

RIPE NCC Tools Update



Robert Kisteleki 17 October 2018 RIPE77 MAT-WG

RIPE Atlas: New Probes and VM Anchors

Probe v4 out now

- Started distributing them via ambassadors and applications
- Working on our backlog and we're working on more probes

RIPE Atlas <u>VM anchors</u>: about to conclude

- We will welcome individual VMs (with vetting)
- We will work on cloud anchors (Amazon and the like)
- Article: Comparing Virtual and Metal RIPE Atlas Anchors

Streamlined RIPE Atlas anchor processes



RIPE Atlas: Recent Activities and Coming Up

- faster backend (API/UI)
- Experimenting with RIPE Atlas data "in the cloud" (Google **BigQuery**)
- Looking into the feasibility of "software probes" • Planning more independent security reviews, like before Adding support for more probe selection use cases
- - Ability to "select similar / dissimilar probes"





• Work is about to conclude on switching to a more scalable/

RIPE Atlas: Recent Activities and Coming Up

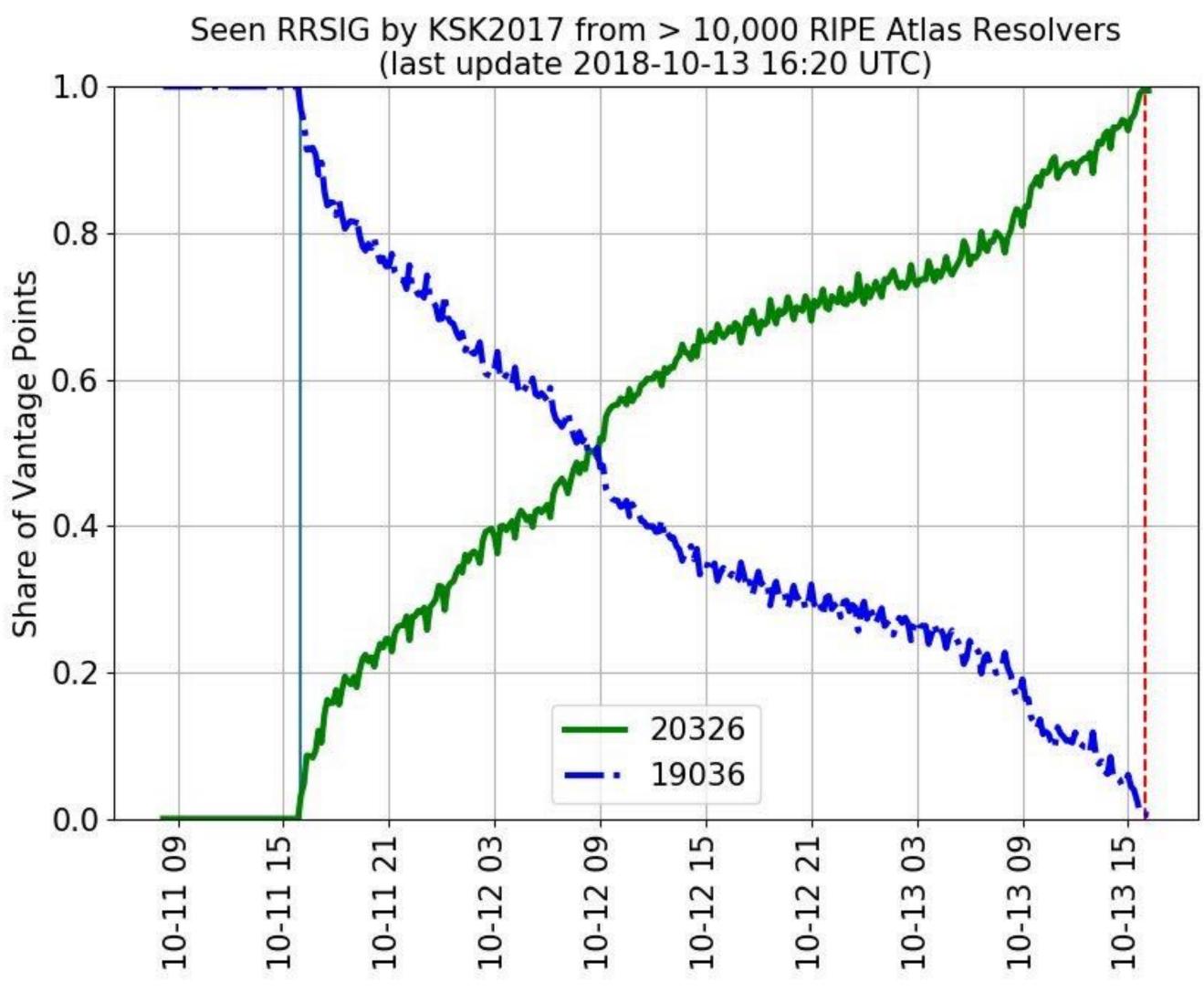
- Added more options (e.g. EC support for TLS)
- infrastructure
 - There are more and more use cases and users which is likely to continue!

Some more use cases and publications:

- Measuring Anycast DNS Services Using RIPE Atlas
- Various research papers at measurement conferences
- Measuring the DNS KSK rollover process (SIDN Labs)
- Many more



RIPE Atlas: Recent Activities and Coming Up



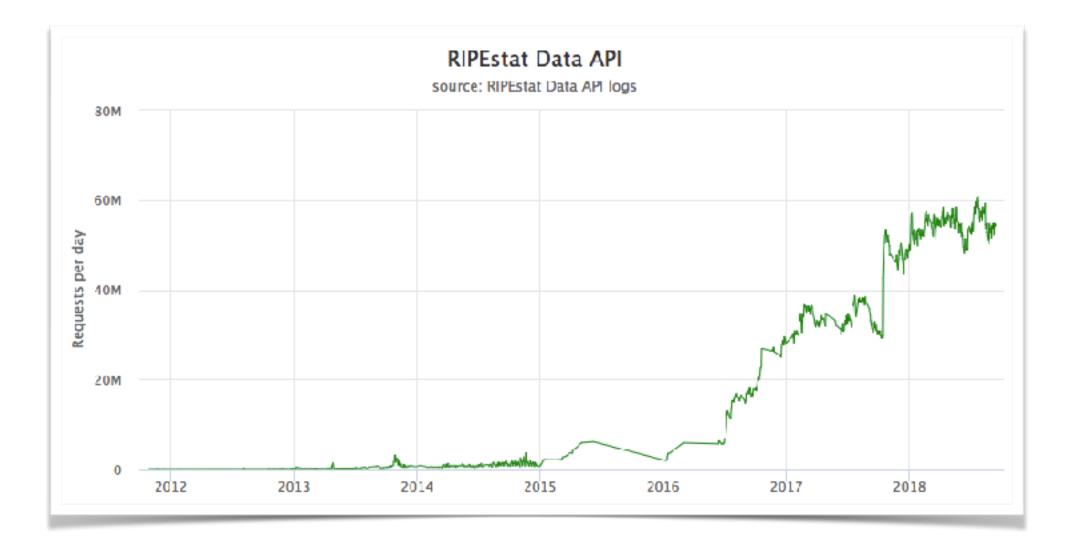


RIPEstat

Since early 2018 RIPEstat is operating at a sustained ~60 million requests / day load

• Therefore we're working on scalability and availability

- Code optimisations and increasing the cluster (efficiency)





RIPEstat - More Cooperation

Arranging cooperation with other RIRs

- **RIPEstat**
- Enabling shared feature development



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- Better support of regional data sets (e.g. global abuse-c) and knowledge in

RIPEstat - Other news

- Various enhancements on the Looking Glass
- New: "Upstream Visibility" derived from RIS data
 - Article: Upstream Visibility: Monitor the Visibility of your Prefix

• We now have a public feature tracker:

- <u>https://ripestat.featureupvote.com/</u>
- Third party tool
- Test phase until end of this year



RIPEstat Feature Tracker		
Users made the following suggestions to improve	e RIPEstat:	
Please note if you submit a suggestions you might get contacted by someone from the RIPEstat team to clarify your feature suggestions. New suggestions are moderated and will not show up immediately. We try to react on new suggestions within one working day! Feature suggestions can have the following statuses and this happens if you upvote one: 1. Under consideration We still have to decide whether or not to work on it. Upvoting makes it more likely to be Planned . 2. Planned We decided to implement this feature but it still needs to be scheduled. 3. Done Well, that's pretty straightforward. Enjoy this feature!		
★ Top ② New All (6) +	Type and pressienter Q ADD YOUR SUGGESTION	
15 Votes Additional geolocation information Suggested by: Laurens (01 Aug) - Upvoted: 29 Aug - Comments: 2 Under consideration		

RIPE IPmap

Released at <u>https://ipmap.ripe.net/</u>

- Also integrated into RIPE Atlas
- Working on more refinements such as:
 - Better anycast geolocation
 - Integration with other RIR data feeds
 - Improving coverage by doing proactive geolocation
 - Bulk crowdsourcing



Research Activities

• TMA 2018: <u>Big Data and Network Measurements</u>

• Will participate at IMC 2018 with:

- <u>A Long Way to the Top: Significance, Structure, and Stability of Internet Top Lists</u>
- <u>Clusters in the Expanse: Understanding and Unbiasing IPv6 Hitlists</u>
- Multilevel MDA-Lite Paris Traceroute

• Other academic engagement

- PAM, ANRW
- Internet data use hackathon in Lebanon



Research Activities

• Other research activities:

- Looking into BGP Large Communities uptake
- <u>Probe similarity metrics</u>: looking into how we can do smarter probe selection -
- <u>BGP Zombies: How prevalent are stuck BGP routes and are they a problem?</u>
- <u>Sketching Connectivity Between Users</u>
- 20,000 Local Internet Registries A Peek into the Future
- <u>Comparing Virtual and Metal RIPE Atlas Anchors</u>
- IPv6 Adoption Statistics: How do APNIC and Facebook Compare?
- IPv6 Launchiversary: the View from RIPE Atlas and K-root -
- ... and more



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Questions

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