

# Survey on Improving RIPE DB Quality

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## Keeping the RIPE DB accurate in the future

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- Exhaustion of IPv4
- No more audits for additional IPv4 allocations
- RIPE DB accuracy declines?
- Keeping the expertise
- Adding value to membership

## DB accuracy currently

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- Optional 'changed' attribute is the only indication how up-to-date an object is in the RIPE Database
- Doesn't specify which lines were updated

# New attributes in objects for data accuracy?

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**First idea** - to start brainstorm & feedback:

- **REG-REP** ‘optional’ and shows quality LIRs’ objects, based on:
  - confirmation by the LIRs themselves
  - audits periodically by the RIPE NCC
- **REG-HIST**
  - generated automatically
  - shows when each line was changed

# REG-REP sample illustrations

## REG-REP Raw

Search for  Search

By pressing the "Search" button you explicitly express your agreement with the [RIPE Database Terms and Conditions](#)

Advanced Search Form

[Switch to the RIPE TEST Database](#)

```
# This is the RIPE Database query service.
# The objects are in RPSL format.

#
# The RIPE Database is subject to Terms and Conditions.
# See http://www.ripe.net/db/support/db-terms-conditions.pdf

# Note: This output has been filtered.
#       To receive output for a database update, use the "-B" flag.

# Information related to '212.172.0.0 - 212.172.255.255'
```

**Note:**  
Could still be useful if RPKI is implemented and most whois information is removed from the public domain

```
inetnum:        212.172.0.0 - 212.172.255.255
org:            ORG-TBG1-RIPE
admin-c:       NET12312-RIPE
tech-c:        NET12312-RIPE
status:        ALLOCATED PA
mnt-by:        RIPE-NCC-HM-MNT
mnt-lower:     AS12312-MNT
mnt-domains:   AS12312-MNT
mnt-routes:    AS12312-MNT
source:        RIPE # Filtered
RIPE-REP-L:    2012m05:AAAA
                2012m05:AAAA 2012m04:aaaa 2012m03:BBBB
                2012q1:BBBB 2011q04:BBBB 2011q03:BBBB
                2011q02:BBBB 2011q01:BBBB 2010q04:BBBB
                2010q03:bbbb 2010q02:cccc
```

REG-REP history  
REG-REP parser  
REG-REP grapher

## REG-REP Grapher

Search for  Search

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RIPErep Grapher (ENG)

[Switch to the RIPE TEST Database](#)

Interaction Level: A, a, B, b, C

Interaction Frequency: 2010 Q2, 2010 Q3, 2011 Q2, 2011 Q3, 2012 Q2, 2012 Q5

Changed Values: ORG (red), ADMIN (purple), MNT (blue), OPS (green)

RIPE database  
REG-REP parser

Verified by RIPE Details

# REG-HIST sample illustrations

## REG-HIST Raw

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**Advanced Search Form**

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#  
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# See <http://www.ripe.net/db/support/db-terms-conditions.pdf>  
# Note: This output has been filtered.  
# To receive output for a database update, use the "-B" flag.  
# Information related to '212.172.0.0 - 212.172.255.255'

**inetnum:** 212.172.0.0 - 212.172.255.255  
**org:** [ORG-TBGL-RIPE](#)  
**admin-c:** [NET12312-RIPE](#)  
**tech-c:** [NET12312-RIPE](#)  
**status:** ALLOCATED PA  
**mnt-by:** [RIPE-NCC-HM-MNT](#)  
**mnt-lower:** [AS12312-MNT](#)  
**mnt-domains:** [AS12312-MNT](#)  
**mnt-routes:** [AS12312-MNT](#)  
**source:** RIPE # Filtered  
**reg-hist:** 89indlmpfexztasbro94INDLmpfEXcTt+\*ASb\*r\*o-w38  
0INDLmpfEXcTt\*ASD\*r\*o-845INDLmpfEXcTt\*ASb\*r\*  
999w-

**reg-hist parser**

**reg-hist grapher**

**Note:**  
Could still be useful if RPKI is implemented and most whois information is removed from the public domain

## REG-HIST Parsed

Search for  Search

By pressing the "Search" button you explicitly express your agreement with the [RIPE Database Terms and](#)

**REG-HIST Parser (ENG)**

[Switch to the RIPE TEST Database](#)

# The most recent reg-hist transaction occurred 89 days ago (20110427).  
#  
# On 20110427 an authenticated resource holder for the resource 212.172.0.0 - 212.172.255.255 **modified** registration records in the following registration record fields:  
# **inetnum** (range), **netname**, **descr**, **org-type**, **address**, **phone**, **fax**, **email**, **remarks**, **tech-c**, **admin-c**, **status**, **mnt-by**, **mnt-routes**, & **origin**.  
#  
# On 20110427 an authenticated resource holder for the resource 212.172.0.0 - 212.172.255.255 **deleted** all information in the following registration record fields:  
# **country**.  
# The next most recent recent reg-hist transaction occurred 183 days ago

**RIPE database** **reg-hist grapher**

# Survey

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- 176 (163) attendees surveyed
- 10 training courses (3 LIR, 5 IPv6, 2 RR)
- 2 months (July, Aug 2010)
- Format:
  - 15 minute presentation
  - fill out questionnaire
  - group discussion
  - one-to-one discussions

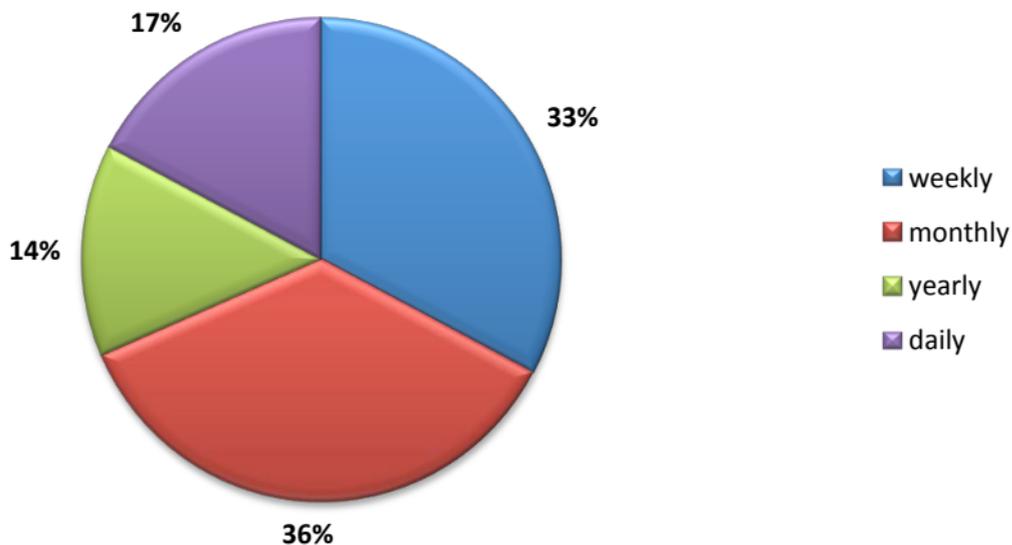
# Questionnaire

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- How often do you use the RIPE DB?
- Affected by outdated info?
- REG-HIST?
- REG-REP (confirmation)?
- REG-REP (audit)?
  - mandatory for all LIRs?
  - additional fee?
  
- space for comments under each question

# How often do you use the RIPE DB?

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# Results

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- How often do you use the RIPE DB?
- Affected by outdated info? No
- REG-HIST? Yes
- REG-REP (confirmation)? Yes
- REG-REP (audit)? Yes
  - mandatory for all LIRs? Yes
  - additional fee? No

# Those who said no: Why not?

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- REG-REP (confirmation)
  - work overload
  - doesn't ensure reliability
  - LIR keeps important objects updated anyway
  
- REG-HIST:
  - no needed, not useful or relevant
  - massive amounts of data
  - confidentiality

## Proposed Features REG-REP (confirmation)

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- **Should only take a few minutes!**
- **Search by confirmation date**
- **Automated validation of email addresses**
- Suggest correct updates
- Positive flagging

## Proposed Features REG-HIST

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- **Time stamp to the second**
- **Who, which maintner made the change**
- **Searchable by time period or attribute**
- **Only visible to LIR**
- **Automatically generated changed line:  
public**
- Only for certain attributes, certain objects
- Previous objects yes or no?



## Proposed alternative to REG-REP (confirmation)

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- Flag incorrect objects
  - by the community
  - fill in referenced nic-hdl and mntner password to avoid abuse
  - comment field
  
- Proposed by several attendees

## What does a “yes” mean?

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- Is yes a “yes” or a “don’t care” ?
- But respondents capable of clearly saying no:
  - premium service? : 69% No
- Final survey results similar to:
  - survey half-way results
  - results for subset of frequent DB users (daily, weekly)
- Need hasn’t been formulated yet?

“Don’t Make the DB more complicated!”

“DB accuracy is important”