ripe-13

version 2.0

RIPE Databases

R.Blokzijl <k13@nikhef.nl>

28 August, 1990

1 Introduction

In the document describing the RIPE Task Forces [ripe-4] several databases are defined as essential for the proper management of IP services in Europe. The various databases are:

- a database that contains the IP networks that have RIPE connectivity.
- a database that contains information about persons responsible for RIPE connected networks.
- a database containing namespace administration data.

These databases will support a European '*whois*' service.

This document describes the format of the various database entries, how to submit new entries to the database, and how to update existing entries.

2 Database entry formats

The database entries are ASCII text. There are three kind of objects in the databases:

- networks
- persons
- namespace data

Objects are stored as a series of `<attribute> <value>` pairs. Attributes have two character names. Attribute–value pairs are stored on a single line of the form:

```
*aa:  vvvvvvvv
```

where `aa` is the attribute name and `vvvvvvvv` is the attribute value. If an attribute value, like an address, has several lines, multiples of these lines may appear. Similarly if an object has multiple attributes of one type, e.g. more than one phone number.

Objects are delimited by blank lines.

All entries have a source attribute with the following defined values:

`so` - source of the information:

`MERIT`	- NSFnet NIC database maintained by MERIT Inc. on host nis.nsf.net
`WHOIS`	- DDN NIC database maintained by SRI International on host nic.ddn.mil
`RIPE`	- RIPE NCC database maintained by RIPE on host nic.eu.net
`LOCAL`	- local info This is intended for local info or aditional info that is not to be published or that supersedes global info

Objects can have multiple entries coming from various sources. It is interesting to see the inconsistencies of the various databases concerned. The RIPE database itself is only the part with the source attribute RIPE.

2.1 Networks

Objects describing networks have the attributes described in the following list:

`in` - IP network number
Including trailing 0's

`na` - official network name
Capitals, numerals and hyphens only.

`as` - autonomous systems the network belongs to locally.
Not stringently defined yet.

`ni` - NSFnet inbound announcements in the form `order=asn`
If the source is MERIT this is what NSFnet had in it's database on the date mentioned in `*ch`. NSFnet updates currently are Tuesdays and Thursdays.
All announcements are mentioned with their order.
Typical: `1=97 2=237 3=224`.

`no` - NSFnet outbound announcements
See above.

`tc` - name of technical contact.
This must be the same string as in the corresponding `*pn` entry.
There *must* be such a person entry!

`ac` - name of administrative contact.
This must be the same string as in the corresponding `*pn` entry.
There *must* be such a person entry!

`de` - description of the network.
Give organisation and place.
Postal address and country are not needed, they can be found via the contacts.
The country is given in `*cy`.

`co` - connectivity.
The definition of this is arbitrary and should be replaced by something more rational as e.g. AS's that may be traversed or some such. Suggestions welcome.

`LOCAL`	- local only This means routing updates will be blocked in RIPE routers.
`RIPE`	- European This means RIPE routers will distribute routes for this net.
`NSF`	- NSFnet This means the net is in the NSFnet database
`ICS`	- Internet Connected Status
`EU`	- member of InterEUnet
`NORDU`	- member of NORDUnet
`BLOCK`	- for local purposes (not in RIPE database)

`gw` - RIPE gateway for this network.
This attribute is very much for local use.
It's value should be more precisely defined later.
Current values are:

`inr`	- INRIA, Paris
`cwi`	- CWI, Amsterdam
`crn`	- CERN, Geneva
`kth`	- KTH, Stockholm
`nih`	- NIKHEF, Amsterdam

`cy` - country
   Country where the network is located as ISO3166 code.

`rm` - remark
   Any explanatory string.

`ch` - who and when of last change
   Suggested format: <email address> <date in YYMMDD>

`so` - source of the information (as defined above)

An example to explain it all:

```
*in: 192.16.184.0
*na: CWI-ETHER
*de: CWI Ethernet (Classical)
*de: Amsterdam
*de: Netherlands
*tc: Piet Beertema
*tc: Daniel Karrenberg
*gw: 192.16.184.32
*co: RIPE Internet NSFnet
*de: CWI, Amsterdam
*ch: dfk@cwi.nl 900802
*so: RIPE
```

2.2 Persons

Objects describing persons have the attributes described in the following list:

`pn` - name
   first names first and no commas etc. please

`ph` - phone number
   International format: `+<country> <city> <subscriber>`
   Blanks are optional.
   If no direct inward dialling specify 'ext.' and extension number.

`fx` - fax number
   See phone number.

`em` - e_mail address
   Valid domain address please.

ad - postal address
  Include everything necessary for papermail to be delivered.
  Use multiple lines!
  City and post code on a single line.
  Country on the last line.

nh - NIC handle
  If known, DDN NIC handle.

ch - who and when of last change
  Suggested format: <email address> <date in YYMMDD>

so - source of the information as defined above

An example to explain it all:

```
*pn: Daniel Karrenberg
*em: dfk@cwi.nl
*ph: +31 20 592 4112
*fx: +31 20 592 4199
*ad: CWI
*ad: Kruislaan 413
*ad: NL-1098 SJ Amsterdam
*ch: dfk@cwi.nl 900802
*so: RIPE
```

2.3 Domains

Objects describing namespace administrative data have the attributes described in the following list. Only top level domains and first level subdomains are entered into the database.

dn - full qualified domain name

de - description of the organisation managing the domain, where the domain is located, description of the domain e.g.: Top-level domain

ac - name of administrative contact

tc - name of technical contact

zc - name of zone contact

`ns` - primary NS for the domain

`ns` - secondary NS's for the domain

`rm` - additional remarks (special policies, status etc.)

`sd` - sub-domains

`di` - IP addresses of networks in this domain

`ch` - who and when of last change
Suggested format: <email address> <date in YYMMDD>

`so` - source of the information as defined above

3 Managing database objects

Database entries, which can describe new, modified or obsolete objects, should be submitted by electronic mail to `auto-dbm@RIPE.net`. When entering more then one object in the same message, care should be taken to sort them in alphabetical order, with the value of the first attribute acting as the sort key.

4 Where to find the database

The databse files are kept on `ftp.RIPE.net`, in the file `ripe/dbase/ripe.bd`.

5 How to use the database

The databese can be interrogated using the `whois` utility.