



Operators Tools

RIPE Labs

..illuminating new ideas and tools **from**
the community **for** the community

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A Bit of History



- RIPE NCC started as Coordination Center for the RIPE community
 - RIPE Database, mailing lists, meetings
- Only later it became an RIR
 - Once it was accepted as a neutral place
 - Providing platform for operators to coordinate their activities

RIPE Labs – back to the Roots



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

<http://labs.ripe.net>



Currently on RIPE Labs

INRDB

IP Allocation Movies

Resource Explainer (REX)

IPv4 and IPv6 Measurements

NetSense

DNS Related Tools



INRDB



- The Internet Number Resource Database
- A system to store and retrieve large amounts of Internet Number Resource related data
 - Routing Information Services (RIS) table dumps, IANA and RIR allocation and assignment data, other external datasets
- Helps accomplish RIPE NCC to serve the community by enabling efficient access across heterogeneous historical data
- Allows us to provide you new types of services

<http://labs.ripe.net/content/intro-inrdb-internet-number-resource-database>



Resource Explainer

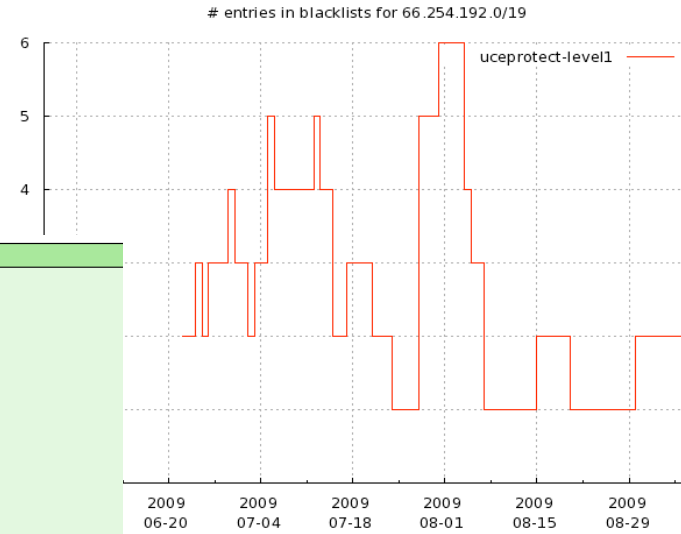
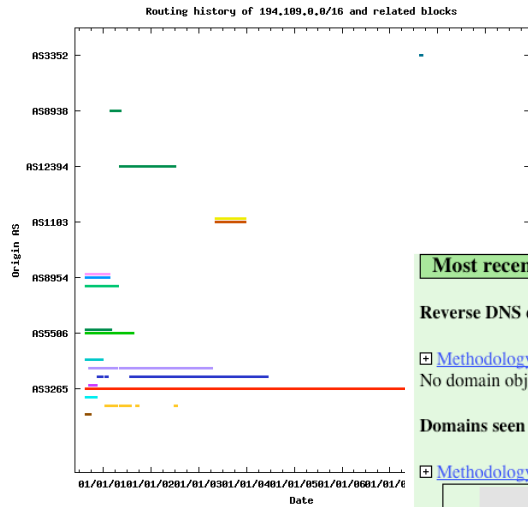


- Based on growing community needs, a service where:
 - History and current **status of resources** can be looked up
 - Information from many sources are **combined** and **explained**
- Some reasons are
 - Growing use of recycled / transferred resources
 - Proliferation of resource abuse
 - Support resource management activities

<http://labs.ripe.net/content/rex-resource-explainer>



Resource Explainer live!



Most recent information as of 2009-10-02

Reverse DNS delegations as seen in RIPE Database domain objects

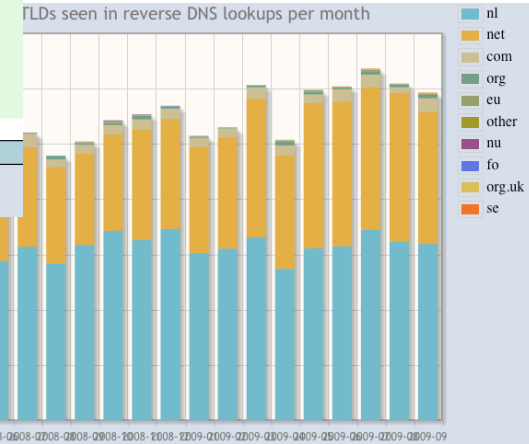
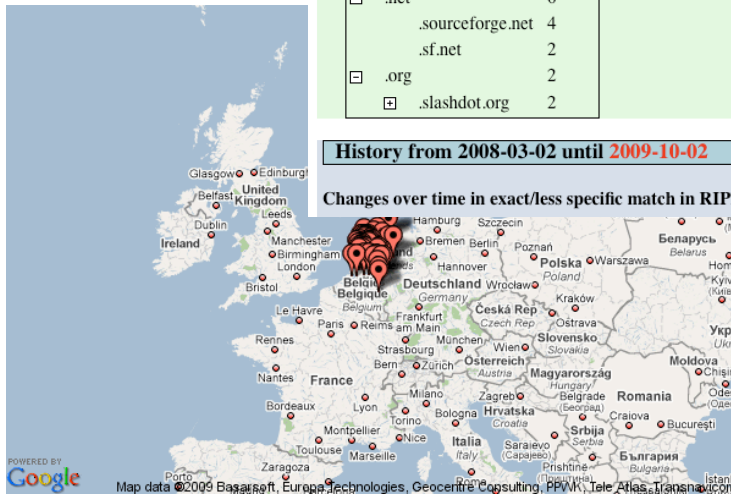
[Methodology](#)

No domain objects found in the RIPE Database

Domains seen in reverse DNS lookups in the month before 2009-09-30

[Methodology](#)

Domain	Count
<input type="checkbox"/> .com	8
<input type="checkbox"/> .sourceforge.com	4
<input type="checkbox"/> .thinkgeek.com	3
<input type="checkbox"/> .net	6
<input type="checkbox"/> .sourceforge.net	4
<input type="checkbox"/> .sf.net	2
<input type="checkbox"/> .org	2
<input type="checkbox"/> .slashdot.org	2



History from 2008-03-02 until 2009-10-02

Changes over time in exact/less specific match in RIPE Database domain objects



Resource Explainer Plans



- Recently included IPv6 support and ASNs

Future Plans:

- Add more aspects and more details to existing ones
- Please let us know what else would be useful!



NetSense (netsense.ripe.net)



- Consistent interface integrating various measurement services provided by the RIPE NCC

AS3333 - RIPE-NCC RIPE Network ...

Prefix †	First Seen †	Last Update †
193.0.22.0/23	1 month ago	5 hours ago
193.0.18.0/23	9 months ago	4 hours ago
193.0.12.0/23	9 months ago	4 hours ago
193.0.20.0/23	9 months ago	5 hours ago
2001:610:240::/42	9 months ago	5 hours ago
193.0.0.0/21	9 months ago	4 hours ago

Visibility of AS3333

POWERED BY Google

Terms of Use

Routing Consistency ▶

Don't Filter Missing in routing table

All inconsistencies Missing in RIPE database

Present in both

Origin Prefixes ▼ Import Peers Export Peers

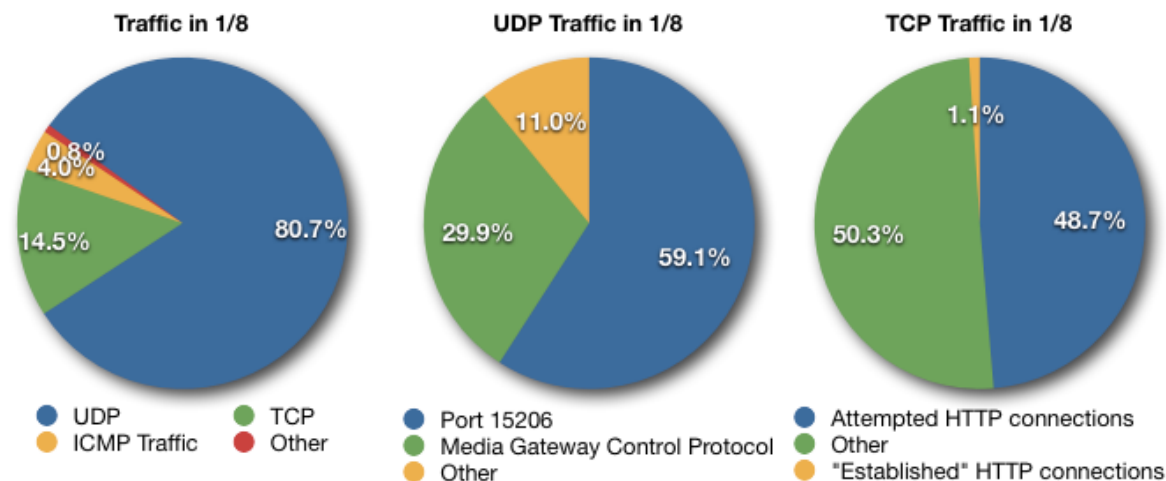
BGP Routing Table †	RIPE Database †	Status †
193.0.18.0/23	193.0.18.0/23	Ok ✓
193.0.22.0/23	193.0.22.0/23	Ok ✓
193.0.20.0/23	193.0.20.0/23	Ok ✓
193.0.12.0/23	193.0.12.0/23	Ok ✓
2001:610:240::/42	Not present	Not present ✗
193.0.0.0/21	193.0.0.0/21	Ok ✓



Pollution in 1/8



- 1/8 allocated to APNIC
- Lots of discussion about usability of 1/8
- How much of it is already routed?
- Lots of interest in the results



<http://labs.ripe.net/content/pollution-18>



IPv6 Measurements



- A compilation of IPv6 measurements
 - List of IPv6 measurements and tools from various sources with a short description and links to the tools and results
 - Please let us know what type of measurements would be helpful for your operations

<http://labs.ripe.net/content/ipv6-measurement-compilation>

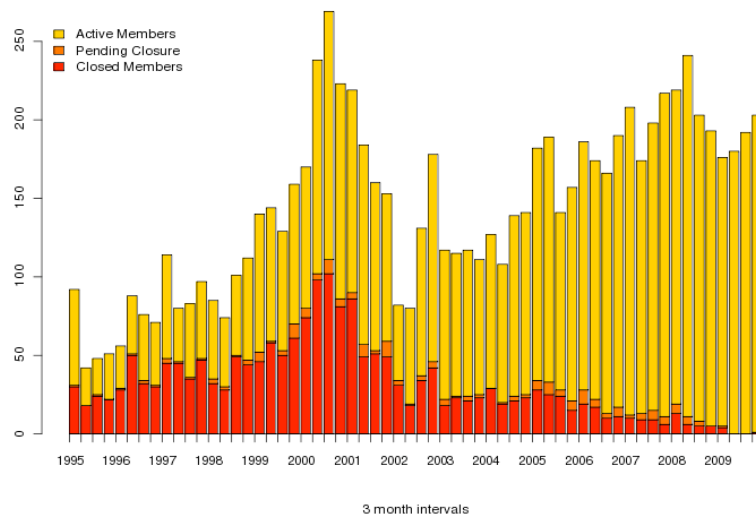


LIR Growth Statistics

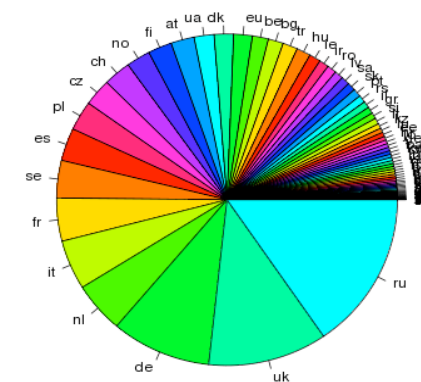


- RIPE NCC membership demographics
 - <http://labs.ripe.net/content/ripe-ncc-membership-growth>
- Internet number resources are distributed among the membership
 - <http://labs.ripe.net/content/members-and-their-number-resources>

Number of members vs. date of commit - all countries, 20100101



IPv4 allocations to current members, per country - 20100101





DNS related Tools



- DNS Lameness checker (Shane Kerr)
 - Downloadable tool for DNS operators
- DNSSEC for the root zone
 - Plans for signing K-root
- DNS reply-size tester
 - Easy tool to determine maximum size of DNS response packets your resolver can handle



24 Sep 2009

RIPE Labs - What's it All About?

Submitted by [mirjam](#) on Thu, 09/24/2009 - 12:09

RIPE Labs

is a new platform designed by the RIPE NCC for network operators, developers and industry experts to expose, test and discuss innovative Internet-related tools, ideas and analysis that can benefit the RIPE community and RIPE NCC members.

It's the place to showcase new and interesting things. Anyone can:

- Present research
- Showcase prototype tools
- Share operational experience
- Exchange ideas

Even if you don't have any new ideas at the moment, but are interested in reviewing the ideas and tools of others, please dive in. **RIPE Labs** is a platform **from** the RIPE community **for** the RIPE community.

» [Read more](#)



Discuss this topic here: [RIPE Labs - What's it All About?](#)

18 Sep 2009

Submit Your Ideas Now

RIPE Labs is all about you, and your ideas. You can contribute a new idea or tool by [creating a new topic](#) in the New Ideas forum or by [sending us an email](#).



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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



RIPE Labs Rules



- Free and civil discussion between individuals
 - Anyone can read RIPE Labs content
 - Please register before contributing
- No service guarantees
 - Content can disappear based on
 - Community feedback
 - Legal or abuse issues
 - Too little resources



Questions or Comments



- Please take a look and participate
- Questions or comments
 - mir@ripe.net or labs@ripe.net