

Pre-Delegation Testing

Whois Search Test Cases

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LIST OF CONTENTS

1. INTRODUCTION.....	5
1.1 SCOPE	5
1.2 REFERENCES	5
1.2.1 <i>External</i>	5
1.2.2 <i>Internal</i>	5
1.2.3 <i>Document Hierarchy</i>	5
1.3 CONTEXT.....	5
1.4 NOTATION FOR DESCRIPTION	5
2. WHOIS SEARCH 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. WHOIS SEARCH 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. WHOIS SEARCH 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. WHOIS SEARCH 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. WHOIS SEARCH 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	10
7.	WHOIS SEARCH o6.....	11
7.1	TEST CASE IDENTIFIER	11
7.2	OBJECTIVE	11
7.3	INPUTS	11
7.4	OUTCOME(S)	11
7.5	ENVIRONMENTAL NEEDS	11
7.6	SPECIAL PROCEDURAL REQUIREMENTS.....	11
7.7	INTERCASE DEPENDENCIES	11
7.8	ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE	11
8.	WHOIS SEARCH o7.....	12
8.1	TEST CASE IDENTIFIER	12
8.2	OBJECTIVE	12
8.3	INPUTS	12
8.4	OUTCOME(S)	12
8.5	ENVIRONMENTAL NEEDS	12
8.6	SPECIAL PROCEDURAL REQUIREMENTS.....	12
8.7	INTERCASE DEPENDENCIES	12
8.8	ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE	12
9.	WHOIS SEARCH o8.....	13
9.1	TEST CASE IDENTIFIER	13
9.2	OBJECTIVE	13
9.3	INPUTS	13
9.4	OUTCOME(S)	13
9.5	ENVIRONMENTAL NEEDS	13
9.6	SPECIAL PROCEDURAL REQUIREMENTS.....	13
9.7	INTERCASE DEPENDENCIES	13
9.8	ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE	13
10.	GLOBAL.....	14
10.1	GLOSSARY.....	14
10.2	DOCUMENT CHANGE PROCEDURES.....	14

1. Introduction

1.1 Scope

The Pre-Delegation Testing Provider will test the Whois service over port 43 (Whois) and 80/443 (HTTP/HTTPS), and verify the response format.

The test cases in this document focus on the Whois service over port 80/443 and the optional searchability. If the applicant states that they have support for it, then the following test cases will be run.

1.2 References

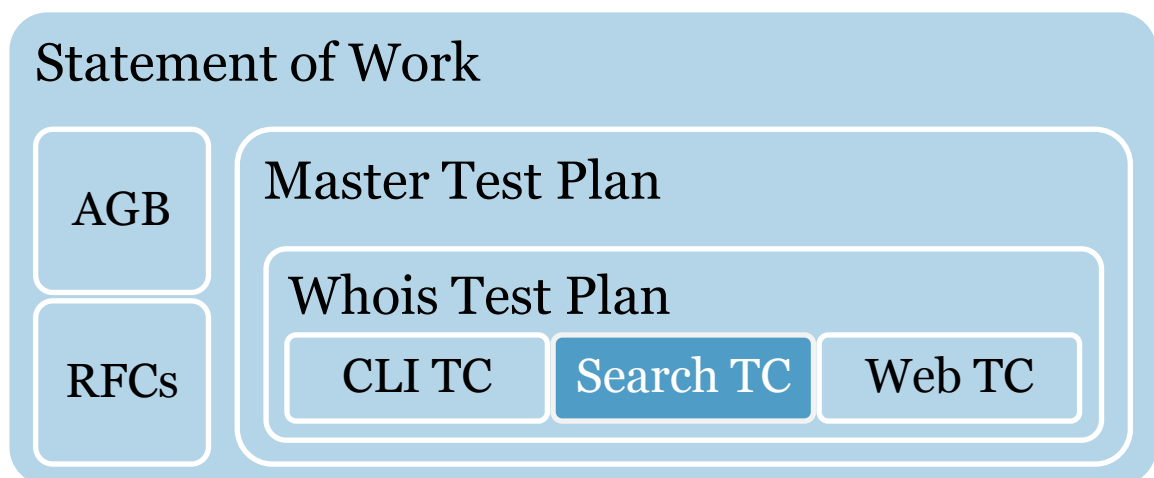
1.2.1 External

- 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, Whois Test Plan

1.2.3 Document Hierarchy



1.3 Context

All tests are performed over IPv4 and IPv6 from one location.

1.4 Notation for description

Each test case for the Whois service over port 80/443 and the searchability is described in their own chapter. The test procedures are described directly in the test case.

2. Whois Search 01

2.1 Test case identifier

WhoisSearch01

2.2 Objective

A manual search query will be performed on the Whois IPv4 website. The objective is to verify the abuse protection.

2.3 Inputs

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

Id	Description	Type
TLD	The ASCII compatible name of the TLD	String
WhoisCredentials	Optional credentials. E.g. username and password for accessing the Whois service	String
DnsGlueRecord	IPv4 or IPv6 addresses for auth NS	String

2.4 Outcome(s)

Abuse protection MUST exist for the Whois service.

2.5 Environmental needs

- Web browser
- IPv4 connectivity
- <WhoisIPv4> from resolving <whois.nic.TLD> using the delegation data.

2.6 Special procedural requirements

Abort the test if any Whois query takes longer than 10 seconds.

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. Resolve IP addresses for subsequent tests using <DnsGlueRecord>.
2. Make sure that whois.nic.<TLD> resolves to <WhoisIPv4>.
3. Browse to http://whois.nic.<TLD> or https://whois.nic.<TLD>
4. Verify that the service is protected with abuse protection
5. Access the service with optional <WhoisCredentials>

3. Whois Search 02

3.1 Test case identifier

WhoisSearch02

3.2 Objective

Manual search queries will be performed on the Whois IPv4 website. The objective is to verify the partial match capabilities.

3.3 Inputs

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

Id	Description	Type
TLD	The ASCII compatible name of the TLD	String
WhoisCredentials	Optional credentials. E.g. username and password for accessing the Whois service	String
WhoisTestDomain	An existing domain which has Whois data	String

3.4 Outcome(s)

The Whois service **MUST** offer partial match capabilities.

3.5 Environmental needs

- Web browser
- IPv4 connectivity
- <WhoisIPv4> from resolving <whois.nic.TLD> using the delegation data.

3.6 Special procedural requirements

Abort the test if any Whois query takes longer than 10 seconds.

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. Make sure that whois.nic.<TLD> resolves to <WhoisIPv4>.
2. Browse to http://whois.nic.<TLD> or https://whois.nic.<TLD>
3. Access the service with optional <WhoisCredentials>
4. Make a query for the domain <WhoisTestDomain>
5. Perform multiple partial match searches based on domain name, contacts and registrant's name, and contact and registrant's postal address (e.g. street, city, state, or province). Use data from previous domain query.
6. Verify that the search results include the domain names matching the search criteria.

4. Whois Search 03

4.1 Test case identifier

WhoisSearch03

4.2 Objective

Manual search queries will be performed on the Whois IPv4 website. The objective is to verify the exact-match capabilities.

4.3 Inputs

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

Id	Description	Type
TLD	The ASCII compatible name of the TLD	String
WhoisCredentials	Optional credentials. E.g. username and password for accessing the Whois service	String
WhoisTestDomain	An existing domain which has Whois data	String

4.4 Outcome(s)

The Whois service **MUST** offer exact-match capabilities.

4.5 Environmental needs

- Web browser
- IPv4 connectivity
- <WhoisIPv4> from resolving <whois.nic.TLD> using the delegation data.

4.6 Special procedural requirements

Abort the test if any Whois query takes longer than 10 seconds.

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. Make sure that whois.nic.<TLD> resolves to <WhoisIPv4>.
2. Browse to http://whois.nic.<TLD> or https://whois.nic.<TLD>
3. Access the service with optional <WhoisCredentials>
4. Make a query for the domain <WhoisTestDomain>
5. Perform multiple exact-match searches based on registrar id and name server name. Use data from previous domain query.
6. Verify that the search results include the domain names matching the search criteria.

5. Whois Search 04

5.1 Test case identifier

WhoisSearch04

5.2 Objective

Manual search queries will be performed on the Whois IPv4 website. The objective is to verify the Boolean search capabilities.

5.3 Inputs

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

Id	Description	Type
TLD	The ASCII compatible name of the TLD	String
WhoisCredentials	Optional credentials. E.g. username and password for accessing the Whois service	String
WhoisTestDomain	An existing domain name which has Whois data	String

5.4 Outcome(s)

The Whois service **MUST** offer Boolean search capabilities.

5.5 Environmental needs

- Web browser
- IPv4 connectivity
- <WhoisIPv4> from resolving <whois.nic.TLD> using the delegation data.

5.6 Special procedural requirements

Abort the test if any Whois query takes longer than 10 seconds.

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. Make sure that whois.nic.<TLD> resolves to <WhoisIPv4>.
2. Browse to http://whois.nic.<TLD> or https://whois.nic.<TLD>
3. Access the service with optional <WhoisCredentials>
4. Make a query for the domain <WhoisTestDomain>
5. Perform multiple Boolean searches (AND, OR, NOT) based on data from previous domain query.
6. Verify that the search results include the domain names matching the search criteria.

6. Whois Search 05

6.1 Test case identifier

WhoisSearch05

6.2 Objective

A manual search query will be performed on the Whois IPv6 website. The objective is to verify the abuse protection.

6.3 Inputs

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

Id	Description	Type
TLD	The ASCII compatible name of the TLD	String
WhoisCredentials	Optional credentials. E.g. username and password for accessing the Whois service	String

6.4 Outcome(s)

Abuse protection MUST exist for the Whois service.

6.5 Environmental needs

- Web browser
- IPv6 connectivity
- <WhoisIPv6> from resolving <whois.nic.TLD> using the delegation data.

6.6 Special procedural requirements

Abort the test if any Whois query takes longer than 10 seconds.

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. Make sure that whois.nic.<TLD> resolves to <WhoisIPv6>.
2. Browse to http://whois.nic.<TLD> or https://whois.nic.<TLD>
3. Verify that the service is protected with abuse protection
4. Access the service with optional <WhoisCredentials>

7. Whois Search 06

7.1 Test case identifier

WhoisSearch06

7.2 Objective

Manual search queries will be performed on the Whois IPv6 website. The objective is to verify the partial match capabilities.

7.3 Inputs

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

Id	Description	Type
TLD	The TLD of which this test is designated for	String
WhoisCredentials	Optional credentials. E.g. username and password for accessing the Whois service	String
WhoisTestDomain	An existing domain which has Whois data	String

7.4 Outcome(s)

The Whois service **MUST** offer partial match capabilities.

7.5 Environmental needs

- Web browser
- IPv6 connectivity
- <WhoisIPv6> from resolving <whois.nic.TLD> using the delegation data.

7.6 Special procedural requirements

Abort the test if any Whois query takes longer than 10 seconds.

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. Make sure that whois.nic.<TLD> resolves to <WhoisIPv6>.
2. Browse to http://whois.nic.<TLD> or https://whois.nic.<TLD>
3. Access the service with optional <WhoisCredentials>
4. Make a query for the domain <WhoisTestDomain>
5. Perform multiple partial match searches based on domain name, contacts and registrant's name, and contact and registrant's postal address (e.g. street, city, state, or province). Use data from previous domain query.
6. Verify that the search results include the domain names matching the search criteria.

8. Whois Search 07

8.1 Test case identifier

WhoisSearch07

8.2 Objective

Manual search queries will be performed on the Whois IPv6 website. The objective is to verify the exact-match capabilities.

8.3 Inputs

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

Id	Description	Type
TLD	The ASCII compatible name of the TLD	String
WhoisCredentials	Optional credentials. E.g. username and password for accessing the Whois service	String
WhoisTestDomain	An existing domain which has Whois data	String

8.4 Outcome(s)

The Whois service **MUST** offer exact-match capabilities.

8.5 Environmental needs

- Web browser
- IPv6 connectivity
- <WhoisIPv6> from resolving <whois.nic.TLD> using the delegation data.

8.6 Special procedural requirements

Abort the test if any Whois query takes longer than 10 seconds.

8.7 Intercase dependencies

This test has no intercase dependencies.

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

1. Make sure that whois.nic.<TLD> resolves to <WhoisIPv6>.
2. Browse to http://whois.nic.<TLD> or https://whois.nic.<TLD>
3. Access the service with optional <WhoisCredentials>
4. Make a query for the domain <WhoisTestDomain>
5. Perform multiple exact-match searches based on registrar id and name server name. Use data from previous domain query.
6. Verify that the search results include the domain names matching the search criteria.

9. Whois Search 08

9.1 Test case identifier

WhoisSearch08

9.2 Objective

Manual search queries will be performed on the Whois IPv6 website. The objective is to verify the Boolean search capabilities.

9.3 Inputs

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

Id	Description	Type
TLD	The ASCII compatible name of the TLD	String
WhoisCredentials	Optional credentials. E.g. username and password for accessing the Whois service	String
WhoisTestDomain	An existing domain name which has Whois data	String

9.4 Outcome(s)

The Whois service **MUST** offer Boolean search capabilities.

9.5 Environmental needs

- Web browser
- IPv6 connectivity
- <WhoisIPv6> from resolving <whois.nic.TLD> using the delegation data.

9.6 Special procedural requirements

Abort the test if any Whois query takes longer than 10 seconds.

9.7 Intercase dependencies

This test has no intercase dependencies.

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

1. Make sure that whois.nic.<TLD> resolves to <WhoisIPv6>.
2. Browse to http://whois.nic.<TLD> or https://whois.nic.<TLD>
3. Access the service with optional <WhoisCredentials>
4. Make a query for the domain <WhoisTestDomain>
5. Perform multiple Boolean searches (AND, OR, NOT) based on data from previous domain query.
6. Verify that the search results include the domain names matching the search criteria.

10. Global

10.1 Glossary

The glossary is available in the Master Test Plan.

10.2 Document change procedures

Document change procedures are documented in the Master Test Plan.