Public Comment Summary Report

Review of the Registry System Testing 2.0 Test Specifications and API

Open for Submissions Date:
Tuesday, 26 March 2024

Closed for Submissions Date:
Monday, 06 May 2024

Summary Report Due Date:
Friday, 31 May 2024

Category: Technical

Requester: ICANN org

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Open Proceeding Link: https://www.icann.org/en/public-comment/proceeding/review-of-the-registry-system-testing-20-test-specifications-and-api-26-03-2024

Outcome:
Only one submission was received, from the Registry Stakeholder Group (RySG). The submission responded in the affirmative to the questions we asked respondents to answer about the implementability of the RST-API and the coverage level of the RST test specs.

The RySG asked ICANN to consider providing an Operational Testing & Evaluation (OT&E) environment for RST v2.0 (which ICANN org already plans to offer) and also asked for clarification on how RST v2.0 would handle testing of Internationalized Domain Names (IDNs) under potential different IDN rules / policies. ICANN org plans to amend the test specifications to provide this clarification in the near future.

Section 1: What We Received Input On

For the Registry System Testing (RST) API specification, we requested commenters to review the API endpoints and JavaScript Object Notation (JSON) schemas that define request and response bodies, and assess whether these:
   a. can be implemented using typical programming languages, libraries, and toolchains;
   b. are concise representations of the data elements that must be communicated between ICANN and test subjects;
   c. implement all the functionality that test subjects will need to efficiently carry out RST testing, whether for evaluation of Registry Service Providers (RSP); evaluation of new gTLDs in pre-delegation testing (PDT) of the New gTLD Program: Next Round, or in day-to-day operations (e.g., material subcontracting arrangement change).

For RST test specifications, we requested that commenters review the individual test plans, test suites, and test cases, and assess whether:

a. the level of coverage was appropriate, i.e., all major aspects of the Critical Function (as identified in Section 6 of Specification 10) of the [ICANN Registry Agreement as approved by the Board 21 January 2024](#), [Internationalized Domain Names](#) and [Registration Validation per Applicable Law with Proxy](#) were tested, and that irrelevant or inappropriate aspects were not tested;
b. the input parameters specified for each suite or test were appropriate and sufficient to allow a test to be carried out;
c. the error codes defined for each test case covered all possible error conditions, were comprehensible and actionable, and had an appropriate severity level.

Section 2: Submissions

Only a single submission was received from the **Registries Stakeholder Group (RySG)**.

Section 3: Summary of Submissions

The RySG submission suggested clarification on two topics.

The first related to the RST API and requested that ICANN org include "*an OT&E test environment with the API interface in order to fully assess and determine if the code suggested is properly reflecting the recommendations of the SubPro PDP Final Report. The API is a description of the interface, not the code itself, and it cannot explain in full what is done and if it was done according to the requirements.*"

The second related to Internationalized Domain Names (IDNs) and suggested that ICANN org include "*clarification on how to address the case for TLDs operating under IDN rules / policies that precede the Final Report on the new gTLD Subsequent Procedures Policy Development Process.*"

Section 4: Analysis of Submissions

1. OT&E environment for the RST API

ICANN org plans to offer an OT&E environment for the RST-API that will be available soon. The RST-API specification describes how the OT&E environment will differ from production. For example, in OT&E, test subjects will be able to create test request objects themselves; in production, only ICANN org can create test requests.

Details of the OT&E environment were most recently presented to the community at the Contracted Parties Summit in Paris on May 8, 2024. A recording and transcript of the presentation may be found at the following URL:

● https://cpsummit2024.sched.com/event/1cfa8/rst-20rsp-evaluation

Once the OT&E environment is available, details of how interested parties can request onboarding will be emailed to the gtld-tech mailing list.

2. Internationalized Domain Names

While IDN testing is automated, generation of the set of second-level domain test labels (specified by the idnTestLabels object type in the RST-API spec) for performing these tests is not (although for Reference Second-Level LGRs, these are pre-computed and then reused), allowing for the set of test labels to be customized in accordance with the appropriate policy.

The JSON syntax for the idnTestLabels object type permits the testing of a registry's IDN implementation under legacy policy requirements that may be different from policy requirements applying to gTLDs in the next round of applications. However, this is not explicitly described in the text of the specification, so ICANN org will consider adding text to provide this clarity.

Section 5: Next Steps

ICANN org will continue to work toward making the OT&E system available to interested parties and provide notice of its availability as described above.

A clarification as to how TLDs under legacy IDN policies will be tested will be included in a future update to the RST-API specification.

ICANN org continues to welcome feedback and suggestions in relation to the RST-API spec and RST v2.0 test specifications via GitHub. Interested parties are encouraged to submit issues via the issue trackers for the respective repositories or submit pull requests.

- RST-API spec: https://github.com/icann/rst-api-spec
- RST v2.0 test specification: https://github.com/icann/rst-test-specs