

Pre-Delegation Testing

Documentation DPS Test Cases

Version PA4

DRAFT

File name: PDT_Documentation_TC_DPS.docx

Last saved: 2013-03-06

Copyright (c) 2013 Internet Corporation For Assigned Names and Numbers. All rights reserved.

Document control

Document information and security

Made by	Responsible for fact	Responsible for document
Björn Sjöholm	Björn Sjöholm	Björn Sjöholm

Security class	File name
External	PDT_Documentation_TC_DPS.docx

Revisions

Date	Version	Name	Description
2013-02-05	PA1	Björn Sjöholm	Initial document
2013-02-08	PA2	Rickard Bellgrim	Review text
2013-02-11	PA3	Lennart Bonnevier	Review text
2013-03-01	PA4	Rickard Bellgrim	"key handling" to "key management" "key changes" to "key rollovers" "DNSSEC Policy Statement" to "DNSSEC Practice Statement" "KSK/ZSK keys" to "cryptographic keys"

LIST OF CONTENTS

1. INTRODUCTION	5
1.1 SCOPE.....	5
1.2 REFERENCES.....	5
1.2.1 External	5
1.2.2 Internal	5
1.2.3 Document Hierarchy	5
1.3 CONTEXT	5
1.4 NOTATION FOR DESCRIPTION	5
2. DOCUMENT DPS 01	6
2.1 TEST CASE IDENTIFIER	6
2.2 OBJECTIVE.....	6
2.3 INPUTS	6
2.4 OUTCOME(S)	6
2.5 ENVIRONMENTAL NEEDS	6
2.6 SPECIAL PROCEDURAL REQUIREMENTS	6
2.7 INTERCASE DEPENDENCIES	6
2.8 ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE	6
3. DOCUMENT DPS 02.....	7
3.1 TEST CASE IDENTIFIER	7
3.2 OBJECTIVE.....	7
3.3 INPUTS	7
3.4 OUTCOME(S)	7
3.5 ENVIRONMENTAL NEEDS	7
3.6 SPECIAL PROCEDURAL REQUIREMENTS	7
3.7 INTERCASE DEPENDENCIES	7
3.8 ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE	7
4. DOCUMENT DPS 03.....	8
4.1 TEST CASE IDENTIFIER	8
4.2 OBJECTIVE.....	8
4.3 INPUTS	8
4.4 OUTCOME(S)	8
4.5 ENVIRONMENTAL NEEDS	8
4.6 SPECIAL PROCEDURAL REQUIREMENTS	8
4.7 INTERCASE DEPENDENCIES	8
4.8 ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE	8
5. DOCUMENT DPS 04.....	9
5.1 TEST CASE IDENTIFIER	9
5.2 OBJECTIVE.....	9
5.3 INPUTS	9
5.4 OUTCOME(S)	9
5.5 ENVIRONMENTAL NEEDS	9
5.6 SPECIAL PROCEDURAL REQUIREMENTS	9
5.7 INTERCASE DEPENDENCIES	9
5.8 ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE	9
6. DOCUMENT DPS 05.....	10
6.1 TEST CASE IDENTIFIER	10
6.2 OBJECTIVE.....	10
6.3 INPUTS	10
6.4 OUTCOME(S)	10
6.5 ENVIRONMENTAL NEEDS	10
6.6 SPECIAL PROCEDURAL REQUIREMENTS	10
6.7 INTERCASE DEPENDENCIES	10

6.8	ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE	11
7.	GLOBAL	12
7.1	GLOSSARY.....	12
7.2	DOCUMENT CHANGE PROCEDURES	12

DRAFT

1. Introduction

1.1 Scope

The Pre-Delegation Testing Provider will test documents regarding DPS and verify that the requirements are fulfilled.

1.2 References

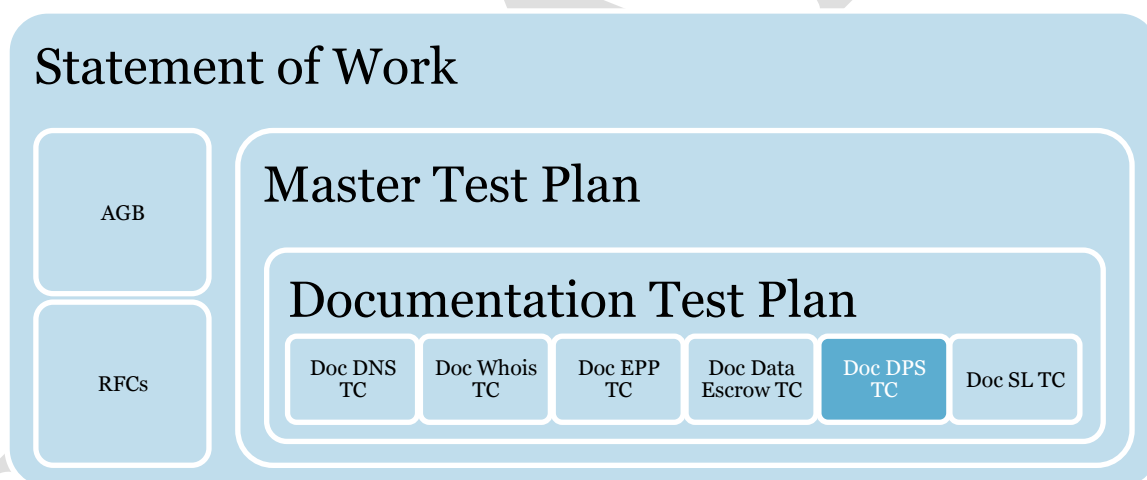
1.2.1 External

- IEEE 829-2008
- ICANN gTLD Applicant Guidebook, Version 2012-06-04
- IETF A Framework for DNSSEC Policies and DNSSEC Practice Statements, RFC 6841

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 DPS is described in its own chapter. The test procedures are described directly in the test case.

2. Document DPS 01

2.1 Test case identifier

DocDPS01

2.2 Objective

The test verifies that the self-certification documents and specifically the DNSSEC Practice Statement (DPS) include controls for key management.

2.3 Inputs

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

Id	Description	Type
gTLDAApplication	The Applicants original application	Document
gTLDDPS	The Applicant DNSSEC Practice Statement	Document

2.4 Outcome(s)

The 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 documents concerning DNSSEC and the DNSSEC Practice Statement, DPS. Expected document is: document gTLDDPS.
2. Verify that the DPS include description of controls for key material storage, access and usage of own keys.
3. Verify that the DPS include description of security controls and procedures for secure acceptance of registrants' public-key material.

3. Document DPS 02

3.1 Test case identifier

DocDPS02

3.2 Objective

The test verifies that the documents and specifically the DNSSEC Practice Statement (DPS) include a demonstration of the ability to accept and publish DS resource records from second-level domain administrators.

3.3 Inputs

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

Id	Description	Type
gTLDAApplication	The Applicants original application	Document
gTLDDPS	The Applicant DNSSEC Practice Statement	Document

3.4 Outcome(s)

The 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 documents concerning DNSSEC and the DNSSEC Practice Statement, DPS.
Expected document is: document gTLDDPS.
2. Verify that the documents include a demonstration of the ability to accept and publish DS resource records from second-level domain administrators.

4. Document DPS 03

4.1 Test case identifier

DocDPS03

4.2 Objective

The test verifies that the documents and specifically the DNSSEC Practice Statement (DPS) include a demonstration of the ability to support the full life cycle of cryptographic keys.

4.3 Inputs

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

Id	Description	Type
gTLDDApplication	The Applicants original application	Document
gTLDDPS	The Applicant DNSSEC Practice Statement	Document

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 documents concerning DNSSEC and the DNSSEC Practice Statement, DPS. Expected document is: document gTLDDPS.
2. Verify that the documents include a demonstration of the ability to support the full life cycle of cryptographic keys.

5. Document DPS 04

5.1 Test case identifier

DocDPS04

5.2 Objective

The test verifies that the documents and specifically the DNSSEC Practice Statement (DPS) include a demonstration of the ability to support the full life cycle of key rollover for child domains.

5.3 Inputs

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

Id	Description	Type
gTLDDApplication	The Applicants original application	Document
gTLDDPS	The Applicant DNSSEC Practice Statement	Document

5.4 Outcome(s)

The 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 documents concerning DNSSEC and the DNSSEC Practice Statement, DPS.
Expected document is: document gTLDDPS.
2. Verify that the documents include a demonstration of the ability to support the full life cycle of key rollover for child domains.

6. Document DPS 05

6.1 Test case identifier

DocDPS05

6.2 Objective

The test verifies that the DNSSEC Practice Statement (DPS) is consistent with RFC 6841.

6.3 Inputs

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

Id	Description	Type
gTLDAApplication	The Applicants original application	Document
gTLDDPS	The Applicant DNSSEC Practice Statement	Document

6.4 Outcome(s)

The 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 DNSSEC Practice Statement, DPS.
2. Verify that the DPS complies with RFC 6841
3. The DPS shall as a minimum include the following components:
 - a. Publication and Repositories for practices and keys
 - b. Operational requirements
 - c. Facility, Management and Operational Controls
 - d. Technical security controls
 - e. Zone signing
 - f. Compliance audit
 - g. Legal matters
4. Verify that the identified DPS and the above content:
 - a. Provides a full and clear description of the security policies, controls and provisions of the Applicant.
 - b. Follows best practice for security policies, procedures and controls
 - c. Provides appropriate level of assurance
 - d. Is consistent and does not contain ambiguities

7. Global

7.1 Glossary

The glossary is available in the Master Test Plan.

7.2 Document change procedures

Document change procedures are documented in the Master Test Plan.

DRAFT