



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE Database

Our observations from certain use cases

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Our Goal Here



- Present and create awareness on how we've seen the RIPE Database being used and interpreted in certain cases
 - Specifically the (mis)interpretations and confusion when using certain RIPE Database information



How Did We Get Here?

- Our observations are derived from various use cases, namely:
 - Published research about the location of specific resources using RIPE Database information
 - (Non-) binding LEA requests, orders
 - Requests for information from other stakeholders on how to use the RIPE Database
- Observations are grouped and will be presented per type of information requested/analysed by the user
- Before we dive into the different categories...

RIPE Database: What Is It?



- Fundamentally it is there to provide information about the registration of specific Internet number resources
- Different objects are available to show who the responsible party is for what resources, how the resources are used, etc.
- It is a co-maintained database; the RIPE NCC maintains certain data sets, the rest by the resource holders themselves



Category #1

Location of a particular resource (holder)

Country, address attributes

A. Country Codes (I)



- In ORGANISATION objects

- A. Refers to resources co-maintained by the RIPE NCC (e.g. ORGANISATION of a member); the RIPE NCC maintains the country attribute, and it shows the country code of the legal address of the resource holder (NWI-10)

- See here how NWI-10 was implemented and the impact of the first phase

- B. Refers to resources not co-maintained by the RIPE NCC (e.g. ORGANISATION object of a customer of a member); the resource holders maintain it and are allowed to insert whichever country code suits their needs

- When NWI-10 was initially introduced, only the RIPE NCC could edit it; the RIPE NCC changed this to align it with how other non-RIPE NCC maintained attributes are treated

- In inet(6)num objects

- Always maintained by the resource holder themselves, and they are allowed to insert whichever country code suits their needs

A. Country Codes (II)



- When allowed to be edited by the resource holder, there is no definition what the country code should refer to
- Recent discussion in the DB WG mailing list with different views on the matter
- The need for a definition to which address it should refer was not shared by the entire WG

A. Country Codes - Use Case & Observations



- We have seen research that uses the country codes inserted in inet(6)num objects in order to tie specific resources to a specific country
- Not an accurate interpretation of the RIPE Database information as there is no agreed definition how this attribute should be used
- In our initial response, we explained:
 - The difference between the different country codes
 - Who is responsible for maintaining them
 - For what purposes they might be used
 - What the process is for updating RIPE NCC-maintained data
- Recent [RIPE Labs article](#) explaining all about country codes in the RIPE Database

B. Address Details - Current Situation



- Address details in an ORGANISATION object are maintained by the resource holders themselves
 - The RIPE NCC maintains only the country attribute (in some cases)
 - Resource holders maintain the rest of the address details
 - It could be used for the postal address of the resource holder
- Varying address details might appear in an ORGANISATION object
 - E.g. country code in the country attribute points to country A whereas the rest of the address details to country B

B. Address Details - Use Case & Observations



- Received questions on:
 - How to read and interpret the information
 - What the address information points to
 - The validity of the data
 - What the RIPE NCC's role is regarding this data
- Confusion and uncertainty about the validity, correctness and value of the data

Summing Up (I)



Object	Attribute	Attribute maintained by	Pointing to
ORGANISATION referencing to co-maintained resources	country	RIPE NCC	country code of the legal address of the resource holder
ORGANISATION not referencing to co-maintained resources	country	resource holder	On the resource holder's discretion to edit it as it suits their needs
ORGANISATION	address	resource holder	
inet(6)num	country	resource holder	

Summing Up (II)



- We will be following any WG discussion on the need for a definition of the country attribute in the non-RIPE NCC maintained attributes
- At your disposal if you need any support from us!



Category #2
Resource holdership

Org-type, status attributes

Resource Holdership



- Each organisation object has a mandatory ‘org-type’ attribute
 - Purpose: indicate the type of the organisation; whether they are an RIR, LIR or Other
 - If created by a user, only the ‘Other’ type can be used; i.e. members’ customers, end users, etc. will have the org-type ‘Other’
- Each resource object has a mandatory ‘status’ attribute
 - Purpose: indicate the type of the address space, the hierarchy in the distribution chain, who is ultimately responsible for a particular Internet number resource

Resource Holdership - Use Cases & Observations



- Received (non-) binding LEA requests, orders to take actions or provide information about Internet number resources that are mistakenly thought to be registered to a particular party, for example:
 - Requests for information about resources that have been registered by a member to a customer
 - Orders to take actions on resources that are not co-maintained by the RIPE NCC (e.g. a member has further allocated them to one of their customers)
- Requesting parties had misinterpreted the 'org-type' and 'status' attributes of the relevant objects

Next Steps



- Currently considering adding further clarifications (e.g. a glossary) so that certain terms used in the RIPE Database become clearer
- Any suggestions?



Questions



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