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Whois Cloud Migration Update

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Cloud work since RIPE81



- Multiple Whois releases with preparatory changes
 - Containerised application
 - Added AWS support
 - UTC changes
- Refining architecture
 - HTTP rewrite rules
 - Investigating Database Availability setup

Cloud work since RIPE81



- Making PoC feature complete
 - IPv6
 - Mailupdates
 - Client IP handling
 - Rewrite rules
- Migrated PoC environment into Landing Zone environment (with CCoE)
- Building up Landing Zone environments (with CCoE)

Cloud work since RIPE81



- Functional testing, Integration testing, Load testing
- Cloud partner has reviewed architecture and is helping with improving setup
- Adapting scripts to include Cloud environment (including rigorous testing)

Next Steps



- Finalise Database setup
- Deploy final preparatory Whois release 1.101
- Move internal test environment to conduct extensive integration testing with dependent systems
- External security pentest
- Switch over/fail over testing

Next Steps



- Further community feedback
- Internal review
- Finalise detailed go live plan
 - Rehearse go live in test environment
 - Announce to db-wg
- Aiming for Q3 go live
- Scale down internal environment

Service changes



- Low DNS TTL
 - Clients should not cache indefinitely
- HTTP/2
- SSL Amazon Root CA
- Dropping support weaker ciphers
- whois.ripe.net only port 43 and 4444
- Labs article with detailed service changes will be published

Service changes



- UTC changes
 - Date/Time in response and notification header in Mail Message, Sync Update and Whois Rest API are now in UTC.
 - Date/Time in version history list (as a result of --list-versions) and Date/Time in version comment output (as a result of --show-version) are now displayed in UTC
 - On Sync update:
 - Header section
Before: Date/Time: Thu Apr 22 12:41:18 2021
After: Date/Time: Thu Apr 22 10:17:29 2021Z
 - Footer section
Before: Handled sync update (TEST, 2021-04-22 10:16:11)
After: Handled sync update (TEST, 2021-04-22T10:48:08Z)

Switch over



- AWS preferred live environment
- Switch from AWS to on-premise and vice versa
- Within 30 minutes
- Performed regularly

Fail over



- In case of AWS downtime
- Switch to on-premise
- Within one hour
- Read only
- Move primary database back to on-premise in case of extended downtime



Questions



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References



- https://labs.ripe.net/author/felipe_victolla_silveira/rpki-repositories-and-the-ripe-database-in-the-cloud/