

# MEMBER UPDATE



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## UPDATE FROM RIPE NCC MANAGING DIRECTOR

Over the course of 2011, the RIPE NCC has presented for discussion a number of alternate charging scheme models for 2012. I would like to thank all of you that participated in the resulting discussion and gave your feedback. The RIPE NCC Executive Board have followed the discussion closely. As a result, they have proposed a revised model for the RIPE NCC Charging Scheme 2012 that makes it easier for individual members to easily determine their own fees. The proposed model is based on the need to provide more fairness and transparency for members, taking into account legal and fiscal constraints.

According to the proposed Charging Scheme, all RIPE NCC members can access all RIPE NCC services and products. However, for access to certain services and products, members may be required to have a minimum category level. A member's size category is determined by the amount of Internet number resources that they hold and certain other services and products they use. For the 2012 Charging Scheme, the RIPE NCC has proposed that no fees will be charged for the work involved in assigning and allocating IPv6 Internet number resources to members during that year.

An overview of the proposed Charging Scheme 2012 is available at:

[www.ripe.net/lir-services/ncc/gm/november-2011/ripe-ncc-proposed-new-charging-scheme-2012](http://www.ripe.net/lir-services/ncc/gm/november-2011/ripe-ncc-proposed-new-charging-scheme-2012)

The proposed charging scheme document will be voted on at the forthcoming RIPE NCC General Meeting in Vienna. This document is available for review, together with all other documents related to the General Meeting, at:

[www.ripe.net/lir-services/ncc/gm/november-2011](http://www.ripe.net/lir-services/ncc/gm/november-2011)

For the first time, it will be possible for members who are unable to attend the General Meeting in person, and who have registered accordingly, to participate in e-voting on resolutions proposed at the meeting. We want to make it as easy as possible for our members to participate in deciding the future direction of the RIPE NCC and are confident that e-voting will promote further involvement of more of our membership. For details about the General Meeting, including details of how to register to attend or vote remotely, please see:

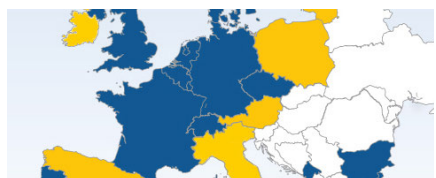
[www.ripe.net/lir-services/ncc/gm/november-2011](http://www.ripe.net/lir-services/ncc/gm/november-2011)



Another resolution that will be voted on at the RIPE NCC General Meeting is related to the certification system for Internet number resources in the RIPE NCC service region. There will also be a special session on the Monday afternoon of the RIPE Meeting to discuss certification. I would urge all of you who are interested in certification to participate in these discussions to ensure your views are heard. We welcome the opportunity to hear everyone's thoughts on this long-running discussion and to get a clear picture of how the RIPE NCC members and the RIPE community would like the RIPE NCC to proceed in this area.

**Axel Pawlik**  
RIPE NCC Managing Director

### DNSSEC DEPLOYMENT



The RIPE NCC has been signing its DNS zones since 2005. Other operators waited for the root to be signed. Signing the root zone in June 2010 clearly encouraged others to deploy DNSSEC. [page 2](#)

### GEOLOCATION



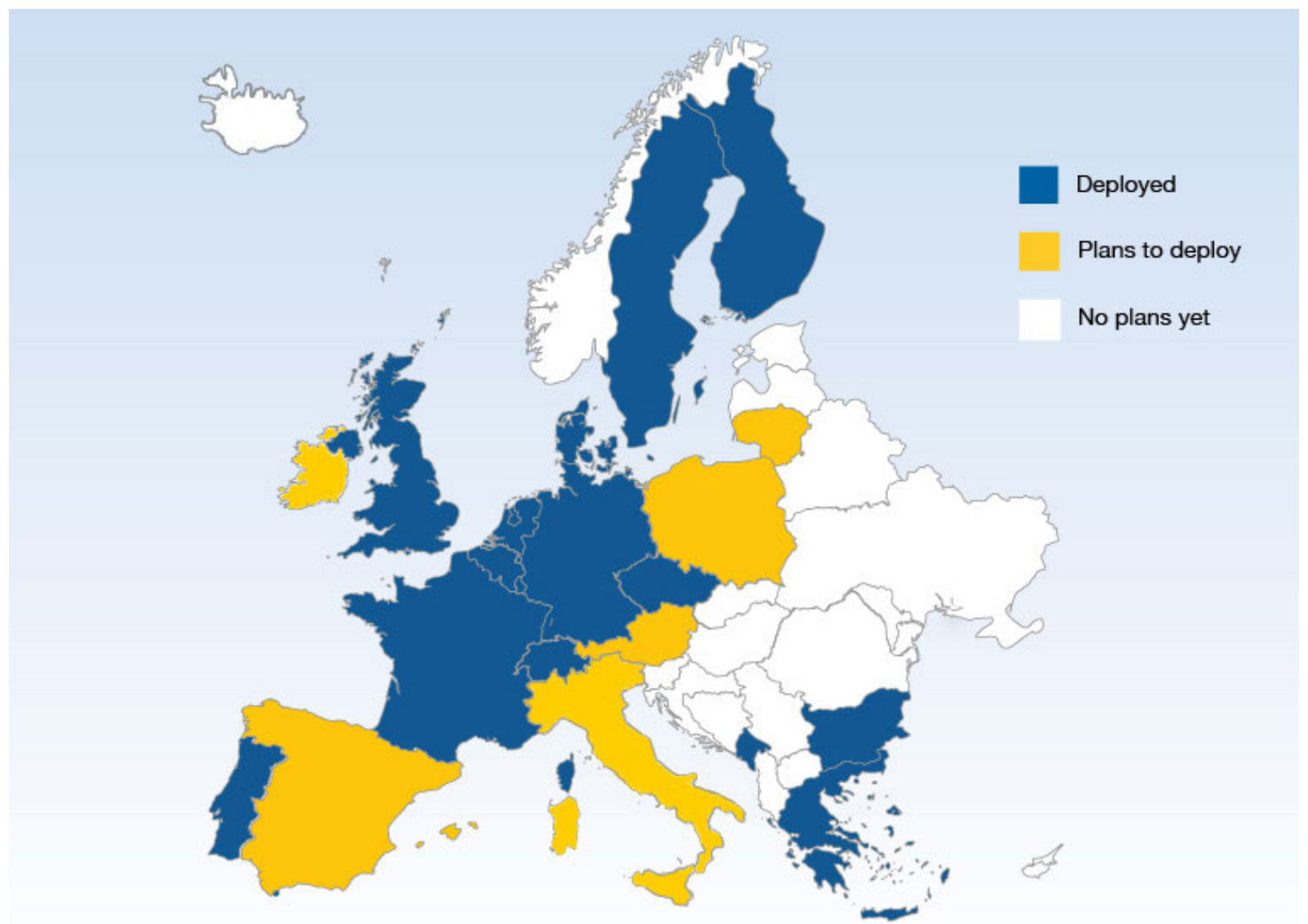
Geolocation is a hot topic. It has been discussed on different RIPE Mailing Lists and is mentioned frequently as part of a solution to a range of different problems. [page 5](#)

### DATA QUALITY



Accurate registration data is essential for the global registry system. To ensure that the RIPE Registry's data is correct, up-to-date and accurate, the RIPE NCC regularly checks the registry data to fix inconsistencies and outdated information. [page 4](#)

# DNSSEC DEPLOYMENT TODAY



DNSSEC Deployment in Europe as of 13 September 2011

The RIPE NCC has been signing its DNS zones since 2005. Other operators waited for the root to be signed. Signing the root zone in June 2010 clearly encouraged others to deploy DNSSEC. In this article we describe the status of those zones maintained by the RIPE NCC and give an overview of the European deployment of DNSSEC.

The Domain Name System Security Extensions (DNSSEC) is a suite of IETF developed specifications designed to validate information provided by the Domain Name System (DNS).

A number of early adopters deployed DNSSEC for the domain they are responsible for. Among these early adopters were the country code Top Level Domains (ccTLDs) .br, .bg, .cz, .pr, .se and the generic Top Level Domain (gTLD) .org. Besides TLD operators, organisations like the RIPE NCC and the RIPE community as a whole were on the forefront of DNSSEC development. The RIPE NCC has signed its DNS zones since 2005. However, many TLD operators waited for the root zone to be signed before they started deploying DNSSEC.

When the root zone was signed in June 2010, this acted as a catalyst for TLD operators to deploy DNSSEC on their side. We have seen a gradual but significant increase in signed TLDs since then.

The map above shows the level of DNSSEC deployment in Europe to date. Those countries marked blue have deployed DNSSEC in their ccTLD today. Those marked yellow have plans to deploy it in the near future.

*This is an excerpt from a longer article published on RIPE Labs by Wolfgang Nagele, Global Information Infrastructure Services Manager, RIPE NCC.*

*The full version of this article provides more graphs of global DNSSEC deployment and information on deployment in reverse zones. It's available at:*

<http://labs.ripe.net/Members/wnagele/dnssec-deployment-today>

# MEMBERSHIP NEWS

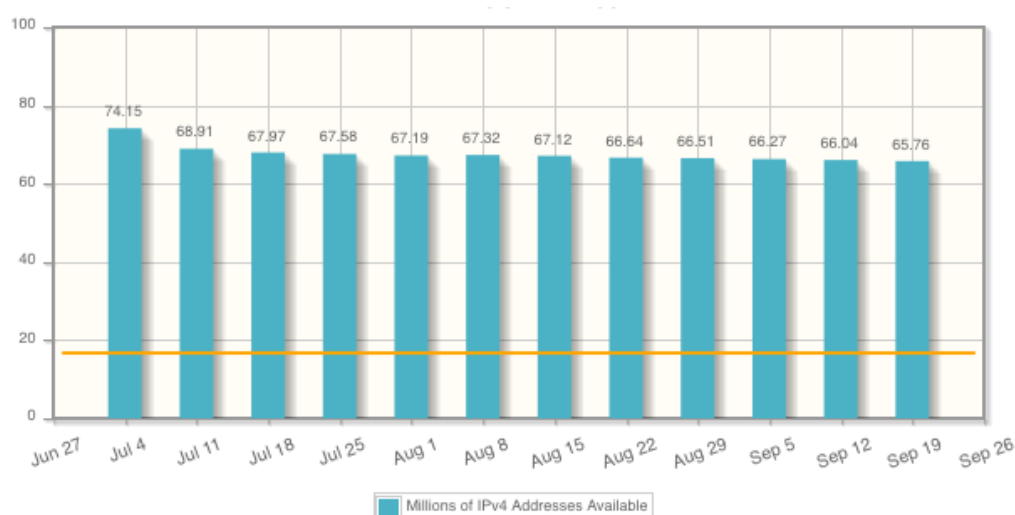
## RIPE NCC IPv4 Available Pool

The RIPE NCC provides up-to-date information on the amount of IPv4 address space it has available. The graph is updated weekly and is adjusted up or down as IPv4 addresses are distributed and returned. The most recent version of this graph is available at: [www.ripe.net/internet-coordination/ipv4-exhaustion/ipv4-available-pool-graph](http://www.ripe.net/internet-coordination/ipv4-exhaustion/ipv4-available-pool-graph)

The amount of IPv4 addresses shown includes the 8.39 million IPv4 addresses temporarily set aside for the De-Bogonising New Address Blocks project.

The last /8 that the RIPE NCC received from the IANA on 3 February 2011 is included in this graph and shown by the yellow horizontal line. This

RIPE NCC's Available IPv4 Addresses as of 19 September 2011



last /8 will be allocated according to section 5.6 of the IPv4 Address Allocation and Assignment Policies for the RIPE NCC Service Region.

## The RIPE NCC Membership and Stakeholder Survey 2011

The RIPE NCC has been conducting membership surveys since 2002. The RIPE NCC Membership and Stakeholder Survey 2011 was our first survey to ask the opinions of both members and non-members. It received by far the most responses to a RIPE NCC survey since they first began.

The Oxford Internet Institute will analyse the results and present the final report on the findings at the RIPE 63 Meeting in Vienna in November 2011.

More information about the survey is available at: [www.ripe.net/lir-services/member-support/info/surveys/ripe-ncc-membership-and-stakeholder-survey-2011](http://www.ripe.net/lir-services/member-support/info/surveys/ripe-ncc-membership-and-stakeholder-survey-2011)

## Documenting IPv6 Assignments in the RIPE Database

The RIPE community approved RIPE Policy Proposal 2010-06, "Registration Requirements for IPv6 End User Assignments" on 10 February 2011. This requires all IPv6 address assignments to be documented in the RIPE Database.

To reduce the workload, a new method of documentation has been implemented in the RIPE Database. This allows a group of multiple assignments of the same size and referencing the same contacts to be aggregated into one object.

More information is available at: [www.ripe.net/data-tools/support/documentation/documenting-ipv6-assignments-in-the-ripe-database](http://www.ripe.net/data-tools/support/documentation/documenting-ipv6-assignments-in-the-ripe-database)

### Got a Question? Try Live Chat!

RIPE NCC members are invited to try out a trial version of Live Chat the next time they have a general question on RIPE NCC services or procedures.

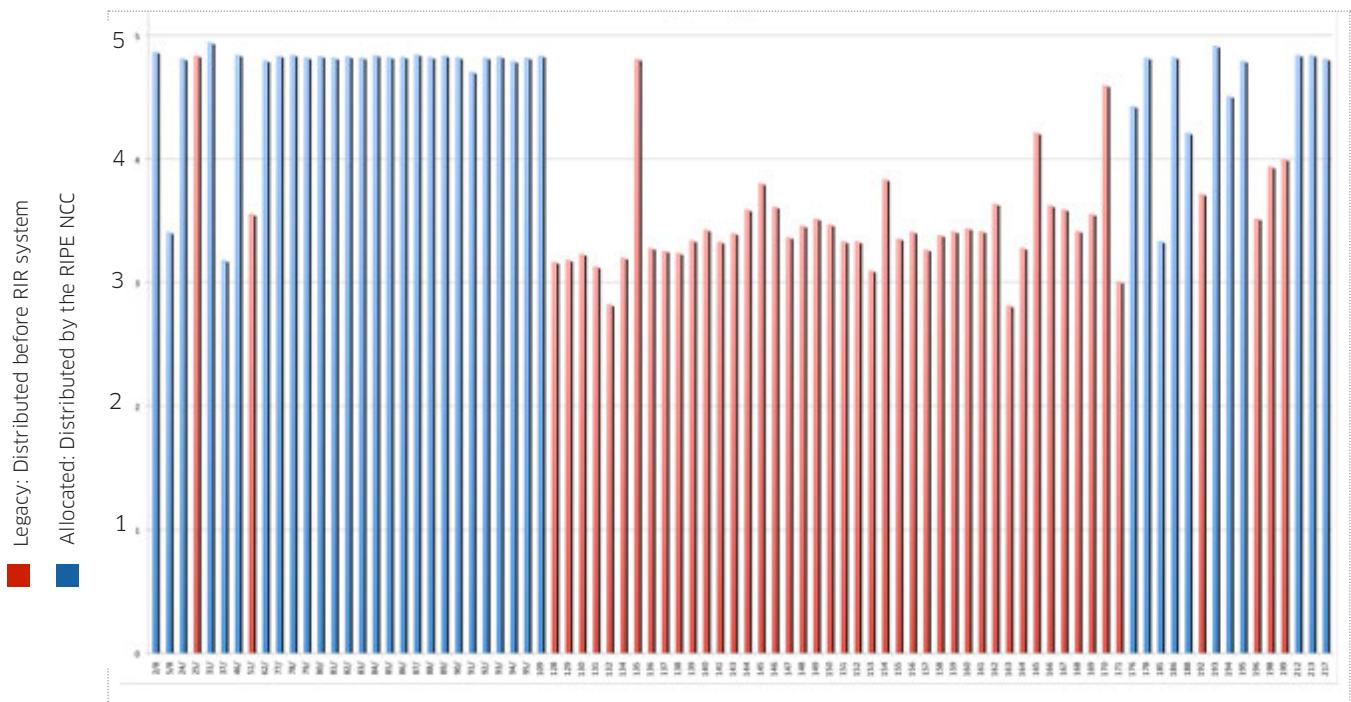


A RIPE NCC Customer Services Representative will be online from 14:00-16:00 (Amsterdam local time) from Monday to Friday.

If the trial is successful, the RIPE NCC will investigate adding Live Chat as a permanent feature.

# REGISTRY DATA QUALITY ASSESSMENT

Registration Data Quality Per /8



**Note:** The red bars in the graph above indicate legacy space. In most cases, the RIPE NCC is only responsible for specific address ranges in a legacy /8. This is due to the Early Registrations Transfer (ERX) project.

Accurate registration data is essential for the global registry system. To ensure that the RIPE Registry’s data is correct, up-to-date and accurate, the RIPE NCC regularly checks the Registry data to fix inconsistencies and outdated information. We recently evaluated and analysed all IP address ranges registered in the RIPE Database and were pleased to find that 96.09% of those records are considered accurate.

The IP address ranges were put into two categories:

- Address space distributed by the RIPE NCC (marked blue in the image above)
- Legacy address space registered in a different registry prior to the formation of the RIR system and inherited by the RIPE NCC (marked red in the image above)

We looked at the confidence score for each /8 from which the RIPE NCC registers addresses (as shown in the image above). Not surprisingly, our assessment revealed that the highest scoring records belonged to IPv4 address space distributed directly by the RIPE NCC. The lowest scoring /8s tend to be legacy space, and in these cases the address holder is not necessarily in regular contact with the RIPE NCC.

While 96.09% of the entries we looked at scored extremely high on the confidence scale, we will continue to work towards closing the gap on the lower-scoring 3.91%. We are doing this on an ongoing basis by cleaning up overlapping entries. We will continue to monitor the registrations that score well today in order to catch any deterioration of registration quality.

We are also in the process of contacting legacy space holders and urging them to update their registration data, and RIPE Policy 2007-01, “Contractual Requirements for Provider Independent Resource Holders in the RIPE NCC Service Region”, is now in its third phase of implementation.

If you’re an address space holder, we encourage you to take a moment to make sure that your registrations are updated in the RIPE Database.

For more background information, including a description of the methodology used, please refer to the RIPE Labs article: [Registry Data Quality Assessment - Phase 2](#)

## Legacy Space and the ERX Project

Legacy address space refers to IPv4 addresses and Autonomous System Numbers (ASNs) distributed by InterNIC prior to the formation of ARIN in 1997.

Once the current RIR system was formed, the RIR communities decided that legacy space should be administered by the RIR operating in the region where the resources were being used.

This led to the Early Registrations Transfer (ERX) project in which early registrations were moved to the appropriate RIR database.

The ERX project concluded in 2005.



# GEOLOCATION



Geolocation is a hot topic. It has been discussed on different RIPE Mailing Lists and is mentioned frequently as part of a solution to a range of different problems. After carefully considering the input we have received from different channels, including RIPE Mailing Lists, RIPE Meetings, Regional and Network Operator Group (NOG) Meetings, feedback from RIPE NCC training courses and the RIPE NCC Membership Survey, we developed a lightweight prototype which was launched in October 2011.

The Geolocation Service prototype has been implemented based on the following three goals:

- It should be optional for any resource holder to provide this data
- It should be easy for users to query the data either manually or using scripts or other applications
- Unless the resource holder wishes to be more specific, the service should not pinpoint an exact location that is smaller than a couple of city blocks.

Keeping these goals in mind, we considered where it would be meaningful to have this data and decided that the best candidates would be IPv4 and IPv6 resources. As we already publish location data for our members on the RIPE NCC website (in the form of a member list as well as location data on the LIR Locator map) and all allocated resources have a link to an organisation, we thought that **organisation** objects would be good candidates too.

When it came to the question of where to put these optional datasets, we decided that the most natural place would be the RIPE Database. This is because the RIPE Database already provides publically available information on all these object types in different forms and has proper authorisation mechanisms for object holders to maintain this data.

Finally, when we mapped these assumptions onto the original requirements, we found that one of the recurring use cases

involved providing content to users in different languages. In order to address that in parallel with geolocation data, we decided to add a content language indicator to the database objects.

Based on these assumptions, we implemented a prototype designed to work in the following way: anyone who maintains **inetnum**, **inet6num** or **organisation** objects in the RIPE Database can update these objects and add or edit “language:” and “geoloc:” attributes for these objects. The format of these new attribute values is also simple. To make things more intuitive, we have added map functionality to Webupdates. If users want to add the “geoloc:” attribute they can simply use the map to do so.

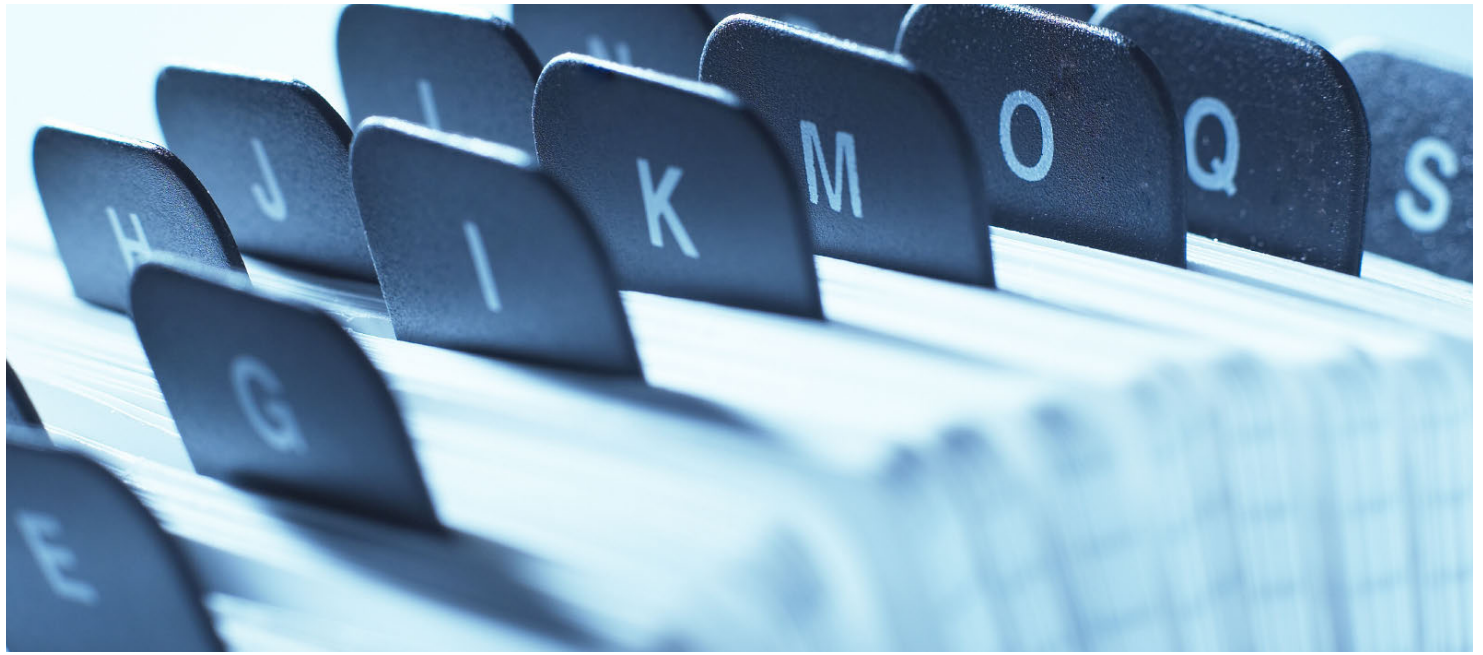
If any of this data is present in an object, it will be returned as a result of a query in the same way as other values present in an object. Using a web query form, an object with a “geoloc:” value will bring up a map showing the location highlighted on that map.

Since there is hierarchy in resources, we have also implemented a prototype tool called “Geolocation Finder”. This traverses the hierarchy (with some constraints) and shows the most relevant location and language values for the resource in question.

Finally, in the prototype, we have made all of the data accessible through our database Representational State Transfer (RESTful) API. We have also added this data to the daily split files so it can be used efficiently by users who need the data in bulk.

This prototype represents a first step in exploring the possibilities of geolocation data. We look forward to your feedback on how we should move forward in further developing this service. Please let us know your thoughts by sending an email to the RIPE NCC Database Group Manager, Kaveh Ranjbar ([kranjbar@ripe.net](mailto:kranjbar@ripe.net)).

# RIPE DATABASE UPDATE



During the last six months, the RIPE NCC has addressed the seven action points we were assigned at the RIPE 62 meeting. As a result, the RIPE NCC has:

- Made progress with the removal of forward domain data
- Developed Geolocation (see page 5)
- Sent a proposal on domain attributes
- Implemented a Transport Layer Security (TLS) prototype
- Provided the community with statistics on the usage of passwords
- Implemented a Dash Notation for Reverse DNS Domain objects in the C code
- Changed the RIPE NCC maintainers required for moving forward with 2007-01 and developed an internal process for managing 2007-01 phase 3

In addition, the RIPE NCC has migrated all of the legacy code for the RIPE Database web services to modern, Java-based code and made many small improvements to existing services, including:

- Web query forms
- Webupdates forms
- Syncupdates front-end
- Maintainer Password Recovery system
- New organisation startup form
- Password Crypt Tool

This new platform is more scalable and easier to maintain and gives us the flexibility to respond quickly to improvement requests and policy changes as well as fixing bugs.

We have also introduced some new services:

- **Global Resource Service (GRS).** This enables users to search with a single query for operational data in nightly snapshots, loaded into the RIPE Database, from

all Regional Internet Registry (RIR) and major Internet Routing Registry (IRR) databases

- **Freetext Search.** This provides the facility to perform a freetext search on a snapshot of the RIPE Database, excluding personal data
- **Representational State Transfer (RESTful) APIs** to access the RIPE Database from within a program and parse the nicely formatted XML or JSON results instead of raw Routing Policy Specification (RPSL) objects

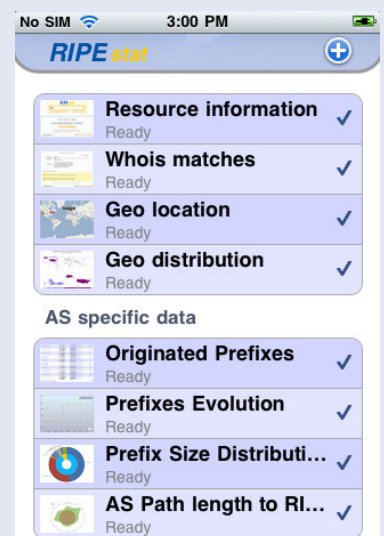
We have also made improvements to our internal infrastructure to provide a more flexible and resilient platform. Over the next few months, we will focus on updating the current version of the whois code on the back-end and improving user experience on the front-end.

## RIPEstat Mobile Application

The RIPE NCC has released a mobile app for iPhone and iPad that provides access to RIPEstat.

More information is available at:

<http://labs.ripe.net/Members/gdl/ripestat-mobile>



# RIPE WORKING GROUPS



## RIPE Working Groups

The RIPE community has several working groups that deal with various issues and topics including: tackling online abuse, DNS-related technology and operations, developing policies for the management of Internet addresses and routing identifiers, the RIPE Database and IPv6.

Each group has its own mailing list. More information is available at:

[www.ripe.net/ripe/groups/wg](http://www.ripe.net/ripe/groups/wg)

## Current Open Policy Proposals

As of 13 September 2011, the following four policy proposals were classed as open:

- PI Assignment Size (2006-05)  
[www.ripe.net/ripe/policies/proposals/2006-05](http://www.ripe.net/ripe/policies/proposals/2006-05)
- Global Policy for post-exhaustion IPv4 allocation mechanisms by the IANA (2011-01)  
[www.ripe.net/ripe/policies/proposals/2011-01](http://www.ripe.net/ripe/policies/proposals/2011-01)

- Removal of multihomed requirement for IPv6 PI (2011-02)

[www.ripe.net/ripe/policies/proposals/2011-02](http://www.ripe.net/ripe/policies/proposals/2011-02)

- Post-depletion IPv4 address recycling (2011-03)

[www.ripe.net/ripe/policies/proposals/2011-03](http://www.ripe.net/ripe/policies/proposals/2011-03)

For more details about these open policy proposals, please see:

[www.ripe.net/ripe/policies/current-proposals](http://www.ripe.net/ripe/policies/current-proposals)

## RIPE Policies – Get Involved and Make your Voice Heard

Want to get involved in developing RIPE Policies? The RIPE Policy Development Process (PDP) is open to everyone. For more information on how to participate, please see:

[www.ripe.net/ripe/policies](http://www.ripe.net/ripe/policies)

## RIPE Working Groups Fast Facts

- Currently 11 active RIPE Working Groups
- All RIPE Working Groups are open to anyone
- Working Groups have dedicated sessions at RIPE Meetings and a mailing list
- Working Groups discuss everything from policy development to the latest technological issues



# NEWS AND ANNOUNCEMENTS

## Serge Radovcic Appointed RIPE NCC Chief Communications Officer

The RIPE NCC is delighted to announce that Serge Radovcic has been appointed as its Chief Communications Officer. Serge comes from his previous position at Euro-IX where he gained more than ten year's experience working with the European and global IXP communities. As the Secretary General of Euro-IX, Serge has been a key figure in IXP communities and a regular attendee of RIPE Meetings and RIPE Working Groups. He will be responsible for the RIPE NCC's internal and external communication activities as well as the organisation of RIPE Meetings and RIPE NCC Regional Meetings. Together with Paul Rendek, Director of External Relations, RIPE NCC, Serge will coordinate the RIPE NCC's public relations activities.



**Serge Radovcic**  
Chief Communications  
Officer



**Paul Rendek**  
Director of External  
Relations

## RIPE NCC General Meeting: November 2011

The RIPE NCC General Meeting (GM) November 2011 will take place on 2-3 November 2011 in Vienna, Austria during RIPE 63.

More information is available at:

[www.ripe.net/lir-services/ncc/gm/november-2011](http://www.ripe.net/lir-services/ncc/gm/november-2011)

## Upcoming RIPE NCC Regional Meetings

### MENOG 9

Muscat, Oman

25 September – 4 October 2011



This regional meeting will take place alongside the 9th meeting of the Middle East Network Operators Group (MENOG).

More information is available at:

[www.menog.net/meetings/menog9](http://www.menog.net/meetings/menog9)

Details of the workshops, tutorials and presentations scheduled for the MENOG 9/RIPE NCC Regional Meeting are available at:

[www.menog.net/content/list-talks](http://www.menog.net/content/list-talks)

### ENOG 2

Moscow, Russia

28-30 November 2011



This regional meeting will take place alongside the second meeting of the Eurasia Network Operators' Group in Moscow.

More information is available at:

[www.enog.org](http://www.enog.org)

## RIPE Meetings

### RIPE 63

Vienna, Austria

31 October – 4 November 2011



### RIPE 64

Ljubljana, Slovenia

16-20 April 2012

## RIPE NCC Training Courses

The RIPE NCC delivers LIR, IPv6 and Routing Registry training courses to its members and offers a collection of online learning material for everyone.

More information is available at:

[www.ripe.net/lir-services/training](http://www.ripe.net/lir-services/training)