RIPE NCC

RIPE NCC Tools Update

Robert Kisteleki
RIPE NCC

Robert Kisteleki | RIPE 84 MAT WG | 18 May 2022

Research

Articles on RIPE Labs & More

- Published various articles:

  - About the state of the Internet in Ukraine and Russia and more

  - Detecting DNS Root Manipulation

  - The Curious Case of Packets From ::

- Recently in the Internet Country Report series:

  - Bulgaria, Moldova and Romania

  - IPv6 in Sweden

- For more information: see RIPE Labs

- Prototyping Internet outage visualisations based on RIPE Atlas data using Observable
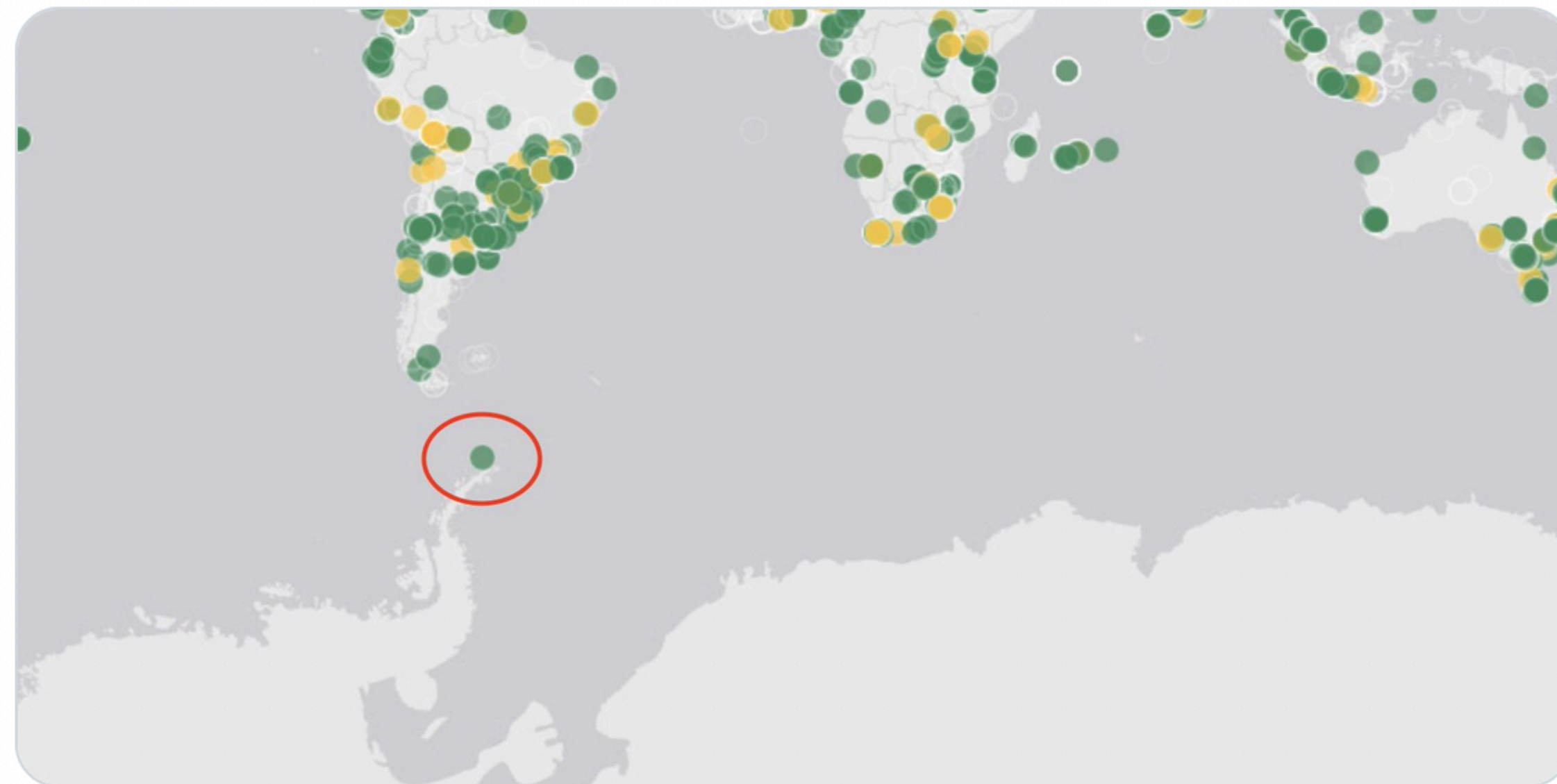
Emile Aben   Robert Kisteleki

RIPE Atlas

RIPE Atlas

RIPE Atlas Recent Developments

- New hardware probes: v5 is almost available

- Work on the revamped UI is ongoing

- Almost ready: measuring "reserved space" i.e. 240/4 and 0/8

- Revamped <u>sponsorship opportunities</u>, starting to improve ambassador relations

- Adding more use cases and looking at the pros and cons of hosting RIPE Atlas data in Google BigQuery

- As usual: lots of operational work on the infrastructure
  - Exploring the possibility to host our Big Data "in the cloud" is ongoing

RIPE Atlas Proposals

We are working on a few proposals:

- Stop supporting "non-public" measurements

  - Very low usage and makes a number of processes complicated

- Enable HTTP measurements

  - With a number of restrictions to keep it safe

  - From the probe hosts' perspective: most likely an opt-in model

- The proposals are meant to facilitate conversations with the community

  - Via the MAT Working Group and/or the RIPE Atlas mailing lists

RIPE Atlas Contacts

You can find us at a table somewhere in the hall:

- Tuesday, Wednesday and Thursday

- We have some T-shirts!

- And a few early bird v5 probes for most wanted networks…
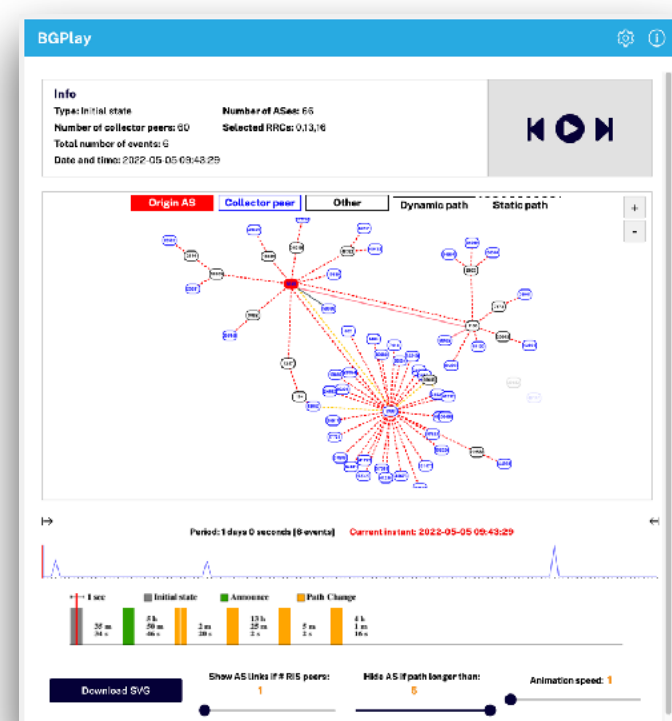
Lia
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Christopher
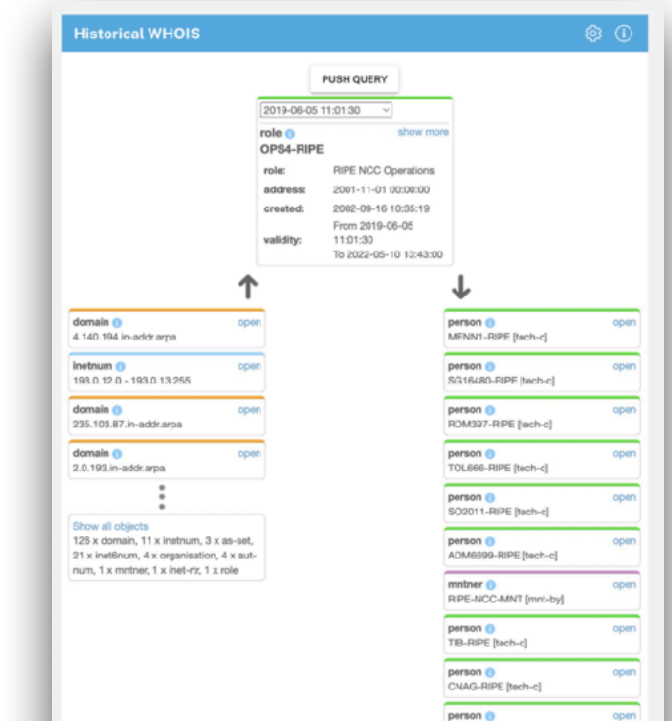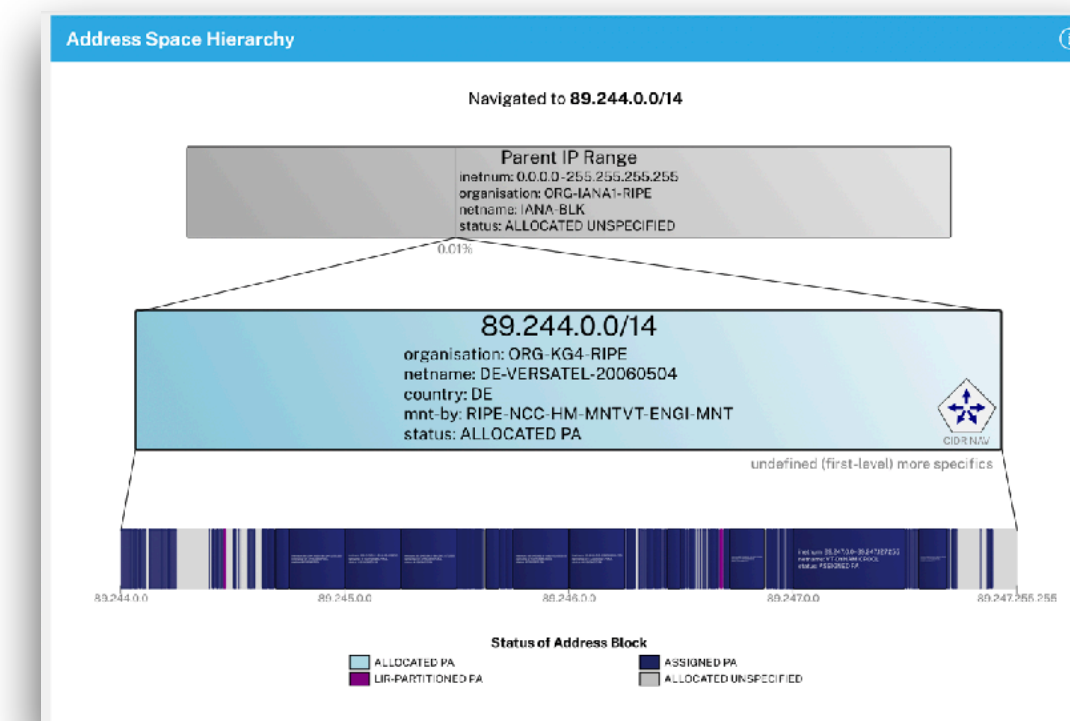Amin

Robert
Kisteleki

RIPEstat

RIPEstat

- ## RIPEstat UI2020

  - Ongoing work towards feature parity with UI2013

  - New customisation preferences, other improvements and bug fixes

  - Change log: https://stat.ripe.net/docs/03.RIPEstat-UI-(Current)/03-releases.html

  - New use cases: BGPlay, Routing Consistency, Reverse DNS Consistency, Address Space Hierarchy and Historical WHOIS

RIPEstat

- RIPEstat UI2013 (widget-based)

  - Maintained until feature parity is reached, then open sourced

  - https://stat.ripe.net/ui2013/

- Feature Request: Provide additional ROA/VRP information

  - https://ripestat.featureupvote.com/suggestions/192993/show-all-roas-in-the-prefix-routing-consistency-widget

  - Added to Prefix and AS Routing Consistency UIs

RIPEstat

- Feature Request: Revamp of blocklist feature

  - https://ripestat.featureupvote.com/suggestions/196464/project-blocklists-2021

  - Implementation is done, now in contact with blocklist operators to get official permission to add blocklists

  - PoC UI: https://stat.ripe.net/widget/dns-blocklists

  - Goal is 20+ blocklists

  - Whitelist feature planned

RIPEstat

- Consolidating Data API parameters

  - Ongoing project to make use of Data API easier

  - ETA: Q2 2022 (previously Q1 2022)

- RIPEstat Operations

  - New test framework in place to increase service quality

  - Improved backend and service monitoring

  - Shifting parts of RIPEstat to cloud is in focus for rest of 2022

RIPEstat

- Michela Galante and Stephen Suess are here at the RIPE meeting to demo/discuss/ answer questions about:

  - The UI work that has been done across the organisation

  - With a special focus on RIPEstat

Michela
Galante

Stephen
Suess

RIPE IPmap

RIPE IPmap

New: reverse-DNS engine

- Locates hostnames from PTR record

- Geo patterns inferred using sc_hoiho tool from CAIDA using daily data from IPmap's **latency** (all RIPE Atlas traceroute results) and **worlds** (city information) engines

- Falls back to naive realtime pattern matching to give a last resort result (with lower score)

-

countryCodeAlpha2:   "DE"
countryCodeAlpha3:   "DEU"
▼ contributions:
    ▼ reverse-dns:
        score: 7
        matchType: "pattern"
        scoreFactor: 3
    ▼ worlds:
        score: 2
        populationScore: 2

RIPE IPmap

- Suggestion engine improved to allow engines to learn from each other and improve each other's results

- Development focus moving to improving the crowdsource engine

- Make it easier for the community to improve IPmap, and for crowdsourced contributions to be combined intelligently with the other engines

Christopher Amin

RIPE RIS

RIPE Routing Information Service (RIS)

- Updated RIS website
  - ris.ripe.net
  - ris.ripe.net/docs
- Peering coordination
  - Actively seeking for "interesting" peers
- New research
  - Bias in Internet Measurement Infrastructure
- Data improvement prototypes:
  - Peer metadata
  - Per-peer MRT dumps
  - Public Kafka (TBA)

Talk to these people in the halls:

Emile Aben

Michela Galante

Florian Obser

Questions ?

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@kistel

Harry, hol schonmal den Wagen!