

Using RIPv2 for Troubleshooting

How Atlas and BGPPlay help for operations

Customer complains...

... some prefixes cannot be reached from certain ASNs

- You're announcing all your prefixes
- Looking Glass sees all your prefixes
- Still, some prefixes are not reachable

A bit of history...

... where the Atlas comes from

- RIPE always had Test Boxes
- Started in RIPE Labs 2010, with latency measurements, 380 probes
- User Defined Measurements in 2011, Beta test starting on RIPE63
- Anchors introduced in 2012, live in 2013
- Software probes explored 2015, now in beta
- ~11000 probes currently online

But wait...

...there's more.

- RIPEstat
 - BGPlay
 - Infocards
 - "Information at your fingertips"

Ask the Atlas...

... to run your tests

- Measure ICMP / TCP / UDP reachability
- Get a traceroute from remote ASNs
- Do one-off measurements in minutes
- Attach this to your issue at \$upstream

Measure twice...

...cut once - think before you measure!

- You are using somebody else's (home) internet connection
- Don't measure adult sites from Saudi Arabia
- Don't measure availability of Ukrainian sites from Russia
- Some DNS requests could land people in jail or torture

Demo

Managing your credit score...

...for fun and profit

- As a LIR you get 1,000,000 credits once
- A single probe gets you 15 credits per minute, 21,6k/day, 7,8M/year
- Hosting an anchor gives you 10x credits
- You can share your balance, donate it or give it away

The whole toolbox...

...batteries included

- REST API
- cli interface
- historical data
- Status checks to include into your monitoring (Icinga2 + compatible)

Query BGPlay...

... to see disruptions in the force

- Did any AS Paths change in the last days?
- Are my prefix announcements working correctly?
- How did paths change after the digger incident last week?

Demo

Documentation...

...any is good and better than nothing

- <https://atlas.ripe.net/docs/>
- But a lot of the documentation links point to 404s
- There's a webinar on using Atlas but no date scheduled and no slides available 😞

It's not just the Looking Glass...

... not every ASN has one.

- Atlas, BGPlay and RIPEstat help you troubleshooting your upstream connections
 - You get 1M credits a month for being a LIR. Please host a probe.
- Another useful tool: The Ring by NLnog <https://ring.nlnog.net/>
 - But! You need ring nodes yourself.