

RIPE Database Training Course

Solutions Booklet

October 2015



Introduction

Test database

In the exercises, we will make use of the RIPE TEST Database. This is a public system that acts and responds in exactly the same way as the RIPE Database would do.

You can access the TEST Database by selecting the correct source in the Webupdates or whois tools:



Exercise 1: Using the “New Organisation Startup Form”

Task: Create a person and maintainer object pair object

In this exercise, you are going to create a person and maintainer object pair using the “New Organisation Startup Form”.

1. Go to the Webupdates tool, select “create object”
Click on the “New Organisation Startup Form” in the bottom of the page.
Select “Test Database” as source at the top of the new page.
2. Fill out all the fields in the person object creation area on the top half of the page.
You can leave the nic-hdl field empty
3. Fill out all the fields in the maintainer object creation area in the bottom half of the page.
Choose a short name for your new mntner. Make sure it ends in “...-MNT”.
4. Accept the terms and conditions by checking the appropriate box in the bottom left.
Click on “Create!”
5. Check your new person and maintainer object pair.
6. Write down the following information:

nic-hdl of your new person object: _____

name of your new maintainer object: _____

password of your new maintainer object: _____

Exercise 2: Create a role Object

Task: Create a role object using Webupdates

In this exercise, you are going to create a role object that will reference (or contain) two person objects: the person object that you have just created in Exercise 1, and the person object of your neighbour.

1. Go to the Webupdates tool, select “Create an Object”
Select the “Test Database” radio button.
Select “role” as object type and then click on “Create”
2. Add additional admin-c and tech-c lines with the “+” button.
3. Fill out the fields of the role object template.
4. Decide what’s your company’s name, and use that in first line in the ‘role’ attribute.
5. Fill out the admin-c field with the nic-hdl of the person object you have just created (in Exercise 1)
6. Fill out the tech-c field with the nic-hdl of your neighbour
7. Fill out the mnt-by field with the name of the maintainer object you have just created (in Exercise 1)
8. Supply the correct authentication in the right hand side. (The password of the maintainer object you have just created in Exercise 1)
9. Write down the following information:

nic-hdl of your new role object: _____

10. Which person(s) does this role object group together for the purpose of contact information?

Exercise 3: Finding the Correct Contact Information

In this exercise, you are going to be given an IP address and you will find the correct contact persons in the **TEST Database**.

For the following IP address: **193.0.29.71**

1. Find the inetnum object (assignment) in the TEST Database to which this IP address belongs:

193.0.29.0/24 = 193.0.29.0-193.0.29.255

2. Who is administratively responsible for this inetnum?

JD2-TEST = John Doe

3. What is the covering allocation (less specific = larger inetnum) above it?:

193.0.24.0/21 = 193.0.24.0-193.0.31.255

4. Who should you contact in case of technical problems with the allocation?

TST-TEST

5. List all their names and nic-hdls:

John Doe (JD1-TEST), Peter Black (PB1-TEST), Jan Klaas (JK33-TEST)

6. Who should you contact in case you got spammed or attacked from an IP address from this allocation?

List all their names and nic-hdls.

Abuse Prevention Role (AZ-TEST) =

(Jane Goodie =JG1-TEST, Olivia Ruimwyck =OR7-TEST, George Usher = GU9-TEST)

7. List all the objects you had to query to find the answer to Question 6.

193.0.24.0/21, ORG-XYZ1-TEST, AZ-TEST

8. What email address should you write to in case you got spammed or attacked from an IP address from this allocation?

abuse-inbox@example.net

Exercise 4: Finding All the Addresses of an LIR

Task: Find all address space that belongs to an LIR

In this exercise, you are going to be given an IP address and you will find all the address space that belongs to the LIR. You want to find all the allocations of the LIR in the **TEST Database**.

1. Consider the following IP address: **193.0.26.19**

2. Is this IP address part of an assignment? **Yes/No**___

3. What is the larger allocation above this assignment?

193.0.24.0/21 = 193.0.24.0-193.0.31.255

4. What is the LIR's organisation object?

ORG-XYZ1-TEST

5. List all the other allocations of this LIR:

43.7.32.0/21

72.3.0.0/21

91.5.0.0/22

6. What was the RIPE DB query you had to type in order to find them?

-i org ORG-XYZ1-TEST

7. How can you be sure there are no additional allocations to the ones you have listed above?

All allocations must reference the LIR's organisation object

8. What other queries could you type to be sure you found all objects of this LIR?

-i person JD2-TEST, -i person TST-TEST, -i mnt-by QQ-MNT

Exercise 5: Hierarchical Authorisation

Task 1: Create a more specific inetnum object.

Your allocation is: 192..0.0 - 192..3.255 (In the TEST DB)

1. What's the size of your allocation in CIDR notation? **/22**
2. Create the following more specific inetnum (assignment) below it:
192..0.0 - 192..0.255
3. Fill out the "netname" attribute with the name of your customer's organisation.
4. Fill out the "status" attribute with: 'ASSIGNED PA'
5. Protect the assignment inetnum with the maintainer you created in Exercise 1.
6. How many mntner(s)' passwords did you need to create this inetnum object? **2**
7. Which maintainer(s)' passwords? **CM-MNT and the mntner created in Exercise1**

Task 2: Enabling hierarchical authorisation

1. In this exercise **don't update any objects in the Database**, just write the answers on this page.
2. You want allow the Organisation Blue Magic Ltd to create another more specific inetnum (assignment): 192..1.0 - 192..1.255, below your allocation.
3. You don't want to tell them the password of your maintainer.
4. The name of their maintainer is BLUEMAGIC-MNT.
5. How do you have to modify your allocation to be able to do this?
What extra line do you have to add to your allocation?

mnt-lower: BLUEMAGIC-MNT

Exercise 6: Setting Up Reverse Delegation

Task 1: Set up reverse delegation for your allocation

1. In this exercise **don't create any objects in the Database**, just write the answers on this page.

2. Your allocation is: 10..0.0 - 10..255.255

3. What is the size of the allocation? **/16**

4. Your nameservers are: nserver.ab.example.org
nserver.xyz.example.com

5. Fill out the template for the domain object that you will create for this allocation:

domain: x.10.in-addr.arpa
descr: Reverse delegation for my /16 allocation
admin-c:
tech-c:
zone-c:
nserver: nserverX.ab.example.org
nserver: nserverX.xyz.example.com
mnt-by:
source: TEST

6. How many objects will you create ?

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Task 2: Set up reverse delegation for your second allocation

1. In this exercise **don't create any objects in the Database**, just write the answers on this page.

2. Your other allocation is: 181..0.0 /22

3. Your nameservers are: nserver.ab.example.org
nserver.xyz.example.com

4. How many objects will you create?

4

5. Fill out the template for the first domain object that you will create for this allocation:

domain: 0.x.181.in-addr.arpa
descr: Reverse delegation for my /22 allocation
admin-c:
tech-c:
zone-c:
nserver: nserverX.ab.example.org
nserver: nserverX.xyz.example.com
mnt-by:
source: TEST

6. Write down the first line ("domain:" attribute) of each of the other object(s) you will create:

1.x.181.in-addr.arpa

2.x.181.in-addr.arpa

3.x.181.in-addr.arpa

NOTES:

Your database objects

For your convenience we have **already created some objects in the RIPE TEST Database**. You can use these objects during the practical exercises today. During the exercises, you can modify these or use them to update or create other objects.

We have created a **maintainer**, **person** and some other objects for you. We shall introduce these objects during the exercises.

To identify your objects, please look up your number in the attendees' list and substitute that in the placeholders. As an example, if your number on the list is **3**, your person object will be **DA3-TEST**. On the next pages you will find the list of all your objects that are in the TEST Database.

Passwords

All your objects are protected by your own **maintainer** object. In order to modify any of them, you will need the password for this maintainer.

This password is "secret" + your number, so the password for attendee **1** will be **secret1**, the password for attendee **2** will be **secret2**, and so on.

All pre-created objects

Fill in all placeholders with your number on the list

person: Training Participant
 remarks: I am participating in a RIPE DB training course
 address: Singel 258
 address: 1016 AB Amsterdam
 phone: +312053544444
 e-mail: attendee@example.org
 nic-hdl: TP-TEST
 mnt-by: CM-MNT
 changed: attendee@example.org 20130301
 source: TEST

mntner: CM-MNT
 descr: Maintainer for the RIPE DB training course
 descr: Managed by attendee
 admin-c: TP-TEST
 mnt-by: CM-MNT
 referral-by: CM-MNT
 auth: MD5-PW \$1\$BhgnmQ44\$sgcdj40h6vYVjdzxkllgx.
 changed: attendee@example.org 20130301
 abuse-mailbox: abuse@example.org
 source: TEST