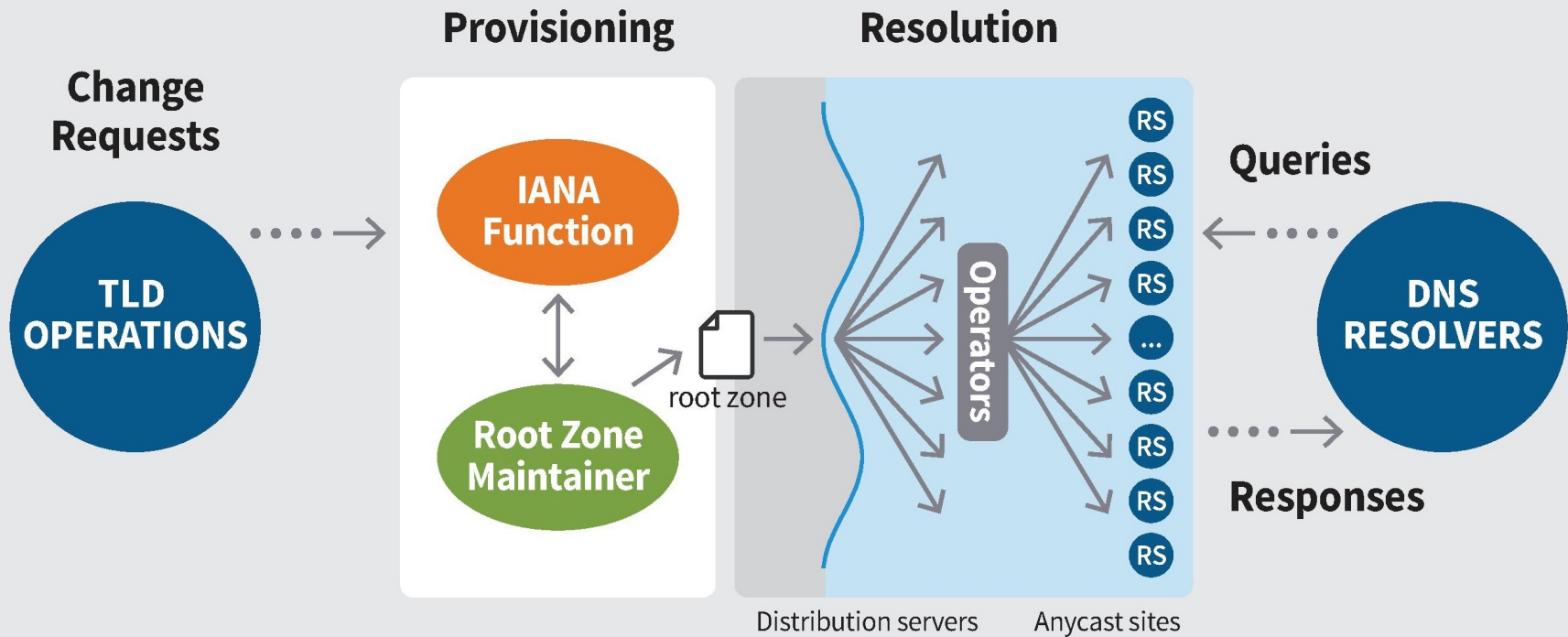
- Root Server Anycast Instance
 - One network location responding to DNS queries on a root server operator's IP address

Definitions (roles)

- Root Zone Administrator (RZA)
 - Organization responsible for managing the data contained within the root zone, which involves assigning the operators of top-level domains and maintaining their technical and administrative details.
- Root Zone Maintainer (RZM)
 - Organization responsible for accepting service data from the root zone administrator, formatting it into zone file format, cryptographically signing it, and distributing it to the root server operators.
- Root Server Operator (RSO)
 - An organization responsible for managing the root service on IP addresses specified in the root zone and the root hints file.

Root Zone Management and Resolution

ROOT ZONE PROVISIONING, DISTRIBUTION, AND RESOLUTION



Questions?

- **For more information on the RSSAC**
- Main webpage
<https://www.icann.org/groups/rssac>
- Frequently Asked Questions
<https://www.icann.org/groups/rssac/faq>
- For general questions
ask-rssac@icann.org

- **For more information on the RSSAC Caucus**
- Main webpage
<https://www.icann.org/groups/rssac-caucus>
- To apply send email to
rssac-membership@icann.org