Operational Update RIPE Database

RIPE NCC Database Team

Ed Shryane | RIPE 83 | 24 November 2021

The RIPE NCC Database Team

Progress Since RIPE 82

Whois Releases

- <u>Whois 1.101 (July)</u>

  - All timestamps in UTC and include "Z" timezone

  - Simplified HTTP redirect / rewrite rules

  - Removed deprecated TLS 1.0 and 1.1 and insecure cipher algorithms

Operational changes to HTTPS affected < 2% of traffic, no reports of disruption

Whois Outages

- ## Update outage - 15 September (1 hour)

  - Due to a network issue, an update failed but didn't timeout, blocking other updates

  - Took time to find root cause, in the end restarted master database

  - We have shortened the transaction idle timeout to 5 minutes

- ## Email notification outage - 9 and 14 July (1 hour, 30 mins)

  - Due to a network issue, intermittent issues sending emails from Whois

- ## Outdated RIPE Database Dump and Split Files - 25 June

  - Due to network glitches, the daily RIPE Database dump and split files on the FTP site were not updated until 10:00 UTC

Whois Features - Statistics

- 2017-02 Regular Abuse-c Validation

  - **106K** abuse-c addresses, **3K** invalid (~3%)

- 2018-06 "RPKI" NONAUTH Route(6) Cleanup

  - Deleted **1,444** route(6) objects

- "Unregistered Prefix" NONAUTH Route(6) Cleanup

  - Deleted **916** route(6) objects

- NWI-8 (Synchronise LIR Portal users to Default Maintainer)

  - **1,026** LIR organisations synchronising users

- NWI-9 (Open NRTM Service)

  - **199** distinct client IPs using NRTM

Data Cleanups

- "Unregistered Prefix" NONAUTH Route(6) Cleanup

    - Only "available" or "reserved" prefixes in delegated stats are considered unregistered

    - Deployed on 29 June

- Corrected "address:" attributes on 1,141 LIR Organisations

    - The address order was reversed when synchronised from the internal registry

- Uppercase "status:" attribute values in 23,890 resources

    - Raised by Remco van Mook at RIPE82

    - Uppercase automatically since 2014 but cleanup was not done on existing data.

Person Objects

- 1.9M Person objects, 1.7M from assignments, 1.0M "Top 10"

- Unlocked **600K** Person Objects (June 2020)

  - **28K** unlocked persons deleted, **1,600** updated since then

  - **13K** locked persons remaining (due for cleanup)

- Emailed "Top 10" LIRs referencing person objects from assignments - responsible for 1M persons (May, June 2021)

  - 6 LIRs have replied

  - End users are informed that their contact details will be added to the database

  - They keep the registration data up to date

Upcoming Changes

Whois 1.102 Release

Now in <u>Release Candidate</u> environment, Production on Dec 7th

- Added NWI-13 "geofeed:" attribute to inetnum and inet6num
  - Minimum prefix size IPv4 >= /24 and IPv6 > /48
- Support base64 encoded signed update emails
- Support IDN in outgoing update notification emails

Release Notes: <u>https://www.ripe.net/manage-ips-and-asns/db/release-notes</u>

Upcoming Changes

- Query page improvements

  - Full Text Search API

- Client certificate authentication

  - Use TLS with client certificate and to authenticate Whois updates (no shared secret)

  - Enabled in RC environment for testing

- Default maintainer

  - Only set on top-level allocations, not on aut-num or any other resources

  - Internal users must update default maintainer manually (which is error-prone)

Cloud Migration

Cloud Migration

- Cloud migration of RIPE Database is on hold since RIPE 82

- Let's Start Again

  - Step back from discussing the technical specifics of our earlier proposal

  - Restart engagement with the RIPE community to define specific requirements for RIPE database usage of cloud

  - Define Service Criticality

- Useful outcomes from cloud work for internal environment

  - Improved collaboration with Operations and RPKI teams

  - More aware how to improve resiliency (and failure modes)

  - Technical improvements

Quarterly Planning

https://www.ripe.net/manage-ips-and-asns/db/quarterly-planning

Request	Progress Since RIPE82
NWI-2: "Displaying history for database objects where available"	Legal have GDPR concerns with request. A more detailed response will be published to DB-WG
NWI-4: "Role of status: field in multivalued status context"	Combined tuple"prefix" & "status" is not feasible. More detailed response to DB-WG
NWI-10: "Definition of Country"	Data entry in progress, expected end 2021 Populate RIPE Database once data verified
NWI-12: "NRTM v4"	Proposed solution definition: https://github.com/mxsasha/nrtmv4
NWI-13: "Geofeed"	Implementation complete
UTF-8 in the RIPE Database	Preparing RIPE Labs article

Questions

eshryane@ripe.net

@eshryane