

# Survey on Improving RIPE DB Quality

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Ferenc Csorba  
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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

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

[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'

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

REG-REP history

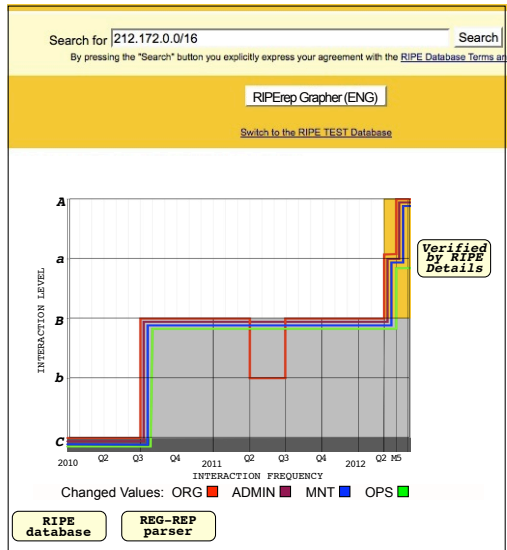
REG-REP parser

REG-REP grapher

2012m05:AAAA	2012m04:aaaa	2012m03:BBBB
2012q1:BBBB	2011q04:BBBB	2011q03:BBBB
2011q02:BBBB	2011q01:BBBB	2010q04:BBBB
2010q03:bbbb	2010q02:cccc	

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

## REG-REP Grapher



# REG-HIST sample illustrations

## REG-HIST Raw

Search for 212.172.0.0/16

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](#)

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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: 89indlmpfexztasbro94INDLmpfEXCt\*ASb\*r\*o-w38  
0INDLmpfEXCt\*ASb\*r\*o-845INDLmpfEXCt\*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 212.172.0.0/16

Search

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

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

RIPE  
database

reg-hist  
grapher



RIPE  
NCC

# 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

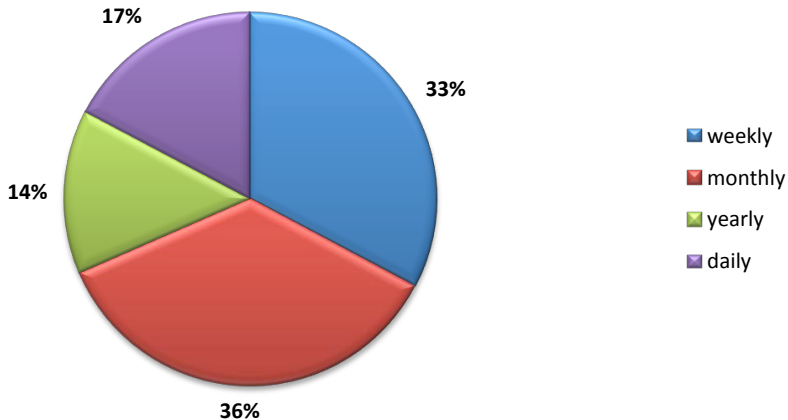
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- How often do you use the RIPE DB?
- Affected by outdated info?
- REG-HIST?
- REG-REP (confirmation)?
- REG-REP (audit)?
  - mandatory for all LIRs?
  - additional fee?
- space for comments under each question





# How often do you use the RIPE DB?



# 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 mntner 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”