



RIPE NCC

RIPE NETWORK COORDINATION CENTRE

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 VM anchors: 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



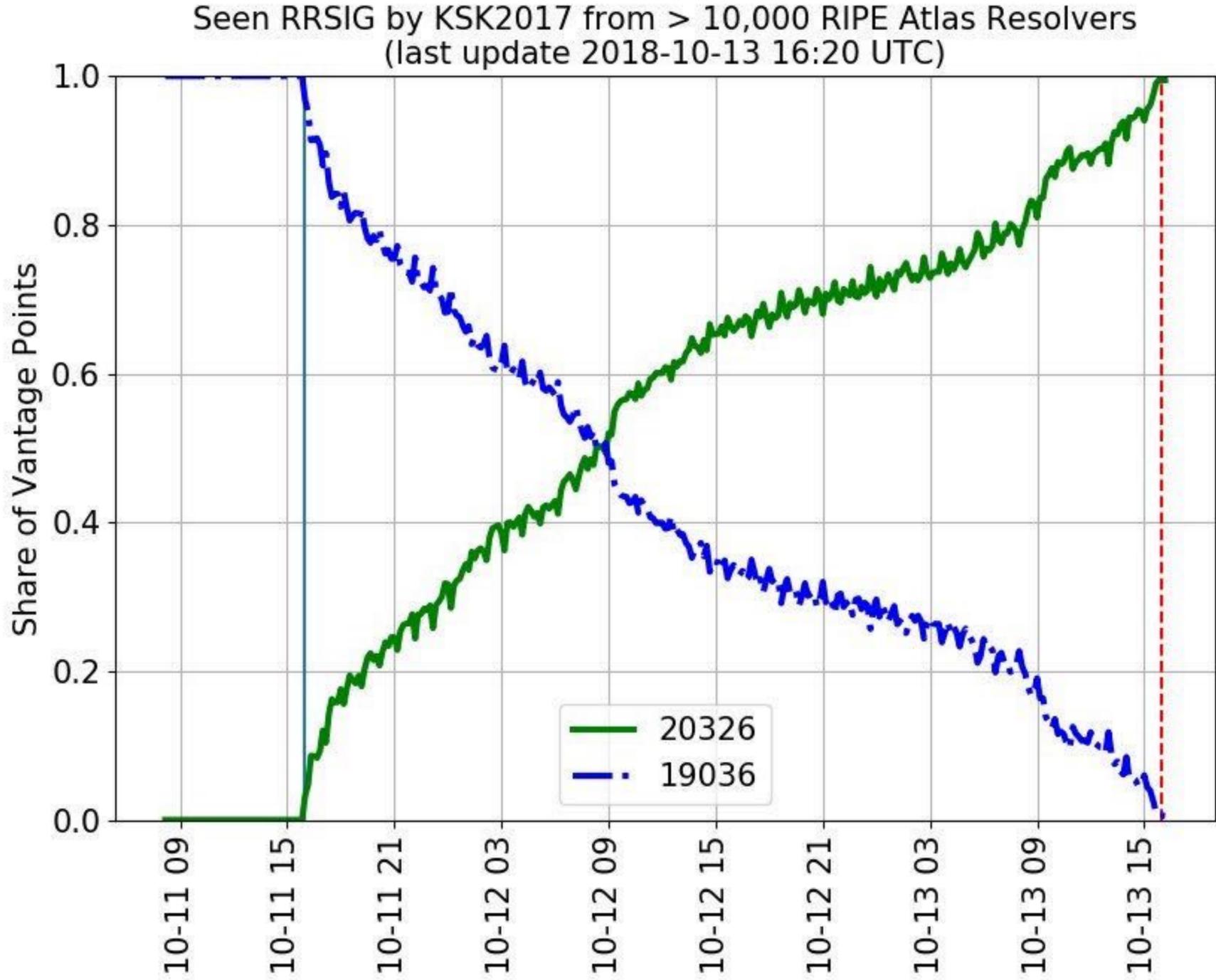
- **Work is about to conclude on switching to a more scalable/faster backend (API/UI)**
- **Experimenting with RIPE Atlas data “in the cloud” (Google BigQuery)**
- **Looking into the feasibility of “software probes”**
- **Planning more independent security reviews, like before**
- **Adding support for more probe selection use cases**
 - Ability to “select similar / dissimilar probes”

RIPE Atlas: Recent Activities and Coming Up



- **Added more options (e.g. EC support for TLS)**
- **Worked on improving our real-time data feed (streaming) 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

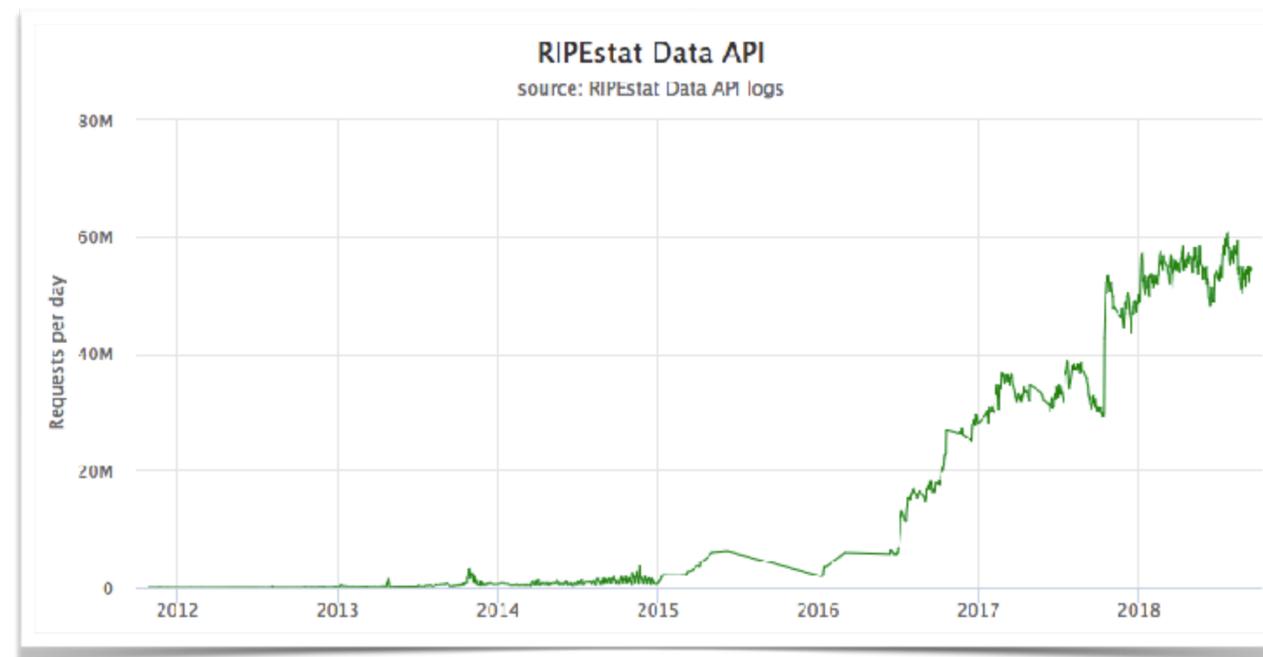
RIPE Atlas: Recent Activities and Coming Up



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



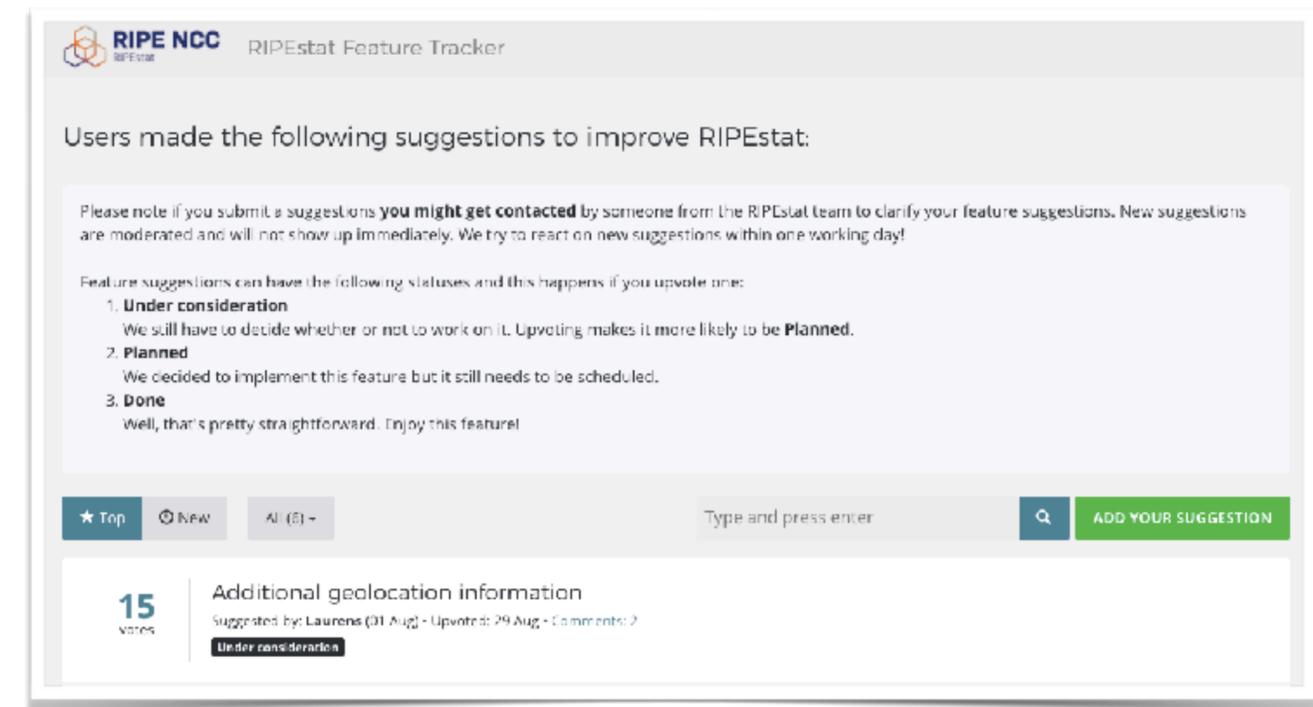
- **Arranging cooperation with other RIRs**
 - Better support of regional data sets (e.g. global abuse-c) and knowledge in RIPEstat
 - Enabling shared feature development



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



RIPE IPmap



- Released at <https://ipmap.ripe.net/>
 - 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: Big Data and Network Measurements**
- **Will participate at IMC 2018 with:**
 - A Long Way to the Top: Significance, Structure, and Stability of Internet Top Lists
 - Clusters in the Expanse: Understanding and Unbiasing IPv6 Hitlists
 - 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
- Probe similarity metrics: looking into how we can do smarter probe selection
- BGP Zombies: How prevalent are stuck BGP routes and are they a problem?
- Sketching Connectivity Between Users
- 20,000 Local Internet Registries - A Peek into the Future
- Comparing Virtual and Metal RIPE Atlas Anchors
- 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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