



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

Results of the IXP-Tools Code-Sprint (mini-Hackathon)

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Goals of the RIPE NCC Hackathons



- bring together operators, researchers, designers, coders
- combine creative skills
 - .. & get feedback for RIPE NCC
- contribute useful tools for operators
- make new connections
- have fun!



Previous hackathons



- labs.ripe.net/hackathons
 - RIPE Atlas DataViz (March 2015)
 - RIPE Atlas Tools for operators (October 2015)
 - RIPE Atlas Interfaces (April 2016)
 - IXP-tools (October 2016)
 - IXP-tools Code-Sprint (April 2017)
 - DNS Measurements (April 2017)
- All code on GitHub

IXP-tools Code Sprint



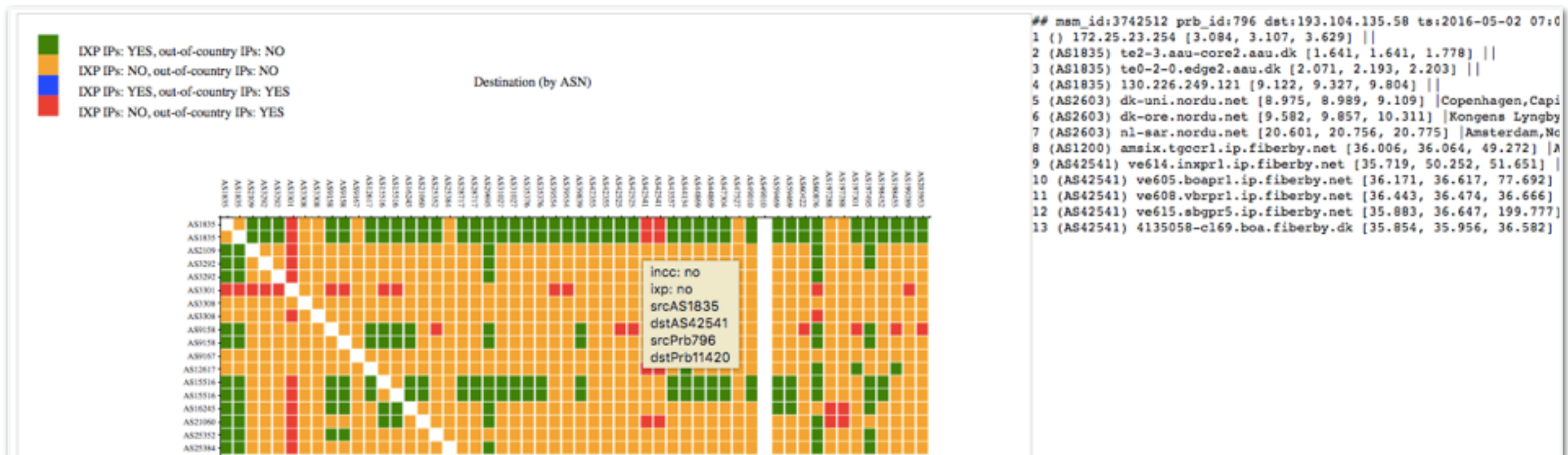
- Continuation of IXP-Tools Hackathon
 - reminder: weekend before RIPE73; 32 people, 7 projects : 11 IXPs, researchers, developers, operators
 - Petros Gigis (FORTH): research internship at RIPE NCC
 - Vasileios Giotsas (CAIDA): reward visit to continue work
- Code-Sprint: smaller scale: 5-6 April 2017
 - two IXPs + two researchers; two working days
 - two projects
- RIPE Labs article



Original: IXP Country Jedi



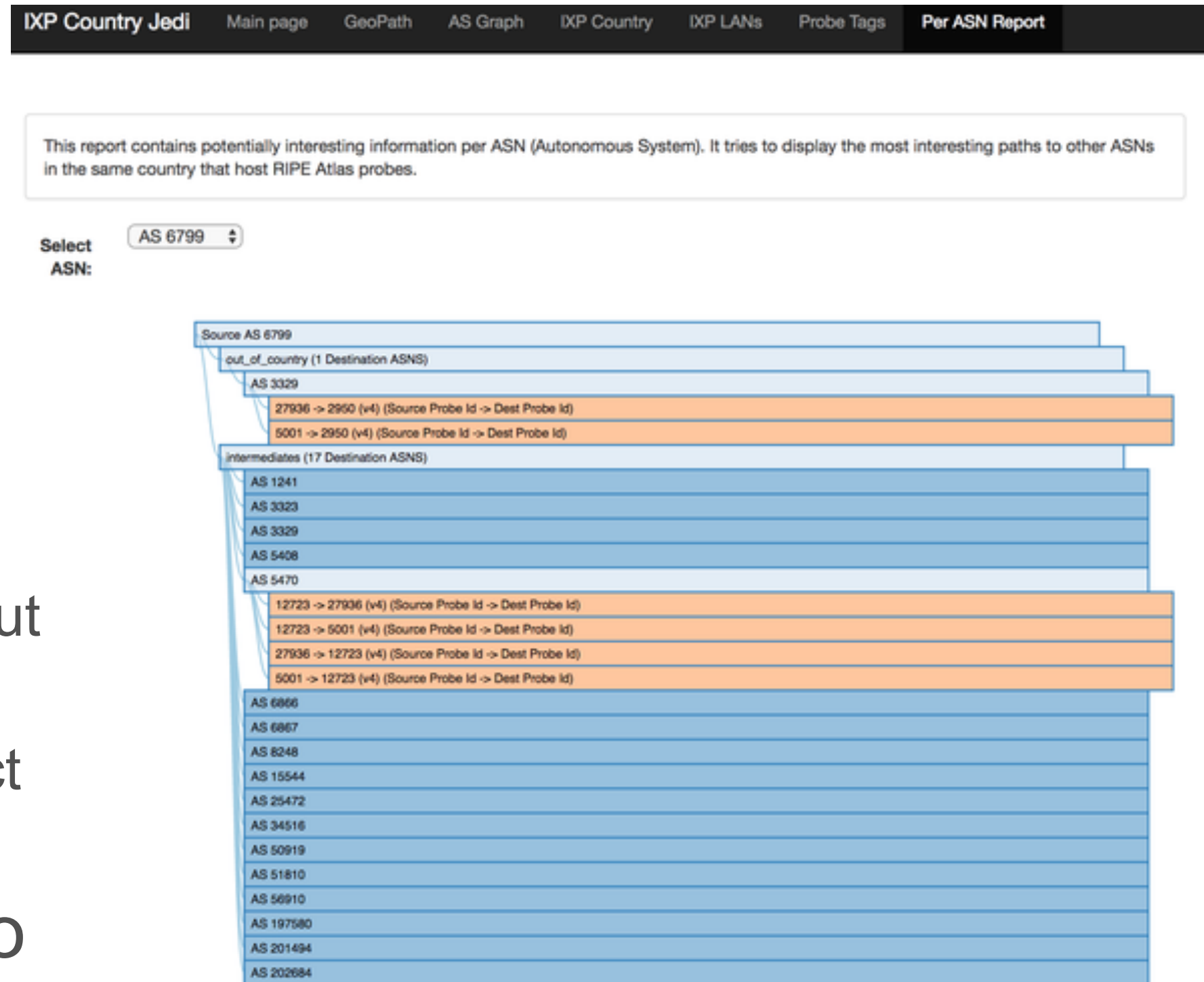
- RIPE Atlas Traceroute mesh per country
 - <http://sg-pub.ripe.net/emile/ixp-country-jedi/>
- Is the path going through an IXP?
- Is the path going out of the country?



Improvements to IXP-Country-Jedi



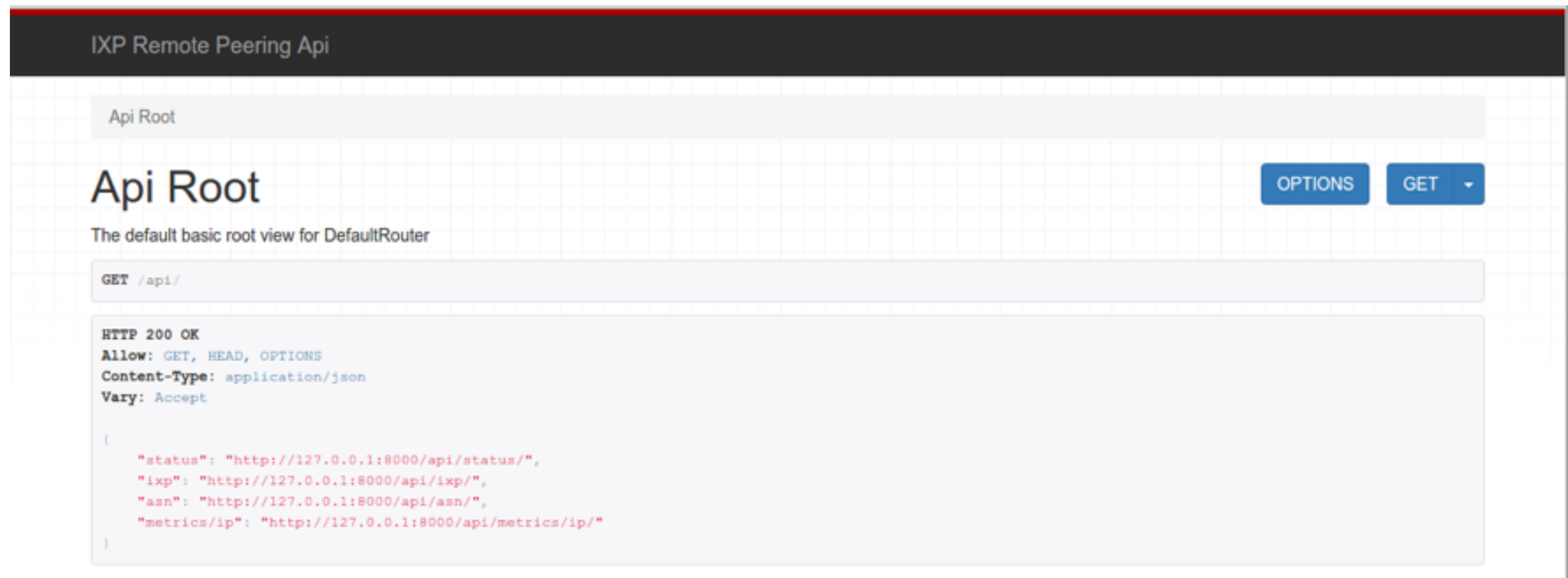
- View per source ASN
- Only display “interesting” destination ASNs:
 - the path goes out of the country
 - there is no direct peering
- Drill-down into traceroutes



Detecting Remote Peerings



- Prototype: <http://inspire.edu.gr/rp/>
- Improvements:
 - daily bulk data creation & processing, based on RIPE Atlas
 - APIs for accessing data (IXP view, ASN view, metrics/IP)



News: BirdsEye implemented!



- Another one of the hackathons projects lives!
- "BirdsEye" looking glass
 - *Secure Micro Service for Querying Bird*
- Live service: <http://lg.ecix.net/>

The screenshot shows the Birdseye web interface. On the left, a dark sidebar lists route servers: rs1.ber.ecix.net (IPv4), rs1.ber.ecix.net (IPv6), rs2.ber.ecix.net (IPv4), and rs2.ber.ecix.net (IPv6). The main content area is titled 'rs1.ber.ecix.net (IPv4) (195.43.89.12)'. It features a search bar with the placeholder 'Filter by Neighbour, ASN or Description'. Below the search bar is a table with the following data:

Neighbour	ASN	State	Uptime	Description	Routes Recv.	R F
194.9.117.1	25074	up	2 months	AS25074 194.9.117.1 MESH GmbH	141	5

On the right side of the interface, there is a status box indicating 'Last Reconfig: Monday, April 10, 2017 10:46 AM' and a battery icon with the text 'Daemon is up and running'.

Take part in our hackathons!



- Join us next time!
 - October 2017: location & topic to be announced
 - Spring & Autumn 2018
- Be a host / local partner / juror
- Be a sponsor
- Use the software & tools
 - Share your use cases and success stories
- Modify the code, contribute improvements
 - all the code is on GitHub



Additional Slides

Old: IXP Tools Hackathon Projects



- Universal looking glass
 - Load MRT dumps from any collector and query it "looking-glass style"
- Bird's eye
 - An API (and UI, and CLI) for insight into BIRD
- Remote Peering Jedi
 - Detecting remote peers at IXPs and geolocate them
- Peer Match-making
 - What peerings may be useful for me?

Old: IXP Tools Hackathon Projects



- IXP Valuator
 - Measure the IXPs' role in connecting local eyeballs with local content
- PeerMe ("make peering great again")
 - Discover and generate possible peering (configurations) between ASNs
- Pinder (Tinder for Peering)
 - Swipe Right On A New Peering Relationship

Projects from previous hackathons



- All code on GitHub:
 - <https://github.com/RIPE-Atlas-Community/ripe-atlas-community-contrib/blob/master/README.md>
- labs.ripe.net/hackathons
 - DataViz: <https://labs.ripe.net/Members/becha/ripe-atlas-hackathon-results>
 - Tools for operators <https://labs.ripe.net/Members/becha/ripe-atlas-tools-hackathon-results>
 - Interfaces <https://labs.ripe.net/Members/becha/ripe-atlas-interface-hackathon-results>
 - IXP-tools <https://labs.ripe.net/Members/becha/ixp-tools-hackathon-results>