



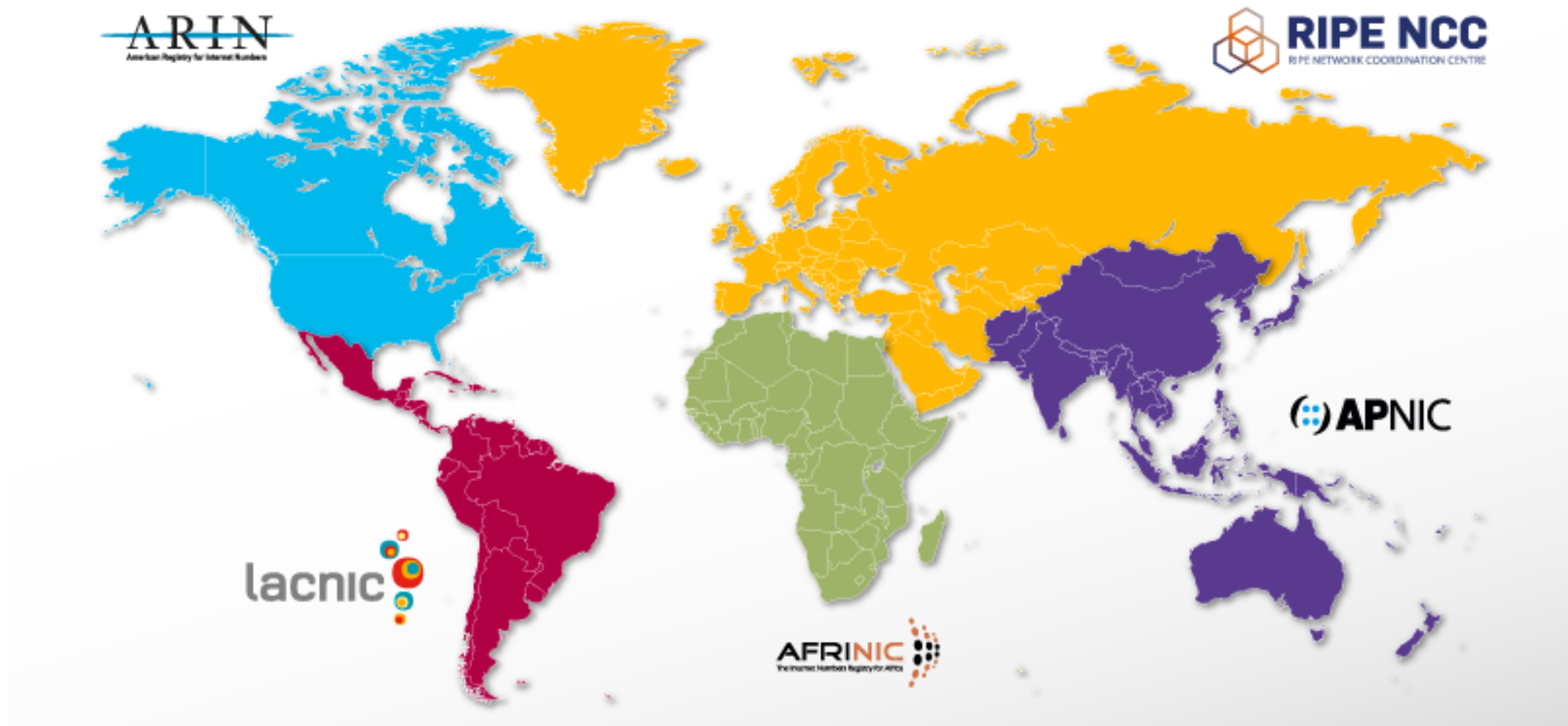
RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE NCC Data & Tools

Mirjam Kühne

Mirjam Kühne | Neutral Peering Days | September 2017

RIR Service Regions



RIPE NCC



- Started operating in 1992
 - Membership association under Dutch law
 - 16,700 members from 76 countries

Member services

- Resource distribution
 - IPv4, IPv6, ASNs
- Training courses

Public services

- RIPE Database
- DNS services
 - reverse DNS
 - K-root
- Tools and Data



RIPE Atlas

Active Measurements Network



- Probe distribution
 - 10,000+ active RIPE Atlas probes
 - 287 active RIPE Atlas anchors
- Coverage
 - 180 countries covered
 - Originating ASes covered
 - 3,429 (IPv4), 1,297 (IPv6)
- ping, traceroute, DNS, TLS (SSL)



RIPE Atlas Distribution



-

IXP Country Jedi

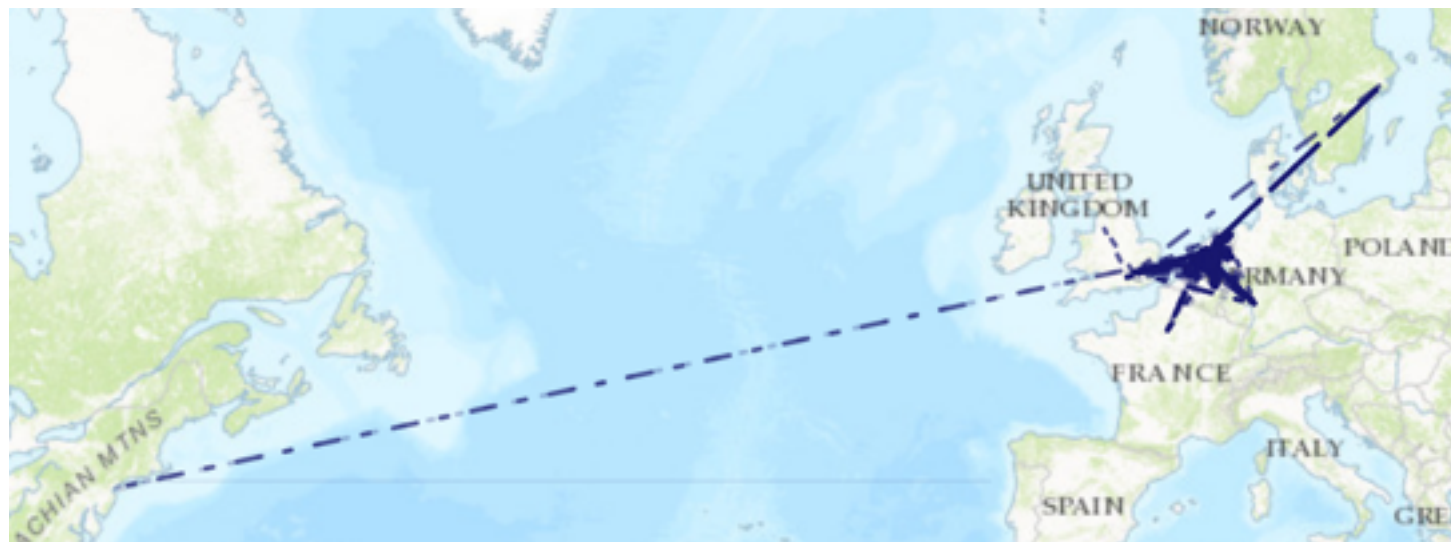


- www.ripe.net/ixp-country-jedi
 - Are the paths between ASes staying in the country?
 - What is the difference between IPv6 & IPv4?
 - How many paths go via a local IXP?
 - Which peer could you add to improve reachability?
- Experimental tool
 - Feature requests welcome!
 - Depends on probe distribution in a country

Difference between IPv4 & IPv6



- Do paths stay in the country?



IPv4

IPv6



Paths that go via an IXP in NL

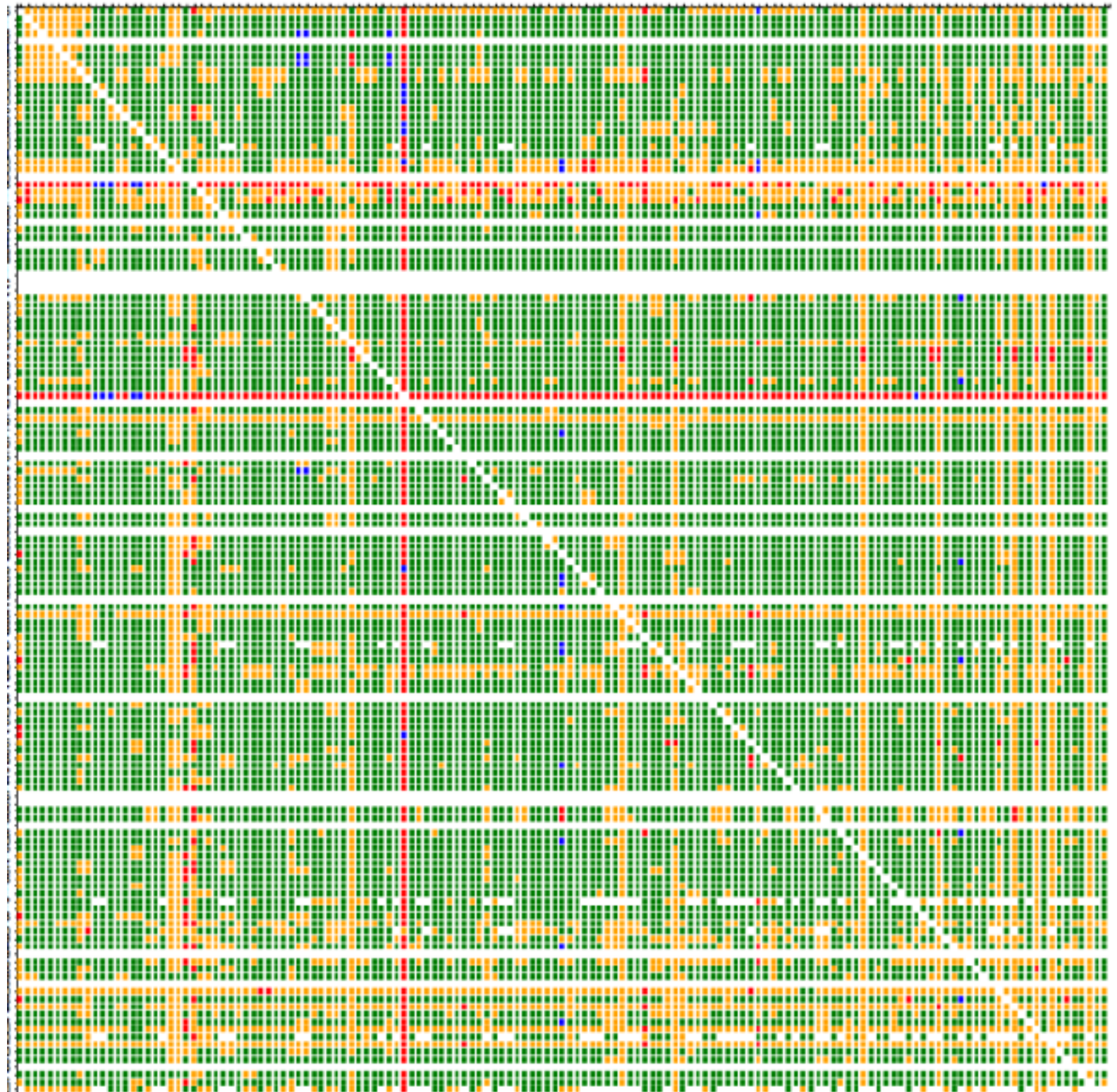


IXP: Yes
Out of country IPs: No

IXP: No
Out of country IPs: No

IXP: Yes
Out of country IPs: Yes

IXP: No
Out of country IPs: Yes





RIPEstat

One stop shop for data

RIPEstat - stat.ripe.net



**RIPE NCC**
RIPE NETWORK COORDINATION CENTRE

RIPE Database (Whois) Website

Search the content of this website

Login

Manage IPs and ASNs > Analyse > Participate > Get Support > Publications > About Us >

>> You are here: Home > Analyse > Statistics > RIPEstat > 193.0.20.0/23

193.0.20.0/23 Search

permalink

At a Glance (4)

- Routing (9)
- DNS (2)
- Anti Abuse (2)
- Database (9)
- Geographic (2)
- Activity (4)
- Suggestions (1)

+ MyView ?

Prefix Overview (193.0.20.0/23)

✓ Announced

This prefix is announced by

AS3333

"RIPE-NCC-AS , NL"

RIR	Status	Registration	Country
RIPE NCC	ALLOCATED	1993-09-01	NL

Show IANA Registry Information

Showing results for 193.0.20.0/23 as of 2016-11-06 16:00:00 UTC

Geoloc (193.0.20.0/23)

Geoloc details

Data is based on MaxMind's GeoLite City data set and valid for the stated query time (see below)

Showing results for 193.0.20.0/23 as of 2016-11-07 00:00:00 UTC

Data Sets



- IP Registry data from all RIRs
- Routing data (RIPE RIS)
 - Collecting BGP data since 1999
 - 160 full-feed peers
- RIPE Atlas data
- External datasets
 - Geolocation, blacklists, bandwidth measurements

Widget API & Data API

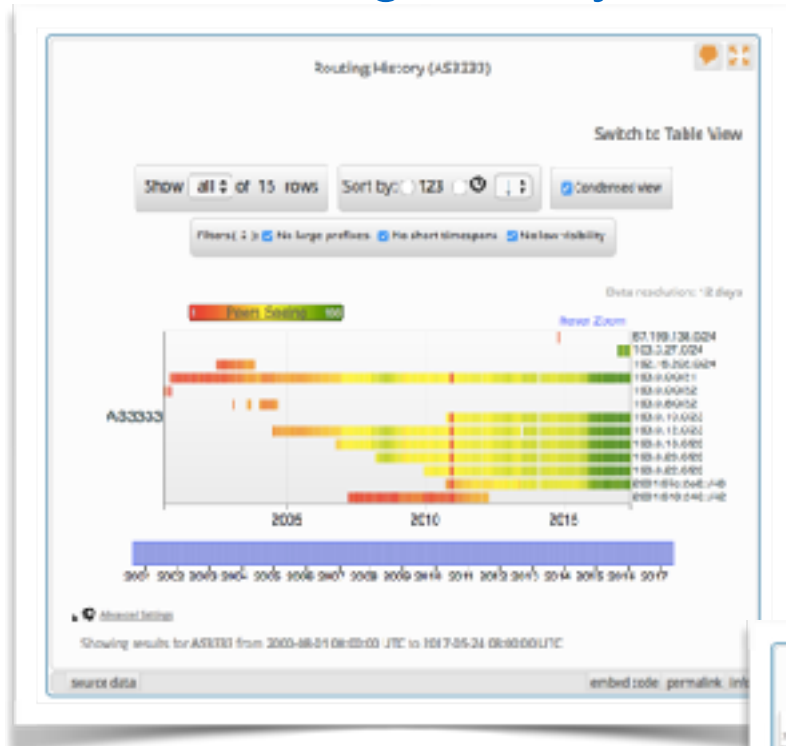


- More than 50 widgets
- RIPEstat widgets are embeddable
 - e.g. web pages or NOC interfaces
- Documentation: https://stat.ripe.net/docs/widget_api
- Access to underlying data via data API
- Documentation: https://stat.ripe.net/docs/data_api

Use Cases



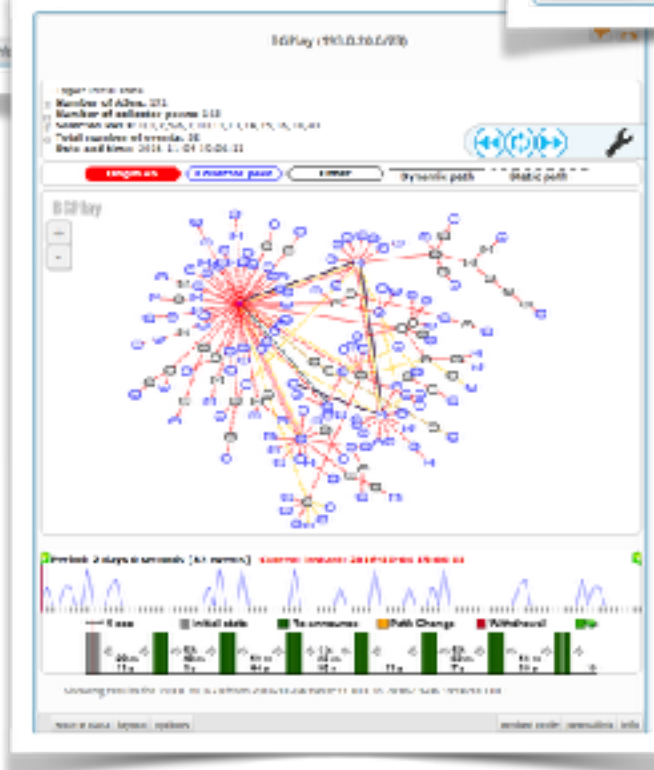
Routing History



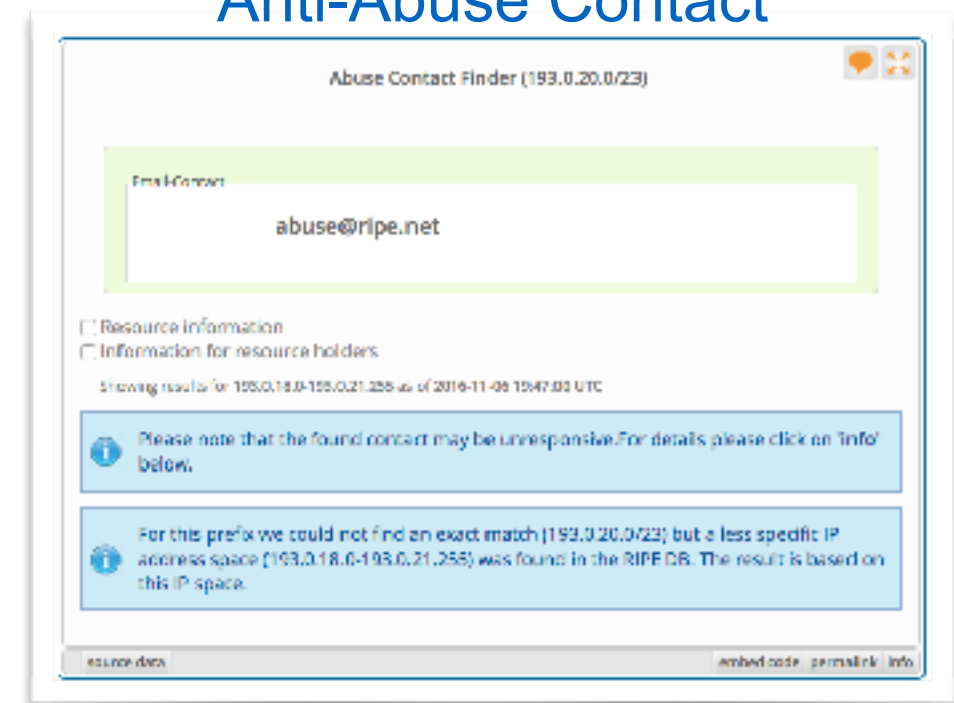
Country Statistics



BGPlay



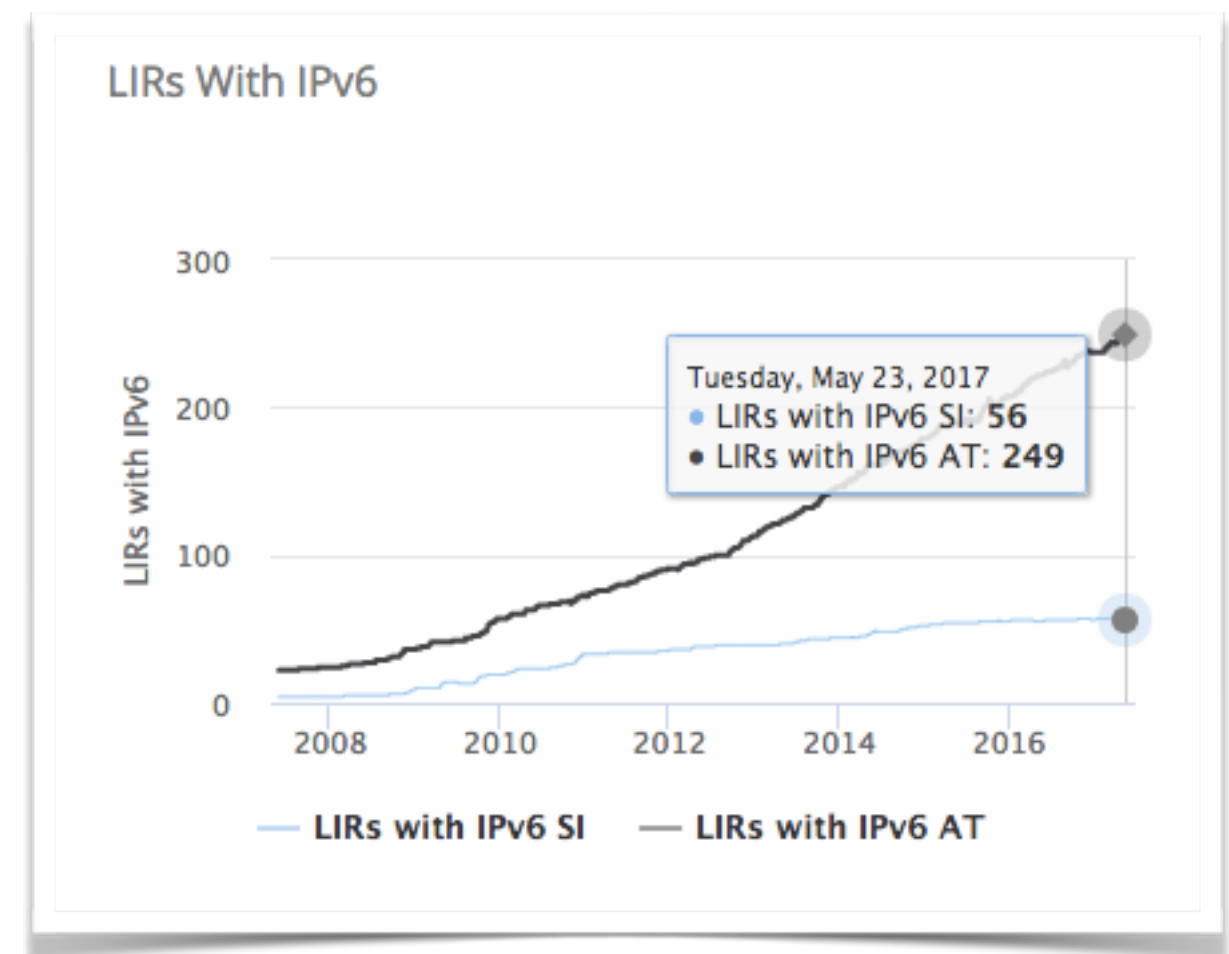
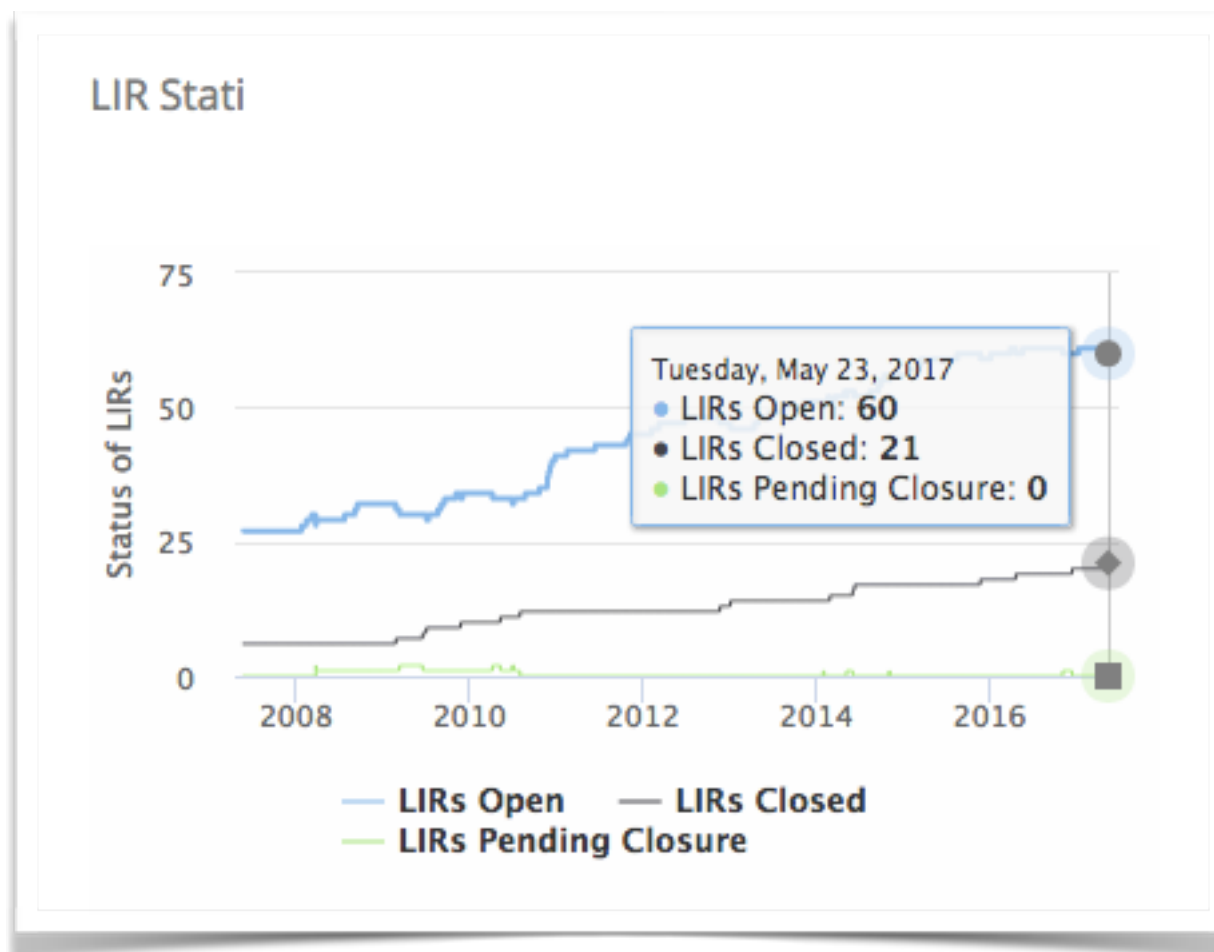
Anti-Abuse Contact



What is next?



- More data
- More visualisations
- Country Reports





IPv6 Deployment

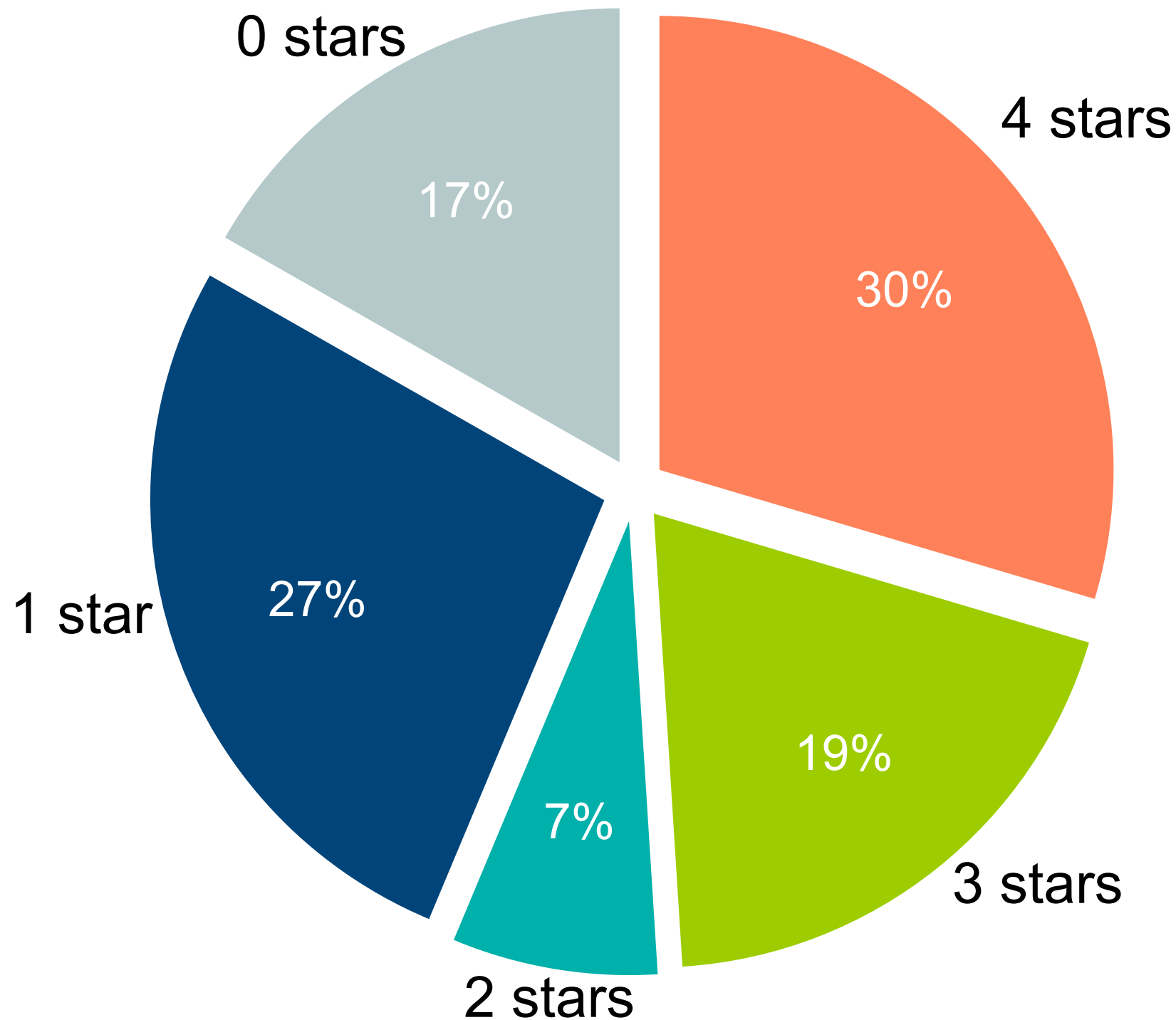
IPv6 RIPEness



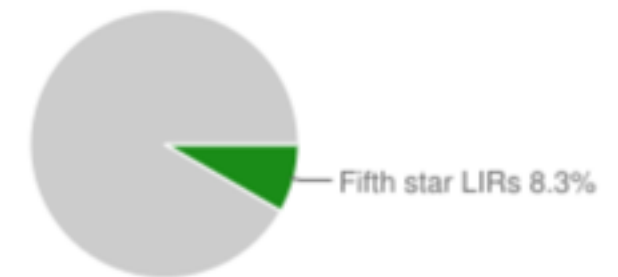
- Rating system to monitor IPv6 deployment among RIPE NCC members
- Stars are awarded for:
 - Obtaining an IPv6 address (allocation)
 - Visibility in global routing table
 - Setting up routing registry entries
 - Setting up reverse DNS
- Per country statistics published daily

<http://ipv6ripeness.ripe.net/>

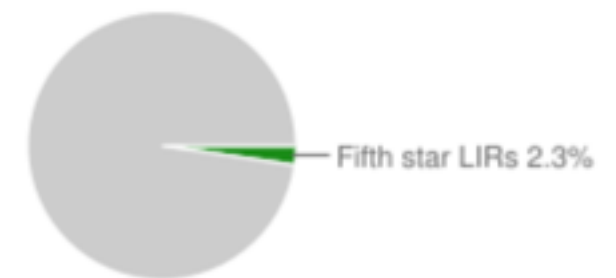
IPv6 RIPEness in NL (943 LIRs)



Content



Access



IPv6 RIPEness - Fifth Star



- Members can qualify for a fifth star
- This measures IPv6 deployment at the edge and looks at:
 - **Content** - 32% of content must be accessible over IPv6; or
 - **Access** - 32% of your customers are IPv6-capable
- The threshold doubles every year
- Get a new 5-star RIPEness t-shirt every year!

<http://ipv6ripeness.ripe.net/5star/NL.html>

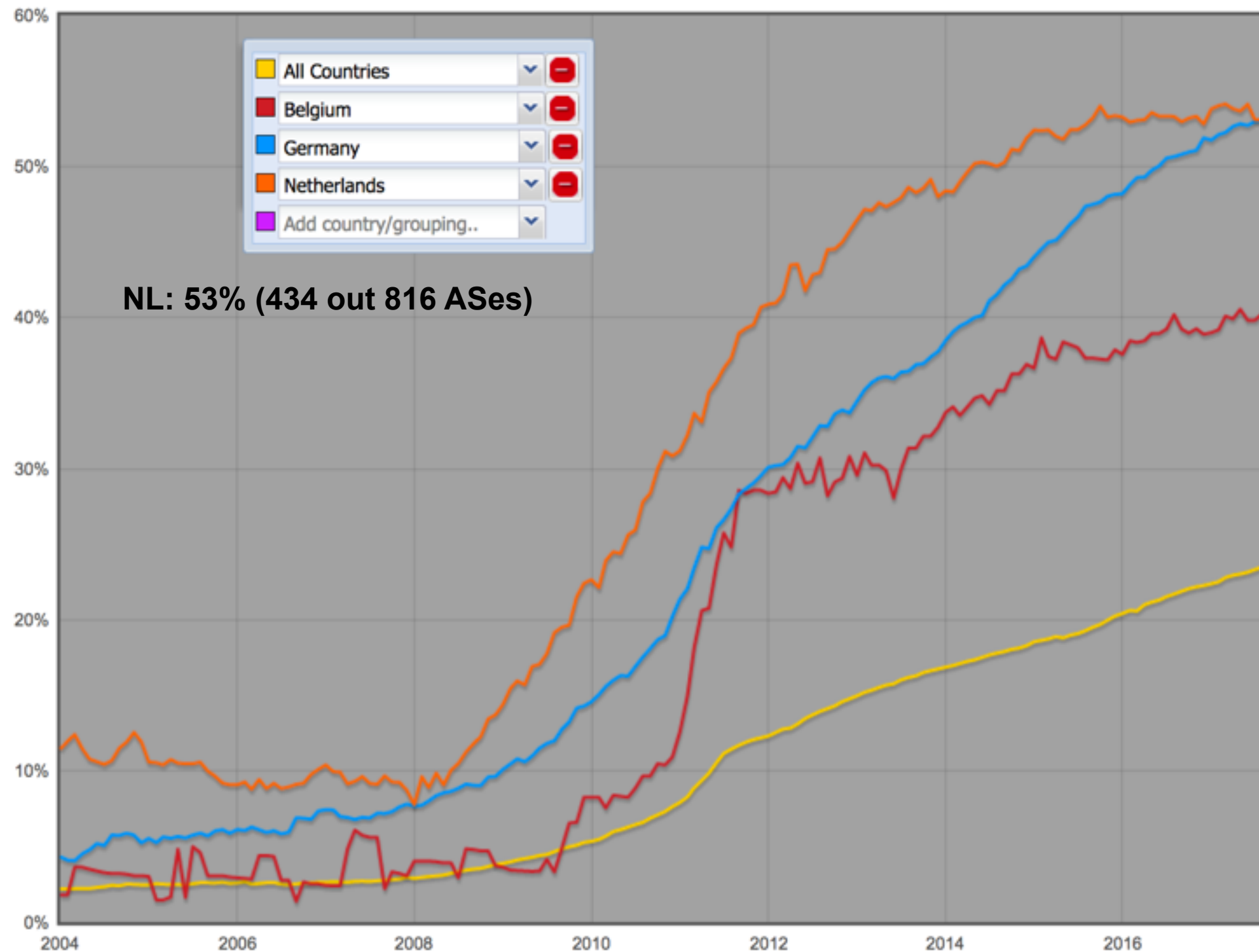
New IPv6 RIPEness T-shirt



Show us your
fifth star and we
will send you this
t-shirt :-)



ASes Announcing IPv6 Prefixes



<http://v6asns.ripe.net>

RIPE NCC Hackathon Version 6



- Date: 4 and 5 November 2017
- Location: Copenhagen, Denmark
- Sponsor: Comcast
- Local support: DKNOG
- Looking for: more sponsors, experts, participants

<https://labs.ripe.net/Members/becha/save-the-date-ripe-ncc-hackathon-version-6>

RIPE NCC Previous Hackathons



- RIPE Atlas DataViz
- RIPE Atlas Tools for Operators
- RIPE Atlas Interfaces
- IXP Tools & IXP Tools Code-Sprint
- DNS Measurements
- All code on GitHub

labs.ripe.net/hackathons

IXP Tools Code Sprint



- Continuation of IXP Tools Hackathon
- Two main projects
 - IXP country Jedi www.ripe.net/ixp-country-jedi
 - Detect remote peering <http://inspire.edu.gr/rp/>
- Results on RIPE Labs

<https://labs.ripe.net/Members/becha/follow-up-to-ixp-tools-hackathon-code-sprint>



RIPE Labs



RIPE Labs

Data Repository

Security

RIPE NCC Statistics

RIPE Database

RIPE Atlas

RIPEstat

About

Your IP address is:
2001:67c:2e8:9::c100:14e6

TagCloud

BGP DNS IOT jodi RIPE RIPE Fellowship RIPE Meeting allocation api ases atlas bgp certification community country cpe database datarepository dns dnsmoon dnssec geolocation governance hackathons hackathon hackathons hackerspace ipv4 ipv6 ipv6day ipv6launch lxp k-root lirs measurements meetings members nat operational policy reputation research rex ripestat root-servers routing security statistics syria tools transfers visualisation



RIPE Labs

INNOVATIVE INTERNET TOOLS AND IDEAS
SHARE EXPERIENCE | SHOWCASE TOOLS | PRESENT RESEARCH

Statistics

15,531
Number of LIRs

11,611
LIRs with IPv6

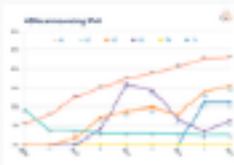
452,864
IPv4 addresses transferred

9,533
RIPE Atlas probes

13.57 Million
IPv4 Allocation Pool

View more statistics

Articles



Focus on Uzbekistan - RIPE NCC Statistics and Data

Fergal Cunningham — 15 Mar 2017

We take a look at the current Internet status in Uzbekistan using RIPE NCC data and statistics. This is a start of a series featuring various countries in our service region.... [Read more](#)

Tags: country

0 comments

0 likes, 0 dislikes



New RIPE Atlas Root Zone DNS Measurements

Chris Amin — 10 Mar 2017

Two new DNS measurements, both designed to assess the impact of issues with one or more root name servers, have been added to every RIPE Atlas probe. ... [Read more](#)

Tags: atlas dns root-servers k-root

2 comments

0 likes, 0 dislikes

Recent RIPE Labs Articles



- The Secrets of De-Peering

https://labs.ripe.net/Members/uta_meier_hahn/the-secrets-of-de-peering

- Introducing NAT64 Checker

<https://labs.ripe.net/Members/JanZorz/introducing-nat64-checker>

- IoT Turning Evil

https://labs.ripe.net/Members/ivana_tomic/iot-turning-evil

- Detecting Network Outages with RIPE Atlas

https://labs.ripe.net/Members/anant_shah/detecting-network-outages-with-ripe-atlas

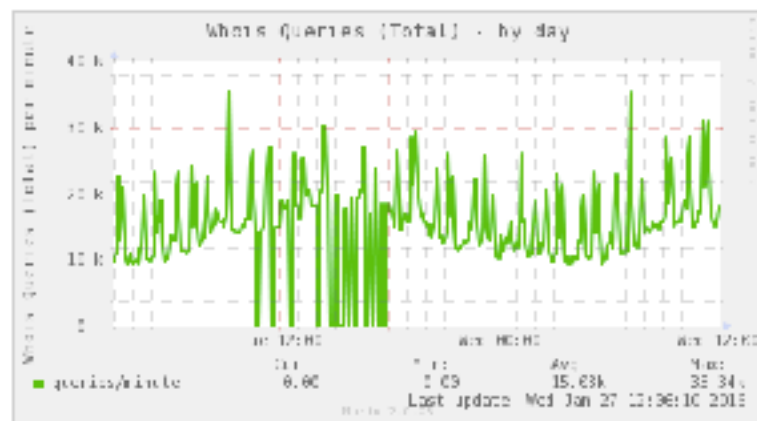
RIPE Labs Statistics Dashboard



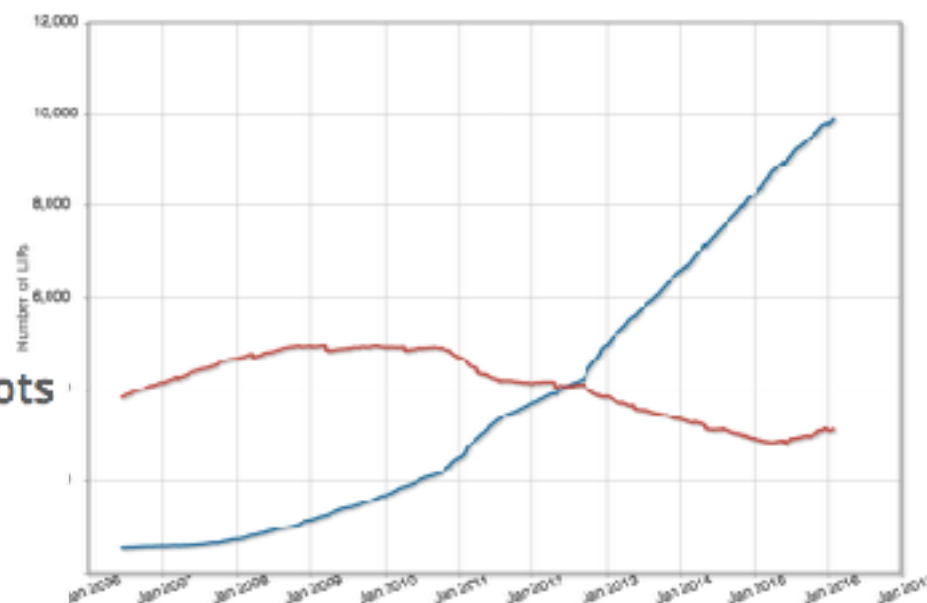
RIPE Database Server - Operational Plots

Query rate:

The number of RIPE Database queries we serve in total



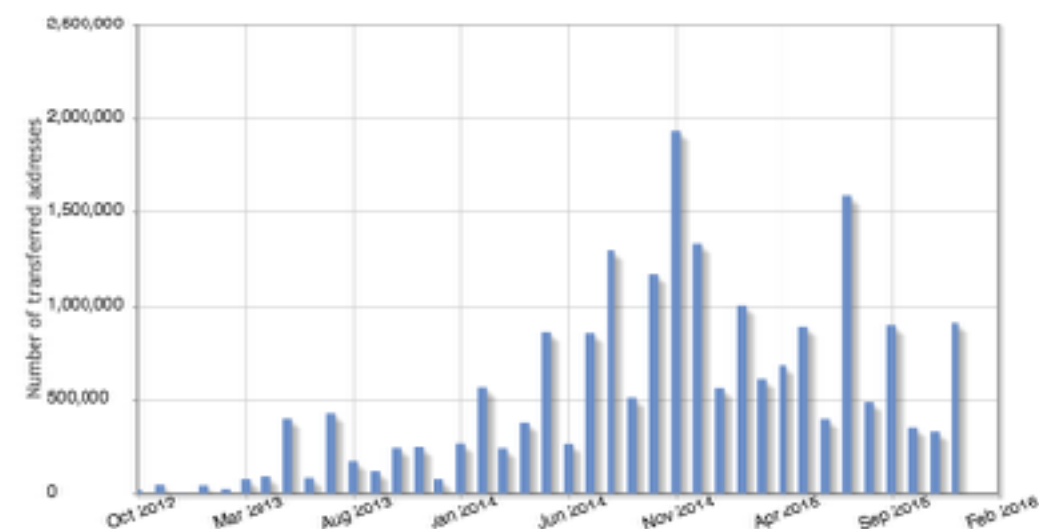
LIRs With and Without IPv6



Tags

allocation ases atlas
certification country
database ipv4 ipv6
k-root lirs meetings
ripestat routing syria
transfers

IPv4 Addresses Transferred



Statistics

15,531

Number of LIRs



11,611

LIRs with IPv6



452,864

IPv4 addresses tr

9,525

RIPE Atlas probes



13.57 Million

IPv4 Allocation Pool



View more
statistics



References



- RIPE Atlas: atlas.ripe.net
- IXP country Jedi: www.ripe.net/ixp-country-jedi
- RIPEstat: stat.ripe.net
- IPv6 RIPEness: ipv6ripeness.ripe.net
- IPv6 ASNs: v6asns.ripe.net



Questions



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