

ircDDB Update instructions

This document describes the update of D-Star Gateways running Icom-Hard- and Software from the "DSM"-based to the "ircDDB-mheard"-based ircDDB-system.

The new ircDDB system provides much more information to the ircDDB network and makes callsign routing more transparent.

With this software version we will have some major changes:

- ircDDB will no longer use DSM.
Instead we have created an own software "ircDDB-mheard".
This software provides a lot more information that we want to share on the ircDDB network.
Note: DSM will still be needed for reporting to dstarusers.org and for DPRS/APRS.
ircDDB-mheard is no replacement for DSM!
ircDDB-mheard makes the ircDDB system independent from DSM and more flexible.
ircDDB-mheard improves the communication to the ircDDB-network.
- The install mechanism of the ircDDB software will be changed.
Most of the Icom gateways run CentOS5.
On this systems we will use standard YUM packages provided from an own repository.
This will make installation and update easier than before.
- We now use a new directory structure for the ircDDB software which is FHS compatible
< <http://www.pathname.com/fhs/pub/fhs-2.3.html> >.

Overview on the Update process:

- At the beginning the ircDDB repository will be added to the Yum-repository list.
- The configuration script will then clean up the DSM properties from entries added by ircDDB.
This may fail if things have been configured manually and differ from our standard settings.
- After that it will clean up the old start and stop entries from the dstar_gw-Start-script.
This may fail if things have been configured manually and differ from our standard settings.
- It will install the new ircDDB-mheard software and replace the old ircDDB installation.
Configuration settings will be copied from the old installation where possible.
- Optionally the content of the old ircDDB installation directory /opt/ircDDB/ may be deleted manually.

Note: This should not be done before the new package is installed!

The configuration script needs to read the old parameters otherwise you will need to enter your password again.

Note: /opt/ircDDB is the home directory of user "ircddb".

Deleting this directory may cause warning messages when using "su".

It should better be moved to the /home directory and left empty.

Detailed description of the Update:

Step 1:

Stop the old software components.

You may use:

```
killall -q -u ircddb
```

Instead you may stop the whole gateway:

```
/sbin/service dstar_gw stop
```

Stop DSM:

```
/sbin/service dsm stop
```

Special requirement:

If you should already have installed ircDDB-mheard from our Github-repository on your own you also have to stop that software manually.

```
killall ircDDB-mheard
```

Step 2:

Add the ircDDB repository to your YUM settings:

This command will do that for you:

```
curl http://group1-update.ircddb.net/ircDDB/centos55/ircddb.repo -o /etc/yum.repos.d/ircddb.repo
```

This step is very important for the future as from now on we will provide our updates through this way.

This only works on YUM-based systems for now!

Step 3:

Install the new ircDDB Yum packages:

```
yum clean expire-cache  
yum -y install 'ircddb*'
```



Step 4:

Enable new system services:

```
/sbin/chkconfig --add ircddb  
/sbin/chkconfig --add ircddbmd
```

Step 5:

Run the configuration script:

```
/usr/sbin/ircddbconfig
```

The script does not need any input during the update, it will pick all necessary information from existing configuration files.

Please check the output to see if any additional actions are required.

Step 6:

Start the ircDDB services:

```
/sbin/service ircddb start  
/sbin/service ircddbmd start
```

Step 7:

Don't forget to restart DSM.

```
/sbin/service dsm start
```

If you stopped the gateway using "service dstar_gw stop" at the beginning you should now restart it:

```
/sbin/service dstar_gw start
```

Step 8:

Finally have a look at the ircDDB gateway status < <http://status.ircddb.net/cgi-bin/ircddb-gwst/> >, the "LED" should be green.

Press the PTT and check "ircDDB-live" < <http://live.ircddb.net:8080/ircddblive.html> > and the ircDDB-LastHeard <<http://status.ircddb.net/>> table.

The update is complete!



Step 9 (optional):

Delete the content of folder /opt/ircDDB/

```
rm -Rf /opt/ircDDB
```

Move the user's home directory from /opt/ircDDB to /home/ircddb

```
/usr/sbin/usermod -d /home/ircddb -m ircddb
```

If you already tested ircDDB-mheard before you may also remove /usr/local/sbin/ircDDB-mheard

These components are no longer needed.

10. Later Updates

New updates are automatically installed together with other packages with a general YUM-update.
It can also be installed specifically by using the 2 command:

```
yum clean expire-cache  
yum update 'ircddb*'
```

Usually the services should be started automatically after a successful update.
However, it is always safe to check if the services are up and running properly:

```
/sbin/service ircddb status  
/sbin/service ircddbcmd status
```

Start it if necessary using this commands:

```
/sbin/service ircddb start  
/sbin/service ircddbcmd start
```

Appendix 1:

Location of the ircDDB files

YUM ircDDB repository:

`/etc/yum.repos.d/ircddb.repo`

Binaries:

The daemons `ircddb` and `ircddbcmd` are located at `/usr/sbin/`

The Java-apps - as variable part of the installation - are now located at `/var/cache/ircddb/`

The apps are updated automatically on a restart of `ircddb`.

It can also be updated from remote through the ircDDB network.

Start/Stop-Scripts:

The daemons are started by 2 separate scripts

```
/etc/init.d/ircddb  
/etc/init.d/ircddbcmd
```

Start the 2 components:

```
/sbin/service ircddb start  
/sbin/service ircddbcmd start
```

Stop the 2 components:

```
/sbin/service ircddb stop  
/sbin/service ircddbcmd stop
```

Check the status of the 2 components:

```
/sbin/service ircddb status  
/sbin/service ircddbcmd status
```

Logfiles:

The log files are located at `/var/log/ircddb`

It will be rotated automatically.

All components of the package can be found here: <http://github.com/dl1bff>



Appendix 2:

How to verify your update in case of any issues

1. Check the start-file /etc/init.d/dstar_gw

Start and stop of the old ircDDB-start-file should be disabled ("#" at the 1st position of the line).

You should find the entries at the end of the section "start()" and at the beginning of section "stop()".

It is marked with my callsign "DL5DI" and looks like this (necessary changes marked in **red**):

```
# DL5DI, 20100614
# Start ircDDB
# /opt/ircDDB/start.sh 2>&1 > /dev/null
    echo_success
    echo
}
stop() {
    echo -n $"Stopping $prog: "
    # DL5DI, 20100614
    # Stop ircDDB
    # killall -q -u ircddb
```

This only worked properly if it was added automatically and no manual changes had been done.

If not done properly please set the lines to comment or delete it manually.

2. Check the new ircDDB-properties-file at /etc/ircddb/

You should find your gateway's callsign and password assigned during the registration in it.

3. Check of the DSM configuration had been cleaned up properly

In /opt/dstarmon/dstarmonitor.properties the block which configures the ircDDB database server should be disabled ("#" at the 1st position of the line).

The block looks like this:

```
#LHDriver*=org.postgresql.Driver
#LHURI*=jdbc:postgresql://group1-postgres.ircddb.net:5432/ircDDB
#LHParameters*=user;xxxxxx;password;xxxxxxxxxxxxxx;loginTimeout;10;autoReconnect;true
```

The index "*" at the end of the parameter names may be 0, 1, 2 or missing.

Check for the hostname-setting "**group1-postgres.ircddb.net:5432/ircddb**".

All 3 configuration parameters with the same index * should be disabled or deleted.



The first line of the block is not unique, it may exist also for other databases.

Only the line with the matching index should be disabled ("#" at the 1st position of the line).

You may delete that lines completely if you like, we won't use it anymore.

4. Press the PTT and check if DSM is working and your callsign is shown up at dstarusers.org.