RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE NCC Tools Update

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Research

Articles on RIPE Labs

Some articles from the recent past:

- Route Collection at the RIPE NCC - Where are we and where should we go?
- RIPE NCC Internet Country Report: Central Asia
- Looking Inside Outages with RIPE Atlas
- Our First Glance at the Belarus Outages
- IPv6 Adoption Statistics: a Comparison of Different Metrics
- From REX to RIPEstat: a Look at the Past and the Challenges Ahead
- … and more on RIPE Labs

RIPE Atlas

RIPE Atlas is 10 Years Old!

The Vision

- A collaborative, active measurement network
- Should potentially be on “unprecedented” scale, perhaps with vantage points in *every network*
- Community involvement - the RIPE NCC shouldn’t do this alone
- Focus on the “network level” measurements as much as possible
- Create and nurture an ecosystem of contributors and users
- Provide a long-term, sustainable platform

At 10 Years

- We’re at ~11.400 connected probes
  - ~1.350 are v1/v2 (!)
  - ~6.000 are v3
  - ~2.600 are v4
  - ~750 are software
  - ~650 are anchors (about half of these are virtual)
- On average about 25.000 measurements are running
- We cover 177 countries, ~3.700 ASNs
- The “most alive” probe has been up and running for:
  - 9y 318d 16h 28m (and a bit more by now)

Celebrating 10 Years

- The RIPE Atlas UI will get a significant facelift
  - Expect changes soon after RIPE 81
- We're introducing "birthday presents" for probes
  - Recognising the long-term support from our probe hosts
- We'll be publishing some "tales from the past" and preparing a few other gimmicks
- Organising a RIPE NCC Open House event and a Deployathon
- Please join the RIPE 81 Atlas community room

After 10 Years

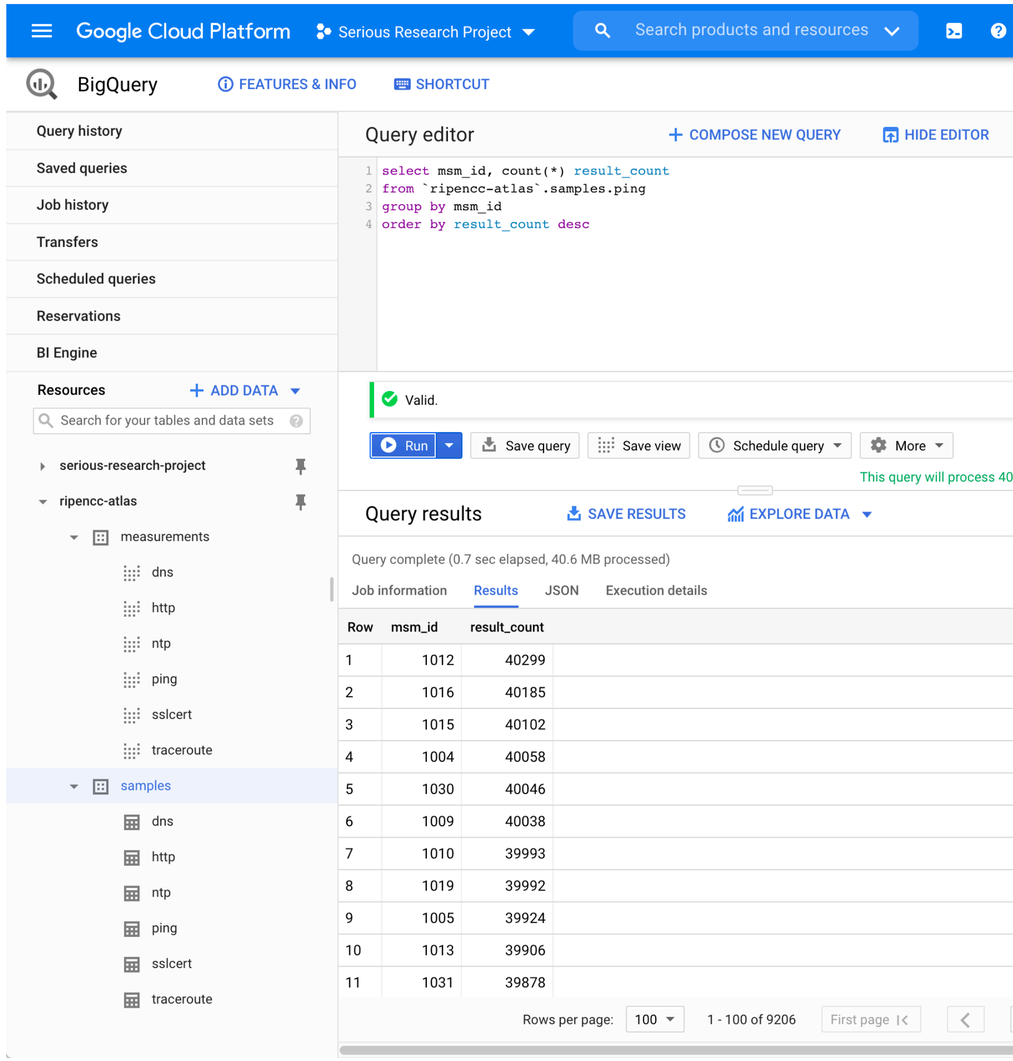
- We plan to make the system more useful to more users
  - Better access to data (simpler, faster, …)
  - More out-of-the-box support for particular use cases
- Increase value for individual contributors such as probe hosts
- Improve on processes that “help our helpers”
  - E.g. ambassadors and sponsors
- Focus on increased network coverage, if possible
  - Various activities to get probes into more networks

RIPE Atlas is 10 Years Old!

For more details: see the *Lightning Talk presentation* from Tuesday!

RIPE Atlas on BigQuery

- We're making RIPE Atlas measurement results available via Google BigQuery
- General purpose data warehouse
  - SQL query language on top
  - great for some types of rapid investigation
  - can be used to build complex analyses, or just heavy filtering prior to local analysis
- Information:
  - https://github.com/RIPE-NCC/ripe-atlas-bigquery/
  - https://labs.ripe.net/tools/

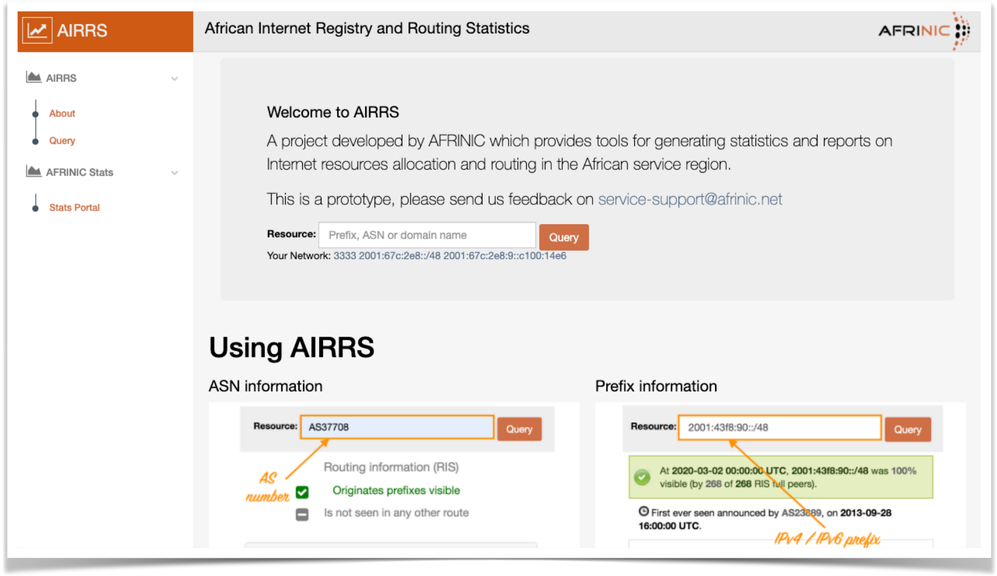


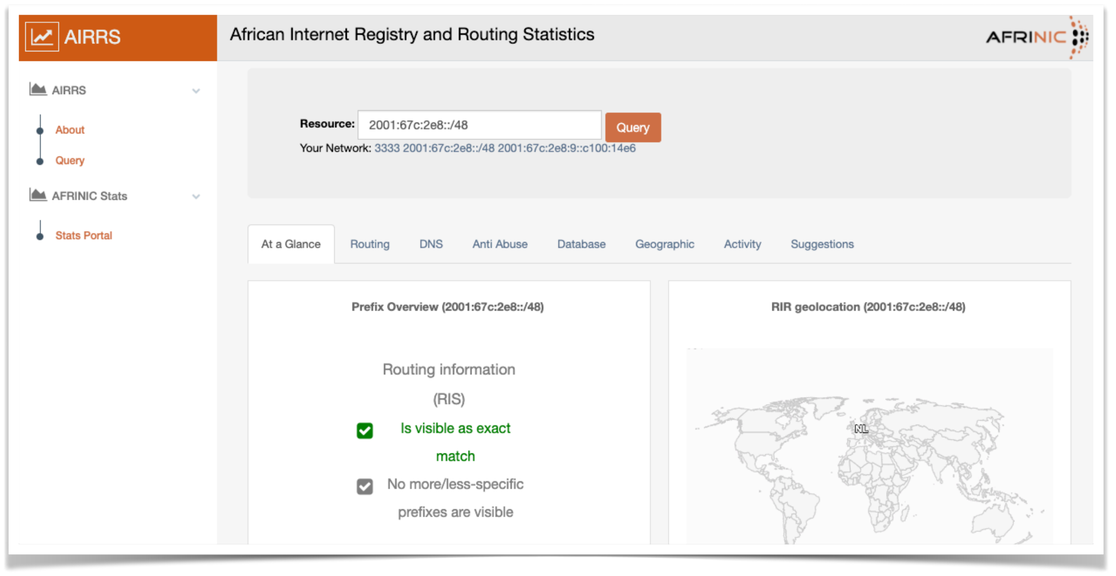
BigQuery: Project & Datasets

- https://console.cloud.google.com/bigquery?project=ripencc-atlas
  - **measurements** dataset:
    - public measurement results for DNS, traceroute, ping, HTTP, SSL, and NTP
    - dataset is current: we're continuously adding new results
    - starting from 1 January 2020; we'll increase the date range as we backfill
  - **samples** dataset:
    - 1% of results from 21 October 2020 for each of the above
    - play with it!
- You need a Google account
  - we're covering storage, the cost of your queries is on you

RIPEstat

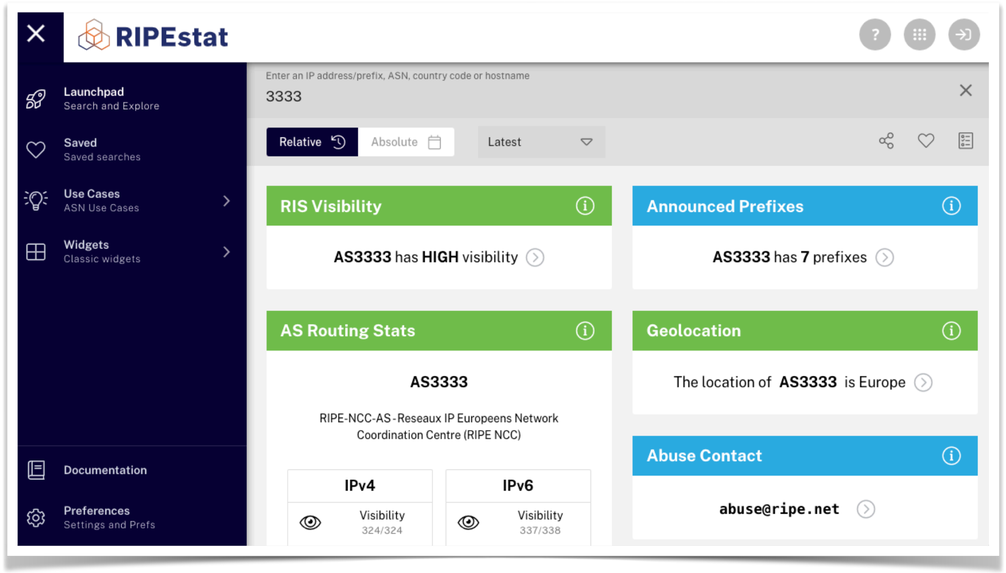
RIPEstat - RIR Collaboration

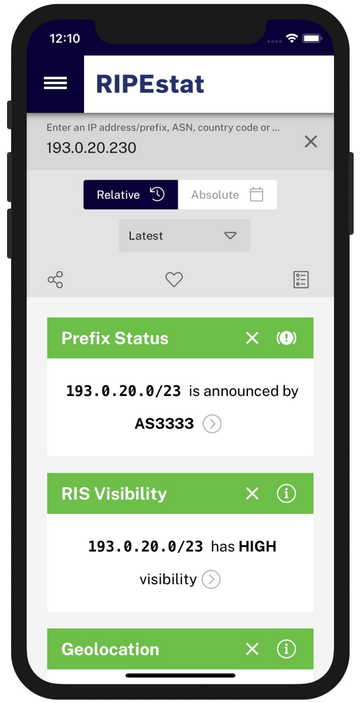




- 3rd RIR collaboration with AFRINIC
  - **A**frican **I**nternet **R**egistry and **R**outing **S**tatistics
  - https://airrs.afrinic.net/
- In addition to APNIC NetOX and LACNIC Inforedes

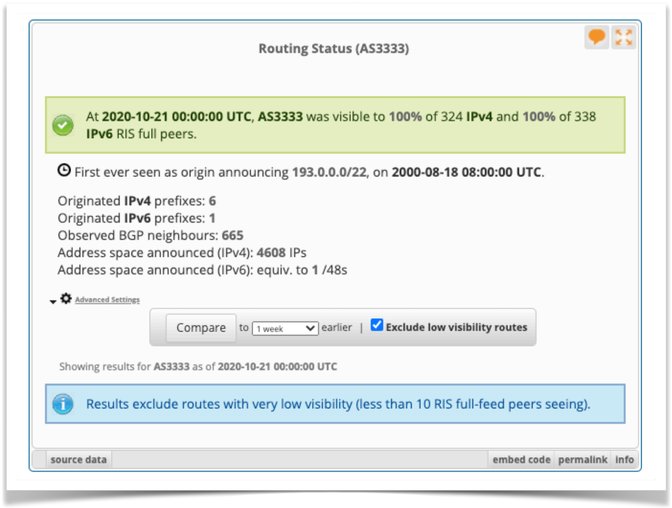
RIPEstat - UI

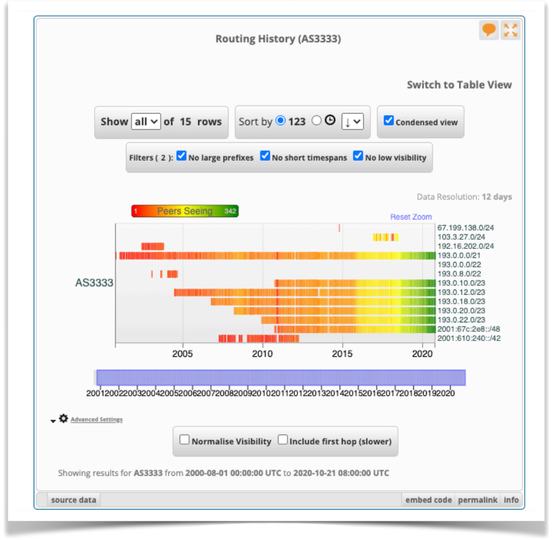


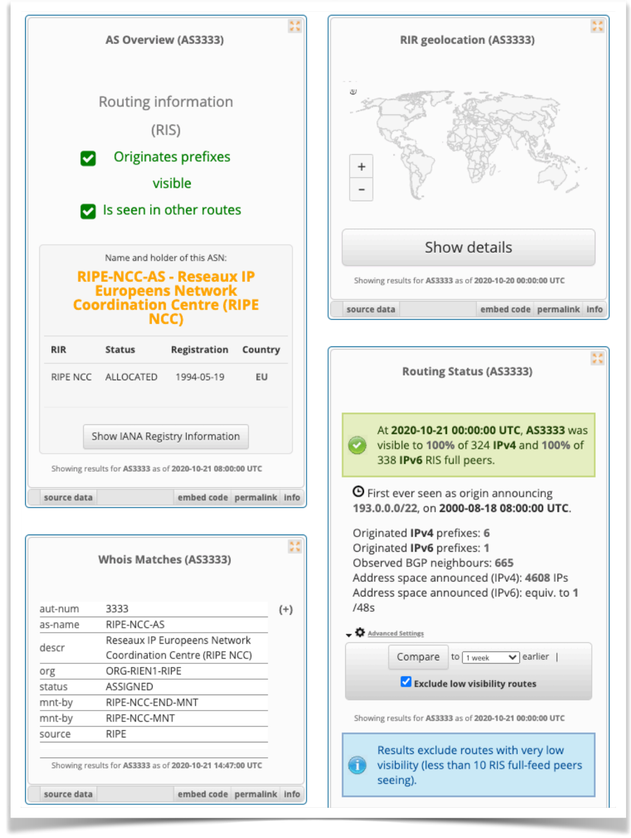


- RIPEstat UI 2020
  - Alternative to current RIPEstat UI 2013
  - Demo during RIPE81 - Thursday 12:00 CET in the main room
  - https://beta-ui.stat.ripe.net/

RIPEstat - UI







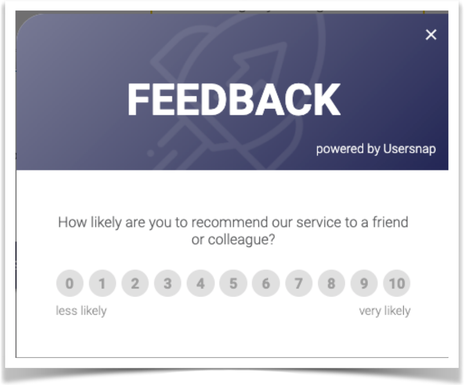
- RIPEstat Widget API
  - Shared codebase between collaborating RIRs
  - Enables every partner to create new widgets and use them on their platform

RIPEstat - Feature Update

- Looking Glass
  - Close to realtime now - most peers are available within 30 seconds
  - Meta data on time recency per peer available
- Maxmind GeoLite2
  - Data is available again but not historically due to changes in the license
  - https://stat.ripe.net/docs/data_api#maxmind-geo-lite
  - https://stat.ripe.net/docs/data_api#maxmind-geo-lite-announced-by-as
- GeoIP/resource information based on RIRStats (*new*)
  - https://stat.ripe.net/docs/data_api#rir-geo

RIPEstat - Feature Update

- RPKI History widget (*new*)
  - By AS, trust anchor and country
  - https://stat.ripe.net/widget/rpki-by-(as|trust-anchor|country)
- New widgets developed by APNIC
  - IRR Explorer: https://stat.ripe.net/widget/apnic-irr-explorer
  - Abuse Contact Finder: https://stat.ripe.net/widget/apnic-abuse-contact-finder
  - Resource Transfer History: https://stat.ripe.net/widget/(afrinic|apnic|ripe)-transfer-history
- Addition of NPS as means of feedback



Questions

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