



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

A Proposal About Country Codes

In Extended Delegated Statistics and
the RIPE Database



Recap From RIPE 77

Problem Statement



There is unclarity for the meaning of the country code attribute in the RIPE Database and our Extended Delegated statistics. This creates problems and inconsistencies.

Scope: IPv4/IPv6 Allocations and PI Assignments

Some Details



- In general, the country code refers to the country where the network is located
- Until recently, the location of the network and legal presence matched in most cases
- Growing number of out-of-region members
- Increase in requests to update the country code in Extended Delegated Statistics
- Increase in the use of the country code for other purposes (e.g. commercial) leading to inaccurate data

In The RIPE Database



- **ripe-050 (1992 - now obsolete)**

Definition of the “country:” attribute: Country where the network is located

- **RIPE Database Manual today:**

“...There are no rules defined for this attribute. It cannot therefore be used in any reliable way to map IP addresses to countries.”

Extended Delegated Statistics



- **Extended Delegated Statistics file created in 2008 as part of an effort from the RIRs to:**
 - Create one joint standard format
 - Publish reserved and free address space in addition to Allocated/Assigned
 - <ftp://ftp.ripe.net/pub/stats/ripencc/>

Extended Delegated Statistics Documentation



- **Format and Conditions used in Extended Delegated Statistics**

“cc = ... The cc value identifies the country. However, it is not specified if this is the country where the addresses are used. There are no rules defined for this value. It therefore cannot be used in any reliable way to map IP addresses to countries.”

- **Readme file Extended Delegated Statistics**

“... indicates the country where resources were first allocated or assigned. However it is not intended that the data be considered as an authoritative statement of the location where any specific resource may currently be in use.”

Status In Other RIRs



RIR	Extended Delegated Statistics	RIR Database	Updates
AFRINIC	Legal Presence (Region only)	Legal Presence (Region only)	RIR Managed Same Value
APNIC	Legal or network presence	Legal or network presence	RIR Managed Mostly same value
ARIN	Legal or network presence	Legal or network presence	User can update Same Value
LACNIC	Legal Presence (Region only*)	Legal Presence (Region only*)	RIR Managed Same Value

*(*some remnants from the past may exist)*



A Proposal

A Proposal



- The Country Code for resource objects in the RIPE Database remains as is
 - Maintained by the resource holder who decides the criteria
- A new attribute is added to the ORGANISATION object, with the Country Code of where the resource holder is legally based
 - Maintained by the RIPE NCC
- This new Country Code attribute is reflected in the Extended Delegated Statistics
 - Hence, this file will show in which country the resource holder is legally based

Why This Proposal



- Establishes a single clear definition for the meaning of country codes in our Extended Delegated Statistics
- Legal country of resource holder can be verified by RIPE NCC
- Location of network is difficult to be verified by RIPE NCC
- Country codes in the RIPE DB (ORGANISATION Objects) will be in sync with Extended Delegated Statistics
- Allows freedom to resource holders to choose how to use the country code attributes on resource objects
- More consistent with other RIRs



Questions



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