

Pre-Delegation Testing

Documentation Service Level Test Cases

Version C

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1. Introduction

1.1 Scope

The Pre-Delegation Testing Provider will test self-certification documents regarding Service Levels and verify that the requirements and the Applicants assertions are fulfilled.

1.2 References

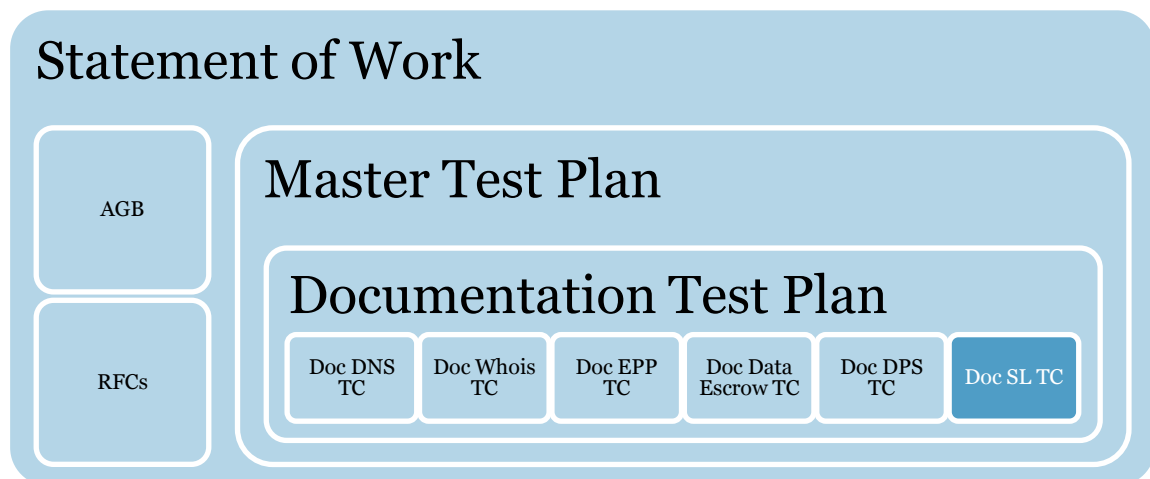
1.2.1 External

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

1.2.2 Internal

- Pre-Delegation Testing, Statement of Work
- Pre-Delegation Testing, Master Test Plan
- Pre-Delegation Testing, Document Test Plan

1.2.3 Document Hierarchy



1.3 Context

N/A

1.4 Notation for description

Each test case for the Documentation Service Level is described in their own chapter. The test procedures are described directly in the test case.

2. Document SL 01

2.1 Test case identifier

DocSL01

2.2 Objective

The test verifies that the self-certification documents concerning DNS state compliance with the Service Level Requirements in Specification 10 of the registry agreement.

2.3 Inputs

The following information will be needed as input for this test case:

Id	Description	Type
gTLDSelfCert	The Applicants self-certification documentation	Documents
gTLDAApplication	The Applicants original application	Document

Service Level Requirements stated in Specification 10 of the registry agreement:

Parameter	SLR (monthly basis)
DNS service availability	0 min downtime = 100% availability
DNS name server availability	< 432 min of downtime (\approx 99%)
TCP DNS resolution RTT	< 1500 ms, for at least 95% of the queries
UDP DNS resolution RTT	< 500 ms, for at least 95% of the queries
DNS update time	< 60 min, for at least 95% of the probes

2.4 Outcome(s)

The self-certification documents **MUST** include the required information.

2.5 Environmental needs

N/A

2.6 Special procedural requirements

Suspend test if applicant documentation is missing or incomplete for most parts.

2.7 Intercase dependencies

This test has no intercase dependencies.

2.8 Ordered description of steps to be taken to execute the test case

1. Identify the parts in the self-certification documents that contain service levels for DNS support. Expected part is: document gTLDSelfCert section 1.5.
2. Verify that DNS service availability
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR “0 min downtime = 100% availability”.
3. Verify that DNS name server availability
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR “ ≤ 432 min of downtime ($\approx 99\%$)”.
4. Verify that TCP DNS resolution RTT
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR “ ≤ 1500 ms, for at least 95% of the queries”.
5. Verify that UDP DNS resolution RTT
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR “ ≤ 500 ms, for at least 95% of the queries”.
6. Verify that DNS update time
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR “ ≤ 60 min, for at least 95% of the probes”.

3. Document SL 02

3.1 Test case identifier

DocSL02

3.2 Objective

The test verifies that the self-certification documents concerning Whois services state compliance with the Service Level Requirements in Specification 10 of the registry.

3.3 Inputs

The following information will be needed as input for this test case:

Id	Description	Type
gTLDSelfCert	The Applicants self-certification documentation	Documents
gTLDAApplication	The Applicants original application	Document

Service Level Requirements stated in Specification 10 of the registry agreement:

Parameter	SLR (monthly basis)
RDDS availability	≤ 864 min of downtime (≈ 98%)
RDDS query RTT	≤ 2000 ms, for at least 95% of the queries
RDDS update time	≤ 60 min, for at least 95% of the probes

RDDS. Registration Data Directory Services refers to the collective of WHOIS and Web-based WHOIS services.

3.4 Outcome(s)

The self-certification documents **MUST** include the required information.

3.5 Environmental needs

N/A

3.6 Special procedural requirements

Suspend test if applicant documentation is missing or incomplete for most parts.

3.7 Intercase dependencies

This test has no intercase dependencies.

3.8 Ordered description of steps to be taken to execute the test case

1. Identify the parts in the self-certification documents that contain service levels for Whois services. Expected part is: document gTLDSelfCert section 2.4.
2. Verify that the availability of Whois services
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR " ≤ 864 min of downtime ($\approx 98\%$)".
3. Verify that the query Round-Trip Time for Whois services
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR " ≤ 2000 ms, for at least 95% of the queries".
4. Verify that the update time for Whois services
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR " ≤ 60 min, for at least 95% of the probes".

4. Document SL 03

4.1 Test case identifier

DocSL03

4.2 Objective

The test verifies that the self-certification documents concerning EPP services state compliance with the Service Level Requirements in Specification 10 of the registry agreement.

4.3 Inputs

The following information will be needed as input for this test case:

Id	Description	Type
gTLDSelfCert	The Applicants self-certification documentation	Documents
gTLDAApplication	The Applicants original application	Document

Service Level Requirements stated in Specification 10 of the registry agreement:

Parameter	SLR (monthly basis)
EPP service availability	≤ 864 min of downtime ($\approx 98\%$)
EPP session-command RTT	≤ 4000 ms, for at least 90% of the commands
EPP query-command RTT	≤ 2000 ms, for at least 90% of the commands
EPP transform-command RTT	≤ 4000 ms, for at least 90% of the commands

4.4 Outcome(s)

The self-certification documents **MUST** include the required information.

4.5 Environmental needs

N/A

4.6 Special procedural requirements

Suspend test if applicant documentation is missing or incomplete for most parts.

4.7 Intercase dependencies

This test has no intercase dependencies.

4.8 Ordered description of steps to be taken to execute the test case

1. Identify the parts in the self-certification documents that contain service levels for EPP services. Expected part is: document gTLDSelfCert section 3.5.
2. Verify that the availability of EPP services
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR " ≤ 864 min of downtime ($\approx 98\%$)".
3. Verify that the session-command Round-Trip Time for EPP services
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR " ≤ 4000 ms, for at least 90% of the commands".
4. Verify that the query-command Round-Trip Time for EPP services
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR " ≤ 2000 ms, for at least 90% of the commands".
5. Verify that the transform-command Round-Trip Time for EPP services
 - a. is stated in the self-certification documents and
 - b. that it complies with the SLR " ≤ 4000 ms, for at least 90% of the commands".

5. Document SL 04

5.1 Test case identifier

DocSL04

5.2 Objective

The test verifies that the self-certification documents concerning DNS service comply with assertions made in the Application.

5.3 Inputs

The following information will be needed as input for this test case:

Id	Description	Type
gTLDSelfCert	The Applicants self-certification documentation	Documents
gTLDDApplication	The Applicants original application	Document

Service Level Requirements stated in Specification 10 of the registry agreement:

Parameter	SLR (monthly basis)
DNS service availability	0 min downtime = 100% availability
DNS name server availability	< 432 min of downtime (\approx 99%)
TCP DNS resolution RTT	< 1500 ms, for at least 95% of the queries
UDP DNS resolution RTT	< 500 ms, for at least 95% of the queries
DNS update time	< 60 min, for at least 95% of the probes

5.4 Outcome(s)

The self-certification documents MUST include the required information.

5.5 Environmental needs

N/A

5.6 Special procedural requirements

Suspend test if applicant documentation is missing or incomplete for most parts.

5.7 Intercase dependencies

This test has no intercase dependencies.

5.8 Ordered description of steps to be taken to execute the test case

1. Identify the parts in the self-certification documents that contain service levels for DNS support. Expected part is: document gTLDSelfCert section 1.5.
2. Identify any assertions regarding service levels for DNS support that are referenced in the self-certification documentation.
3. Verify that DNS name server availability complies with these assertions.
4. Verify that TCP DNS resolution RTT complies with these assertions.
5. Verify that UDP DNS resolution RTT complies with these assertions.
6. Verify that DNS update time complies with these assertions.
7. Verify that all other DNS Service Levels comply with these assertions.

6. Document SL 05

6.1 Test case identifier

DocSL05

6.2 Objective

The test verifies that the self-certification documents concerning Whois services comply with assertions made in the Application.

6.3 Inputs

The following information will be needed as input for this test case:

Id	Description	Type
gTLDSelfCert	The Applicants self-certification documentation	Documents
gTLDApplcation	The Applicants original application	Document

Service Level Requirements stated in Specification 10 of the registry agreement:

Parameter	SLR (monthly basis)
RDDS availability	≤ 864 min of downtime (≈ 98%)
RDDS query RTT	≤ 2000 ms, for at least 95% of the queries
RDDS update time	≤ 60 min, for at least 95% of the probes

RDDS. Registration Data Directory Services refers to the collective of WHOIS and Web-based WHOIS services.

6.4 Outcome(s)

The self-certification documents **MUST** include the required information.

6.5 Environmental needs

N/A

6.6 Special procedural requirements

Suspend test if applicant documentation is missing or incomplete for most parts.

6.7 Intercase dependencies

This test has no intercase dependencies.

6.8 Ordered description of steps to be taken to execute the test case

1. Identify the parts in the self-certification documents that contain service levels for Whois services. Expected part is: document gTLDSelfCert section 2.4.
2. Identify any assertions regarding service levels for Whois services that are referenced in the self-certification documentation.
3. Verify that the availability of Whois services complies with these assertions.
4. Verify that the query Round-Trip Time for Whois services complies with these assertions. Verify that the update time for Whois services complies with these assertions. Verify that all other Whois services Service Levels comply with these assertions.

7. Document SL 06

7.1 Test case identifier

DocSL06

7.2 Objective

The test verifies that the self-certification documents concerning EPP services comply with assertions made in the Application.

7.3 Inputs

The following information will be needed as input for this test case:

Id	Description	Type
gTLDSelfCert	The Applicants self-certification documentation	Documents
gTLDAApplication	The Applicants original application	Document

Service Level Requirements stated in Specification 10 of the registry agreement:

Parameter	SLR (monthly basis)
EPP service availability	≤ 864 min of downtime (≈ 98%)
EPP session-command RTT	≤ 4000 ms, for at least 90% of the commands
EPP query-command RTT	≤ 2000 ms, for at least 90% of the commands
EPP transform-command RTT	≤ 4000 ms, for at least 90% of the commands

7.4 Outcome(s)

The self-certification documents MUST include the required information.

7.5 Environmental needs

N/A

7.6 Special procedural requirements

Suspend test if applicant documentation is missing or incomplete for most parts.

7.7 Intercase dependencies

This test has no intercase dependencies.

7.8 Ordered description of steps to be taken to execute the test case

1. Identify the parts in the self-certification documents that contain service levels for DNS support. Expected part is: document gTLDSelfCert section 3.5.
2. Identify any assertions regarding service levels for EPP services that are referenced in the self-certification documentation.
3. Verify that the availability of EPP services complies with these assertions. Verify that the session-command Round-Trip Time for EPP services complies with these assertions.
4. Verify that the query-command Round-Trip Time for EPP services complies with these assertions.
5. Verify that the transform-command Round-Trip Time for EPP services complies with these assertions.
6. Verify that all other EPP services Service Levels comply with these assertions.

8. Global

8.1 Glossary

The glossary is available in the Master Test Plan.

8.2 Document change procedures

Document change procedures are documented in the Master Test Plan.