RIPE Atlas Update

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Some Numbers

- Number of connected probes: ~9350
  - Slow-down / dip because of (temporarily) running out of probes and USB issues

- Covered AS-es: 3345 (IPv4), 1269 (IPv6)

- Collecting 4000+ results/sec (over 350M/day)

- Close to 6 million measurements so far

- Collected almost 100TB (compressed) results

Some More Numbers

- 362 RIPE Atlas ambassadors

- 1580 Twitter followers (@RIPE_Atlas)

- 29500+ users total, 5000+ active last quarter

- 939 subscribers of the mailing list

- 6 RIPE Atlas sponsors in 2016

  - Let us know if you feel like sponsoring!

Anchors

- An anchor is a probe and a willing target

  - Automatically measured and generate more credits

- Number of anchors: 224 (191 last time)

- Hardware lifecycle changes are ongoing

  - Decommissioning of v1 anchors is in progress

- Thanks to APNIC, LACNIC, ISOC & AFRINIC who are sponsoring anchors in other regions

  - Le us know if you also want to sponsor these

Recent Use Cases

- Measuring cloud connectivity:
  - https://labs.ripe.net/Members/jason_read/using-ripe-atlas-to-measure-cloud-connectivity

- Monitor a game service connectivity:
  - https://labs.ripe.net/Members/annika_wickert/using-ripe-atlas-to-monitor-game-service-connectivity

- Detecting Internet Disruption In TR - July 2016
  - https://labs.ripe.net/Members/emileaben/internet-access-disruption-in-turkey

- Detecting Operator Level DNS Hijacking
  - https://labs.ripe.net/Members/babak_farrokhi/operator-level-dns-redirection

Some Notable Changes

- API changes

  - v1 APIs have been deprecated, will be turned off at the end of the year

- More flexibility on API keys

  - You can now have multi-purpose API keys

- Introduced bonus credits for the probe hosts for delivered measurement results

Some Notable Changes

- Internet topology discovery measurements

  - New built-in measurements to all routed prefixes

- Working on:

  - Continued scalability

  - Proposal for VM probes

  - OpenIPMap

  - Traceroute visualisation

  - …
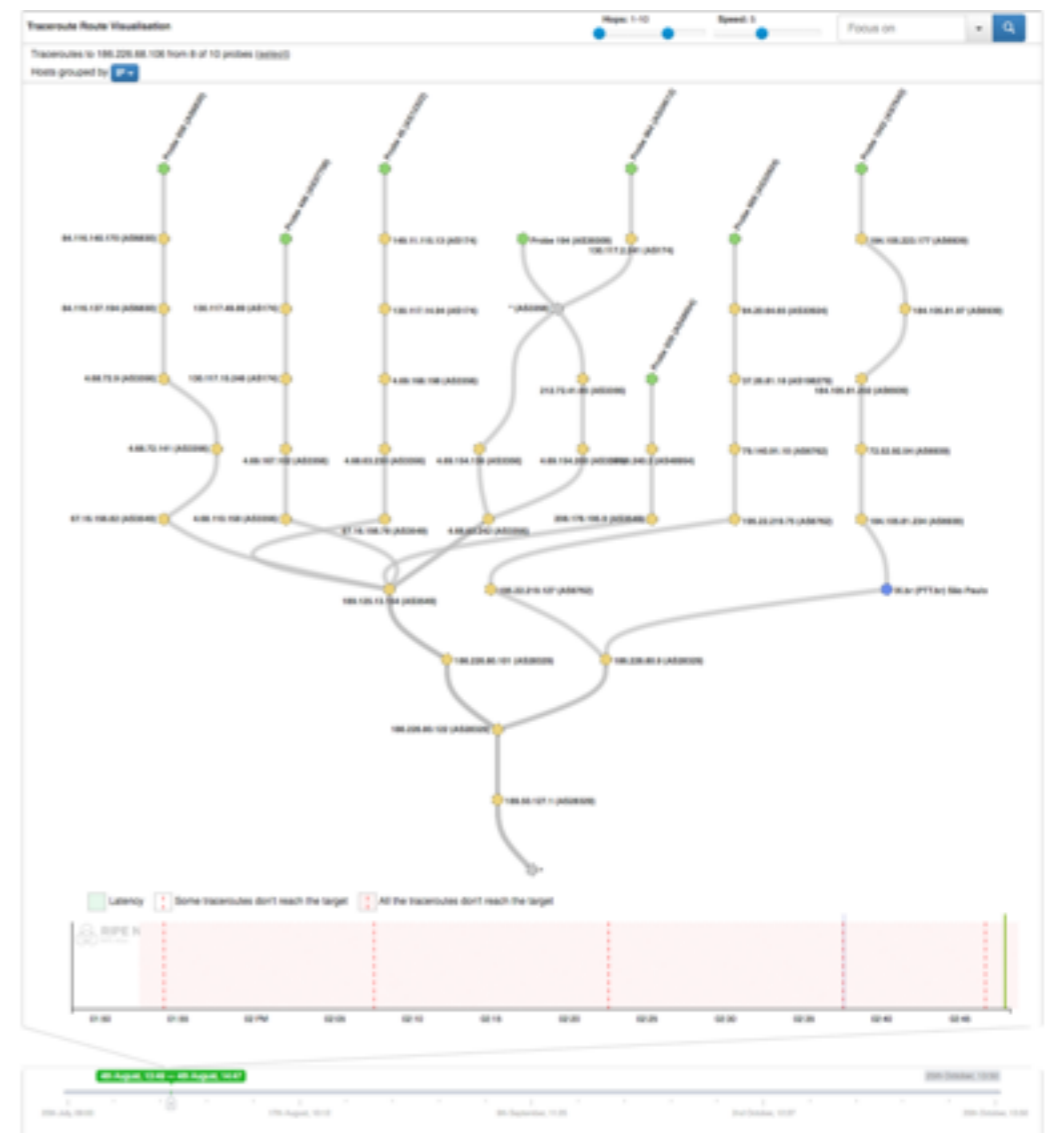
Coming up: **WiFi measurements**

- Verifying if WiFi connections work or not

  - Using regular, wired probes

- Not general purpose "is my home wifi ok?"

  - Targets specific WiFi networks; Eduroam first

- Probes/hosts can to opt-in

- Main benefit for RIPE Atlas: potential wider coverage of networks

A Word About Public Measurements

- A key value for RIPE Atlas is public data

- There are some use cases for doing non-public measurements

    - Only a handful of users do this though

- Should we continue supporting this?

- See details at https://labs.ripe.net/Members/kistel/non-public-measurements-in-ripe-atlas

A Word About Measurement Ethics

- A plea to "measurers":

  - Think about the ethical aspects of what and how you're measuring.

  - Adjust your measurement accordingly, if needed.

  - Refrain from measuring if you suspect it could cause harm.

- Expect a RIPE Labs article and perhaps more discussion coming up soon!

IXP Tools Hackathon

- Held on the weekend before RIPE 73

- Some teams used RIPE Atlas for this

- More reports in other working groups

- See all the code at:

  - https://github.com/RIPE-Atlas-Community/ripe-atlas-community-contrib/blob/master/README.md

Questions

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