May 2015

RIPE NCC

MEMBER UPDATE 29

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RIPE NCC

Issue 29 | May 2015

MEMBER UPDATE

UPDATE FROM THE RIPE NCC MANAGING DIRECTOR

Axel Pawlik
RIPE NCC Managing Director

I'm happy to be able to report to you in what is a very vibrant period for the RIPE NCC and its membership. We depend on participation from you, the members, as well as from the wider Internet community in order to be able to function as a registry and a coordination centre for the technical community. So far this year, we have seen noticeably increased involvement from our community in many areas, and this is reflected in the progress we've made and which is outlined in this Member Update.

The RIPE 70 Meeting is almost upon us and, as I write, over 650 people have registered to attend. This demonstrates the growing strength of the RIPE community, who will present their ideas on a range of technical matters and discuss Internet addressing policies. The Programme Committee and working group chairs have developed an excellent agenda, and the RIPE NCC is proud to be able to take part and report on its own developments. I hope to see you in Amsterdam, and if that's not possible, please join us online and be part of this great event.

Alongside the RIPE Meeting, the RIPE NCC General Meeting (GM) will take place on 13 May. This is an extremely important meeting for the RIPE NCC and the membership – not only will you decide on resolutions relating to the membership fees you will pay, but there will also be an election to fill two seats on the Executive Board. The two people you elect to the board will have a key role in representing your interests in the years ahead and driving the RIPE NCC forward.

I was pleased to see that the members had a lively discussion in the run up to the GM on whether there should be a charge for AS Numbers. Differing views were put forward and, in the absence of a clear outcome, the members will vote on the issue at the GM. The ability to have our members make democratic decisions like this is one of the most obvious benefits of our organisation's membership model. I strongly urge you to inform yourself of the issues to be discussed and decided upon at the GM, and don't forget to register to cast your vote.

It is also encouraging to see that the Policy Development Process (PDP) is seeing plenty of policy proposals and associated discussion since we reached the last /8 of IPv4 address space. Of course, the RIPE NCC does not influence the policies that are decided by the RIPE community, but we do implement those policies in our processes and procedures. This update contains an interesting article on how the implementation of policies relating to legacy address space and the transfer of IPv4 address space is helping to improve the quality of the data in the RIPE Registry. This is another example of RIPE community participation having a direct benefit for all of us.

In the pages ahead, there are several examples of how your direction has helped us to improve our services and direct our activities in areas that are most beneficial for our members. This ranges from the new RIPE NCC website to RIPE Database improvements and the recently launched RIPE NCC Academy. We hope you'll continue to help us develop and I look forward to your input in the months ahead.

Contents

Feedback

If you have feedback about the contents of this Member Update or suggestions for future issues, please email the Membership Communications Officer at fergalc@ripe.net.

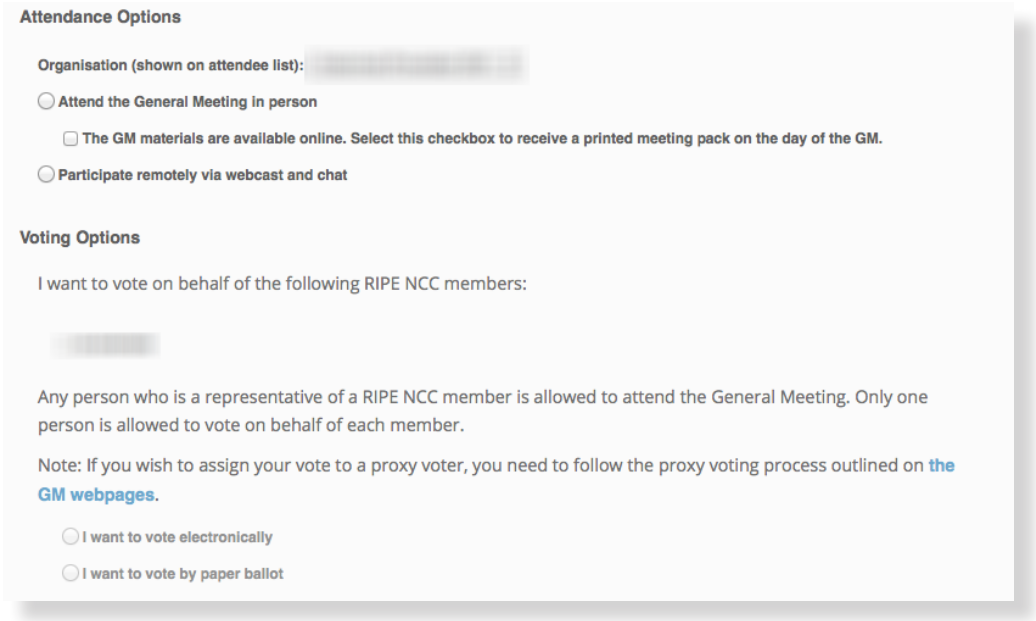
The RIPE NCC General Meeting May 2015 - Get Involved!

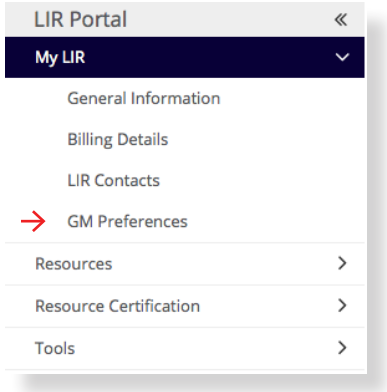
The RIPE NCC General Meeting (GM) takes place at 18:00 UTC on Wednesday, 13 May at the Okura Hotel in Amsterdam. We strongly urge all members to attend, either in person at the meeting in Amsterdam, or via the remote participation options available.

Registration at the GM

All members can register in a matter of seconds by choosing their participation and voting options in the LIR Portal. This secure method of registration was introduced at the last GM, and we've made several improvements to the software to make registering a better experience for users. Electronic voters can register until 16:00 UTC+2 on the day of the GM, while the Executive Board has approved the continued extension of the voting window until 09:00 UTC+2 on Friday, 15 May.

You can register by navigating to the GM Preferences section in the LIR Portal. If you are unable to log in, an LIR Portal administrator from your organisation will be able to add you as a contact or you can email agm@ripe.net for help.



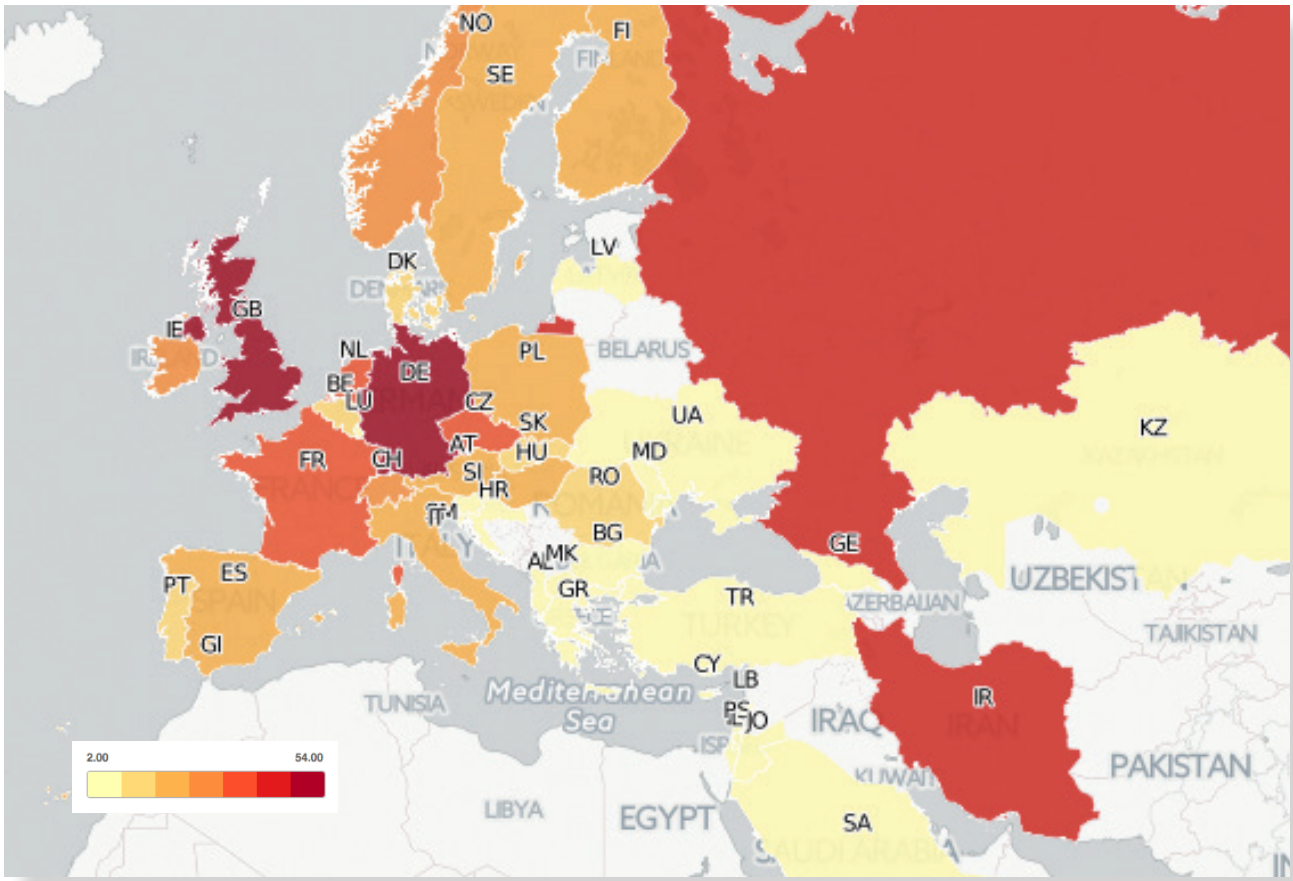


While registration now takes place through the LIR Portal, the electronic voting itself is still carried out by BigPulse to ensure an independent voting process. The announcement of the results will be made during the Friday morning coffee break at the RIPE Meeting, at 10:45 UTC.

For this GM, we also created a map that shows the GM registrations per country in our service region. We hope you'll exercise your right to democratically influence the direction of the RIPE NCC and add your registration for this important event in the RIPE NCC calendar.

The GM will be webcast and there will be a live chat facility available to ensure that all members are able to join the meeting and discussions. If you are attending the meeting in London, the GM Registration Desk will be open all day Wednesday, and you can go there to pick up your badge that you need for entry to the meeting, and your meeting pack and votes. We ask that you go to the GM Registration Desk as early as possible on Wednesday to avoid large queues and delays later in the day.

All the details about registration, voting and remote participation are available on the GM webpages: https://www.ripe.net/participate/meetings/gm/meetings/may-2015



General Meeting Vote Registrations Per Country

Resolutions and Executive Board Election

Resolutions

At the GM, members will vote on four resolutions relating to approval of our financial reporting and the discharge of the Executive Board. Two of the resolutions will also determine the fees that the members will pay in 2016. The resolutions in full are:

- The General Meeting adopts the RIPE NCC Financial Report 2014.
- The General Meeting discharges the Executive Board with regard to its actions as they appear from the Annual Report 2014.
- The General Meeting adopts the RIPE NCC Charging Scheme 2016.
- In addition to the Charging Scheme, the General Meeting approves a separate charge of EUR 50 per ASN.

Members are advised to read the supporting documentation so they can make an informed decision on these resolutions.

https://www.ripe.net/participate/meetings/gm/meetings/may-2015/supporting-documents

Executive Board Election

The RIPE NCC Executive Board currently has six members, and after this GM the board will expand to seven members who will represent the interests of the membership. There are two seats to be filled, and the two new board members will serve three-year terms.

There are four candidates for the election:

Dmitry Burkov
Russia

Amir Mohsenian
Iran

Piotr Strzyżewski
Poland

János Zsakó
Hungary

All candidates will present themselves to the membership at the GM on 13 May and explain why you should vote for them. The board and the RIPE NCC encourages you to follow the proceedings and vote for those candidates you want to represent your interests for the next three years.

The full biographies of all the candidates are available for the membership to review before the election.

https://www.ripe.net/participate/meetings/gm/meetings/may-2015/candidate-biographies

Data Quality at the RIPE NCC

It goes without saying that, as a Regional Internet Registry, the quality of the data at the RIPE NCC is of the utmost importance to our members and to the wider Internet community.

Much of the work in this area comes from within the RIPE NCC – we work to improve our processes to make it easier for members to keep their data up to date. The Assisted Registry Check (ARC) is a good example of this – members have been overwhelmingly positive about this project, which not only helps to make sure their data are accurate and up to date but also gives them practical information about their resources and information about RIPE NCC tools and services that can help them with their daily operations and streamline their own processes.

Another aspect of data quality improvement comes directly from the members and the RIPE community, who drive much of the work in this area. We implement the policies decided on by the RIPE community, and the recent approval of policies relating to resource transfers and legacy address space are good examples of this. The improvements to the RPKI system and increased use of RPKI by members and End Users is another factor that helps to improve data quality.

With this article, I'd like to give you some more detail on these projects and the policy implementations that are improving the quality of the data operators rely on.

Legacy Policy Implementation

At the 2014 RIPE NCC General Meeting, the membership approved our implementation plan for "RIPE NCC Services to Legacy Internet Resource Holders". This was an important policy for the community and the membership, and we've been working hard to ensure the goals of improved data quality in the RIPE Database and being able to provide services for legacy resource holders have been met.

With the implementation of the policy, a new "LEGACY" value for the "status:" attribute of **inetnum** and **aut-num** objects was introduced. Once this status is set, users cannot change it while it remains a legacy resource.

There are approximately 4,700 legacy resources, and we have attempted to contact all the organisations that hold this space to inform them of their options under the legacy resource policy. By engaging with the RIPE NCC, these legacy address space holders can ensure that their registrations are up to date and prevent attempted hijackings of their space.

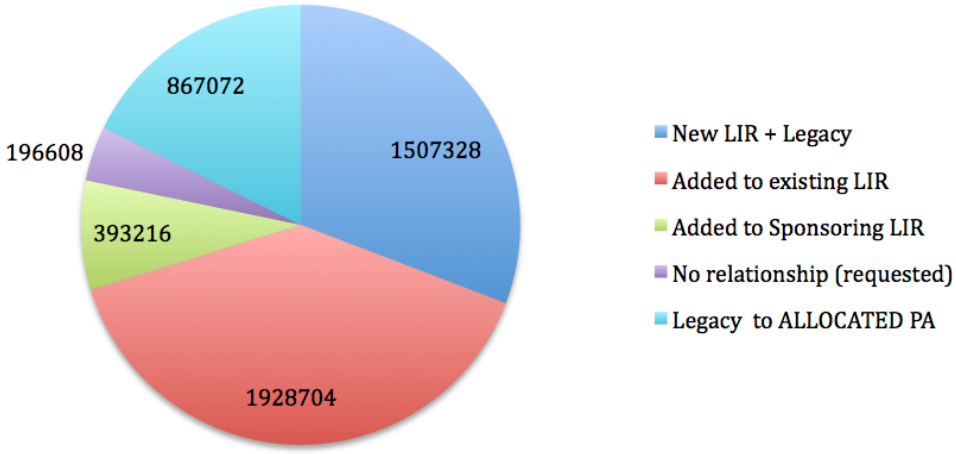
The options available to legacy resource holders are:

- Extend the existing contract by registering their legacy Internet resources (if already a RIPE NCC member)
- Become a member of the RIPE NCC
- Engage via a sponsoring LIR
- Engage directly with the RIPE NCC
- Opt not to establish a formal relationship with the RIPE NCC (these legacy holders can still update the RIPE Database and make use of our reverse DNS services)

The table below shows the options that have been chosen so far by legacy resource holders:

Outcome	# Resources
New LIR + Legacy	13
Added to existing LIR	302
Added to Sponsoring LIR	183
Engage directly with the RIPE NCC	0
No relationship (requested)	138
Legacy to ALLOCATED PA	45

The option to add legacy resources to an existing LIR account has proven most popular so far, and this is also reflected in the size of the address space registered (or not) by this resource holders.



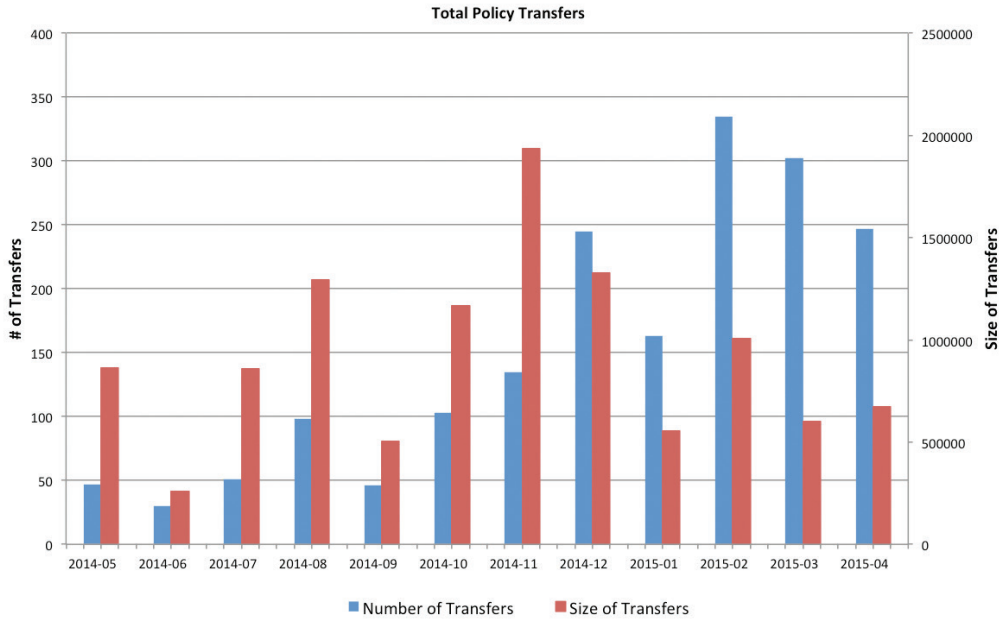
No. of IPv4 addresses per legacy engagement option chosen

The RIPE NCC has informed approximately 2,700 holders of 4,700 legacy resources in the RIPE Database to inform them of their options under the legacy resource policy.

Transfers and Certification in the RIPE NCC Service Region

The increase in IPv4 transfer activity over the past two and a half years since reaching the last /8 has also increased the accuracy of the registry. Over this period, around 14,526,720 IPv4 addresses have changed hands - equivalent to 86.6% of a /8. When the RIPE NCC processes a transfer, we update the registration records to reflect the new holder, which not only means a particular block is current but also benefits the registry as a whole.

The chart below shows the number and size of the transfers that have taken place under the policy since its approval.



My colleague Rene Wilhelm has written an article providing detailed statistics around IPv4 transfers in the RIPE NCC service region:
https://labs.ripe.net/Members/wilhelm/ipv4-transfers-in-the-ripe-ncc-service-region

Similar to transfers, Internet Resource Certification (RPKI) requires that a user have up-to-date registration records in order to use it. With the expansion of RPKI in 2014 to cover Provider Independent (PI) and legacy resources also, there is more incentive for a wider range of address holders to update their registry data. By the end of 2014, over 1,000 PI resources were already certified, and this number is growing.

The Assisted Registry Check (ARC)

The Assisted Registry Check (ARC) is the new name for the RIPE NCC's "audit" and "additional allocation audit" activities that have been improved using feedback from both the RIPE community and the RIPE NCC membership. This improvement aims to make the process more efficient and less time consuming for LIRs.

During the ARC review, the RIPE NCC performs a variety of consistency checks to assess the quality of LIRs' registry data. We then provide personalised support to help correct any issues that are found, thereby helping our members to strengthen the quality of their registry data.

The feedback we received from members who have had their ARC review so far indicates that, in contrast to the old LIR audits we conducted, it is seen as a highly beneficial service that can help members with their operations.

For the upcoming RIPE 70 Meeting, over 40 LIRs have requested to have a live, in-person ARC review with our IP Resource Analysts, which demonstrates the popularity of this new service.

Since September 2014, we have conducted over 600 ARC reviews of LIRs, and these are some ways in which it has helped to improve data quality in the Registry.

300+ LIRs	Received assistance enabling them to accurately register their resources
400+ LIRs	Discussed how they should implement IPv4 and IPv6 policy requirements
150+ LIRs	Received advice regarding resource transfers
100+ LIRs	Were supported in resolving inconsistencies between their BGP announcements and their route objects in the RIPE Database
150+ LIRs	Received help to identify lame reverse delegations

The RIPE NCC is working hard through all these mechanisms to improve the data quality in the RIPE Registry. Members see the benefits of this in their operations, through the quality of the data in the registry, and with the addition of increased security for their resources that accurate data brings.

Andrea Cima
Registration Services Manager
RIPE NCC

From the Product Manager's Desk

With the launch of the new www.ripe.net website, it is now possible to log in with your RIPE NCC Access account on every page. The addition doesn't offer an awful lot of extra functionality now, but the presence of your Single Sign-On account everywhere around the site is an important building block for our plan to offer a website and online services that work seamlessly together: displaying content that is relevant to you and allowing you to achieve your goals in an intuitive manner.

Since adding SSO support to the RIPE Database about a year ago, every service that the RIPE NCC offers uses Access for authentication. Even though more than 2,000 maintainer objects are associated with at least one SSO account, still the vast majority of users have their maintainer protected with an (arguably insecure) MD-5 password.

We have changed several of our processes to promote SSO. For example, when a user contacts us to recover a lost MD-5 password we first do the necessary checks, after which we set up the maintainer with their SSO account. New members get a maintainer protected with SSO by default. Still, in order to make bigger progress in this area, we will gradually be rolling out a new user interface for Webupdates over the coming months.

The goal we set is to migrate users from MD-5 to SSO without interrupting their workflow in a jarring manner. This means that if you want to create or update an object in the RIPE Database using Webupdates, we'll first ask you to log in with your RIPE NCC Access account (if you haven't already) and let your go about your business of doing your updates in the way you are used to. After providing your MD-5 password, we'll ask if you would like to associate your SSO account with the maintainer. You can confirm with a single click, after which you'll never have to use your MD-5 password again.

There are a great number of opportunities that become available with this migration. Tim Bruijnzeels, Assistant Manager Software Engineering, has a detailed exposé on our RIPE Database vision elsewhere in this Member Update.

With regards to the rest of the functionality on our website, we want to make big strides in improving notifications. Because we know who you are and which organisation you represent, we can give you detailed, configurable notifications on everything that is relevant to you, ranging from invoicing, meeting registration, RIPE Atlas measurements to open tickets. One of the changes that we'll implement first is to give a better context of which organisation you represent. Many of you work for multiple members or provide services as a sponsoring LIR to End User organisations. At the moment you can only choose this context in the LIR Portal. We want to make this ubiquitous throughout the website so we can show you relevant content and notifications everywhere.

All in all, blurring the lines between our different services and giving you a more seamless, integrated experience will be the focus for the foreseeable future. Exciting times are ahead! We will keep you informed and look forward to your feedback.

If you have feedback for Alex, you can contact him on alexb@ripe.net. He's also an avid Twitterer and posts about product development.

Follow @alexander_band for updates!

Alex Band
Product Manager
RIPE NCC

K-root Expansion Coming Soon

Over the past several years, many of our members and those in the wider Internet community have expressed interest in hosting a K-root node, and we believe that a more widely distributed K-root network could help improve access to K-root for Internet users within the RIPE NCC service region and around the globe. That's why we're preparing to expand K-root coverage, and will soon be inviting interested members of the community to express their interest in hosting their own node.

We are particularly interested in those organisations that can host nodes in currently under-represented regions within the K-root network in order to improve latencies within those regions, as determined by measurements we will perform. Depending on the number of requests we receive, we'll balance this by giving priority to potential hosts within the RIPE NCC service region. We'll also reach out to those organisations that have already expressed interest in hosting a K-root node, again prioritising those that will improve root server availability, both within the RIPE NCC service region and globally.

We will discuss the details of the request process with the community at RIPE 70, and are open to feedback from the community at any stage.

You can learn more about the proposed expansion, the requirements for hosting your own K-root node, and the projected timeline, on RIPE Labs:

https://labs.ripe.net/Members/romeo_zwart/k-root-expansion-plan

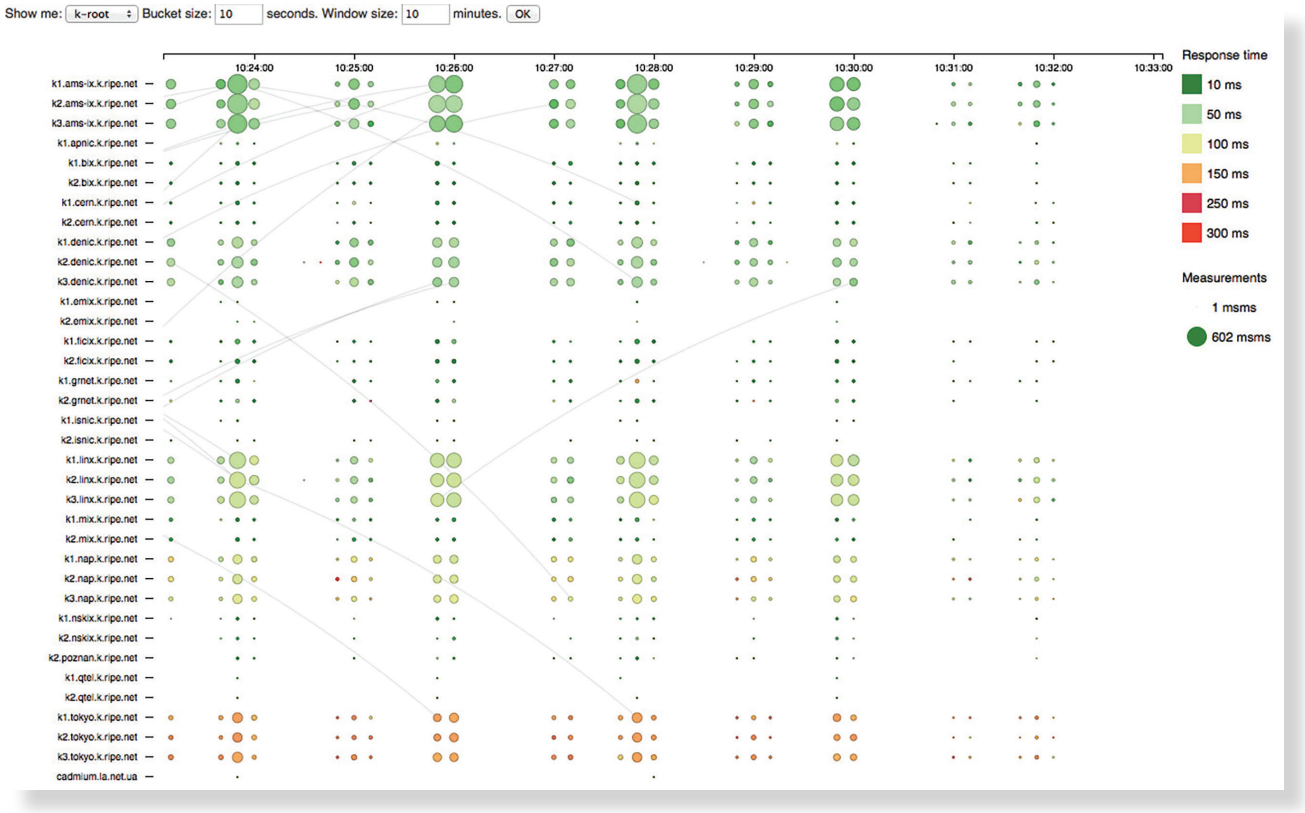
Measuring the Health of the Internet in Real Time

RIPE Atlas users were already able to analyse the health of the Internet based on the thousands of measurements collected every second by probes all over the globe. But now, a new architecture lets users receive a continuous stream of those measurement results as soon as they are sent by the probes, sort of like tuning in to a radio station. By "listening" to these data streams, network operators can access RIPE Atlas data and use it for their own custom purposes, whether it's to obtain a real-time view of their own network, or investigate a major network event such as an outage.

This new streaming capability has been put to use in the DNS root server visualisation, which shows response times for different instances, as well as how many measurements are targeting each instance, as a scrolling data stream. Data streaming can also be used to investigate network events, such as the recent incident in which Facebook went offline, by combining different tools like RIPEstat's BGPlay widget, which shows the routing history for a specific block of address space, and the RIPE Atlas' seismograph, which shows RTT and packet loss trends as seen by multiple probes in a single visualisation. At the first-ever RIPE Atlas hackathon, which took place in Amsterdam from 27-29 March, participants also used the new data streaming to visualise a power outage in the city, changes in traceroute paths, and probe connections and disconnections in real time, among other things.

Try the new data streaming API for yourself, and consider sharing your experiences with the rest of the community on RIPE Labs.

Read more about the hackathon on RIPE Labs:
https://labs.ripe.net/Members/becha/ripe-atlas-hackathon-results
Find the documentation for the new data streaming at:
https://atlas.ripe.net/docs/result-streaming/



The DNS root server visualisation is one example that makes use of the new RIPE Atlas data streaming

The RIPE NCC Website Launch

In April 2015, we launched the restructured RIPE NCC website to provide a better web experience for our users. This project was announced to the membership and it comes in response to feedback received via the RIPE NCC Survey 2013 and various other feedback mechanisms. The specific action items identified in the survey were to improve navigation, structure and usability, as well as the search functionality.

We have been hard at work during the past few months implementing the recommendations that followed the research we conducted in 2014. Our task was three-fold:

- Create, move and rename content to fit the new navigation structure
- Improve the search functionality
- Implement a brand new, fresh and modern design for the website and add new features to support it

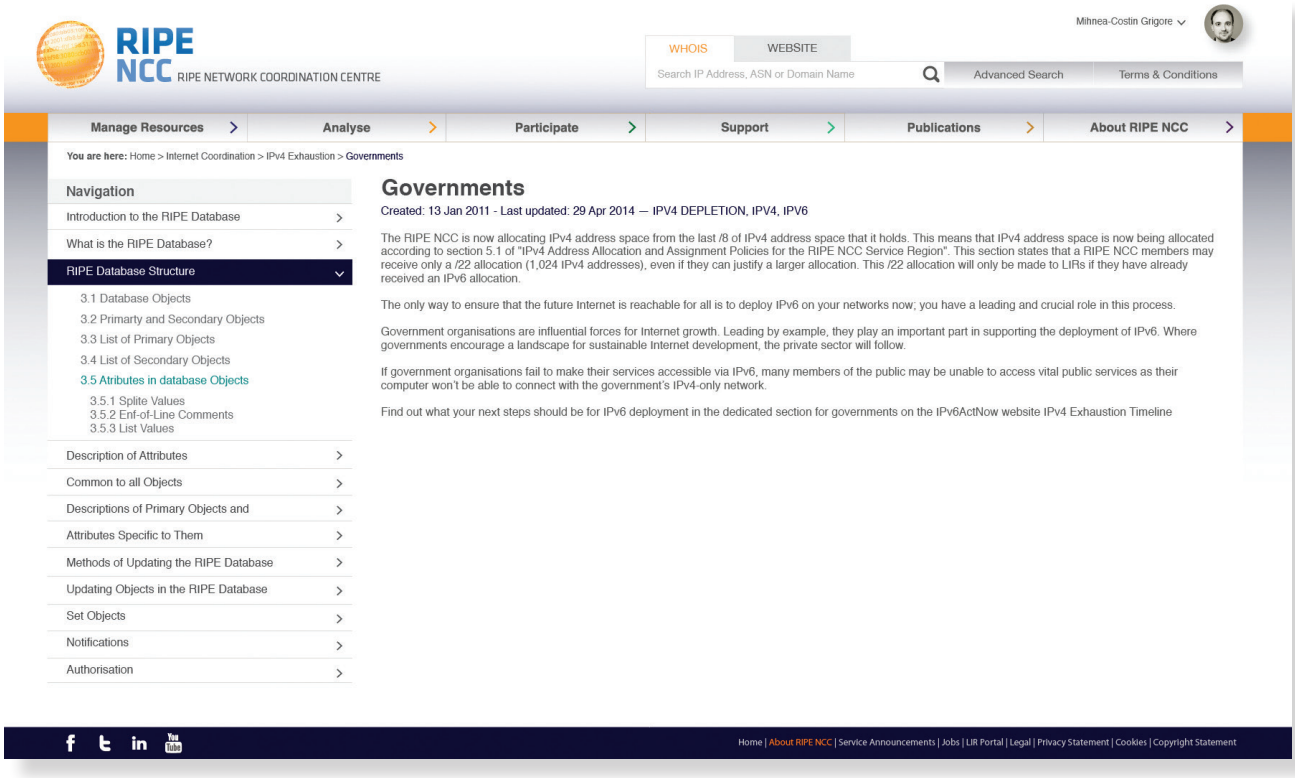
The three tasks merge together towards the final goal of our project, which was to make the website easier to navigate and bring focus on the content while reducing clutter.

Our final navigation structure, based on the information architecture research and feedback from testers, looks like this:

You will notice that we now use call-to-action titles for categories whenever possible to make them more dynamic, and we brought the content that was buried deeper in the site closer to the top level to minimise the number of clicks required to reach it. During all this, great attention was spent on keeping all existing links functional so that any bookmarks our users have would keep working.

One item that became apparent during development was that re-organising a website which contains almost 10,000 items was not an easy task. We encountered many challenges along the way about how to best organise the content. In the end, we reached a structure that we believe is a clear improvement compared to the old website, but we are not stopping here; we will continue iterating on the design, navigation and features to continuously improve them.

To complement the new navigation, we also worked with our graphic designer to come up with a modern aspect for the website. Here's what it looks like:



Our goal with the design was to create a clean, fresh look for the website while also improving its usability and accessibility. We now make better use of the available screen size on desktop machines with larger fonts for added legibility, while adjusting seamlessly to small screens on mobile devices. On the technical side, we employ the latest web technologies while still supporting older browsers, degrading gracefully and using responsive techniques. In the process we significantly improved the loading performance of pages and worked with our colleagues in the company to deploy the same template across all RIPE NCC services so that they all benefit from the improvements.

Last but not least, a number of new features were launched along with the new website:

- The ability to compare two RIPE Documents, highlighting the changes from one version to the next
- Dynamic generation of ASCII files for all RIPE Documents that have an HTML version
- Better RIPE NCC Access integration throughout the main website and all of our services, allowing for further improvements and customisation down the line

All of the research and work that went into creating the new website is contained in our suite of articles on RIPE Labs, where we go into a lot more detail about the work we did for the website:

https://labs.ripe.net/Members/mgrigore/redesigning-the-ripe-ncc-website

I am looking forward to hear what you think about it, for any feedback or questions please contact ws@ripe.net.

Mihnea-Costin Grigore
Web Services Team Leader
RIPE NCC

RIPE Database Developments

The RIPE Database is one of the most important resources that the RIPE NCC operates on behalf of the RIPE community, so any work involves ensuring that no substantive changes are made to the core functionality of the database without the support of the community. At the same time, we are working constantly to introduce usability and simplicity to the database for the benefit of the many RIPE NCC and Internet community members who rely on it for their operations.

The primary focus of the Database Team is of course on the RIPE Database operations, and requirements from the RIPE Database Working Group or RIPE Policies, and our priorities are continuously re-evaluated in this context. That said, we expect that our main focus for the first half of 2015 will be on the following two subjects:

- Deprecating "changed:"
- Improving usability of web tools

Deprecating "changed:"
As requested by the working group, the RIPE NCC has started the implementation plan to deprecate the "changed:" attribute from the RIPE Database and replace it with automatically generated attributes "last-modified:" and "created:".

The implementation plan consists of three phases. As usual, each phase is deployed to the Release Candidate environment first. This is to allow users of the database to test their tools with the new release, before it is deployed to production. In a nutshell, the plan consists of these phases:

Phase 1: Adding "last-modified:" and "created:"

Phase 1 is already completed. In this phase, the RIPE Database automatically adds two new attributes to each object: "created:" and "last-modified:". As these attributes are server-generated, no action is required from maintainers of these objects.

Scripts that have been relying on the "changed:" attribute to derive when an object was last modified should now be changed to use "last-modified:" instead because it's more reliable and the "changed:" attribute will be deprecated soon.

Phase 2: "changed:" Becomes Optional

In this phase, "changed:" will become optional. Users should stop including the attribute in updates. Updates that include "changed:" will be accepted with warnings. However, scripts can no longer rely on "changed:" to be present in objects.

Phase 3: "changed:" is Deprecated

In this phase "changed:" is completely deprecated. The attribute is removed from all existing objects, and updates that still include this attribute will be rejected.

The whole plan, including expected release dates, is described in more detail here:
https://labs.ripe.net/Members/tim/deprecating-the-changed-attribute-in-the-ripe-database

Improving the Usability of Web Tools
The RIPE Database Working Group focuses mainly on core database (template) issues, and usability of tools is rarely discussed. The RIPE NCC would welcome discussion on this, but even without this we have a lot of experience dealing with various support requests and teaching about the RIPE Database in training courses. Based on this experience we believe that the usability can and should be improved in order to lower obstacles for users, and thereby both improve the quality of the data in the database, and reduce the support burden on the RIPE NCC.

Recently we released a new version of the web tools for the redesigned RIPE NCC website. At the moment we are working hard to make it much easier to use RIPE NCC Access Single Sign-On (SSO) accounts when creating or updating objects in the RIPE Database.

The use of SSO accounts on the website makes it much easier to provide personalised relevant content to users. With regards to the RIPE Database, this will (in time) enable us to provide easier ways for users to carry out common tasks such as:

- find my maintainers and update who else has access to them
- manage my organisation's public profile
- manage my organisation's reverse DNS
- manage my organisation's route objects
- manage my organisation's allocations and assignments

Implementing all this will be a long process of small incremental steps, but we are very excited to take on this work whenever we can.

Tim Bruijnzeels
Assistant Manager Software Engineering
RIPE NCC

RIPE NCC Academy: Graduate to the Next Level!

Did you know that at RIPE 69 we launched our new E-Learning service: the RIPE NCC Academy?

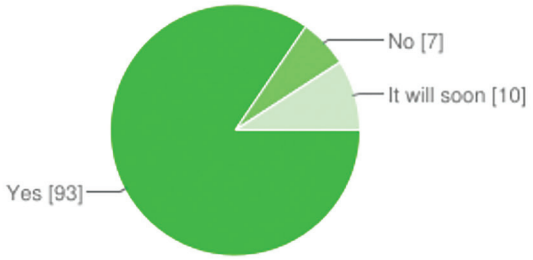
We have invested so much of our time over the past year developing the RIPE NCC Academy and now it's time to tell you a little bit about it. Based on the feedback we received from you, and after the success of our videos and of the live interactive Webinars, we went one step further and worked on a virtual learning environment that allows you to take our training courses online.

Currently, the RIPE NCC Academy consists of one online course: The RIPE Database Expert course. So far, we have 570 participants in the course and 157 already got their RIPE Database Expert certificate.

Why does the Academy benefit you? Although we travel throughout most of our region to deliver training courses and give presentations, it is very hard to reach all of our members. The fact that our courses are available online makes it easy for you to access our content, get updated with our procedures and get tested on your knowledge. Yes, you can get certified!

During the face-to-face courses, it was clear to us that for many of our members, it is important to get a certificate of knowledge for the skills they acquire during the course or even the skills they have been developing on their jobs where they have to work with the RIPE NCC tools or be familiar with our procedures and RIPE policies. As you can see, most of our learners use or will use the RIPE Database in their jobs soon.

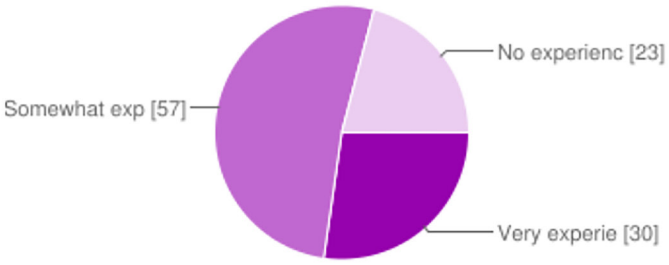
Does your job require you to use the RIPE Database?



Yes	**93**	84.5%
No	**7**	6.4%
It will soon	**10**	9.1%

Graph 1: Results from the RIPE Database Expert Course Feedback Survey

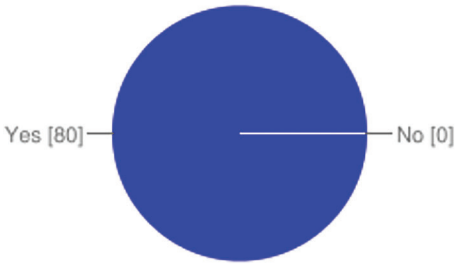
Before taking this course, how experienced were you with the RIPE Database?



Very experienced	**30**	27.3%
Somewhat experienced	**57**	51.8%
No experience at all	**23**	20.9%

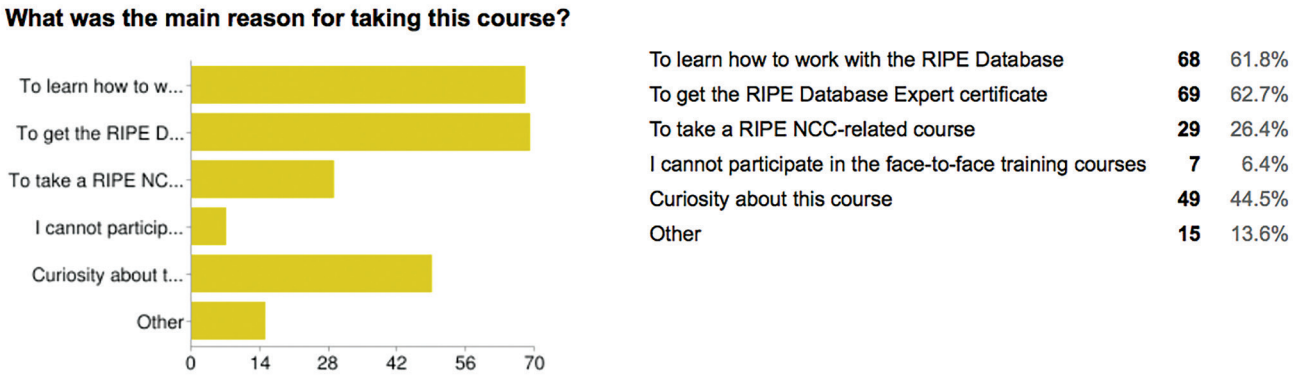
Graph 2: Results from the RIPE Database Expert Course Feedback Survey

Did the RIPE Database Expert course make you feel more confident using the RIPE Database?



Yes	**80**	100%
No	**0**	0%

Graph 3: Results from the RIPE Database Expert Course Feedback Survey



Graph 4: Results from the RIPE Database Expert Course Feedback Survey

We are very happy to see that for the people who did not have experience with the RIPE Database, the course helped them feel more confident using it.

One of the main goals of the RIPE NCC Academy is to give you the possibility to acquire your certificate through the tests and activities available in the online courses. The feedback we receive shows that this is the main reason people take the RIPE Database Expert Course.

Graph 4: Results from the RIPE Database Expert Course Feedback Survey

Since the certificate is such a great motivation to take the online courses, we want you to be able to show it. All the certificates can be seen on the RIPE NCC Academy Hall of Fame:

https://www.ripe.net/lir-services/training/academy-hall-of-fame

Regarding the course itself, there are some small things we need to fine tune, but the feedback from the learners has been crucial for us to quickly understand the improvements we need to make. But we are very happy with all the positive comments we have been receiving.

One of the most important aspects of the RIPE NCC Academy is to make sure the learners do not feel alone while taking the courses. Although the course is extremely easy to follow, we do take the importance of providing timely support very seriously.

I would like to thank our members and the people in the RIPE community who took a little bit of their time to test the RIPE NCC Academy and those who keep on giving us their feedback. All of your comments have been extremely important for us and have been taken into account at every stage of the process.

We are already working on future courses. Soon we will release an "Introduction to IPv6 course" and the "LIR Expert Course".

Following a slightly different format, we are also working on an Internet Governance online course.

As always, we love to hear from you. Send an email to academy@ripe.net if you have any comments or suggestions.

Graduate to the next level! Take our courses at:
https://academy.ripe.net

See you online very soon!

Sandra Brás
E-Learning Coordinator/Trainer
RIPE NCC

"Train the Trainer" Starting in the Middle East

The RIPE NCC's new "Train the Trainer" initiative has been designed to support the growth of IPv6 knowledge across the Middle East. The RIPE NCC will deliver courses to a core group of 15 Arabic-speaking instructors, who can then pass on their knowledge throughout the region. The idea is to grow IPv6 capacity in the Middle East by establishing local training expertise in a number of countries.

The instructors that will take part are based in the United Arab Emirates, Lebanon, Palestine and Saudi Arabia. Representatives from public and private sector companies that provide connectivity to End Users, as well as ICT-specialised universities and colleges, will comprise the first cohort of the initiative.
As the networks in the Middle East continues to work towards deploying IPv6, the initiative will provide technical expertise on a range of Internet-related matters. The empowerment of local participants promises a greater level of support for developing local Internet infrastructure as well as the growth of individuals and organisations.

IPv6 Roadshows are a joint initiative between the Middle East Network Operators Group (MENOG) and the RIPE NCC. They are three- or five-day events targeted at government and enterprise network operators. Eight IPv6 Roadshows will be held in 2015.
http://www.menog.org/ipv6-roadshow/

Nathalie Künneke-Trenaman
IPv6 Program Manager
RIPE NCC

How Are You Contributing to ICT Development?

Many RIPE NCC members organise or contribute to initiatives and activities that assist ICT development, both in their own countries and abroad. And we at the RIPE NCC would like to hear about it!

ICT development is an important issue to many stakeholders, including business, governments and civil society. Whether assisting communities in the developing world to develop their ICT knowledge and infrastructure or helping under-represented stakeholder groups to get online, development is the key to ensuring that everyone can benefit from access to the Internet.

Discussions in Internet governance circles often focus on the work being done by governments, inter-governmental organisations and NGOs. However, many RIPE NCC members and others in the Internet technical community have taken the initiative with their own efforts to build knowledge, infrastructure and capacity-building networks. Examples of grassroots contributions that the RIPE community is making to global ICT development include:

- Mentoring programs
- Funding for training and capacity building
- Community-building initiatives
- Supporting relevant research projects
- Sponsorship for participation in technical groups and forums
- Subsidised services for young entrepreneurs or not-for-profit organisations
- Green technology initiatives

The RIPE NCC would like to collect information on as many of these activities as possible and compile a report highlighting the scope and diversity of RIPE community development-related activities. This report would serve a number of purposes:

- Inspiring organisations that wish to contribute to industry development by providing examples and best practices that they could use or build on.
- Helping the RIPE NCC to focus our own activities in this area and refine the work we do for the good of the Internet.
- Demonstrating the important role that the technical community plays in the development of the Internet for all stakeholders.

As the global Internet governance discussion heats up, especially around the UN-related World Summit on the Information Society 10-year review (WSIS+10), this information can also help us to highlight the important contribution that RIPE and the Internet technical community are making to global ICT development and "bridging the digital divide".

Please send any information that you think might be relevant to goodoftheinternet@ripe.net

Chris Buckridge
Senior External Relations Officer
RIPE NCC

Update from the Policy Development Office

The Policy Development Process (PDP) is the tool the RIPE community uses to create and update policies for the RIPE NCC service region. Everyone can participate on this open and transparent process.

Over the last year, the Policy Development Office (PDO) has increased its efforts to raise the awareness about the PDP and to motivate people to join policy proposal discussions. Monthly updates about ongoing proposals are sent out.

These updates are provided in three languages: English to the RIPE community, Arabic to the MENOG community, and Russian to the ENOG community. Mailing list discussions are closely monitored and countries with little or no participation are visited to explain about the PDP. Social media such as Twitter are actively used to provide updates to parts of the Internet community that are not subscribed to the mailing lists.

The recent redesign of www.ripe.net was used to make it easier to participate in discussions and to review RIPE policies and policy proposals. All these efforts have resulted in higher awareness and new people joining the PDP.

RIPE Policy Development Update

Policy Proposals are published on the relevant working group mailing list and discussed by community members.

When there is consensus on a proposal, it becomes an active policy and is implemented by the RIPE NCC.

Accepted Policy Proposals

2014-04, Removing IPv6 Requirement for Receiving Space from the Final /8, proposed by Aleksi Suhonen and Martin Pels.
Previously, LIRs had to have an IPv6 allocation from the RIPE NCC or an upstream provider in order to request their /22 IPv4 allocation. This proposal removed this requirement.
The proposal was published in April 2014, it got revised three times and the final version was accepted in March 2015.
https://www.ripe.net/participate/policies/proposals/2014-04

2014-05, Policy for Inter-RIR Transfers of Internet Resources, proposed by Sandra Brown
This proposal describes how the transfer of Internet number resources will occur between resource holders in the RIPE NCC service region and those in other RIR service regions. The proposal was published in May 2014 and in the following months revised two times based on feedback from the RIPE Community.
The proposal was published in April 2014, it got revised two times and the final version was accepted in April 2015.
https://www.ripe.net/participate/policies/proposals/2014-05

2014-06, Publication of Sponsoring LIR for Legacy Internet Resource Holders, proposed by Nick Hilliard and Niall O'Reilly
This policy proposal applies the "Publication of Sponsoring LIR for Independent Resources" policy to holders of legacy resources.
The proposal was published in August 2014 and accepted in March 2015
https://www.ripe.net/participate/policies/proposals/2014-06

2014-07, 2014-08, 2014-10, 2014-11, Language Clarification Proposals
These policy proposals replaced in four different RIPE policies the term "should" with "must" in cases where the previous wording created unwanted ambiguity in policy documents.
The proposals were published in October 2014 and accepted in March 2015
https://www.ripe.net/participate/policies/proposals/2014-07

https://www.ripe.net/participate/policies/proposals/2014-08

https://www.ripe.net/participate/policies/proposals/2014-10

https://www.ripe.net/participate/policies/proposals/2014-11

2014-12, Allow IPv6 Transfers
This policy proposal allowed the transfer of IPv6 allocations and IPv6 Provider Independent (PI) assignments within the RIPE NCC service region.
The proposal was published in October 2014 and accepted in March 2015.
https://www.ripe.net/participate/policies/proposals/2014-12

2014-13, Allow AS Number Transfers
This proposal allowed the transfer of Autonomous System (AS) numbers within the RIPE NCC service region.
The proposal was published in October 2014 and was accepted in March 2015
https://www.ripe.net/participate/policies/proposals/2014-13

Current Policy Proposals

2014-03, Remove Multihoming Requirement for AS Number Assignments, proposed by Saku Ytti and Job Snijders
This proposal aims to ease the requirements when requesting an Autonomous System (AS) Number. It is proposed to remove the need evaluation, limit the amount of AS Numbers per organisation to 1,000 and require that 16-bit AS Numbers are multihomed after nine months.

The proposal was published in April 2014 and was revised in November 2014. Currently the proposal is in extended Review Phase until 19 May 2015.
https://www.ripe.net/participate/policies/proposals/2014-03

2015-01, Alignment of Transfer Requirements for IPv4 Allocations
This proposal aims to align the transfer requirements with a 24 month holding period for all IPv4 allocations. Currently IPv4 allocations received from another LIR only can be re-allocated after 24 months, while IPv4 allocations made by the RIPE NCC can be transferred immediately.

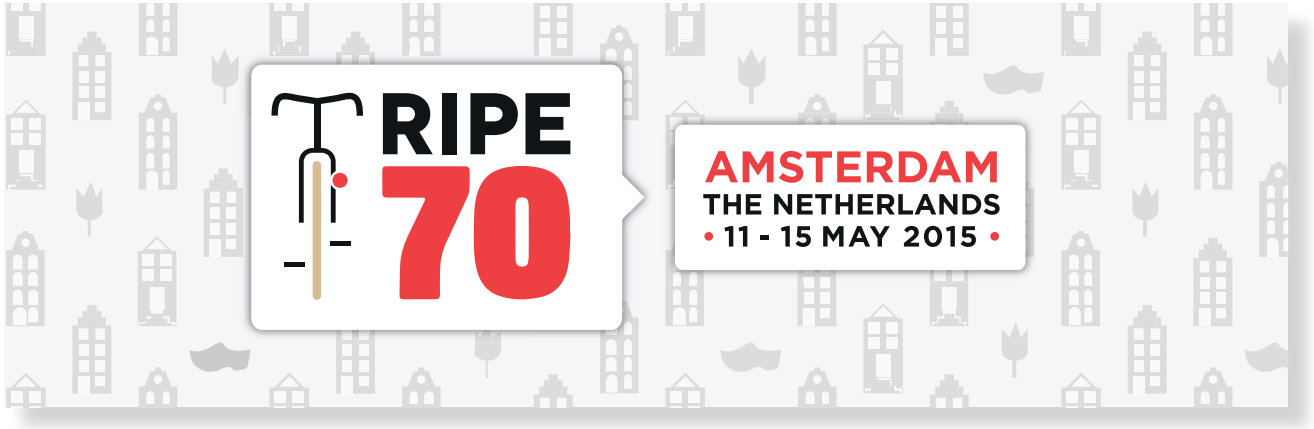
The proposal was published in February 2015 and at the time writing the RIPE NCC is producing the impact analysis and the proposal will move to Review Phase once the analysis is done.
https://www.ripe.net/participate/policies/proposals/2015-01

2015-02, Keep IPv6 PI When Requesting IPv6 Allocation
This proposal aims to remove the requirement that LIRs should return their IPv6 Provider Independent (PI) assignment when requesting an IPv6 allocation.
The proposal was published in April 2015 and at the time writing it is in the initial Discussion Phase.
https://www.ripe.net/participate/policies/proposals/2015-02

2015-03, Assessment Criteria for IPv6 Initial Allocation Size
The proposal aims to expand the criteria for evaluating initial IPv6 allocations larger than a /29. The RIPE NCC would consider additional aspects beyond only the number of existing users and extent of the organisation's infrastructure.
The proposal was published in April 2015 and at the time writing it is in the initial Discussion Phase.
https://www.ripe.net/participate/policies/proposals/2015-03

Marco Schmidt
Policy Development Officer
RIPE NCC

The RIPE 70 Meeting: A Guide for Members



RIPE 70 runs from Monday, 11 May to Friday, 15 May, and the entire program will be of interest to RIPE NCC members. Here, we explain some of what will happen next week and highlight some areas that RIPE NCC members will want to follow.

All of the RIPE Meeting sessions are webcast live, the presentations are available for download and you can join discussions in the chat room. You can also click each session on the meeting programme to find the agenda and other details for that session. You can access all these via the RIPE 70 Meeting website:
https://ripe70.ripe.net/

Here's a list of the sessions that will take place during the week. Make a note of particular subjects that catch your attention, and plan your week accordingly.

Tutorials | 09:00 - 11:00 UTC Monday

Three tutorials take place on Monday morning:

- Get Your Hands Dirty with BGP
- Hands-on DNSSEC with DNSViz
- LISP (Locator/ID Separation Protocol) Tutorial

Newcomers' Introduction | 11:30 - 12:30 UTC Monday

RIPE Chair Hans Petter Holen and RIPE NCC Managing Director Axel Pawlik will welcome newcomers to the RIPE Meeting. There are about 100 newcomers at each RIPE Meeting, so this session is a great opportunity to meet new people and find out what to expect from the week ahead.

The Plenary | 14:00 UTC Monday – 12:30 UTC Friday

The content in the plenary is chosen by a dedicated RIPE Programme Committee (PC) with the express purpose of selecting interesting, relevant and inspiring presentations. Every session in the plenary is webcast for the Internet community, so you can join us in person or online.

RIPE Atlas Workshop | 18:00 - 19:00 UTC Monday

This hands-on workshop will cover specific details about RIPE Atlas' advanced applications, such as setting up user-defined measurements, accessing results, preparing monitoring features and using the new streaming API.

BCOP Task Force | 18:00 – 19:00 UTC Monday

The Best Current Operational Practices is a specific forum for network operators, who gather to discuss the latest developments in operational documentation.

RACI Session | 18:00 – 19:00 UTC Tuesday

RACI (the RIPE Academic Cooperation Initiative) gives students and researchers the opportunity to present their work in front of some the leading technical figures in the Internet world, receive feedback on their research from experts and have their work published on the RIPE Labs website for community feedback. This session will be webcast live for the first time at RIPE 70.

Address Policy Working Group | 09:00 – 12:30 UTC Wednesday

The Address Policy Working Group discusses policies relating to the distribution and management of IPv4, IPv6 and AS Numbers. The topics on this year's agenda include keenly-debated open policy proposals that have recently attracted a lot of discussion on the mailing list.

DNS Working Group | 09:00 – 10: 30 UTC Wednesday and Thursday

The DNS Working Group discusses current DNS-related issues in technology and operations. Anand Buddhdev will give the DNS report from the RIPE NCC, and there are several presentations from the community, covering topics including Knot DNS 2.0 and DLV sunset.

Connect Working Group | 11:00 – 12:30 UTC Wednesday

The Connect Working Group discusses all subjects related to IP interconnection, raises awareness about interconnection and its role on the global Internet, and educates policymakers on how interconnection works.

Measurement, Analysis and Tools (MAT) Working Group | 14:00 – 15:30 UTC Wednesday
This is the working group where the RIPE NCC and the community can collaborate in the areas of data, tools and analysis relating to the Internet and its infrastructure, with a loose focus on monitoring, diagnosis, analysis and forecasting.

Anti-Abuse Working Group | 14:00 – 15:30 UTC Wednesday
The Anti-Abuse Working Group aims to tackle online abuse from the technical and non-technical angles. This year's session includes presentations on mapping out cyber crime infrastructure and on DNS-based DDOS.

RIPE NCC Services Working Group | 16:00 – 17:45 UTC Wednesday
The reports from the RIPE NCC, which form part of the RIPE NCC General Meeting, will be given in this working group. There will be presentations on the RIPE NCC's implementation of RIPE Policies. Attendees can also hear about the features and functions of the restructured RIPE NCC website.

IPv6 Working Group | 09:00 – 10:30 and 16:00 – 17:30 UTC Thursday
Issues relating to IPv6 deployment and measurement are the focus in this discussion. With plenty of talking points, the IPv6 Working Group covers two sessions on Thursday.

Cooperation Working Group | 11:00 – 12:30 and 14:00 – 15:30 UTC Thursday
This working group primarily discusses outreach from the traditional RIPE community to everyone else, especially governments, regulators and NGOs. RIPE 70 features two Cooperation Working Group sessions on Thursday, with a strong focus on the IANA stewardship transition.

Open Source Working Group | 11:00 – 12:30 UTC Thursday
The Open Source Working Group promotes discussion among developers, Internet Service Providers and the rest of the RIPE community about open source projects related to the RIPE community.

Routing Working Group | 14:00 – 15:30 UTC Thursday
The Routing Working Group defined the RIPE Routing Registry and promoted it worldwide. The group exchanges information about various Routing Registries. It is concerned with the growth of the routing tables on the Internet and has started an effort to decrease their size in Europe.

Database Working Group | 16:00 – 17:30 UTC Thursday
The RIPE Database is crucial for members' work, and this working group deals with all matters relating to the database. The RIPE NCC will update the community on its work on the RIPE Database, including new RIPE Database software functionality.

NRO/RIR Reports | 09:00 – 10:30 UTC Friday
In this plenary session, updates from the other four RIRs and the NRO are presented. This is also where the elections for the RIPE Programme Committee take place, which is extremely important for the development of future RIPE Meetings.

Upcoming Meetings

RIPE71
BUCHAREST ROMANIA
16 - 20 November 2015

RIPE NCC

RIPE NCC Regional Meeting
Tbilisi, Georgia
19 May 2015

ENOG
EURASIA NETWORK OPERATORS' GROUP

ENOG 9
Kazan, Russia
8-10 June 2015