

# Registry System Testing

## SRS Gateway Test Plan

Version B

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# Document control

## Document information and security

Made by	Responsible for fact	Responsible for document
Lennart Bonnevier	Mats Dufberg	Mats Dufberg

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## Revisions

Date	Version	Name	Description
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2021-06-10	B	Mauro Lozano	Update references.

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## **1. Introduction**

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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**

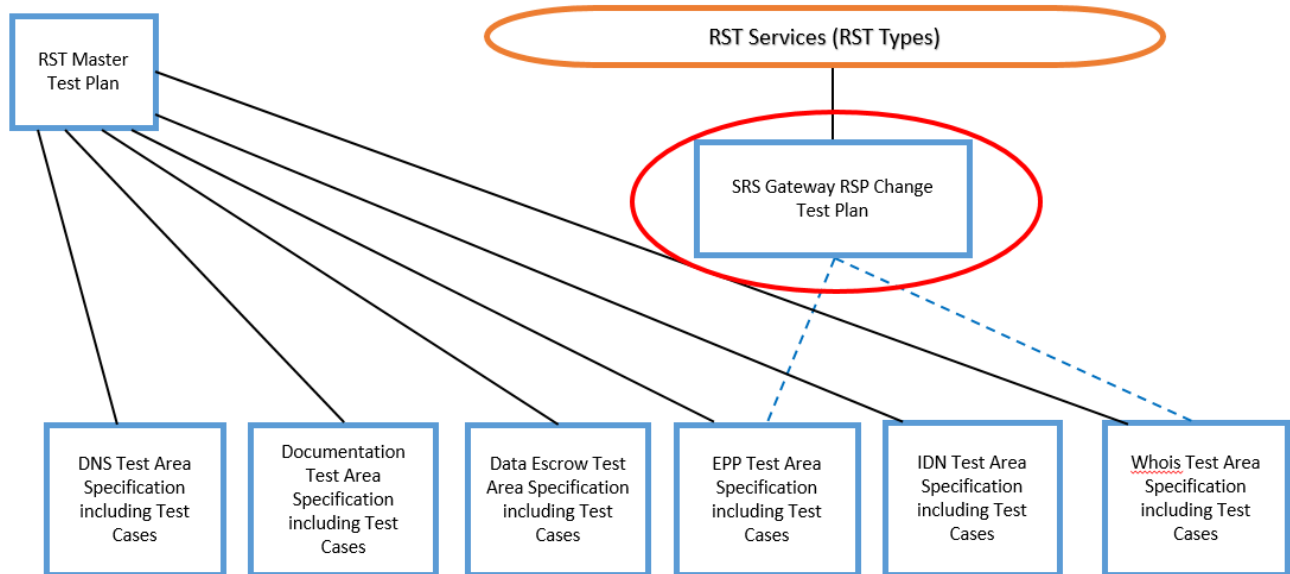
#### **1.4.1 External**

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

#### **1.4.2 Internal**

- 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

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### 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**

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#### **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.