



RIPE NCC

RIPE NETWORK COORDINATION CENTRE

RIPE NCC DNS Update

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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 roll-overs
 - 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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