



RIPE NCC

RIPE NETWORK COORDINATION CENTRE

RIPE NCC RIS Update

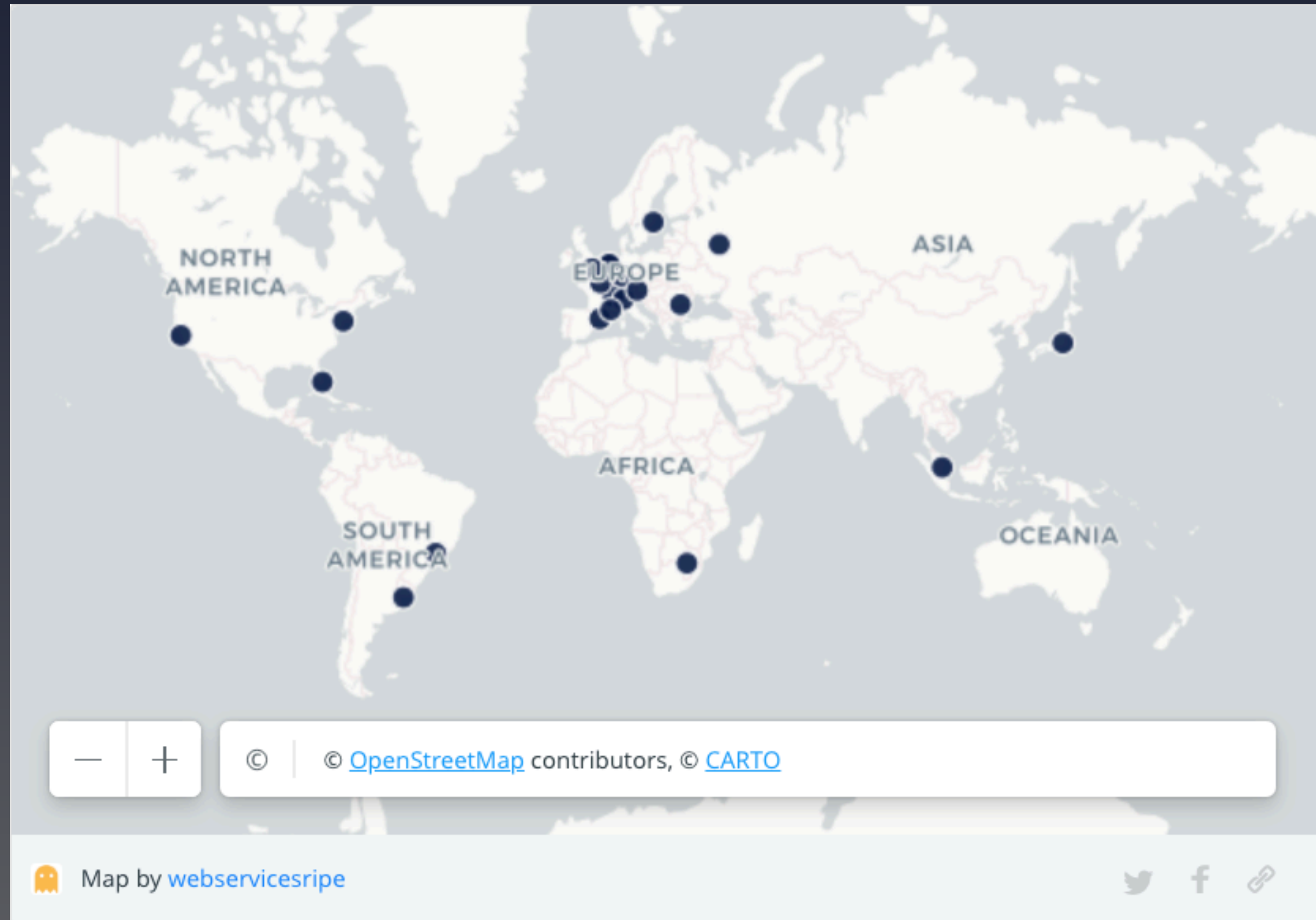
Florian Obser | RIPE 79 | October 2019

Routing Information Service (RIS)



- Collects routing information (BGP updates / withdraws)
 - Remote Route Collectors (RRCs)
 - 19 at Internet Exchanges, 2 multihop
- Data archived since 1999
 - BGP updates in MRT format every 5 minutes (<http://data.ris.ripe.net>)
 - BGP table dumps every 8 hours (<http://data.ris.ripe.net>)
 - RIPEstat (<https://stat.ripe.net/>)
 - RIS Live (<https://ris-live.ripe.net/>)

RRCs Locations Map



New RRCs (since 2015)



- RRC18, CATNIX, Barcelona
- RRC19, NAP Africa JB, Johannesburg
- RRC20, SwissIX, Zurich
- RRC21, FranceIX, Paris & FranceIX, Marseille
- RRC22, InterLAN, Bucharest
- RRC23, Equinix Singapore, Singapore
- RRC24, LACNIC Multihop, Montevideo, Uruguay

RRC updates



- Hardware refresh
- All collectors reinstalled with CentOS 7
- All collectors switched from Quagga to ExaBGP

ExaBGP



- (simple) BGP speaker written in python
- Scalable (for RIS use case)
- Update / withdraw messages stored in DirQ on local disk
- Beacon prefix announce / withdraws done inside of ExaBGP
 - No more cronjob, accurate timing

Kafka



- BGP messages are shipped to kafka cluster in Amsterdam
 - Does not interfere with BGP
 - Lower delay (seconds, not minutes)
 - Allows us to do RIS Live
- BGP updates and table dumps generated in Amsterdam
 - Easier to scale up
 - Accurate timing



Questions



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