

Introducing the RIPE NCC

Axel Pawlik
Managing Director



We are here to serve you

- Secretariat for RIPE Community
- Founded in 1992
 - Teenager on verge of adulthood
- Activities to support coordination of Internet operations
 - Service region Europe, Middle East, Parts of Central Asia

Guiding Principles

- Neutral
- Impartial
- Open
- Transparent

Activities

- Support for RIPE
 - Policy development Process
- Allocation of Internet Number Resources
- Operations of Root Nameserver
- Operations of RIPE Database
- ENUM Tier 0 Registry
- Training
- Outreach

Future and Strategy

- IPv4 depletion as Discontinuity
 - How will RIPE NCC be affected?
- Developing Strategies for the Future
 - Focusing on Usefulness for Members and Community
 - “Back to the Roots”
- Focus on
 - Strong Registry
 - Strong Community

Three Pillars

- Resource Lifecycle Management
 - Maintaining the Number Registry
- Reliable Source of Data
 - Develop, use and publish the wealth of data available
- Developing the Role of the RIPE NCC
 - Engage Stakeholders in Internet Governance
 - Prove Utility of RIPE NCC to Public Policy Makers

We are here to Listen & Learn

- 7th Regional Meeting in Moscow
- Important to understand local issues
- Please talk to us, ask, propose, complain and praise (where appropriate 😊)
- We are planning to intensify regional presence
- The RIPE NCC is your organisation
 - Please tell us your needs...

Policy and Registration Services Update

Andrew de la Haye
Chief Operating Officer



World wide main topics, prominent proposals

- IPv4 Depletion and Use of Final Unallocated Address Space
 - Allocations from the last /8 (2010-02)
 - Policy on how the last Internet resources will be distributed in the RIPE Region
 - Published third version for community comment and review

World wide main topics, prominent proposals

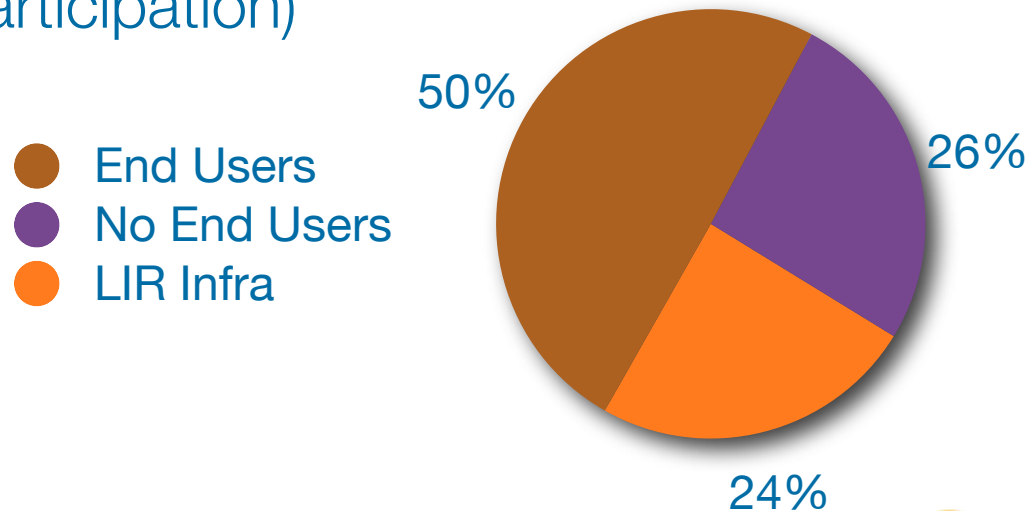
- Registration (quality) focus
 - Registration Requirements for IPv6 End User Assignments (2010-06)
 - 2007-01 End-user contracts

End User Contractual Relationship Requirements

- Phase 1
 - Set contract for all new independent resources (PI & AS)
 - Started 3 March 2009

End User Contractual Relationship Requirements

- Phase 2 (ongoing)
 - End Users to sign contracts with LIR or RIPE NCC
 - May 2009 – November 2010
 - 26,940 resources involved
 - 23,960 resources with status set (89% participation)



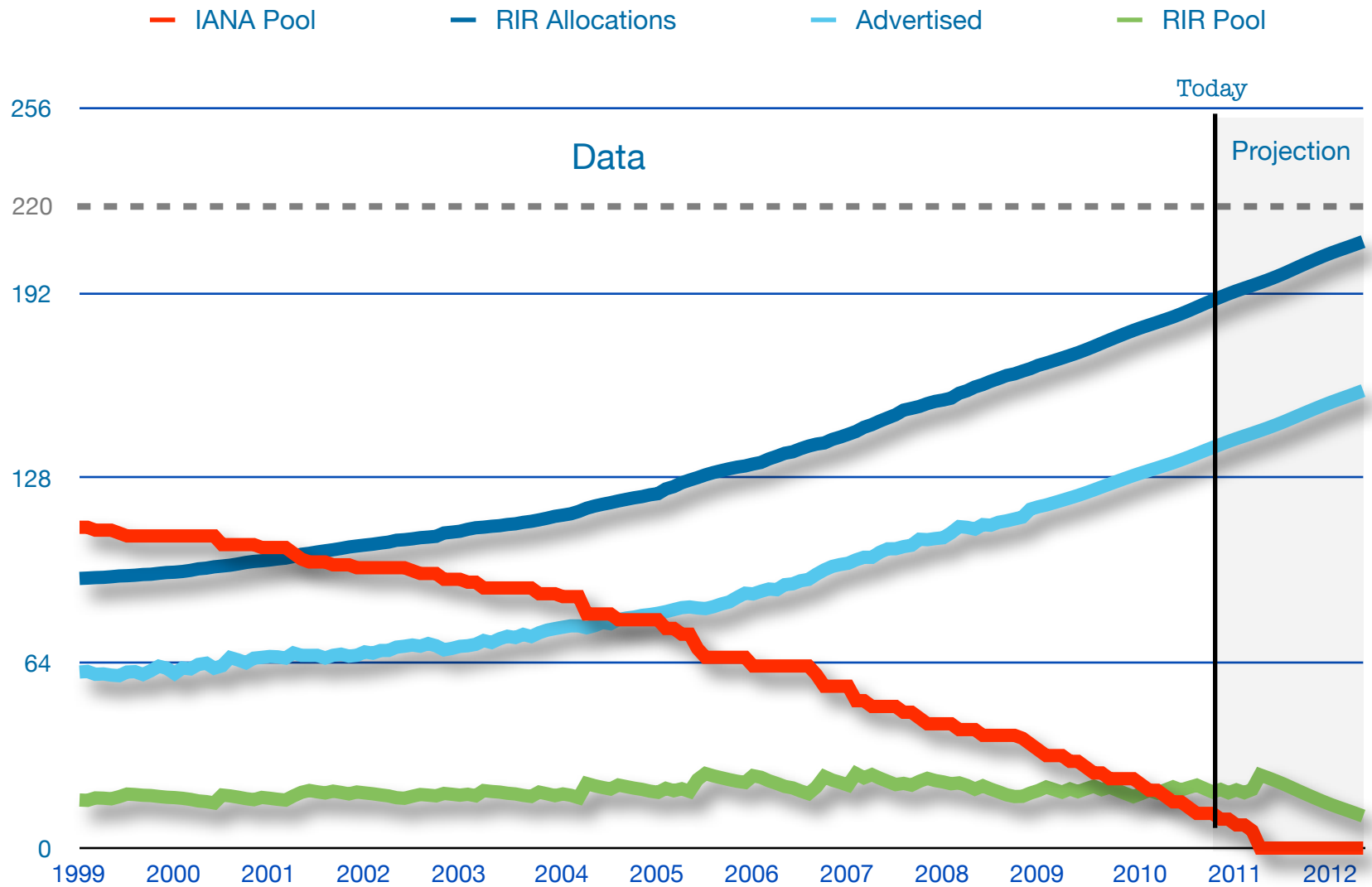
End User Contractual Relationship Requirements

- Phase 3
 - RIPE NCC contacting 'orphaned' End Users
 - Starting December 2010

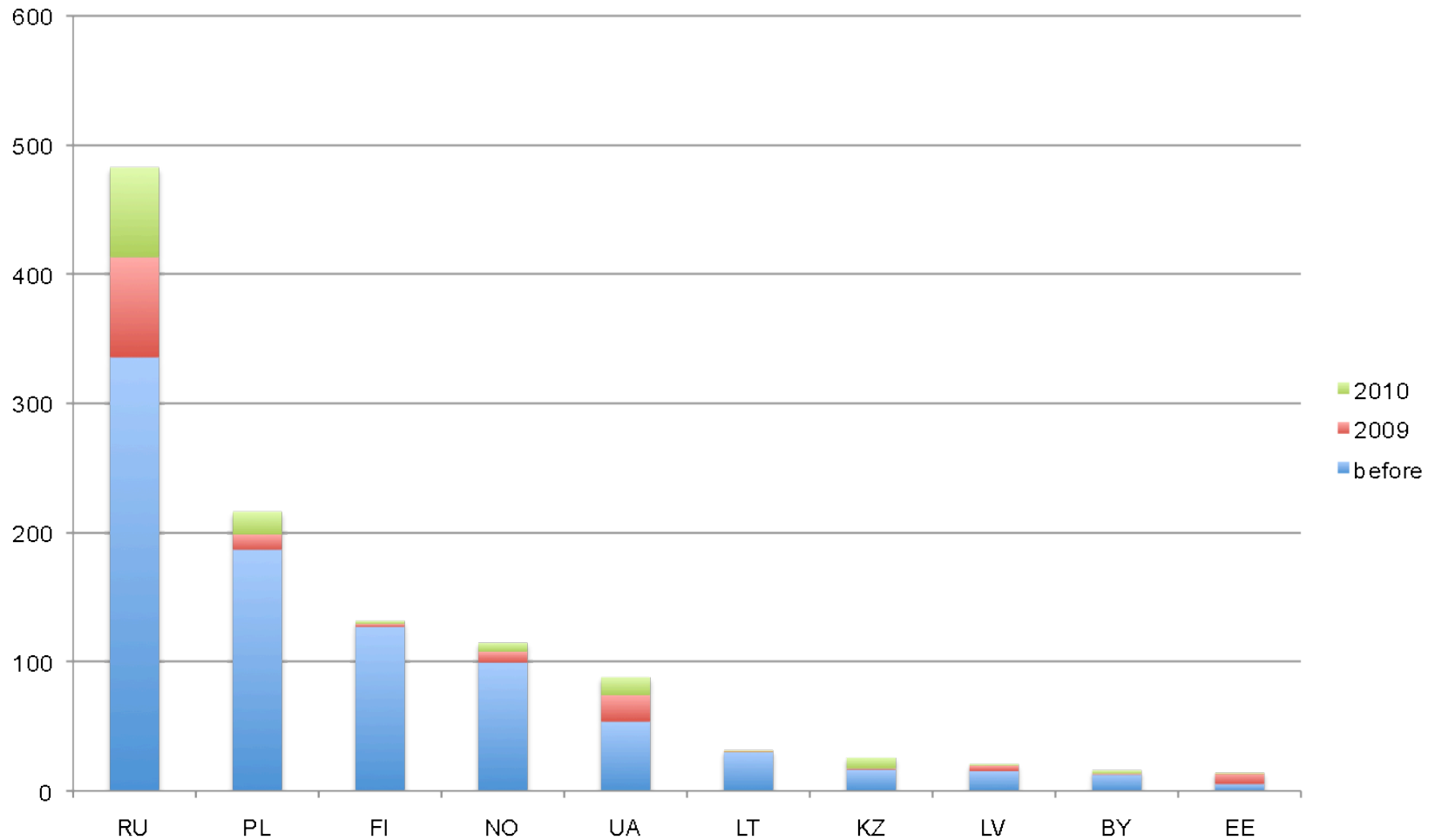
Registration Quality

- Reclamation
 - Announced IP address space, “pending closure” LIRs
 - Since 2007, 847 non-paying LIRs contacted
 - 226 LIRs re-opened
 - 605 LIRs had Allocations returned to the RIPE NCC
(5,910,528 IP addresses)
- LIR Audit Activity
 - From 1996 until 2008 - 343 Audits
 - 2009 - 301 Audits
 - 2010 - 345 Audits (to date)

Runout Date

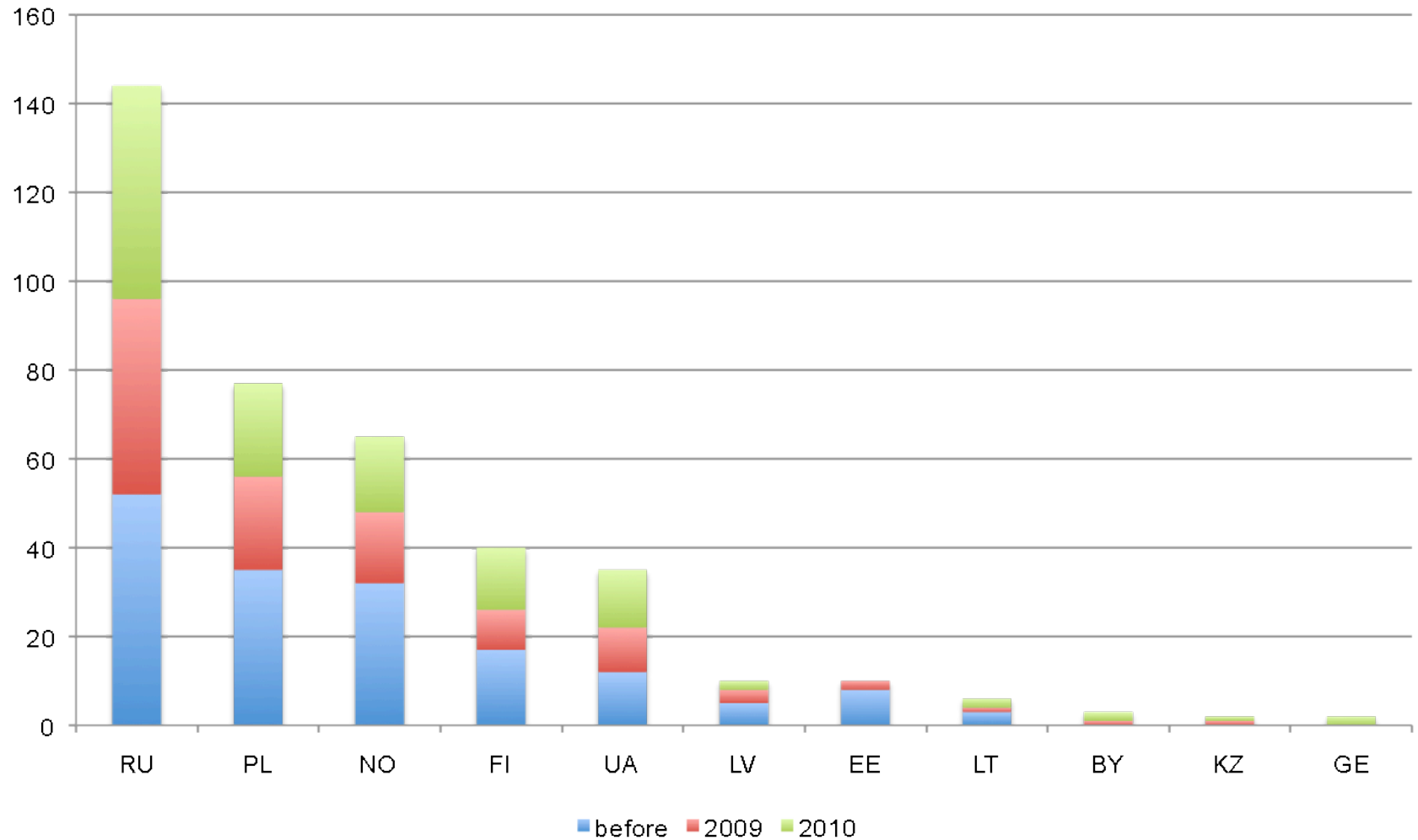


IPv4 – Regional Statistics



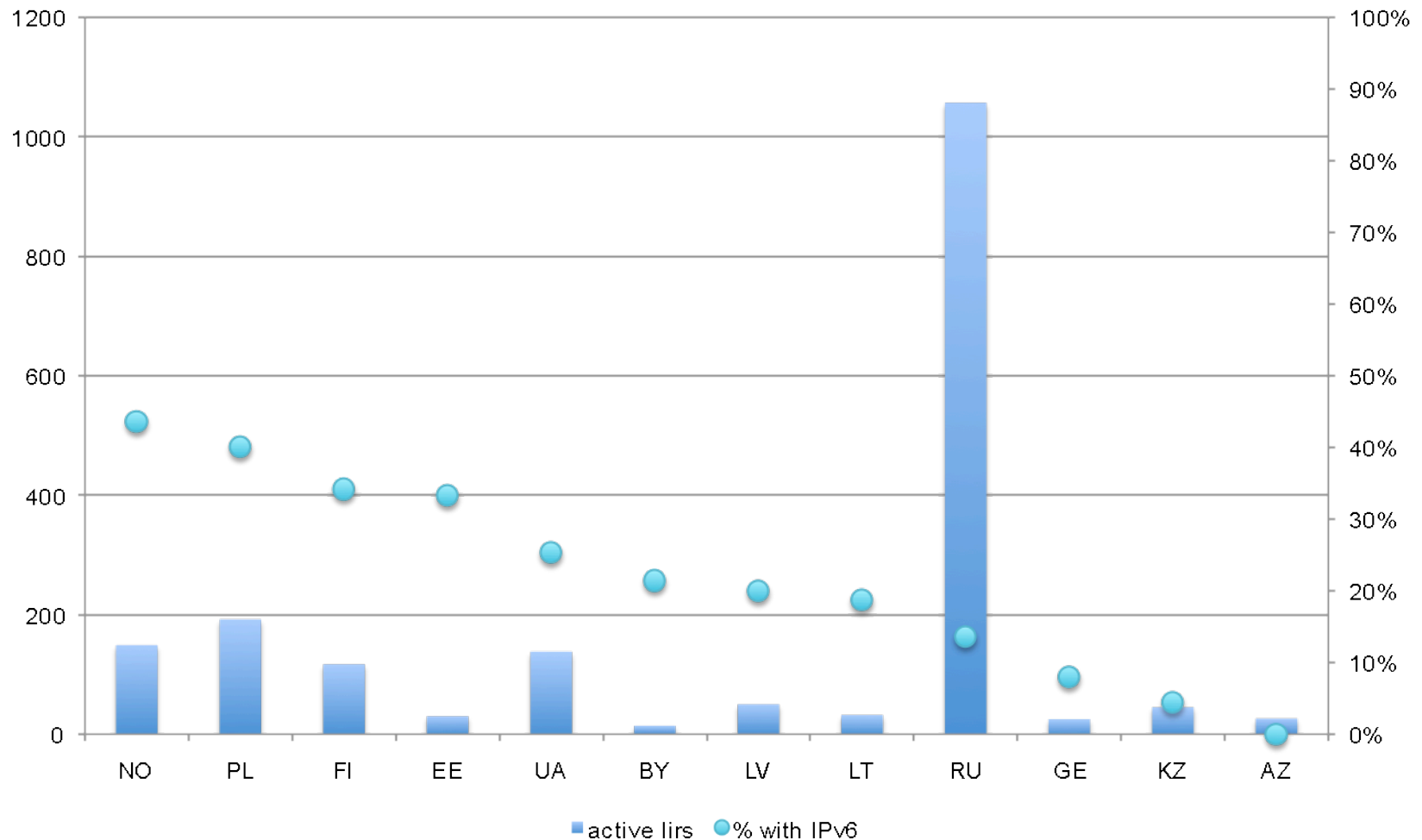
Counted in /16s

IPv6 – Regional Statistics



Number of allocations shown

IPv6 - Regional Statistics

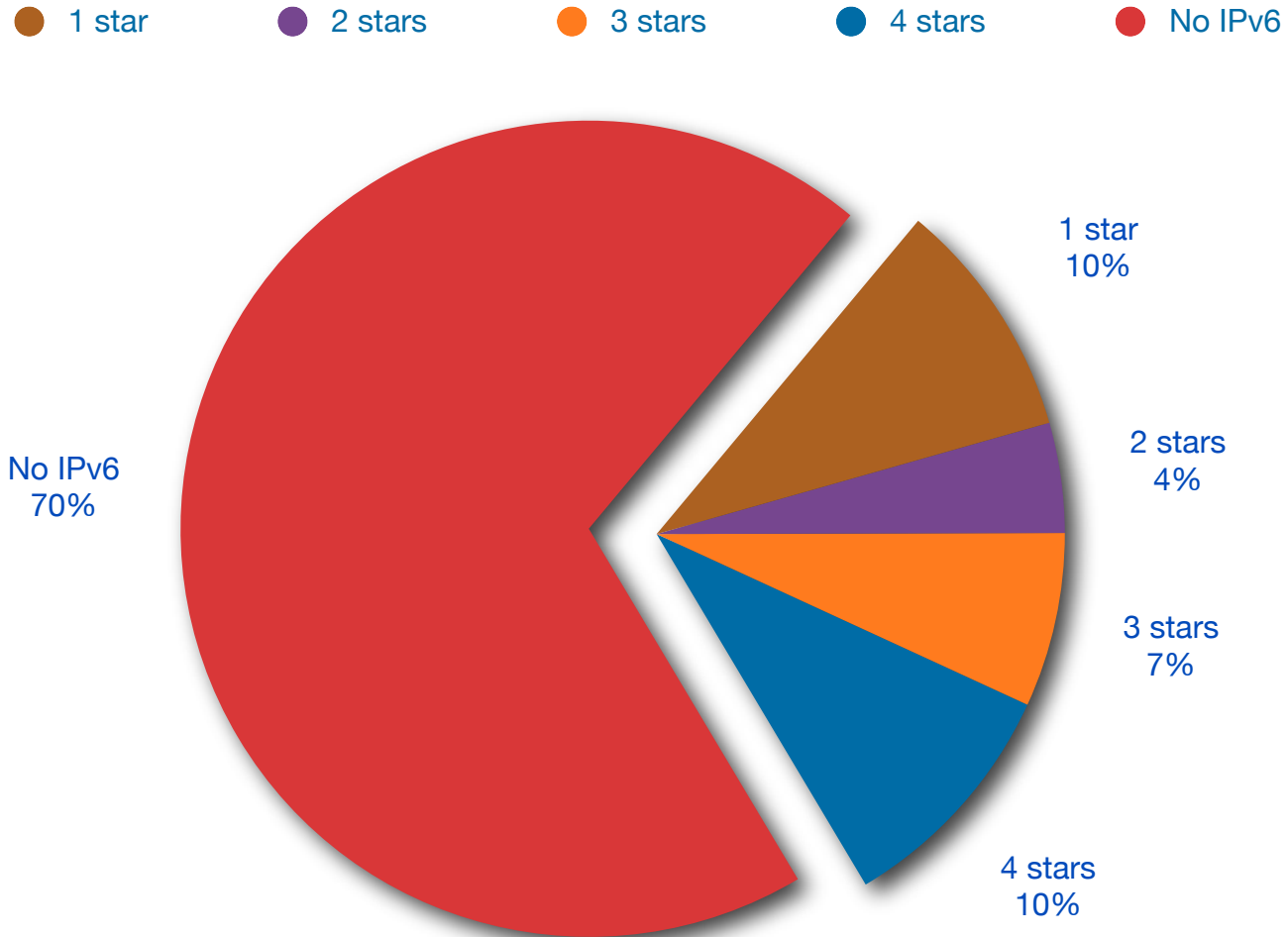


% of LIRs with an IPv6 allocation

IPv6 Ripeness

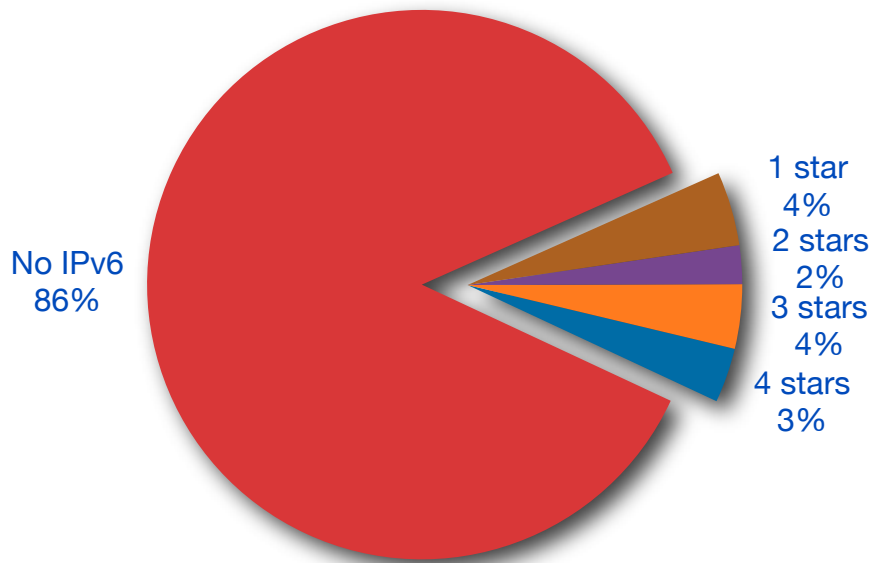
- Rating system:
 - One star: LIR has IPv6 allocation
 - Two stars: IPv6 Prefix is announced on router
 - Three stars: A route6 object is in the RIPE Database
 - Four stars: Reverse DNS is set up

IPv6 Ripeness in RIPE region (7002 LIRs)

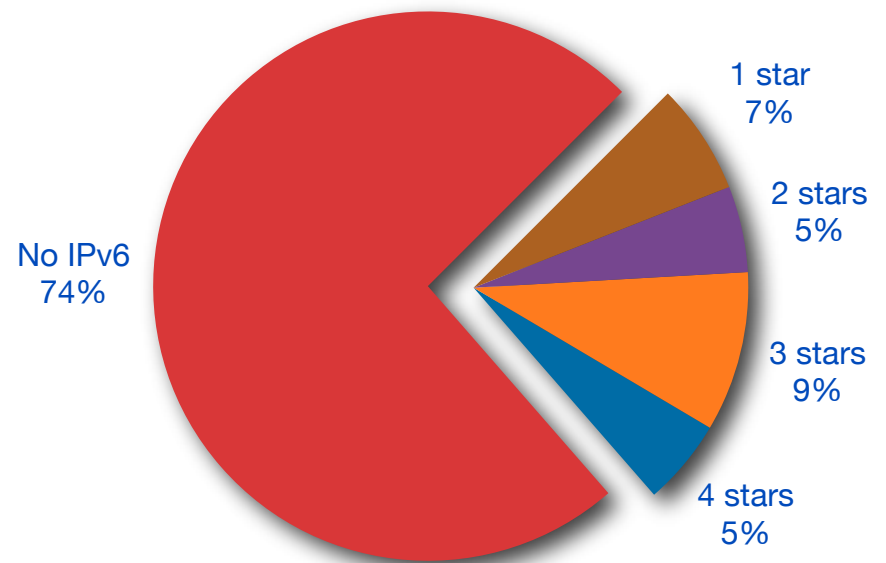


IPv6 Ripeness in this region

● 1 star ● 2 stars ● 3 stars ● 4 stars ● No IPv6



Russian Federation



Ukraine

Membership & Charging Scheme Update

Jochem de Ruig
Chief Financial Officer



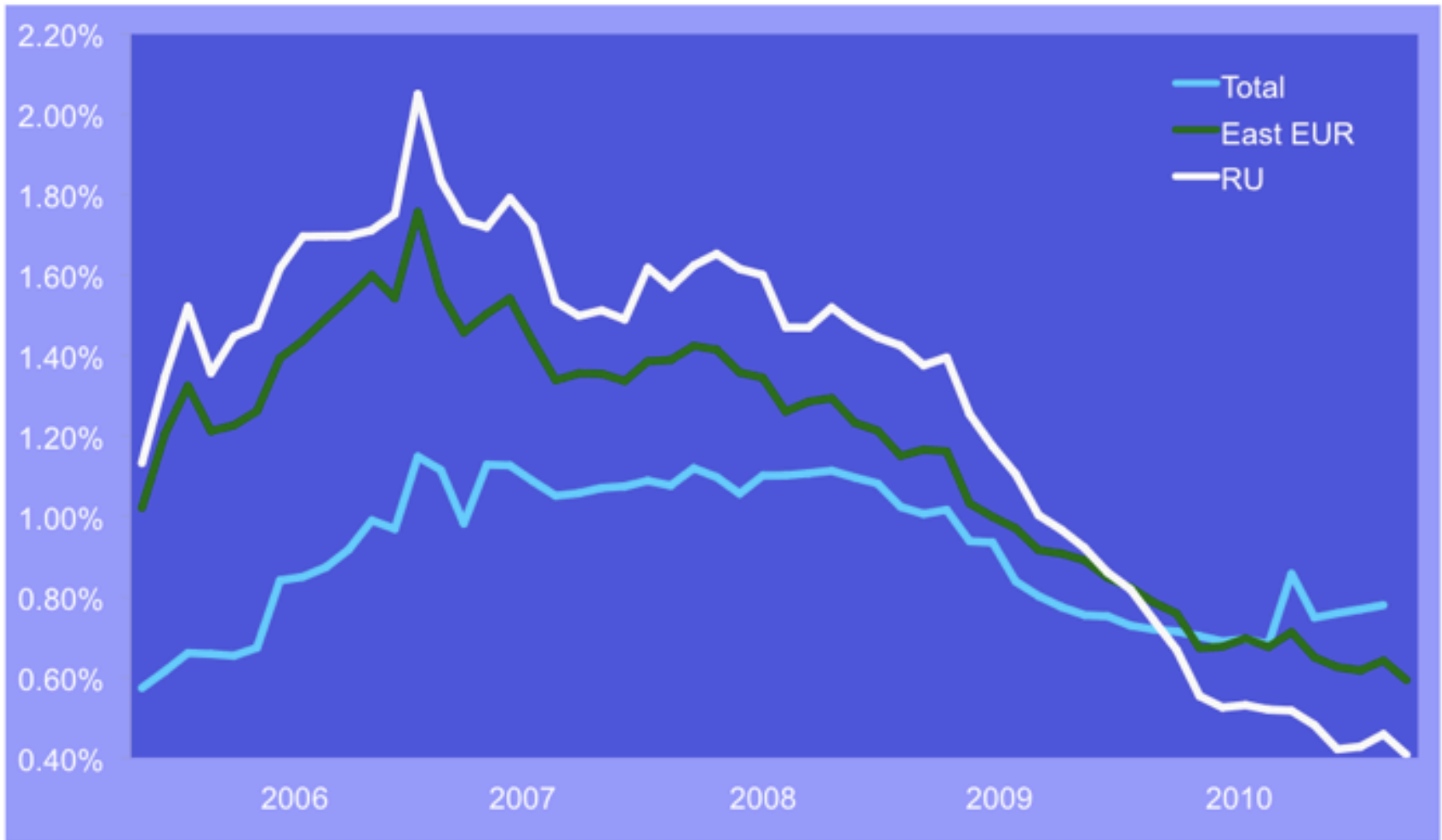
Membership Development



Membership Development



Membership II – Growth rate



Draft Charging Scheme 2011

- No increase in fees
 - 5 Categories
 - EUR 50 per Independent Resource Assignment
- Independent Resource from single customer – € 50
- First IPv6 allocation – no score (“no fee”)
- Direct Assignment Users – Extra Small Fee
- All temporary and test Independent Resources are taken into account
- 30 September – Today last registration changes

Information Services, DNS and Database Update

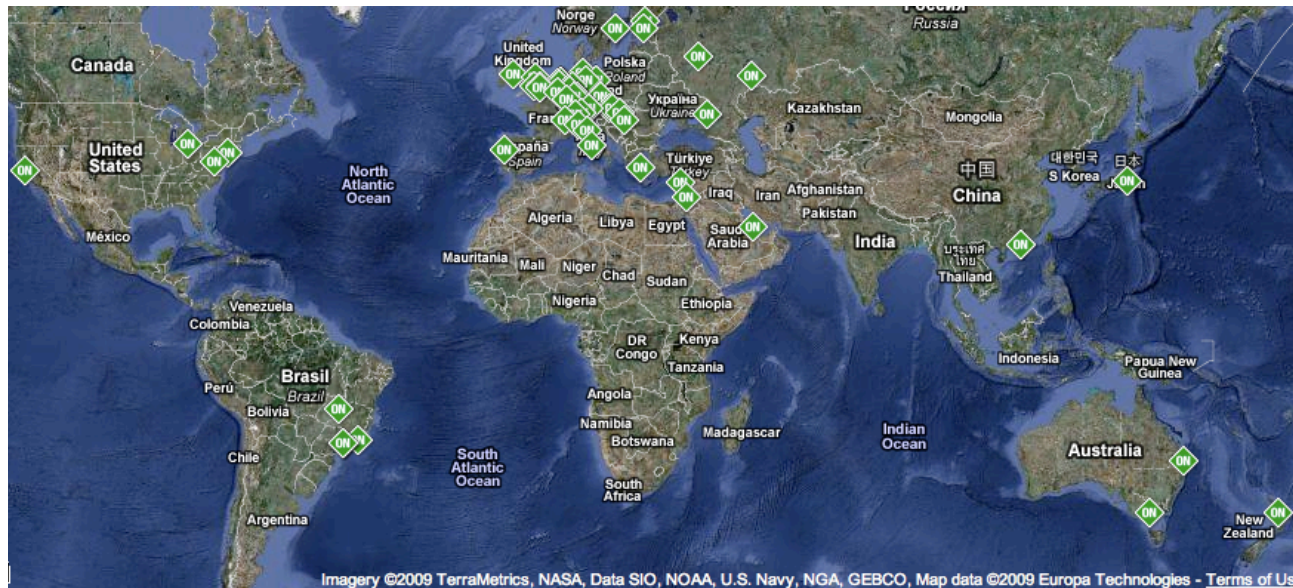
Andrei Robachevsky
Chief Technical Officer



Measurement Networks

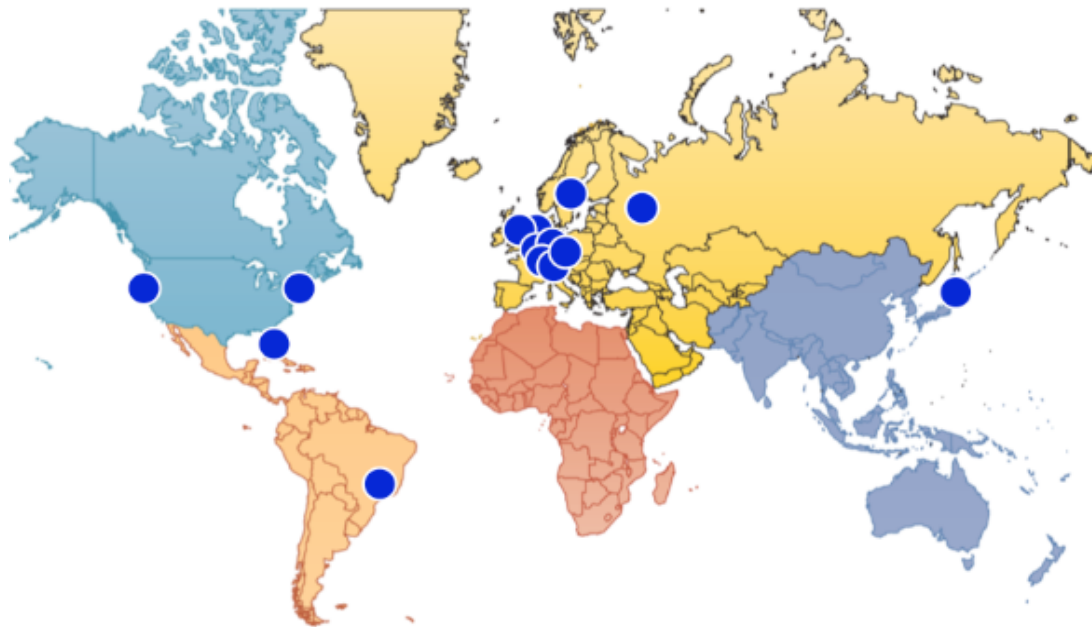
- Active Measurements

- 80 Test Traffic Boxes
- Located at commercial ISPs and research institutions
- Full Mesh



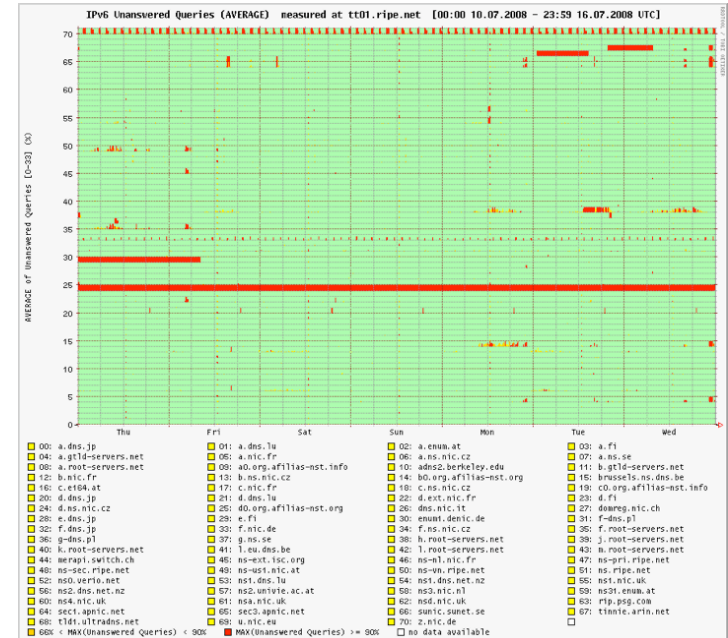
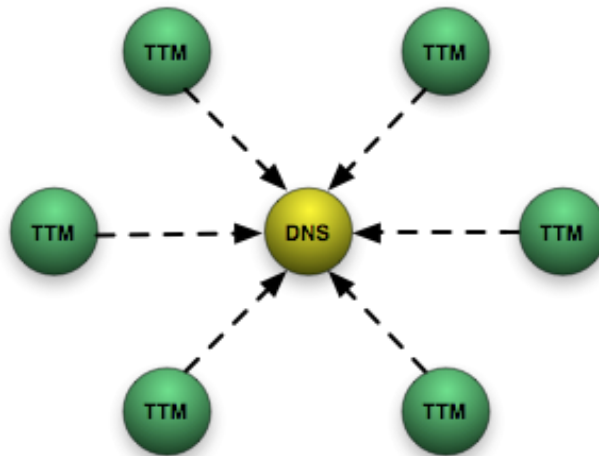
Measurement Networks

- Passive Measurements
 - 15 Remote Route Collectors
 - Located at major Internet Exchanges
 - BGP Routing Information



Information Services: DNSMON

- DNS Monitoring service
- Uses ~80 global probes
- Impartial performance report
- Troubleshooting and trend analysis



Information Services: NetSense

RIPE NCC - NetSense

http://netsense.ripe.net/sense/#3333/193.0.0.0/21

Most Visited - RIPE NCC - Calendar timeanddate.com Business Expense Cl... SPM Weekly Report ... IAB Wiki TeleconferenceSche... SvcMarratechEnable... IAB News Feed

RIPE NCC - NetSense

NetSense

You Are Here: [Home](#) -> [NetSense](#)

Quick Links

Send us feedback

Find out information about your AS or Prefix

AS3333 - RIPE-NCC RIPE Network ...

Prefix †	First Seen †	Last Update †	+
193.0.22.0/23	5 months ago	2 hours ago	
193.0.18.0/23	1 year ago	7 hours ago	
193.0.20.0/23	1 year ago	2 hours ago	
193.0.12.0/23	1 year ago	7 hours ago	
2001:610:240::/42	3 months ago	7 hours ago	
193.0.0.0/21	1 year ago	7 hours ago	

Visibility of 193.0.0.0/21

POWERED BY Google

Terms of Use

DNS Lameness

Don't Filter | All Issues | Only Errors

Routing Consistency

Prefix †	DNS Lameness †	Status †
193.0.22.0/23	No Lameness Detected	No Lameness Detected ✓
193.0.0.0/21	Found 1 Errors	Lameness ✗
193.0.18.0/23	No Lameness Detected	No Lameness Detected ✓
193.0.12.0/23	No Lameness Detected	No Lameness Detected ✓
2001:610:240::/42	No Data	Not Present !
193.0.20.0/23	No Lameness Detected	No Lameness Detected ✓

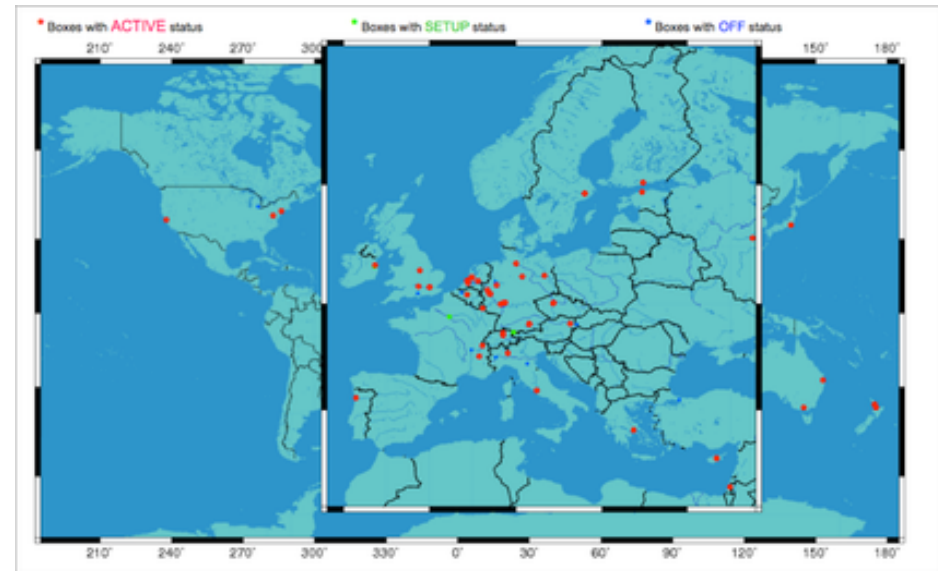
Find: Highlight all Match case

https://www.i1b.org/wiki/index.php?title=TeleconferenceSchedule

FoxyProxy: Disabled

Extending Measurements: A Pilot

- TTM has limited distribution, so...



Extending Measurements: A Pilot

- TTM has limited distribution, so...



Extending Measurements: A Pilot

- TTM has limited distribution, so...
- ... more measuring nodes needed
- Goal: Reach each AS, each major city
- Will announce pilot at RIPE 61
- Article series on labs.ripe.net



DNS

- K-root DNSSEC readiness
 - Reply-size tester
 - Increased transit capacity
 - TCP load testing and tuning
 - Continuous pcap data collection
 - Analyses on RIPE Labs
- Reverse DNS
 - New cluster infrastructure with a 32-bit ASN
 - New DNSSEC signing infrastructure
 - Updated DNSSEC Practices Statement (DPS)



RIPE Database

- RIPE Database today
 - Serves over 150 queries per second
 - Received about 5,760 updates a day
 - Several RIPE Labs prototypes using RESTful web API
 - <http://labs.ripe.net/ripe-database>
- RIPE Database tomorrow
 - New free-text RIPE Database search
 - New and easier interfaces to queries and updates
 - Improved data quality and stronger integration with our INR registry



Communications and External Relations Update

Paul Rendek
Head of Communications and External Relations





RIPE Labs

- Operators Tools, Ideas and Analysis

The screenshot shows the RIPE Labs website homepage. At the top left is the RIPE NCC logo (RIPE NETWORK COORDINATION CENTRE). To the right is a 'Site Search' box with a 'Search' button. Further right are links for 'Site Map' and 'Contact'. Below this is a yellow navigation bar with 'RIPE Labs' on the left, and 'Log In' and 'Register' on the right. A breadcrumb trail below the navigation bar reads 'Home • Users • Data Repository • RIPE Database • About'. Below the breadcrumb is a 'You are here: Home' indicator. The main content area features a large banner for 'RIPE Labs' with a lightbulb icon, the text 'Innovative Internet tools & ideas', and a 'Register!' button. To the right of the banner are three checkmarks with the text: 'Share experience', 'Showcase tools', and 'Present research'. Below the banner is a 3D bar chart visualization. Underneath the banner is a 'New contributions' section with an RSS icon. The first contribution is titled 'Active Measurements - Hosting a Probe' with 19 comments, by Daniel Karrenberg, dated 27 September 2010 15:45. The text below the title reads: 'Why YOU may want to host a small probe to help with large scale active Internet measurements.' There are tags for 'maps, measurements' and a 'Read more' button. To the right of the 'New contributions' section is a 'tagcloud' with terms like 'api', 'apnic', 'arin', 'asns', 'dns', 'dnssec', 'database', 'netsense', 'ripenix', 'ripe', '60', 'ripe', 'db', 'ripe', 'meeting', 'ripe', 'ncc'. To the right of the tagcloud is a 'Follow us on Twitter' section with a Twitter icon and the text 'Subscribe to @mir_ripe_labs'. Below this is a tweet: '#RIPELabs article published on CircleID: A Look at Nine Years of RIPE Database Objects: http://bit.ly/c4bhKQ 28 September 2010 10:28'. Below the tweet is a link: 'Interested in hosting a small probe to help with large scale active Internet measurements? Find out more on #RIPELabs: http://bit.ly/d1VPHi'.



What is RIPE Labs?

- It is a web site, but more importantly:
 - A platform and a tool for the community
- You can:
 - Test and evaluate new tools and prototypes
 - Contribute new ideas and research results
 - Discover and discuss in forums and blogs

Currently on RIPE Labs

- IPv4 and IPv6 Measurements
- DNS and DNSSEC Related Data and Tools
- RIPE Database API and Abuse Finder Tool
- BGP Tool
- BGP Route Origin Validation
- Various Stats and Measurements
- and much more ...

tagcloud

api apnic
arin dns
dnssec
database
netsense pi rex
ripe 59 ripe 60 ripe
db ripe meeting
ripe ncc rpsl
allocation
ipv4 ipv6 ipv6
adoption
measurements
policy
root-servers
routing
statistics
tools

Why RIPE Labs?

- Faster, tighter innovation cycle
- Provide useful prototypes to you earlier
- Adapt to the changing environment more quickly

- Closer involvement of the community
- Openness
- Make feedback and suggestions easier and more effective

Questions or Suggestions

- Please take a look and participate

Questions or comments?

labs@ripe.net

<http://labs.ripe.net>

Visit us at the next meeting!

<http://ripe.net/meetings>



Questions?

