

# RIPE NCC DNS Update

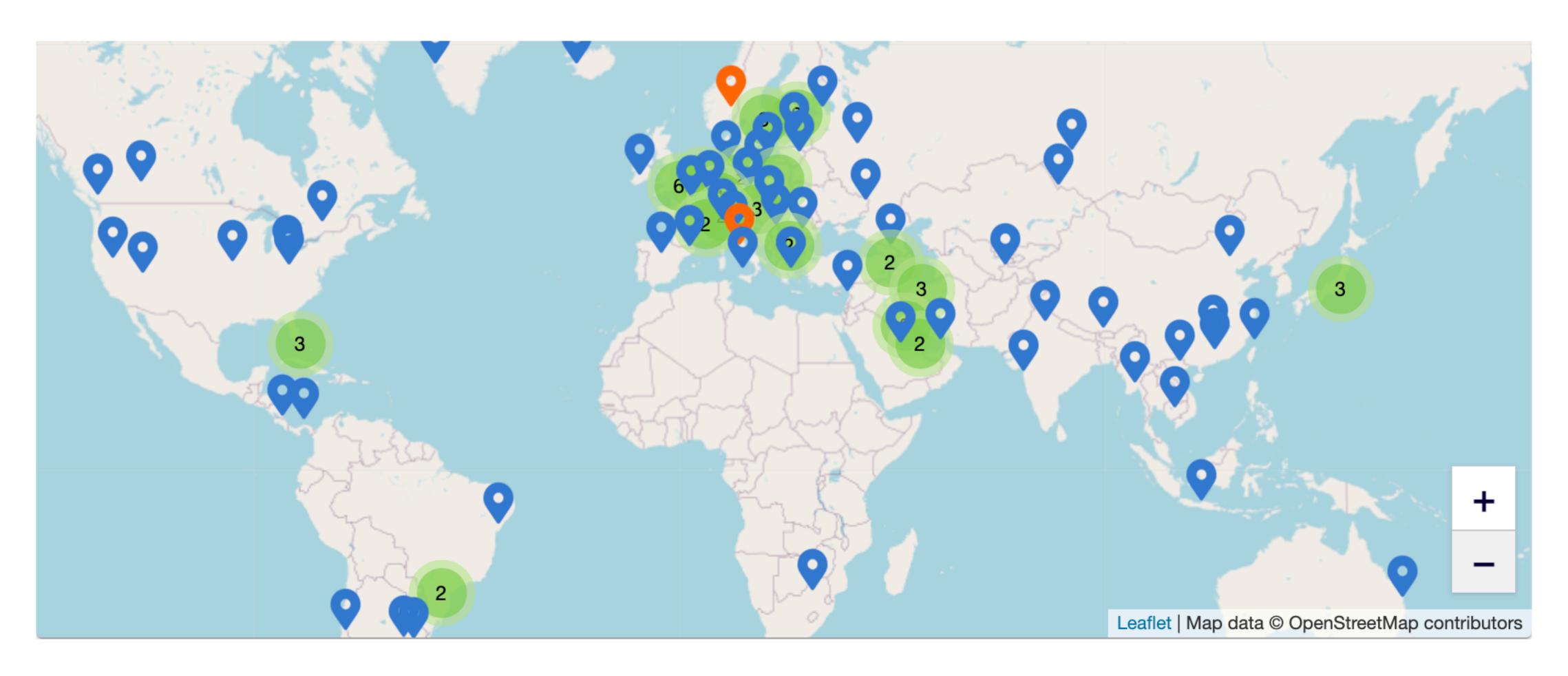
#### Hosted DNS



- Hosted K-root has become Hosted DNS
- New app to accept applications for both K-root and AuthDNS
  - https://hosted-dns.ripe.net/
  - Please host an AuthDNS instance, especially outside Europe
- Virtual Machines are acceptable
- Three new instances active since launch
  - AuthDNS (Ponta Grossa)
  - K-root (Ponta Grossa and Yogyakarta)

# Map of Hosted DNS instances





# Core Site Upgrades



- AuthDNS and K-root core sites have new hardware and more bandwidth
  - New Dell R440 servers with more and faster CPUs
  - New Juniper and Arista routers
  - 10G connections to upstreams and exchanges

#### CDS for Reverse DNS



- CDS scans and automatic DOMAIN object updates in the RIPE Database
- Running successfully since March 2021
- Between 10 and 20 updates per month

# Switch to Combined Signing Key



- RIPE NCC switched to algorithm 13 for all our zones in June 2021
- Our current KSKs and ZSKs are stored together
- Algorithm 13 keys are the same size
- Algorithm 13 keys offer strong security
  - No need for frequent ZSK roll-over
  - No strong reason for separate KSKs and ZSKs
- Switch to a combined signing key, with annual roll-over
- Planned for Q1 2022

### Lower TTLs for NS and DS records



- The Time to Live (TTL) for NS and DS records in RIPE NCC's reverse DNS zones is 172800 (2 days)
  - Causes delays for users when they change delegation or perform DNSSEC key rollovers
  - DNSSEC-related outages can linger for very long due to cached DS records
  - Large resolver operators limit TTLs on NS and DS records
- We propose to lower TTLs in RIPE NCC's reverse DNS zones
  - 3600 (1 hour) for DS records
  - 86400 (1 day) for NS records



# Questions



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