Registry System Testing

SRS Gateway Test Plan

Version A~~A~~B

Document control

Document information and security

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Revisions

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2017-07-27	A	Mats Dufberg	First release version.
2021-06-10	B	Mauro Lozano	Update references.

LIST OF CONTENTS

1.   Introduction

This document defines an SRS Gateway Test within the Registry System Testing framework.

1.1   Background

An SRS Gateway service is a Shared Registry System implementation that acts as a proxy between a subset of Registrars and the Registry. It uses a local cache to speed up EPP query commands, but forwards all EPP transform commands to the TLD Registry System. TLD registries need to deploy a proxy setup in order to operate in certain markets worldwide.

1.2   Purpose

The purpose of an SRS Gateway Test is to verify that the Registry Operator's proxy setup operates in accordance with the technical and operational criteria for EPP systems described in the gTLD Applicant Guidebook (AGB). Furthermore, it must keep its own database synchronized with that of the TLD registry.

1.3   Scope

Only the test cases listed in this document will be included in an SRS Gateway Test. For details about a test case, refer to the relevant Test Area Specification document.

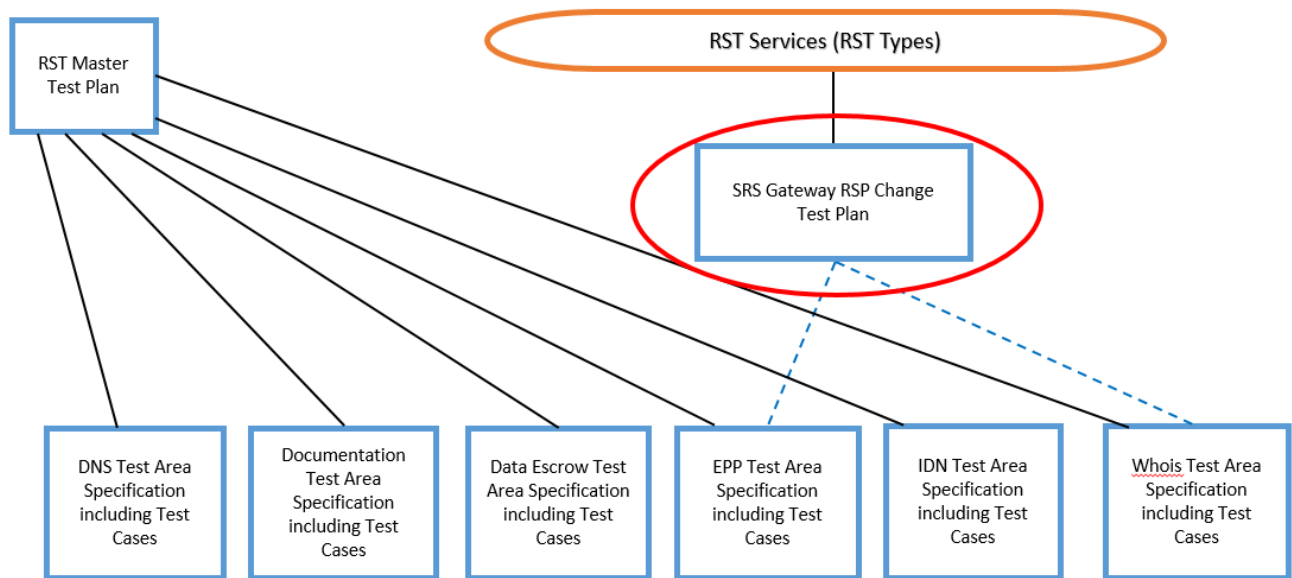## 1.4   References

1.4.1   External

- IEEE 829-2008
- ICANN gTLD Applicant Guidebook, Version 2012-06-04

1.4.2   Internal

- ~~Pre-Delegation Testing, Statement of Work~~
- ~~SRS Gateway Testing, Statement of Work~~
- RST Master Test Plan
- Registry System Testing, Whois Test Area Specification
- Registry System Testing, EPP Test Area Specification

1.4.3 Document Hierarchy

This document is one of many that specifies the Test Plan for a specific RST Type (circled in red in the above graphic).

1.5 Test overview

An SRS Gateway Test consists of three distinct phases. In the first phase, a set of standard EPP transform commands are sent to the TLD Registry System, to ensure that it operates correctly. Second, the same set of transform commands are sent to the Gateway proxy, and it is verified that all changes are propagated to the TLD Registry System through EPP INFO commands to both systems (Gateway proxy and TLD Registry System, respectively).

Finally, a series of whois queries are sent to both the TLD Registry System and the Gateway proxy, and the answers are compared.

All tests of the SRS Gateway are run from a single Test Node residing in the same country as the SRS Gateway. If no such node is available to the RST Provider, one must be set up in preparation for the test. Test against the TLD Registry System are run from a single Test Node within an ICANN region different from the one where the SRS Gateway is located.

2. Details of the Test Plan

2.1 Test Areas included in a SRS Gateway Test

1. Whois
2. EPP

2.2 Test Cases included in an SRS Gateway Test

2.2.1 Whois

All Test Cases below are defined in "Whois Test Area Specification".

- SRSGWWhoisCLI01   Verify consistency for domain name objects
- SRSGWWhoisCLI02   Verify consistency for registrar objects
- SRSGWWhoisCLI03   Verify consistency for name server objects

2.2.2 EPP

All Test Cases below are defined in "EPP Test Area Specification".

- TLDSRSEPPConnTest   Verify connectivity
- TLDSRSEPPDomCreate01   Create a domain
- TLDSRSEPPDomCreate02   Add hosts to existing domain
- TLDSRSEPPDomCreate03   Create a DNSSEC-signed domain
- TLDSRSEPPDomRenew01   Renew a domain
- TLDSRSEPPDomTransfer01   Request transfer of a domain
- TLDSRSEPPDomTransfer02   Approve a requested domain transfer
- TLDSRSEPPDomDelete01   Delete a domain
- TLDSRSEppConCreate01   Create a contact
- TLDSRSEPPConDelete01   Delete a contact
- TLDSRSEPPHostDelete01   Delete a host
- TLDSRSEPPHostUpdate01   Update a host
- TLDSRSEPPConUpdate01   Update a contact
- TLDSRSEPPDomUpdate01   Add DNSSEC records to a domain
- SRSGWAddrVer   Verify IP addresses to SRS Gateway System
- SRSGWConnTest   Verify connectivity
- SRSGWDomCreate01   Create a domain and verify that TLD SRS is updated
- SRSGWDomCreate02   Add hosts to a domain and verify that TLD SRS is updated
- SRSGWDomCreate03   Create DNSSEC-signed domain and verify TLD SRS is updated
- SRSGWDomRenew01   Renew a domain and verify that TLD SRS is updated
- SRSGWDomTransfer01   Request transfer of a domain and verify TLD SRS is updated
- SRSGWDomTransfer02   Approve a domain transfer and verify TLD SRS is updated
- SRSGWDomDelete01   Delete a domain and verify TLD SRS is updated
- SRSGWConCreate01   Create a contact and verify that TLD SRS is updated
- SRSGWConDelete01   Delete a contact and verify that TLD SRS is updated
- SRSGWHostDelete01   Delete a host and verify that TLD SRS is updated
- SRSGWHostUpdate01   Update a host and verify that TLD SRS is updated

- SRSGWConUpdate01   Update a contact and verify that TLD SRS is updated
- SRSGWDomUpdate01   Add DNSSEC records to a domain, verify TLD SRS is updated

3. General

3.1 Glossary

The glossary is available in the RST Master Test Plan.

3.2 Document change procedures

Document change procedures are documented in the RST Master Test Plan.