



MEMBER UPDATE

UPDATE FROM THE RIPE NCC MANAGING DIRECTOR

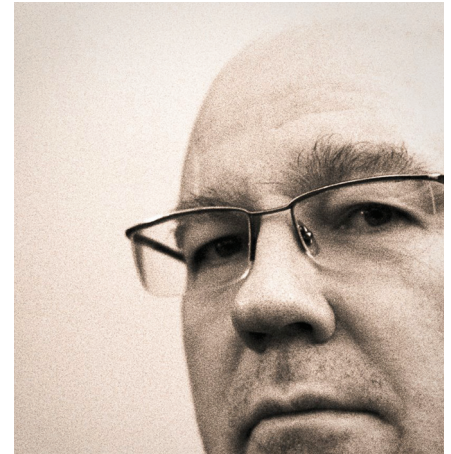
The RIPE NCC Executive Board has published the draft RIPE NCC Activity Plan and Budget 2013 in preparation for the RIPE NCC General Meeting (GM) September 2012. This document is part of a series of feedback mechanisms through which RIPE NCC members can provide input into the organisation's activities and plans for the following year. It provides a full overview of these activities together with a breakdown of the associated costs. By presenting this document in advance of RIPE 65 and the GM, the RIPE NCC aims to provide the membership with sufficient time to review, discuss and comment on the RIPE NCC's proposed activities for 2013. These activities will be discussed by the membership at the RIPE NCC Services Working Group at RIPE 65 and at the GM. If you wish to comment on them before then, please send your feedback to members-discuss@ripe.net.

The RIPE NCC Executive Board has also proposed three Charging Scheme options for members to vote on at the GM. These follow from the work of the Charging Scheme Task Force, which was set up to examine the principles underlying the RIPE NCC's Charging Scheme. RIPE NCC Executive Board Chairman, Nigel Titley, discusses the proposed Charging Scheme options and the new style RIPE NCC Draft Activity Plan and Budget on page 5 of this issue of the Member Update.

If you wish to participate in the RIPE Meeting or the RIPE NCC General Meeting but are not able to attend in person, it is possible for you to participate remotely. Sessions from the RIPE Meeting are webcast and allow for remote participants to make comments or ask questions using IRC and Jabber. RIPE NCC General Meetings are webcast only for RIPE NCC members, who are also entitled to vote remotely. You should have received an email explaining how this works and requesting you to register. More information is available at: <http://www.ripe.net/internet-coordination/lir-services/ncc/gm/september-2012/voting-procedure>

This is an exciting time for the RIPE NCC as we have almost reached the final /8 of unallocated IPv4 address space in our service region. I would like to remind our members that they should expect some changes to our IP allocation and assignment processes as a result of RIPE community policies related to the final /8 of IPv4 address space. More information about the processes adopted by the RIPE NCC regarding the final /8 of IPv4 address space is available at: <http://www.ripe.net/internet-coordination/ipv4-exhaustion/last-8-phases>

This is a historic moment for the RIPE NCC and a key focus of our activities in recent years. We have provided the Internet community with transparent and accurate data regarding IP addressing issues including the IPv4 run out and the steps needed to adopt IPv6 in good time. Government and industry IPv6 roadshows have communicated the data and offered guidance on best practice adoption. Using multiple channels, from websites, mailing lists and training courses to articles in the popular press and workshops for network operators, governments and regulators, the RIPE NCC has consistently engaged with the issues of IPv4 depletion and the importance of IPv6 deployment. We will continue to work with all stakeholders in the Internet industry and technical communities to ensure the continuation of responsible and transparent management of IP resources.



Axel Pawlik
RIPE NCC Managing Director

Contents

- 2** - Processes for Allocating Remaining IPv4 Address Space
- 2** - RIPE NCC IPv4 Available Pool
- 3** - IPv6 Updates
- 4** - RIPE Meetings
- 4** - RIPE NCC General Meetings
- 4** - RIPE NCC Regional Meetings
- 5** - RIPE NCC Draft Activity Plan, Budget and Charging Scheme 2013
- 6** - ITU Developments
- 6** - First Arab IGF Supported by RIPE NCC
- 7** - RIPE Atlas
- 8** - Resource Certification Reaches 1,000th LIR Landmark
- 8** - Access LIR Portal Data Locally

RIPE NCC Processes for Allocating Remaining IPv4 Address Space

The RIPE NCC has now entered Phase One of its approach to reaching the last /8 of unallocated IPv4 address space. This means that, as of 4 September 2012:

- We have approximately one month (or a /10) worth of IPv4 address space to distribute before we reach the last /8.
- Our IP Resource Analysts (IPRAs) are now working in pairs to ensure that all requests are dealt with efficiently and to further ensure fairness, consistency and transparency. This means that our response times may be longer than you have previously experienced.

You can find the response times for requests for IPv4 address space at:
<http://www.ripe.net/lir-services/resource-management/tools-for-lirs/reponse-time-ipv4>

- Our call back procedure has changed. We will now call requestors about their ticket only when their ticket is at the front of the request queue. This will ensure that no ticket is handled outside of the order it was received in.
- Depending on the availability in the RIPE NCC's free pool of IPv4 address space, you may receive multiple smaller prefixes that add up to the size of your request.
- The quarantine period in place for returned IPv4 address space before it can be re-used will be gradually decreased.

In the last days before we reach the last /8, the quarantine period may be reduced to one week or less. This will ensure that there is no IPv4 address space left in the quarantine pool when we start to allocate from the last /8.

More information about quarantine periods can be found at:
<https://www.ripe.net/lir-services/resource-management/quarantine-for-returned-internet-number-resources>

The IPv4 Available Pool graph will now be updated daily. You can find this graph online at:
<http://www.ripe.net/internet-coordination/ipv4-exhaustion/ipv4-available-pool-graph>

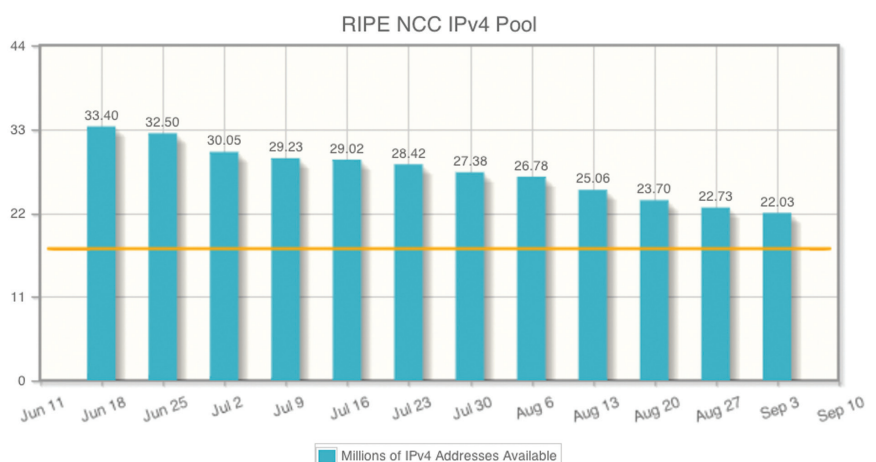
More information about reaching the last /8 can be found at:
<http://www.ripe.net/internet-coordination/ipv4-exhaustion/last-8-phases>

Important Billing Information for RIPE NCC Members

If you have had an outstanding invoice for 60 days or more, we cannot approve any requests for Internet number resources until the outstanding amount has been paid. For more details about billing, please see:
<https://www.ripe.net/lir-services/member-support/info/billing/billing-procedure-and-fee-schedule-for-lirs-2012>

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 daily and is adjusted up or down as IPv4 addresses are distributed and returned. The most recent version of this graph is available at:
<http://www.ripe.net/internet-coordination/ipv4-exhaustion/ipv4-available-pool-graph>



IPv6 Update

We're continuing to ensure every stakeholder has access to the information they need to enable them to manage IPv6 deployment. Some of our recent and ongoing activities are listed below.

CPE Survey

We're currently collating the 2012 Customer Premises Equipment (CPE) Survey. This information offers an overview of the IPv6 capabilities of various vendor equipment to help purchasers find the right home equipment for their customers.

This will be discussed further at RIPE 65 in Amsterdam, the Netherlands.

Background information and results from previous surveys can be found online at: <https://labs.ripe.net/Members/marco/ipv6-cpe-survey-results-may-2011>

IPv6 Act Now

The RIPE NCC's website, www.IPv6ActNow.org enables all stakeholders to find information about IPv6 and to prepare for deployment. In addition to sections devoted to the different IPv6 needs of governments, End Users, small business owners, decision makers and ISPs, the website also has a comprehensive collection of case studies, upcoming events, training options, and links to white papers and other IPv6 websites.

We've added an IP address checker to the homepage; you can now go to the URL and see whether you're accessing the site using an IPv6 or an IPv4 address.

World IPv6 Launch

The RIPE NCC conducted several measurements before, during and after the World IPv6 Launch on 8 June 2012. We were one of the main organisers of the IPv6 Launch events taking place in Amsterdam to celebrate the occasion. More information about the measurements and analysis can be found at RIPE Labs: <https://labs.ripe.net/ipv6launch>

More information about our involvement in World IPv6 Launch is available at:

<http://www.ripe.net/ipv6launch>
Outreach

We're continually sending our staff to relevant IPv6-related events to ensure that the urgent message about IPv6 deployment reaches all stakeholders and to promote capacity building and facilitate knowledge sharing.

An overview of the events that we've attended recently and the presentations given can be found online at: <http://www.ipv6actnow.org/ipv6-events-archive/>

A list of upcoming events can be found at: <http://www.ipv6actnow.org/info/ipv6-events/>

IPv6 RIPEness - how prepared are you?

IPv6 RIPEness is a rating system that awards stars to RIPE NCC members depending on specific indicators of IPv6 preparedness. IPv6 RIPEness provides a unique indicator of IPv6 preparedness across the RIPE NCC service region which can be used by all stakeholders. Find out how well your country is doing in the race towards IPv6 deployment: <http://ripeness.ripe.net/>

RIPE NCC IPv6 Training

Our Training Services Team delivers IPv6 for LIRs Training Courses approximately once

a week throughout the RIPE NCC service region. The courses include hands-on exercises.

You can sign up for a free IPv6 training course at: <https://lirportal.ripe.net/training/courses>

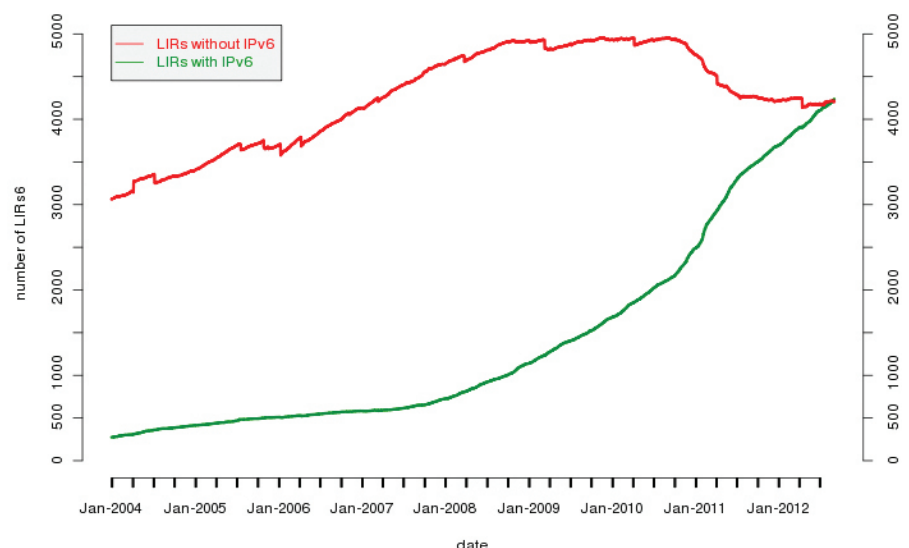
IPv6 Roadshow

A joint initiative from the Middle East Network Operators Group (MENOG), the RIPE NCC and APNIC, the IPv6 Roadshow provides an innovative three- or five-day program giving high-level operators from the region hands-on experience in deploying, routing and securing IPv6 networks.

Covering IPv6 transition mechanisms, routing, addressing and security issues, the IPv6 Roadshow also includes important modules on IPv6 monitoring, access, servers and applications. IPv6 Roadshow events have been held throughout the region since 2010, in countries including Jordan, Lebanon, Oman, Palestine, Saudi Arabia, Syria and Turkey. IPv6 Roadshow events are currently scheduled to take place in Bahrain in September 2012 and Saudi Arabia in November 2012.

More information about the IPv6 Roadshow, including schedules, agendas and requirements for potential hosts, is available at: <http://www.menog.org/IPv6-roadshow/>

RIPE NCC LIRs with IPv6 Allocation



RIPE Meetings

RIPE 64

Ljubljana, Slovenia
16-20 April 2012
<https://ripe64.ripe.net/>



RIPE 65

Amsterdam, the Netherlands
24-28 September 2012
<http://ripe65.ripe.net/>



RIPE NCC General Meetings

RIPE NCC General Meeting April 2012

The RIPE NCC General Meeting (GM) April 2012 took place on 18 April in Ljubljana, Slovenia during RIPE 64.

More information about the GM April 2012 is available at:
<http://www.ripe.net/lir-services/ncc/gm/april-2012>

RIPE NCC General Meeting September 2012

The RIPE NCC GM September 2012 will take place on 26 September. The GM will be held adjacent to the RIPE 65

Meeting which takes place at the Hotel Okura, Amsterdam, the Netherlands.

The draft agenda is available at:
<http://www.ripe.net/lir-services/ncc/gm/september-2012/agenda>

For more information and to register, see:
<http://www.ripe.net/lir-services/ncc/gm/september-2012>

Regional Meetings - ENOG / MENOG



RIPE NCC Regional Meeting Dubai / MENOG 10

Dubai, United Arab Emirates
22 April - 1 May 2012

This regional meeting took place alongside the 10th meeting of the Middle East Network Operators Group (MENOG) from 22 April - 1 May 2012. There were 120 attendees from 28 different countries.

More information is available at:
<http://www.menog.org>



RIPE NCC Regional Meeting Odessa / ENOG 3

Odessa, Ukraine
22 - 23 May 2012

The ENOG 3/RIPE NCC Regional Meeting took place in Odessa, Ukraine from 22 - 23 May 2012. This was the first time an ENOG Meeting took place in Ukraine. There were more than 250 attendees from more than 10 countries.

More information is available at:
<http://www.enog.org/meetings/enog-3>

Upcoming Regional Meetings

RIPE NCC Regional Meeting / MENOG 11

Amman, Jordan
30 September – 9 October 2012
<http://www.menog.org/meetings/menog-11/>

RIPE NCC Regional Meeting Moscow / ENOG 4

Moscow, Russia
23-24 October 2012
<http://www.enog.org/meetings/enog-4>

RIPE NCC Draft Activity Plan, Budget and Charging Scheme Options 2013

The RIPE NCC service region is very diverse and includes a wide variety of regions, languages and economies. The RIPE NCC Executive Board makes every endeavour to position the RIPE NCC so that it can deliver the highest level of service to the more than 8,000 members across its service region.

We are elected by those members to represent their interests and to ensure that the organisation performs activities that meet their needs. Over the last year, the Executive Board has thoroughly examined the activities performed by the RIPE NCC. In particular, we have focused on analysing these activities in relation to the detailed feedback we have received from the membership and in light of changing conditions affecting the Internet industry. We have also made a sustained effort to develop alternative charging models through which the activities performed on behalf of the membership are covered by the annual service fees paid by the members.

During this process, we have tried to incorporate the feedback that we have received from you. In addition to following the discussions taking place on the members' mailing list and at RIPE Meetings, we commissioned an independent survey that generated valuable feedback. We also made sure to respond to comments and criticisms we received at recent RIPE NCC General Meetings. The results of these efforts are the Draft RIPE NCC Activity Plan and Budget 2013 and the proposals for the RIPE NCC Charging Scheme 2013.

Draft RIPE NCC Activity Plan and Budget 2013

As a result of your feedback about the previous Draft Activity Plan and Budget, we have provided a simpler format with a much clearer connection between the proposed activities and corresponding budget figures. We hope this will provide you with a quicker and more transparent way to assess the activities performed by the RIPE NCC on your behalf.

We would like to point out some of the key strategic areas in the Draft Activity Plan and Budget 2013:

- **The Registry:** There is a sharp focus on maintaining and developing the registry to ensure it remains robust and that the data it contains is accurate. Resource Certification (RPKI) is continuing to be developed with an emphasis on ensuring operator autonomy.

- **Services:** Effort has been put into developing RIPEstat, a service that provides RIPE NCC members with information about the history and current state of any IP number resource. We are also proposing to put significant efforts into RIPE Atlas, a unique tool that enables users to measure how packets actually travel around the Internet.

- **Coordination Activities:** In recent years, the RIPE NCC has taken an increasingly active role in reaching out to governments, regulators and other public bodies, such as law enforcement. This is vital for the RIPE NCC membership and the RIPE community as it enables the RIPE NCC to influence a range of public and intergovernmental bodies and to promote the success of the self-regulatory model of the Internet. It is difficult to over-emphasise the importance of this work if we wish the Internet to continue in the form in which we know it.

Charging Scheme 2013 - Proposals

The Executive Board is proposing three charging scheme options for RIPE NCC members to consider, discuss and vote on at the General Meeting. The options can be summarised as follows:

- Option A – Under this option, there are no categories and every LIR pays the same fee
- Option B – Based on the model presented to the membership in July 2012, which includes self-determination of billing categories for 2014
- Option C – Based on the current Charging Scheme model with modifications to the billing score algorithm to include IPv6 and remove the separate charge for AS Numbers



Nigel Titley

RIPE NCC Executive Board Chairman

The three options are presented to the membership in order to address the wide range of ideas and concerns raised by the membership in recent discussion of the Charging Scheme model. The RIPE NCC Executive Board is eager to give members the opportunity to vote for the Charging Scheme model they prefer.

The Executive Board presented a draft model to the membership in July 2012, and we firmly believe that this is the model (Option B) that most fully incorporates the recommendations of the Charging Scheme Task Force and is best placed to provide stability for both the RIPE NCC and its members in the years to come.

The Draft Activity Plan and Budget 2013 and the proposed charging scheme options are available at:

<http://www.ripe.net/lir-services/ncc/gm/september-2012/documents>

We encourage you to read these documents in advance of the General Meeting and to post any feedback you have on the mailing list for RIPE NCC members:

members-discuss@ripe.net

If you wish to contact the Executive Board directly, you are also welcome to email us at: exec-board@ripe.net

There has been a lot of commentary already in 2012 about the International Telecommunication Union (ITU), as Member States, Internet technical community organisations and other stakeholders prepare for the World Conference on International Telecommunications (WCIT) and the revision of the International Telecommunication Regulations (ITRs). WCIT is not the only ITU game in town though - the last few months have brought up a few new developments, some of them bringing closure to old arguments, others opening up new questions to debate.

Conclusion of the ITU IPv6 Group

Established by ITU Council in 2009, the ITU IPv6 Group was tasked with reporting on a number of issues raised by ITU Member States regarding the distribution of IPv6 address space and the deployment of IPv6. Its Terms of Reference included a directive to "study the possibility for ITU to become another Internet Registry".

The RIPE NCC has participated in all four of this group's meetings, alongside other RIRs and Internet technical community organisations, providing data, analysis and information on the state of IPv6 deployment and the bottom-up policy development processes that govern the distribution of IPv6 address space.

At the group's fourth meeting in June 2012, the participants agreed that the group's mission, as laid out in the Terms of Reference, had been fulfilled. The report of that meeting recommended that ITU Council officially close the group, and at

its meeting in July, Council accepted and acted upon that recommendation.

Also contained in the report of the fourth meeting were the following findings:

- That "current IPv6 allocation policies and processes met the needs of stakeholders."
- That "future work of IPv6 human capacity building activities and project on technical, policy and economic aspects of the transition from IPv4 to IPv6 will be continued and led by ITU-BDT in collaboration with interested partner entities (RIRs, NAv6, Cisco, etc.) and partner States (Czech Republic, Sudan, Sweden, etc.)."

Further details about the group, including its full Terms of Reference, can be found here:

<http://www.itu.int/en/ITU-T/others/ipv6/Pages/default.aspx>

Opening up WCIT and the ITRs

The same ITU Council meeting also discussed the WCIT and the revision of the ITRs. The ITRs are an international treaty that "establish general principles relating to the provision and operation of international telecommunication". The WCIT forum is being convened to update the treaty, which has not been updated since 1988. Many in the Internet technical community are concerned that the new regulations may be detrimental to continuing growth and innovation in the Internet.

The RIPE NCC, coordinating closely with other RIRs and Internet technical

community organisations, has argued strongly for greater openness and transparency in the WCIT process. This will ensure that all stakeholders with an interest have the opportunity to scrutinise proposed changes to the ITRs, and will minimise the possibility of these changes having unforeseen and damaging consequences for the health of the Internet.

In July, Council agreed to make public the working draft of the revised ITRs (CWG-WCIT TD-64). While access to the individual proposals will remain restricted to ITU Members, this nonetheless represents a significant step toward a more open approach by the ITU.

The ITU Secretariat will post the draft ITRs online at:

<http://www.itu.int/en/wcit-12/>

More information on the RIPE NCC's engagement with the ITU, and more generally on the negotiations leading up to WCIT in December is available at:

<https://www.ripe.net/internet-coordination/internet-governance/multi-stakeholder-engagement/itu/>

If you have any comments or questions regarding the RIPE NCC's participation in the ITU, we encourage you to discuss the subject in the RIPE Cooperation Working Group:

<https://www.ripe.net/ripe/groups/wg/coop>

First Arab IGF Supported by the RIPE NCC

The first Arab Internet Governance Forum (IGF) event will take place in Kuwait, running from 9-11 October. Based on the model of multistakeholder dialogue and governance that has underpinned the global IGF over six years, this event marks a significant new opportunity for Internet stakeholders in the region to participate more fully in Internet governance, and focus on issues of specific relevance to the Arab region.

The RIPE NCC is proud to be a major supporter and sponsor of the Arab Internet Governance Forum. Paul Rendek, RIPE NCC Director of External Relations, is a member of the Multistakeholder Advisory Group responsible for guiding the forum, and we are working with industry partners, including AFRINIC, to organise several sessions as part of the event, on topics including Critical Internet Resources (CIR), IPv6 deployment and best practices for Internet capacity building.

All relevant information, including online registration, can be found on the website of the host organisation, the Kuwait Information Technology Society (KITS):

<http://arabigf.kits.org.kw>

If you are interested in contributing to any of the sessions listed in the draft agenda, you can contact the local host organisation or the RIPE NCC. Industry sponsorship is also welcome, and we encourage anyone with an interest in sponsoring to make contact with the local host organisation.

RIPE Atlas Enables RIPE NCC Members to Test Reachability of their Networks over IPv6

For a network operator it is far easier to find out what the Internet looks like from his or her network, than it is to find out how his or her network looks from the Internet. Tools to see from outside-in include route collectors (like the Routing Information Service) where control-plane data can be found, and looking glasses where control- and data-plane data can be obtained, but only from a single source at a time.

Since July 2012, RIPE NCC members can easily make IPv6-traceroutes from all RIPE Atlas probes to IPv6 destinations. Specifically, you can now run traceroute6 from RIPE Atlas probes towards a destination in your network. This enables an outside-in view of your network at the data-plane.

RIPE Atlas presents these traceroutes using prototype analysis and visualisation techniques. More information is available at:
<https://labs.ripe.net/Members/emileaben/visualise-your-ipv6-connectivity-using-ripe-atlas>

To test the reachability of your IPv6 network from 1,700 RIPE Atlas probes and receive graphical analysis of the paths between your network and the Internet, please go to RIPE Atlas:
https://atlas.ripe.net/atlas/ipv6_traces.html

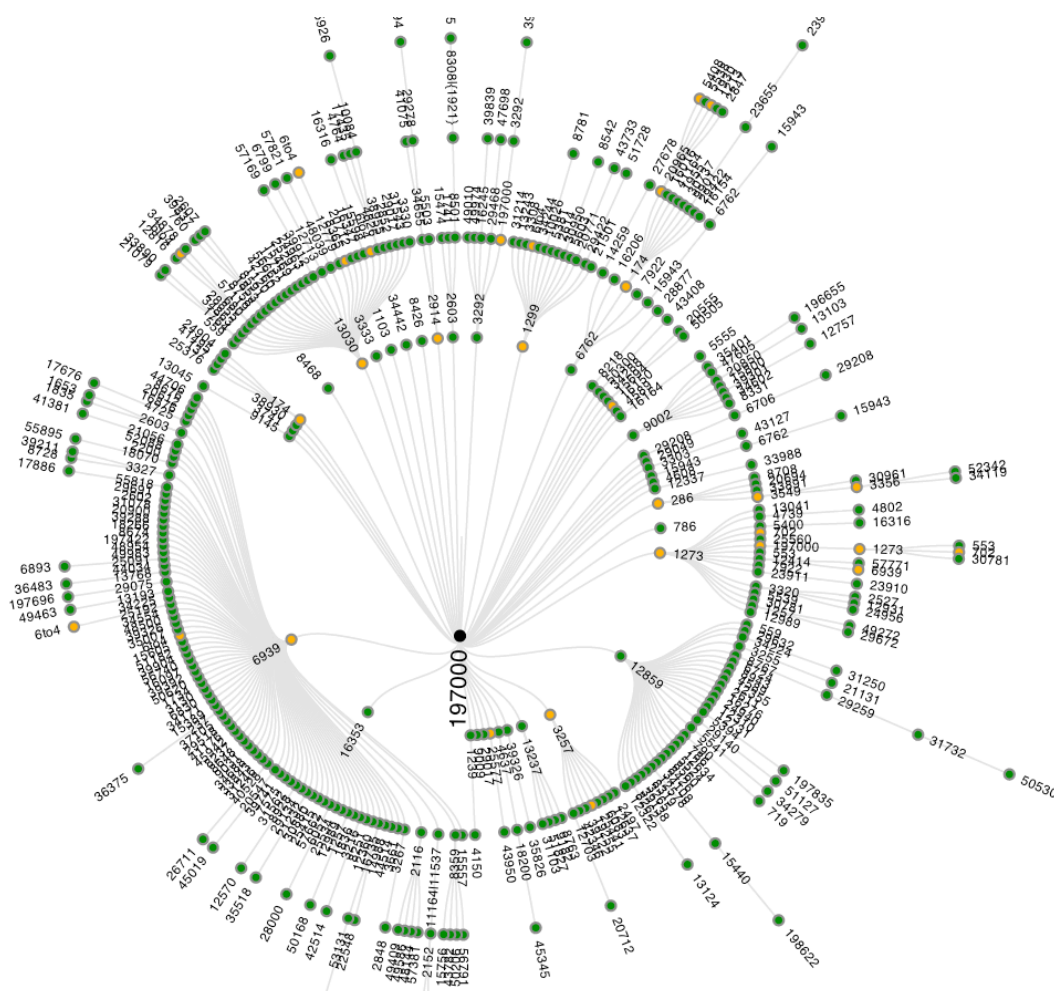


Figure 1: AS-level graph of successful trace routes to ns.ripe.net

Benefits of RIPE Atlas for Network Operators

Network operators can use RIPE Atlas measurements to:

- Detect anomalies, monitor trends, fault analysis
- Benchmark your organisation's performance
- Have "situational awareness" of network events and disturbances
- Monitor how traffic engineering affects actual latencies and losses
- Show correlation between broader network issues and your own
- Pin-point connection problems between peers
- Perform more efficient troubleshooting

RIPE Atlas Anchors – Pilot Phase

RIPE Atlas now consists of more than 1,700 active small probes located mostly at the edge of the Internet. We are looking to expand that system with a number of fixed measurement targets, the RIPE Atlas Anchors. In the first instance the anchors would be willing and cooperating targets for measurements from the probes.

will benefit from all the probes that are topologically close to you performing base-line measurements towards your network.

More information about RIPE Atlas Anchors is available at:
<https://labs.ripe.net/Members/dfk/ripe-atlas-anchors>

Hosting a RIPE Atlas Probe Anchor will direct the power of entire RIPE Atlas measurement service towards your location: by using the RIPE Atlas Anchor as the regional target, your organisation

Resource Certification (RPKI) reaches 1000th LIR Landmark

In June 2012, 18 months after launching the RIPE NCC Resource Certification (RPKI) service, the 1,000th LIR requested a digital certificate for their Internet number resources. The service has come a long way, from a prototype developed in 2006 to a full production service in collaboration with the other Regional Internet Registries, aimed at making the registries more robust and BGP routing more secure.

Resource Certification offers LIRs validatable proof of holdership. In addition, it allows LIRs to make cryptographically verifiable statements about which Autonomous Systems are authorised to originate the IP prefixes they hold. The toolset developed by the RIPE NCC to validate and use this data has already been downloaded hundreds of times in 2012 and is actively used by many organisations to make better BGP routing decisions.

For more information, please visit:
<http://ripe.net/certification>

API Keys for Members to Access LIR Portal Data Locally

There have been many requests from the membership to provide a way to access private LIR data that is not locked into the LIR Portal web interface. This is why we have built the option to create API access keys. Using a unique URL that contains the key, you can fetch data from the LIR Portal over HTTPS and use it in your local applications.

When you're logged into the LIR Portal with administrator credentials, you will see a link in the Tools section called "API Access Keys". If you click it, you will be given options to manage your keys.

More information is available on RIPE Labs at:
<https://labs.ripe.net/Members/AlexBand/lir-portal-api-keys>