

Root Zone Management System (RZMS)

January 16, 2017

Major Development in 2017

- **Major rearchitecture.** The core codebase for RZMS is based on early 2000s technology, using frameworks that make it difficult to improve the software. The software team is re-implementing the software in modern frameworks and making the system less monolithic so individual modules can be updated more rapidly.
- **New authorization model.** Removes the tight linkage between the Administrative/Technical Contact's role in being listed as the WHOIS contact for a TLD, and the role of authorizing change requests. This will allow TLDs much more flexibility on managing how changes to their TLD are approved and makes it easier to list customer service helpdesks as contacts in the WHOIS. The new authorizer contact model will also support multi-factor authentication for increased security, and will implement specific changes in the ccNSO's Framework of Interpretation for a new "delegation contact".
- **New technical check system.** By de-coupling the logic of technical checks from the workflow management system, it will allow the technical check system to adapt to new requirements more easily. It will also provide richer feedback to customers on what has failed in their TLD's configuration and how to remedy problems.
- **Customer API.** Providing customers with API-access to submit root zone change requests and manage their accounts. This is a growing requirement as some TLD operators manage portfolios of hundreds of domains, and submitting the change requests individually can be burdensome. An API allows either customers to build their own tools, or us to provide customers with specific tools for unique circumstances.
- **Implement TLD deletion workflow.** Currently deleting a TLD (due to retirement or revocation) is performed manually out-of-band. Under the RZMA agreement with Verisign we are obligated to communicate these via EPP by 1 October 2017. This is envisaged by implementing TLD delegation capability in RZMS similar to how TLD creation and maintenance is performed.
- **New internal admin interface.** By taking the experience of staff from the existing RZMS deployment, the interface is being redesigned to simplify workflows and reduce time it takes for staff to perform common actions.

High level Timeline for 2017 improvements

- 2017Q1 — Reimplementing existing functionality in v3 platform. Initial work on defining new authorization model.

- 2017Q2 — Implement new authorization model and TLD delegation workflow.
- 2017Q3 — Implement Customer API and technical check system. Commence integration testing.
- 2017Q4 — Continue testing and deployment.