



RIPE NCC

RIPE NETWORK COORDINATION CENTRE

RIPE NCC DNS Update

Anand Buddhdev | Nov 2023 | RIPE 87

AuthDNS expansion



ripe.net DNSSEC outage



- On 1 Nov 2023, most signatures in the zone expired
- “Perfect storm” situation
- Human error - large TTL introduced for a record
- Strict signer
- Incomplete monitoring - only SOA record was monitored
- Incident report
 - <https://www.ripe.net/ripe/mail/archives/dns-wg/2023-November/004105.html>

DNSSEC outage prevention



- More checks to prevent human error
- Discussion with signer vendor
 - Continue signing but log warning
- Full zone verification and alerting
 - Transfer all zones and check with `Idns-verify-zone`

RIPEStat interface for Zonemaster



A screenshot of the RIPEStat interface. On the left is a dark blue sidebar with a close button (X) and the RIPEStat logo. Below the logo are three menu items: 'Launchpad Search and Explore' with a rocket icon, 'Saved Saved Searches' with a heart icon, and 'Use Cases' with a lightbulb icon. The main content area has a grey search bar at the top with a magnifying glass icon and the placeholder text 'Enter an IP address/prefix, ASN, country code or FQDN'. Below the search bar is a section titled 'Launchpad' with the text 'Search above or start with one of the suggestions below'. Underneath are four rows of suggestions: 'Your IP: 193.0.20.230', 'Your Prefix: 193.0.20.0/23', 'Your ASN: 3333', and 'Your Country: Netherlands (NL)'. A red oval highlights the search bar.

RIPESStat interface for Zonemaster



The screenshot shows the RIPESStat interface. On the left is a dark blue sidebar with a close button (X) and the RIPESStat logo. The sidebar contains the following menu items: Launchpad (Search and Explore), Saved (Saved Searches), Use Cases (Host Use Cases), and Host Stats. The main content area has a search bar with the text "Enter an IP address/prefix, ASN, country code or FQDN" and the search term "14.0.193.in-addr.arpa". Below the search bar are buttons for "Relative" (selected), "Absolute", and "Latest". A prominent orange banner reads "DNS Check" with an information icon and a refresh icon. Below this, it states "WARNINGS found for 14.0.193.in-addr.arpa" and shows a summary: "WARNING 1 CRITICAL 0 ERROR 0 NOTICE 2". A red arrow points to the "NOTICE 2" text. Below the summary is a "Test date:" field, a "SELECT OTHER TEST" dropdown menu, and a "CHECK NOW" button which is circled in red. At the bottom, it says "ADDRESS (3 items)" with a right-pointing arrow.

Software updates



- Some DNS servers updated to Oracle Linux 9
 - Default crypto policy needs to be relaxed
 - Utilities like kzonecheck can't verify SHA1 and GOST hashes
 - Fix coming soon
- After RIPE 87, we will be updating many more servers
 - Complete upgrades before CentOS 7 end-of-life in June 2024



Questions



anandb@ripe.net