

# Pre-Delegation Testing

## Whois Search Test Cases

Version E

**File name:** PDT\_Whois\_TC\_Search.docx  
**Last saved:** 2013-07-09

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
Rickard Bellgrim	Rickard Bellgrim	Rickard Bellgrim

Security class	File name
External	PDT_Whois_TC_Search.docx

## Revisions

Date	Version	Name	Description
2013-01-08	PA1	Rickard Bellgrim	Initial document
2013-01-11	PA2	Rickard Bellgrim	Update test cases
2013-01-24	PA3	Rickard Bellgrim	Update text
2013-02-06	PA4	Rickard Bellgrim	Update test cases after meeting with ICANN
2013-03-03	PA5	Rickard Bellgrim	No IP is required as input data; the IP will be resolved using the delegation data from the DNS tests.
2013-03-10	PA6	Rickard Bellgrim	Add DnsGlueRecord as input data
2013-04-08	B	Staffan Hagnell	Delivery D2 for production
2013-05-03	C	Amar Andersson	Released
2013-06-12	PD1	Rickard Bellgrim	Clarify the test cases
2013-06-24	PD2	Rickard Bellgrim	Clarify pass/fail criteria
2013-07-01	D	Mats Dufberg	Added reference to Registry Agreement. Released.
2013-07-08	PE1	Ulrika Ahlgren	Added test case Whois Search 00.
2013-07-08	PE2	Mats Dufberg	Updated Whois Search 00.
2013-07-09	E	Mats Dufberg	Released.

## LIST OF CONTENTS

<b>1. INTRODUCTION .....</b>	<b>5</b>
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
<b>2. WHOIS SEARCH 00 .....</b>	<b>6</b>
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 ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE .....	6
<b>3. WHOIS SEARCH 01.....</b>	<b>7</b>
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
<b>4. WHOIS SEARCH 02 .....</b>	<b>8</b>
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
<b>5. WHOIS SEARCH 03 .....</b>	<b>9</b>
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
<b>6. WHOIS SEARCH 04 .....</b>	<b>10</b>
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

<b>7. WHOIS SEARCH o5 .....</b>	<b>11</b>
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
<b>8. WHOIS SEARCH o6 .....</b>	<b>12</b>
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
<b>9. WHOIS SEARCH o7 .....</b>	<b>13</b>
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
<b>10. WHOIS SEARCH o8 .....</b>	<b>14</b>
10.1 TEST CASE IDENTIFIER .....	14
10.2 OBJECTIVE .....	14
10.3 INPUTS .....	14
10.4 OUTCOME(S) .....	14
10.5 ENVIRONMENTAL NEEDS .....	14
10.6 SPECIAL PROCEDURAL REQUIREMENTS.....	14
10.7 INTERCASE DEPENDENCIES .....	14
10.8 ORDERED DESCRIPTION OF STEPS TO BE TAKEN TO EXECUTE THE TEST CASE .....	14
<b>11. GLOBAL .....</b>	<b>15</b>
11.1 GLOSSARY .....	15
11.2 DOCUMENT CHANGE PROCEDURES .....	15

## 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 Registry Agreement states that the TLD has support for searchable whois, then the following test cases will be run and must be met.

### 1.2 References

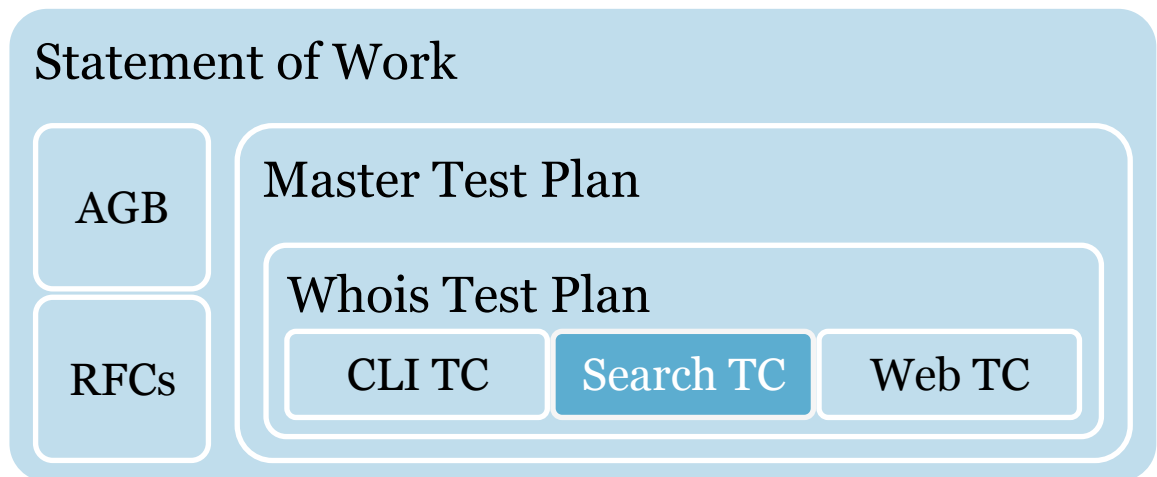
#### 1.2.1 External

- 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 00

---

### 2.1 Test case identifier

WhoisSearch00

### 2.2 Objective

The objective is to verify if applicant is contractually obligated to support searchable whois service. If the applicant will support searchable whois, the applicant must provide instructions on how to use seachable whois service sufficient.

### 2.3 Inputs

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

Id	Description	Type
RegAgree	The Registry Agreement for the specific gTLD	Document
SearchWhoisDoc	URL to a manual for searchable whois for the specific gTLD	String

### 2.4 Outcome(s)

- If searchable whois is required by the Registry Agreement for the specific gTLD then remainder of test cases must be performed, and there must be a working URL to documents on how to use searchable whois.
- If the Registry Agreement does not require support for searchable whois no other tests within this specification will be performed.

### 2.5 Environmental needs

- Web browser

### 2.6 Special procedural requirements

Abort the test if it takes longer than 10 seconds to get to the information page.

### 2.7 Ordered description of steps to be taken to execute the test case

1. Identify support for searchable whois within Registry Agreement. Expected location is Exhibit A. Determine if support for searchable whois is required by contract. If not, the test will end and the result of this test case and the following test cases are N/A.
2. If it exists continue:
3. Browse to web page where information on how to use searchable whois is stored.
4. Information must be stored in English.
5. Make a note on any visible information regarding how to use searchable whois.

### 3. Whois Search 01

---

#### 3.1 Test case identifier

WhoisSearch01

#### 3.2 Objective

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

#### 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
DnsGlueRecord	IPv4 or IPv6 addresses for auth NS	String

#### 3.4 Outcome(s)

Abuse protection MUST exist for the Whois service.

#### 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

6. Resolve IP addresses of the host whois.nic.<TLD> using <DnsGlueRecord>. This result will also be used for subsequent tests..
7. Make sure that whois.nic.<TLD> resolves to <WhoisIPv4>.
8. Browse to http://whois.nic.<TLD>
9. Make a note on any visible abuse protection.
10. Access the service with optional <WhoisCredentials>

## 4. Whois Search 02

---

### 4.1 Test case identifier

WhoisSearch02

### 4.2 Objective

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

### 4.3 Inputs

- Information on webpage in English on how to use the Searchable Whois.
- 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 partial 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>
3. Access the service with optional <WhoisCredentials>
4. 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 a previous domain query.
5. Verify that the search results include the domain names matching the search criteria.



## 5. Whois Search 03

---

### 5.1 Test case identifier

WhoisSearch03

### 5.2 Objective

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

### 5.3 Inputs

- Information on webpage in English on how to use the Searchable Whois.
- 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

### 5.4 Outcome(s)

The Whois service MUST offer exact-match 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>
3. Access the service with optional <WhoisCredentials>
4. Perform multiple exact-match searches based on registrar id and name server name. Use data from a previous domain query.
5. Verify that the search results include the domain names matching the search criteria.

## 6. Whois Search 04

---

### 6.1 Test case identifier

WhoisSearch04

### 6.2 Objective

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

### 6.3 Inputs

- Information on webpage in English on how to use the Searchable Whois.
- 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

### 6.4 Outcome(s)

The Whois service MUST offer Boolean search capabilities.

### 6.5 Environmental needs

- Web browser
- IPv4 connectivity
- <WhoisIPv4> 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 <WhoisIPv4>.
2. Browse to http://whois.nic.<TLD>
3. Access the service with optional <WhoisCredentials>
4. Perform multiple Boolean searches (AND, OR, NOT) based on data from a previous domain query.
5. Verify that the search results include the domain names matching the search criteria.

## 7. Whois Search 05

---

### 7.1 Test case identifier

WhoisSearch05

### 7.2 Objective

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

### 7.3 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

### 7.4 Outcome(s)

Abuse protection MUST exist for the Whois service.

### 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>
3. Make a note on any visible abuse protection.
4. Access the service with optional <WhoisCredentials>

## 8. Whois Search 06

---

### 8.1 Test case identifier

WhoisSearch06

### 8.2 Objective

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

### 8.3 Inputs

- Information on webpage in English on how to use the Searchable Whois.
- 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

### 8.4 Outcome(s)

The Whois service **MUST** offer partial 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>
3. Access the service with optional <WhoisCredentials>
4. 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 a previous domain query.
5. Verify that the search results include the domain names matching the search criteria.

## 9. Whois Search 07

---

### 9.1 Test case identifier

WhoisSearch07

### 9.2 Objective

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

### 9.3 Inputs

- Information on webpage in English on how to use the Searchable Whois.
- 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

### 9.4 Outcome(s)

The Whois service **MUST** offer exact-match 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>
3. Access the service with optional <WhoisCredentials>
4. Perform multiple exact-match searches based on registrar id and name server name. Use data from a previous domain query.
5. Verify that the search results include the domain names matching the search criteria.

## 10. Whois Search 08

---

### 10.1 Test case identifier

WhoisSearch08

### 10.2 Objective

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

### 10.3 Inputs

- Information on webpage in English on how to use the Searchable Whois.
- 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

### 10.4 Outcome(s)

The Whois service MUST offer Boolean search capabilities.

### 10.5 Environmental needs

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

### 10.6 Special procedural requirements

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

### 10.7 Intercase dependencies

This test has no intercase dependencies.

### 10.8 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>
3. Access the service with optional <WhoisCredentials>
4. Perform multiple Boolean searches (AND, OR, NOT) based on data from a previous domain query.
5. Verify that the search results include the domain names matching the search criteria.

## 11. Global

---

### 11.1 Glossary

The glossary is available in the Master Test Plan.

### 11.2 Document change procedures

Document change procedures are documented in the Master Test Plan.