RIS Update

Emile Aben | May 2021 | RIPE 82

RIPE Routing Information Service

- Our goal is to provide insights into the BGP routing system

- Collects Internet control plane data

- Important data source for net ops tools: RIPEstat, bgp.he.net, BGPalerter

- We create open data:

  - MRT files with all BGP updates and periodic state dumps

  - RIS Live shows near-realtime streaming

1332
BGP Peering sessions

324 IPv4
341 IPv6
"Full feeds"

Route Collector Collaboration

- Public route collection is important for the health of the Internet

- There are other route collector projects out there

  - Diversity of governance, technology

  - Robust against failures (outages, funding, security issues)

- Collaboration with RouteViews

  - Tech transfer

  - Meta-data

    - https://github.com/CAIDA/route-collectors/wiki/RouteCollectionMetaData

Expanding RIS

- ## More peers

- ## More data

- ## One extra RRC

  - RRC25: multihop, VM

    - Ask peers for meta-data: geographical location and feed type ("full" or not)

  - One more planned in Dubai, UAE

RIS Peers

GB/Day
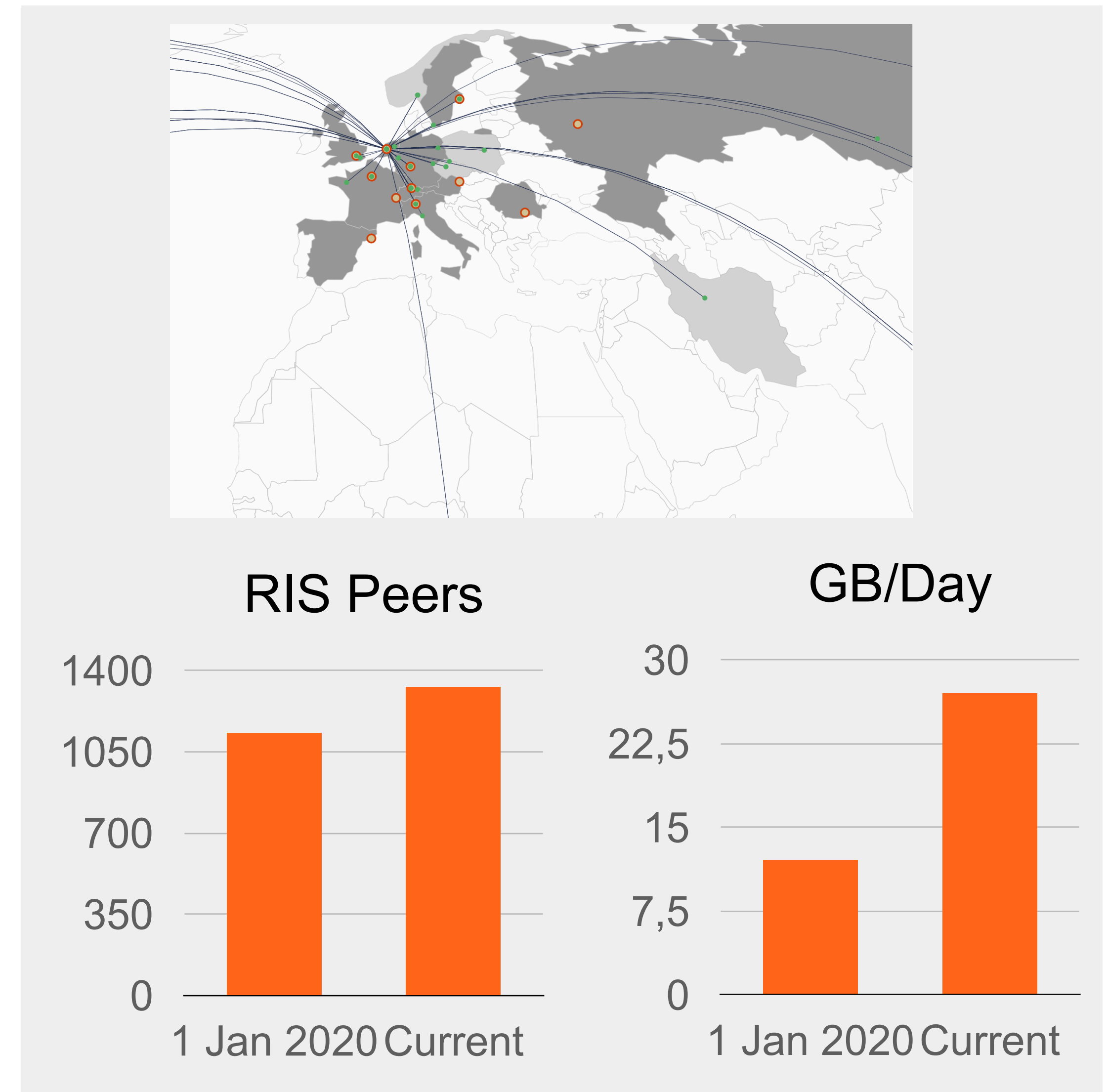
The Downsides of Expansion

- Additional delays

  - Data delivered to RIPEstat and as raw files (MRT) have more delays

    - Example: 30% of data has a delay of 1hr or more (MRT dumps)

- More "noisy peers"

- Towards more timely data

  - Backend improvements

  - Prototype of per peer MRT files (planned)

  - More restrictive in taking on new inputs

BGP message counts for top 50 peers and all other peers
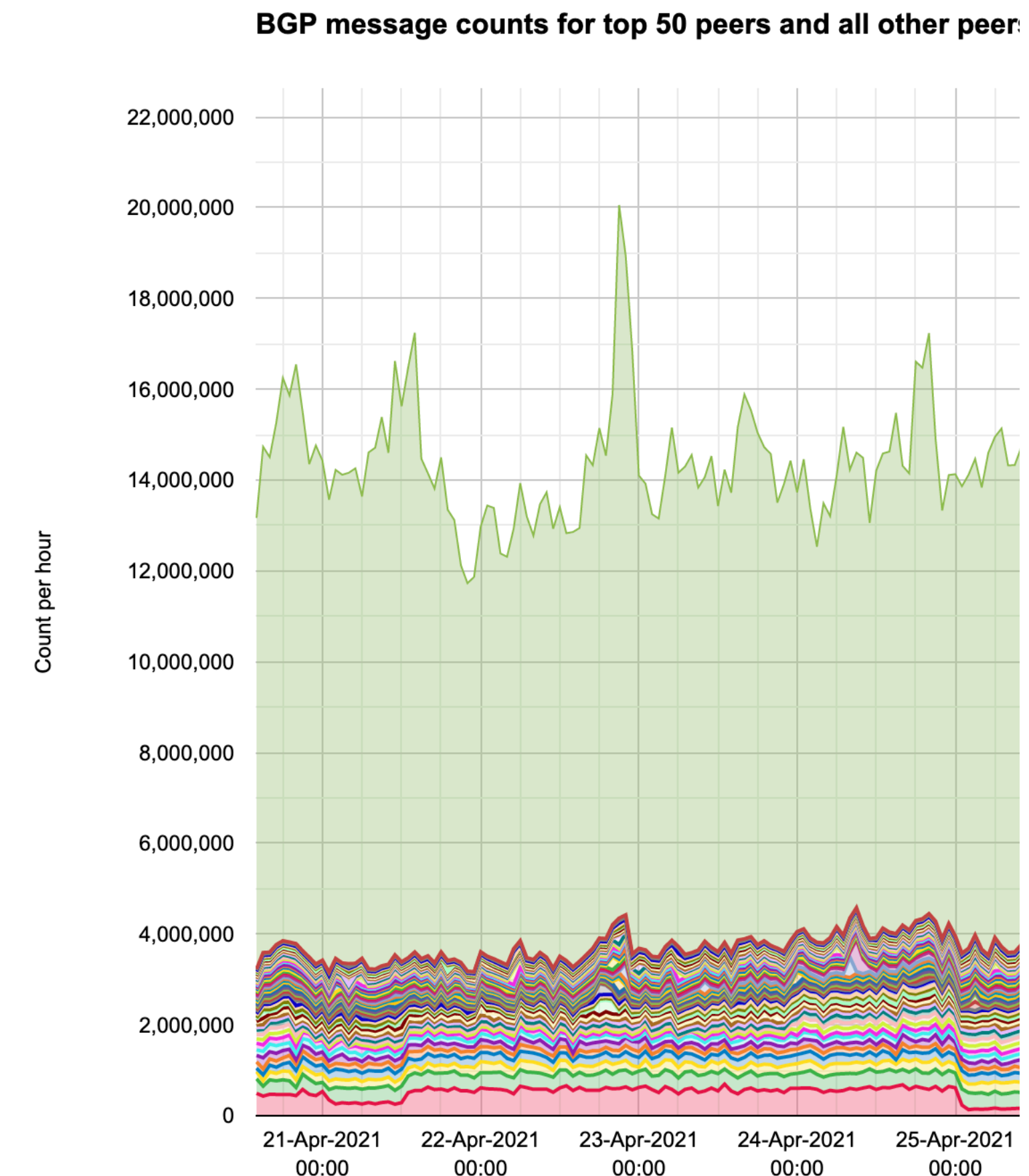
Balancing Data Input

- New: Peering coordinator

Passive Input (Peering Form)

- Multiple sessions discouraged

- Diversity encouraged

- Not asking for full feed if we already have similar feeds

Active Input (Seeking out high-value new peers)

- First step: full feeds from "tier1" networks

- Future: more tooling for finding high value new peers

Join Us On SpatialChat!

- Room: "RIS JAM"

- We're interested in your feedback and use-cases

- Some topics we are interested in:

  - What peers should RIS focus on?

  - RRCs: multihop?

  - Collect IXP route-server data?

  - RIS data in the cloud

Questions

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