



### **Operational Update RIPE Database RIPE NCC Database Team**



### The RIPE NCC Database Team



Ed Shryane | RIPE 83 | 24 November 2021





### Whois Releases

- Whois 1.101 (July)
  - 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- **Outdated RIPE Database Dump and Split Files 25 June** 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

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### 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

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### Data Cleanups

- "Unregistered Prefix" NONAUTH Route(6) Cleanup

  - 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

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

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

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## **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

  - 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)

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



### **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 <u>Service Criticality</u>
- 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

NWI-2: "Displaying history for database objects where available"

NWI-4: "Role of status: field in multivalued status context"

NWI-10: "Definition of Country"

NWI-12: "NRTM v4"

NWI-13: "Geofeed"

UTF-8 in the RIPE Database

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### **Progress Since RIPE82**

Legal have GDPR concerns with request. A more detailed response will be published to DB-WG

Combined tuple"prefix" & "status" is not feasible. More detailed response to DB-WG

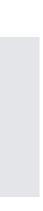
Data entry in progress, expected end 2021 Populate RIPE Database once data verified

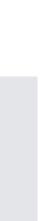
Proposed solution definition: https://github.com/mxsasha/nrtmv4

Implementation complete

Preparing RIPE Labs article











# Questions

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