RIPE NCC Measurements and Tools Training Course

Solutions Booklet

January 2017



Introduction

This course material and available updates can be found under <u>http://</u><u>www.ripe.net/lir-services/training/courses</u>

Exercise A: Querying for a Resource

Tasks:

In this exercise, you are going to use RIPEstat to query for resources (IP address ranges, AS Numbers) and find out more details about them.

- 1. Go to the RIPEstat https://stat.ripe.net
- 2. What network announces 140.78.50.90? 140.78/16 from AS1205

3. Is 193.3.4.2 routed? Yes, announced by DTAG AS3320

4. In which country is 91.229.42.0/23 used? Poland

- 5. What is its corresponding INETNUM object? 91.229.42.0/22
- 6. What widget provides real-time routing status? Looking-Glass
- 7. By what percent did the number of prefixes announced within Greece increase over the last two years?

2012-07-30 to 2014-07-28: 12% ASN: 126 - 130 ~ 3% IPv4: 648 - 751 ~ 16% IPv6: 19 - 31 ~ 63%

8. How would you share interesting network events with a colleague?

After querying the resource in question, and setting the optimal zoom and/or timescale, use the "permalink" button on the result page or for an individual widget.

Exercise B: BGPlay

Tasks:

In this exercise use the BGPlay widget to find the answers

- 1. Go to RIPEstat (<u>https://stat.ripe.net</u>), after querying you can find the BGPlay widget on the 'Routing' tab.
- 2. Find the up-stream provider for AS1205: go to <u>stat.ripe.net/bgplay</u> and enter AS1205. Upstream is AS1853
- 3. Is AS3333 multi-homed? Yes, e.g AS1103, AS1299..
- 4. Check the IPv6 connectivity of your own network Type in your IPv6 prefix and if there are any networks connecting your AS.

Exercise X (Optional): Handling Abuse

Tasks:

- 1. In this exercise, you are going to find who to contact in case of abuse (hacking.spamming etc)
- 2. Who is the abuse contact for 193.0.20.22?

abuse@ripe.net

3. Who is the abuse contact for the hotel network?

look up the network you see for "Your network" if you go to <u>stat.ripe.net</u> using the hotel network

4. Who is the abuse contact for your home network?

look up an IP address from your prefix

- 5. Discussion: What can you do in these cases?
- No abuse contact found? find the webpage for the company that is holding this address space and try to find a contact there. With ripe-563 which makes having an abuse contact mandatory these cases are getting more rare but dealing with invalid abuse contacts or "getting no reply" cases are more frequent.
- No response on an abuse report? similar to the case before, finding the webpage of the company and trying other ways to contact the company.
 Some companies ignore emails sent to the abuse contact - this is a known problem.

Exercise Y (Optional): MyView

Tasks:

In this exercise, you are going to use the MyView feature of RIPEstat to select and arrange the widgets that you would like to have in your own personalised MyView tab.

- 1. Create a RIPE Access account (if you don't already have one) https://access.ripe.net
- 2. Create a MyView for a prefix containing the following widgets:
 - Routing Status
 - Looking Glass
 - Routing History

Create a view and "drag'n'drop" the mentioned widgets (by their title) on the tab that represents the newly created view.

3. Create another MyView with at least two widgets and give it a meaningful name

Exercise Z (Optional): Comparing Results

Tasks :

In this exercise you test features to compare results in RIPEstat.

- 1. No login required
- 2. Go the the 'Use Cases' >'Compare Results' menu item at the top of the RIPEstat page.
- Add widgets AND input query for each widget (ASN or IP or...). First select a widget from the drop down list, then enter a resource. By hovering over the input box for the resource, you will see what resources are supported. Click "Add" and the widget with the given resource will appear in the space below. The maximum of widgets to compare is 6.
- 4. You get a result page with widgets and query results
- 5. Share it via a permanent link Use the permalink button to create the permalink then just copy it.

Exercise W (Optional): RIPEstat Use-Cases

Tasks :

In this exercise we discuss common use-cases that network operators can encounter and try to solve them using RIPEstat.

Depending on discussed use-cases.