



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

R&D Update

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RIPEstat



- Usability improvements
 - Increased mobile friendliness
 - UI improvements for many widgets

RIPEstat

Enter an IP address/prefix, ASN, country code or hostname

Your network: AS3333, 2001:57c:2e8::/48 Try one of these: IPv4 prefix, IPv4 range, IPv6, ASN

Twitter Feed

#RIPEstat

OpenDataMonkey Retweeted

Christian Teuschel @ctauschel

The hunger for #OpenData on #RIPEstat continues to grow: 48.5 million requests per day in Oct 2017 vs. 38.7 million in Jul 2017!

RIPE Labs Feed

BGP Meets Cat Jun 26, 2017

Sand in the Gears Jun 08, 2017

Finviz in Switzerland - RIPE NCC Statistics and Data May 30, 2017

Focus on Greece - RIPE NCC Statistics and Data May 26, 2017

Focus on Hungary - RIPE NCC Statistics and Data May 05, 2017

RIPEstat Links

About RIPEstat
Get general information about RIPEstat

Documentation
Access the documentation for all RIPEstat APIs

Use Cases
Read about use cases for RIPEstat

RIPEstat Training Course
Attend a training course for RIPEstat

DNS Check 192.193.in-addr.arpa!

Reload this widget by entering a resource href

Choose a test record:

201:101:30:16:50:25 | INFO

✓ All tests are okay! For details see below

- SYSTEM INFO v2
- BASIC INFO v3
- ADDRESS INFO v3
- CONNECTIVITY INFO v3
- CONSISTENCY INFO v3
- DNSECC INFO v1
- DELEGATION INFO v3
- FRAMESERVER INFO v3 (NOTICE v2)
- SYNTAX INFO v2
- ZONE INFO v3 (NOTICE v3)

Request a new test

START TEST

Reverse DNS Consistency (AS3333)

Reload this widget by entering a resource href

IPv4 IPv6

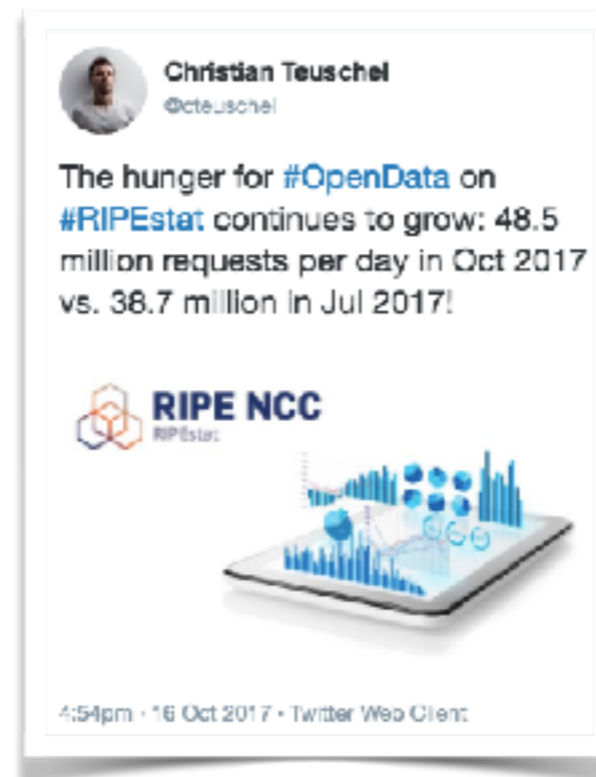
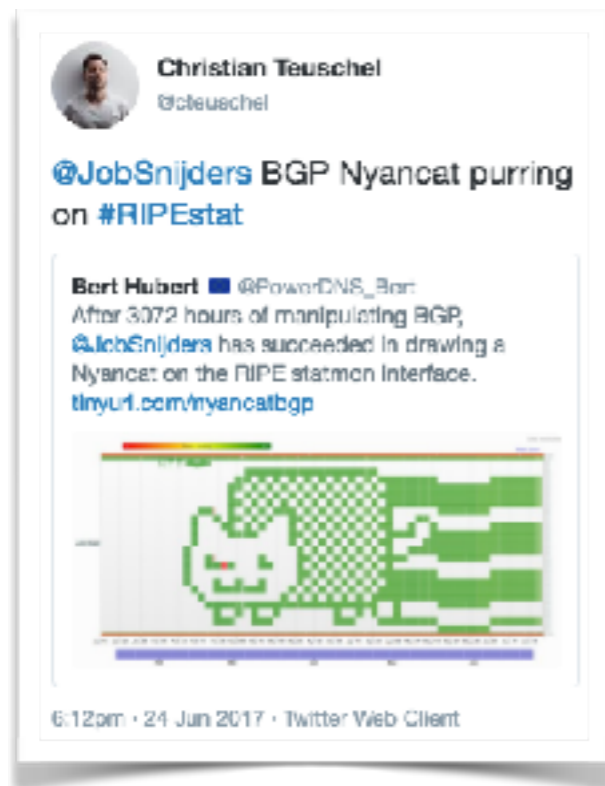
Show 18 entries

prefix	Reverse DNS domain	In RIPE registry	DNS Change	Updated
192.8.0.0/21	0.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05
192.8.0.0/21	1.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05
192.8.0.0/21	2.0.192.in-addr.arpa	✓	ERROR	2017-03-28 14:36:05
192.8.0.0/21	3.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05
192.8.0.0/21	4.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05
192.8.0.0/21	5.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05
192.8.0.0/21	6.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05
192.8.0.0/21	7.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05
192.8.0.0/21	8.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05
192.8.13.0/22	10.0.192.in-addr.arpa	✓	INFO	2017-03-28 14:36:05

RIPEstat



- Awareness building
 - Updates and news via #RIPEstat on Twitter
 - Regular, internal stakeholder meetings
 - Working on video to explain RIPEstat



RIPEstat



- Improved scalability & operational stability
 - Zero-downtime deployments
 - Extended front-end cluster to 16 nodes
 - Increase in daily requests and daily visitors since beginning of 2017

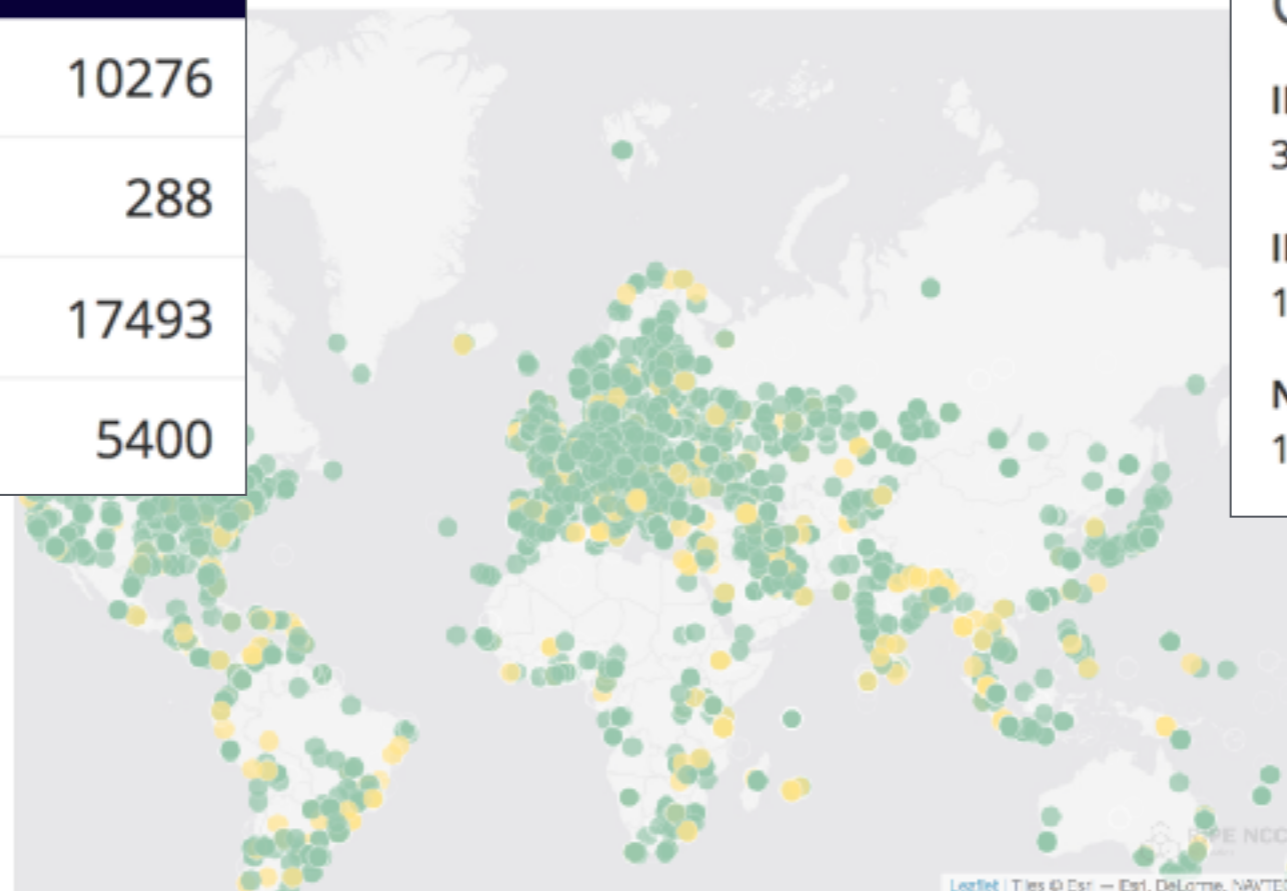
	Daily Requests	Daily Visitors
Jan 2017	30M	800k
Oct 2017	45M	1.4M

RIPE Atlas Coverage, October 2017



- 10,000+ active probes
 - https://labs.ripe.net/Members/alun_davies/celebrating-10000-active-ripe-atlas-probes
- Future direction: 10% of active ASes

Statistics	
Probes connected	10276
Anchors connected	288
Measurements running	17493
Results per second	5400



Coverage

IPv4 ASNs covered
3613 (6.142%)

IPv6 ASNs covered
1366 (9.742%)

Number of countries covered
182 (92.857%)

RIPE Atlas probes



- Continuing to evaluate candidates for next generation probes
- Considering diverse interfaces (controller connection over Wi-Fi, etc)
- Evaluating virtual probes
- Version 1 & 2 probes firmware frozen (except security updates)

RIPE Atlas Anchors



- Version 3 RIPE Atlas anchors
 - https://labs.ripe.net/Members/alun_davies/introducing-ripe-atlas-v3-anchors
- Price halved compared with version 2
- RIPE NCC sponsored anchors - not many left, apply quickly!
- Fully assembled anchor with 3-year warranty available from recommended vendors




New features



- All RIPE Atlas results from past month on ftp.ripe.net
 - <http://ftp.ripe.net/ripe/atlas/data/>
- Includes data for new root zone measurements 30001 and 30002
 - https://labs.ripe.net/Members/chris_amin/new-ripe-atlas-root-zone-dns-measurements
- More measurement options
 - Probe ID for ping, SNI hostname for TLS, DNS macros

New features (continued)



- New measurement creation form and measurement listing with improved usability, stability and performance
- DomainMON interface improved
- TraceMON: improved stability and geolocation
 - Open to collaboration!
- More features and improvements 
 - <https://atlas.ripe.net/resources/announcements/>

RIPE Labs articles



- “Insights from RIPE Atlas Probe Disconnections”
 - <https://labs.ripe.net/Members/emileaben/insights-from-ripe-atlas-probe-disconnections>
- “Current Network Connectivity from Puerto Rico”
 - https://labs.ripe.net/Members/stephen_strowes/observable-network-connectivity-from-puerto-rico
- Tool for plotting probe connects available
 - <https://github.com/emileaben/resource-gnuplotter>

RIPE Labs articles (continued)



- “Web Server Reachability with TCP Ping”
 - <https://labs.ripe.net/Members/wilhelm/measuring-your-web-server-reachability-with-tcp-ping>
- “RIPE Atlas Probes as IoT Devices”
 - <https://labs.ripe.net/Members/kistel/ripe-atlas-probes-as-iot-devices>

Other activities



- OpenIPMap
 - Stay put!
- Country Reports
 - RIPE NCC Services Working Group, Tuesday PM
- Training
 - RIPE NCC::Educa (see RIPE NCC Services WG)
 - <https://www.ripe.net/support/training/ripe-ncc-educa/agenda>
 - <https://www.ripe.net/support/training/courses/mat/mat>



Get involved!

- Use RIPE Atlas for your operations: monitoring, troubleshooting, measuring
- Do scientific **research**
- Participate in a **webinar**
- Add **multilingual** content
- Become an **ambassador** or a **sponsor**
- Host a RIPE Atlas anchor
- **Contribute to the code:** <https://github.com/RIPE-Atlas-Community/ripe-atlas-community-contrib/blob/master/README.md>

Sponsors: we thank you!



We appreciate the support of the following sponsors:

2017



2016



Rabobank

Contact RIPE Atlas



- Use cases and updates:
 - <https://labs.ripe.net/atlas>
- Mailing list for active users:
 - ripe-atlas@ripe.net
 - <https://www.ripe.net/participate/mail/forum/ripe-atlas>
- Questions: atlas@ripe.net
- Twitter: @RIPE_Atlas and #RIPEAtlas

Next Generation of RIPE Atlas Probes

- v4 - Evaluating NanoPi NEO Plus2
 - Raspberry PI “clone”
 - 1GB RAM, 8GB flash
 - Allwinner H5, Quad core Cortex A53
 - No external storage needed
 - Will run either Armbian or OpenWRT as base OS
 - Looks very capable, but logistics needs work

