What is the RIPE Network Management Database ?

One of the activities of RIPE is to maintain a database of European IP networks, DNS domains and their contact persons and other information needed for the technical coordination of IP networks. This database is called the RIPE Network Management Database or simply the "RIPE Database". The information held on this database is available to the public for the purpose of coordinating IP networking. This supports the work of network operators (NICs and NOCs) throughout Europe and worldwide.

For instance, if a user in network A cannot reach a machine in network B, then the network manager of network A could find out the technical contact person of network B, to locate and solve the problem. The database also holds information which supports optimal routing of IP packets through the networks.

The information in the database is maintained centrally by the RIPE NCC. The access to the database is currently only available at the RIPE NCC, but in the future the maintenance and access of the database will be distributed throughout Europe.

What information is in the database ?

Currently the RIPE database consists of IP networks, Domain Name System domains and contact persons. Information from the US NIC database and the NSFnet Routing Policy Database is also available in the same format. The latter databases are not maintained by the RIPE NCC, but made available for your convenience.

A network and its contact persons are represented by different database objects. This means that for each network there is a network object describing the network and one or more person objects describing the persons.

Objects are described by attributes, one per line separated by empty lines. The information stored about network 192.87.45.0 consists of 3 objects, one network object and 2 person objects and looks like this:

```
inetnum: 192.87.45.0
netname: RIPE-NCC
descr:   RIPE Network Coordination Centre
descr:   Amsterdam, Netherlands
country: NL
admin-c: Daniel Karrenberg
tech-c:  Marten Terpstra
connect: RIPE SURF NSF
rev-srv: ns.ripe.net
changed: dfk@cwi.nl 920312
changed: ripe-dbm@ripe.net 920407
source:  RIPE
```

```
person:  Daniel Karrenberg
address: RIPE Network Coordination Centre
address: Kruislaan 409
address: NL-1098 SJ Amsterdam
address: Netherlands
phone:   +31 20 5925065
fax-no:  +31 20 5925155
e-mail:  dfk@ripe.net
nic-hdl: DK58
changed: dfk@ripe.net 920407
changed: ripe-dbm@ripe.net 920407
source:  RIPE
```

```
person:  Marten Terpstra
address: RIPE Network Coordination Centre
address: Kruislaan 409
address: NL-1098 SJ Amsterdam
address: The Netherlands
phone:   +31 20 592 5065
fax-no:  +31 20 592 5155
e-mail:  marten@ripe.net
changed: dfk@cwi.nl 920501
source:  RIPE
```

The information stored about the DNS domain name `ripe.net` consists of 3 objects, one domain object and two person objects and looks like this:

```
domain:  ripe.net
descr:   RIPE Network Coordination Centre
admin-c: Daniel Karrenberg
tech-c:  Marten Terpstra
zone-c:  Daniel Karrenberg
nserver: 192.87.45.1
nserver: 192.16.202.11
nserver: 137.39.1.3
remarks: fully-managed
changed: ripe-dbm@ripe.net 920401
source:  RIPE
```

and again, the objects for the 2 mentioned persons would appear.

An extensive explanation of the fields in an object can be found in the object templates described in the paragraph. titled 'How do I send updates for the RIPE database?'

How to reach the RIPE database ?

The RIPE database can be accessed via a whois server (RFC 954) on host `whois.ripe.net` (tcp port 43). An example of accessing the database using whois to get the DNS domain information for `ripe.net` would be:

```
whois -h whois.ripe.net ripe.net
```

This would result in providing the information as in the example opposite. Search keys for the database are surname, first name, network number, network name, domain name and nic handle.

By default, only the RIPE database information is searched. To also access the NSFnet and US NIC databases you can add the `-a` flag to the search key. You will have to put quotes around the flag and the search key. On most machines you should use the following to find the information in all databases on person `Karrenberg`:

```
whois -h whois.ripe.net "-a karrenberg"
```

There is also a RIPE version of `whois` which implements the `-a` flag so that the quotes can be omitted.

The whole database is also available via anonymous ftp from `ftp.ripe.net` as file `ripe.db` in directory `ripe/dbase`.

Alternative ways of reaching the RIPE database

The information in the RIPE database is also available from the Interactive Information Service provided by the RIPE NCC, by means of a browser and a full text search through the database. This is explained in the RIPE NCC Interactive Information Services leaflet.

As a very last resort, you can access the database by connecting to tcp port 43 using `telnet`, after which you can type the search key.

How do I send updates for the RIPE database ?

Database updates should be sent via electronic mail to

```
ripe-dbm@ripe.net
```

Templates for the objects are available via anonymous ftp from `ftp.ripe.net` in the directory `ripe/docs/ripe-current/` where the latest versions of the `domain`, `network` and `person` templates can be found. When sending in updates, be sure to supply a person object for each contact person mentioned in the any of objects. Of course you need not supply person objects if they are already present in the database and the information is still correct.

About RIPE

RIPE (Réseaux IP Européens) is a collaborative organisation open to all European Internet service providers. The objective of RIPE is to ensure the necessary administrative and technical coordination to allow the operation of a pan-European IP network. RIPE does *not* operate a network of its own. The IP activity of RARE is RIPE.

RIPE has been functioning since 1989. Currently more than 60 organisations participate in the work. The result of the RIPE coordination effort is that the individual end-user is presented on his desktop with a uniform IP service irrespective of the particular network his or her workstation is attached to. In September 1992, more than 220,00 hosts throughout Europe are reachable via networks coordinated by RIPE. The total number of systems reachable worldwide is estimated at more than one million.

About the RIPE NCC

The RIPE *Network Coordination Centre* supports all those RIPE activities which cannot be effectively performed by volunteers from the participating organisations. Besides supporting RIPE activities in general the NCC provides the following services to network operators:

- **network management database** containing information about IP networks, DNS domains, IP routing policies and contact information
- **delegated Internet registry**, a clearing house distributing IP network numbers
- **coordinated network statistics gathering**
- **domain name system (DNS) coordination**
- **graphical maps of IP networks** (planned)
- **repository for network operations software**
- **RIPE document store**
- **interactive information service**

The RIPE NCC currently has 3 permanent staff members. The RARE association provides the formal framework for the NCC. Funding for the first year of operation of the NCC is provided by EARN, the national members of RARE, Israel and EUnet.

To learn more about the RIPE NCC and its services you can consult the appropriate leaflet, the interactive information server or contact the NCC by electronic mail, telephone or fax.

RIPE NCC Contact Information

Address: RIPE NCC
Kruislaan 409
NL-1098 SJ Amsterdam
The Netherlands

Phone: +31 20 592 5065

Fax: +31 20 592 5090

Electronic Mail: `ncc@ripe.net`

RIPE NCC Interactive Information Service

Information about RIPE and RIPE NCC services can also be obtained using the Interactive Information Service. This menu-driven service allows browsing through the RIPE document store, reading documents and sending them by electronic mail. It can be reached by telnetting to host `info.ripe.net`. The service is also available via the public X.25 networks at `0204129004331`. Users of the IXI X.25 network should contact the NCC for more information.

Access to the RIPE Document Store

All RIPE documents and Internet RFCs are available via anonymous FTP from host `ftp.ripe.net`. The same documents are also available via a “gopher” server at `gopher.ripe.net` and a “WAIS” server at `wais.ripe.net`. Access via “World Wide Web” and OSI-FTAM are planned.

Access to the RIPE Database

The RIPE network management database can be accessed via the whois (RFC 954) server running on host `whois.ripe.net`. The database can also be accessed via the RIPE NCC interactive information service, described above.

Mailserver

Documents can also be retrieved from the RIPE document store using a mailserver program. For more information on how to use the program, send email to `mail-server@ripe.net` with `"send HELP"` in the body text.

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RIPE ncc

Network Management Database

RARE