

Registry System Testing

Standard RSP Change Test Plan

Version B

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LIST OF CONTENTS

1.	INTRODUCTION.....	4
1.1	SCOPE.....	4
1.2	REFERENCES.....	4
1.3	DOCUMENT HIERARCHY.....	4
2.	DETAILS FOR STANDARD RSP CHANGE TEST PLAN.....	5
2.1	TEST CASES INCLUDED IN A STANDARD RSP CHANGE TEST	5
2.1.1	<i>DNS</i>	5
2.1.2	<i>EPP</i>	6
2.1.3	<i>Whois</i>	6
2.1.4	<i>IDN</i>	7
2.1.5	<i>Data Escrow</i>	7
2.1.6	<i>Documentation</i>	7
3.	GENERAL	9
3.1	GLOSSARY.....	9
3.2	DOCUMENT CHANGE PROCEDURES	9

1. Introduction

This Test Plan defines the Standard RSP Change Testing of the new gTLDs.

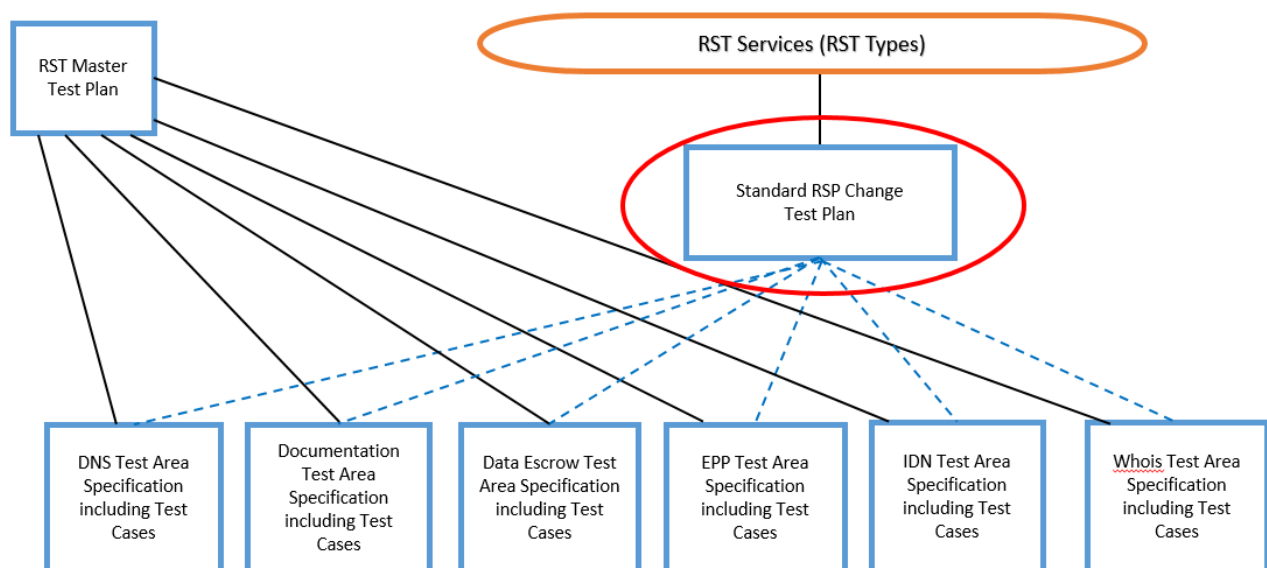
1.1 Scope

The RST Service Provider will test the technical infrastructure (DNS, EPP, Whois, Data Escrow and IDN) and also review submitted documents (IDN, Documentation).

1.2 References

- Registry System Testing, DNS Test Area Specification
- Registry System Testing, EPP Test Area Specification
- Pre-Delegation Testing, Whois Test Area Specification
- Pre-Delegation Testing, Data Escrow Test Area Specification
- Pre-Delegation Testing, IDN Test Area Specification
- Pre-Delegation Testing, Documentation Test Area Specification

1.3 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).

2. Details for Standard RSP Change test plan

The Standard RSP Change Test (RSPSTD). The following test levels are included in Standard RSP Change Testing:

- DNS
- EPP
- Whois
- IDN
- Data Escrow
- Documentation

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

2.1 Test Cases included in a Standard RSP Change Test

2.1.1 DNS

Full description of the DNS Test Cases is found in the DNS Test Area Specification.

- | | |
|---------|---|
| • DNS01 | Minimum number of name servers |
| • DNS02 | Name server reachability |
| • DNS03 | Answer authoritatively |
| • DNS04 | Network diversity |
| • DNS05 | Consistency between glue and authoritative data |
| • DNS06 | Consistency between delegation and zone |
| • DNS07 | SOA record consistency between authoritative name servers |
| • DNS08 | NS record consistency between authoritative name servers |
| • DNS09 | No truncation of referrals |
| • DNS10 | Prohibited networks |
| • DNS11 | No open recursive name service |
| • DNS12 | Same source address |
| • DNS14 | Legal values for the DS hash digest algorithm |
| • DNS15 | DS must match a DNSKEY in the designated zone |
| • DNS16 | Signatures in the designated zone must validate |
| • DNS17 | Zone contains NSEC or NSEC3 records |
| • DNS18 | Consistency between glue and authoritative data |
| • DNS19 | SOA record consistency between authoritative name servers |
| • DNS20 | NS record consistency between authoritative name servers |
| • DNS21 | No open recursive name service |
| • DNS23 | Syntax for SOA RNAME |
| • DNS24 | SOA Minimum |
| • DNS25 | NSEC3 Iterations |
| • DNS26 | RRSIG Lifetimes |
| • DNS27 | DNSKEY Algorithms |

- DNS28 DS TTL
- DNS29 Wildcards
- DNS30 Dotless domain
- DNS31 nic.<TLD> or whois.nic.<TLD> must be delegated
- DNS32 Name server reachability
- DNS33 Answer authoritatively
- DNS34 Consistency between delegation and zone
- DNS35 Name server must be able to provide referral to known subdomains
- DNS36 RRSIG(SOA) must validate with supplied DS record

2.1.2 EPP

Full description of the EPP Test Cases is found in the EPP Test Area Specification.

- EppConnTest Verify connectivity
- EPPDomCreate01 Create a domain
- EPPDomCreate02 Add hosts to existing domain
- EPPDomCreate03 Create a DNSSEC-signed domain
- EPPDomRenew01 Renew a domain
- EPPDomTransfer01 Request transfer of a domain
- EPPDomTransfer02 Approve a requested domain transfer
- EPPDomDelete01 Delete a domain
- EPPConCreate 01 Create a contact
- EPPConDelete01 Delete a contact
- EPPHostDelete01 Delete a host
- EPPHostUpdate01 Update a host
- EPPContactUpdate01 Update a contact
- EPPDomUpdate01 Add DNSSEC records to a domain
- EPPExtensions Verify required EPP extensions

2.1.3 Whois

Full description of the Whois Test Cases is found in the Whois Test Area Specification.

- WhoisCLI01 Query for domain name
- WhoisCLI02 Query for registrar
- WhoisCLI03 Query for name server
- WhoisWeb01 Verify IPv4 connectivity
- WhoisWeb02 Verify IPv6 connectivity
- WhoisWeb03 Manual query for domain name
- WhoisWeb04 Manual query for registrar
- WhoisWeb05 Manual query for name server
- WhoisWeb09 Manual query for domain name over IPv6
- WhoisSearch00 Verify if Whois Search is supported
- WhoisSearch01 Verify abuse protection
- WhoisSearch02 Partial Match capabilities
- WhoisSearch03 Exact Match search

- WhoisSearch04 Boolean Search capabilities
- WhoisSearch09 Search over IPv6

2.1.4 IDN

Full description of the IDN Test Cases is found in the IDN Test Area Specification.

- IDNvalid00 IDN documentation validation
- IDNvalid01 IDN Table validation
- IDNvalid02 IDNA Code Point validation
- IDNvalid03 Contextual Rule validation
- IDNvalid04 IDN Script validation
- IDNvalid05 IDN Script Mixing Rule validation
- IDNvalid06 IDN Language validation
- IDNvalid07 Variant Code Point validation
- IDNvalid09 Variant Management Policy
- IDNvalid10 Basic IDN compliance
- IDNvalid11 IDN online registry response validation
- IDNvalid12 Asymmetrical and intransitive variant rule verification
- IDNvalid13 Pre-composed vs. decomposed character equivalence verification

2.1.5 Data Escrow

Full description of the Data Escrow Test Cases is found in the Data Escrow Test Area Specification.

- DataEscrowFileName01 Verify file names, full escrow
- DataEscrowFileName02 Verify file names, differential escrow
- DataEscrowVerify01 Verify signatures, full escrow
- DataEscrowVerify02 Verify signatures, differential escrow
- DataEscrowContent01 Validate content, full escrow
- DataEscrowContent02 Validate content, differential escrow

2.1.6 Documentation

Full description of the Documentation Test Cases is found in the Documentation Test Area Specification.

- DocDNS01 Capacity and DDOS mitigation
- DocDNS02 Load capacity, latency and network reachability
- DocDNS03 Load capacity – tables and graphs
- DocDNS04 Load capacity – 20 data points
- DocDNS05 Query latency
- DocDNS06 TCP reachability
- DocDNS07 Basic DNSSEC support
- DocDNS08 Name server consistency
- DocWhois01 Maximum QPS
- DocWhois02 Data mining
- DocEPP01 EPP capacity
- DocEPP02 EPP TPS

- DocEPP03 EPP landrush
- DocEPP04 EPP extensions
- DocEscr01 Data Escrow Agreement
- DocSL01 DNS SLA
- DocSL02 Whois SLA
- DocSL03 EPP SLA
- DocDPS01 DNSSEC Practice Statement – Structure
- DocDPS02 DNSSEC Practice Statement – Content

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.