



Setting up Firebird on Ubuntu Linux

Rodney Gedda

Marius Popa

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Setting up Firebird on Ubuntu Linux

This article describes the process of installing and running Firebird on Ubuntu Linux. It should also work without modification in the Debian GNU/Linux distribution (stable version named Squeeze and unstable version named Sid). Ubuntu is based on Debian core packages. Installing software with Ubuntu (or Kubuntu) is very straightforward and Firebird is no exception. This guide is based on Ubuntu 10.04 LTS “Lucid Lynx”.

The version of Firebird packaged with Ubuntu “Lucid Lynx” is 2.1.3 and is included by default and is the latest stable. For other Ubuntu releases there is a Firebird stable [ppa repository](#) from where you can install it.

With administrator privileges on the target machine, issue the following command:

```
$ sudo su
# apt-get install firebird2.1-super
```

Apt's dependency tracking will automatically propose all the packages required for a complete installation with the following output:

```
The following extra packages will be installed:
firebird2.1-common firebird2.1-server-common libedit2
  libfbclient2 libicu38
Suggested packages:
firebird2.1-doc
The following NEW packages will be installed:
firebird2.1-common firebird2.1-server-common firebird2.1-super
  libedit2 libfbclient2 libicu38
0 upgraded, 6 newly installed, 0 to remove and 1 not upgraded.
Need to get 11.7MB of archives.
After unpacking 28.4MB of additional disk space will be used.
Do you want to continue [Y/n]? y
```

The packages will then download and install on the target machine. A new user “firebird” will be created to run the server, but the server will not yet be started by default:

```
Selecting previously deselected package firebird2.1-super.
(Reading database ... 542436 files and directories currently
  installed.)
Unpacking firebird2.1-super
  (from .../firebird2.1-super_2.1.3.18185-0.ds1-6build1_i386.deb) ...
Processing triggers for ureadahead ...
Setting up firebird2.1-super (2.1.3.18185-0.ds1-6build1) ...
Created default security.fdb
* Firebird 2.1 server manager not running.
* Not starting Firebird 2.1 server manager
* Use `dpkg-reconfigure firebird2.1-super' to enable.
```

If you want Firebird to start automatically, run `dpkg-reconfigure` on the package and click the Yes button. Then you will be asked again for the SYSDBA password:

```
# dpkg-reconfigure firebird2.1-super
```

If all goes well, Firebird Superserver will be started:

```
* Firebird 2.1 server manager not running.
* Starting Firebird 2.1 server manager...      [ OK ]
* Firebird 2.1 server manager already running.
```

If you're a seasoned Unix person but new to Ubuntu, you might be wondering where all the Firebird files are residing in the directory hierarchy. To see where all the files were installed by Apt, simply do:

```
# dpkg -L firebird2.1-super
/.
/etc
/etc/init.d
/etc/init.d/firebird2.1-super
/etc/default
/etc/default/firebird2.1-super
/usr
/usr/share
/usr/share/doc
/usr/share/lintian
/usr/share/lintian/overrides
/usr/share/lintian/overrides/firebird2.1-super
/usr/bin
/usr/bin/nbackup
/usr/bin/qli
/usr/bin/gbak
/usr/bin/gfix
/usr/bin/gpre
/usr/bin/isql-fb
/usr/bin/gsec
/usr/bin/fbstat
/usr/bin/gdef
/usr/lib
/usr/lib/firebird
/usr/lib/firebird/2.1
/usr/lib/firebird/2.1/bin
/usr/lib/firebird/2.1/bin/fbmgr
/usr/lib/firebird/2.1/bin/fbmgr.bin
/usr/lib/firebird/2.1/bin/fb_lock_print
/usr/lib/firebird/2.1/bin/fbguard
/usr/lib/firebird/2.1/bin/fbserver
/usr/lib/firebird/2.1/UDF
/usr/lib/firebird/2.1/UDF/fbudf.so
/usr/lib/firebird/2.1/UDF/ib_udf.so
/usr/share/doc/firebird2.1-super
```

As mentioned, a new user “firebird” is created on the target machine. With administrator access, set a password for this new user:

```
# passwd firebird
Enter new UNIX password:
Retype new UNIX password:
```

Now you can switch to the `firebird` user with the `su` command if required.

Install the examples and dev files:

```
# apt-get install firebird2.1-examples firebird2.1-dev
```

The example databases will wind up in the directory tree `/usr/share/doc/firebird2.1-examples/examples/`.

Now you can test your Firebird installation by connecting to an example database. Decompress the `employee.fdb` example database:

```
# cd /usr/share/doc/firebird2.1-examples/examples/empbuild/
gunzip employee.fdb.gz
chown firebird.firebird employee.fdb
mv employee.fdb /var/lib/firebird/2.1/data/
```

Fire up the interactive shell and at the `SQL>` prompt connect to the employee database using the [connect statement](#):

```
isql-fb
SQL> connect "/var/lib/firebird/2.1/data/employee.fdb" user 'SYSDBA'
        password 'SYSDBApassword' ;
```

(replacing `SYSDBApassword` with the correct password for SYSDBA!)

When you manage to successfully connect to the database you will see the message:

```
Database:  "/var/lib/firebird/2.1/data/employee.fdb", User: SYSDBA
SQL>
```

Now, from the `SQL>` prompt, feel free to browse around the employee database. For instance, you can list the tables and check the server version:

```
SQL> show tables;
COUNTRY                CUSTOMER
DEPARTMENT             EMPLOYEE
EMPLOYEE_PROJECT       JOB
PROJECT                PROJ_DEPT_BUDGET
SALARY_HISTORY         SALES
SQL> show version;
ISQL Version: LI-V2.1.3.18185 Firebird 2.1
```

```
Server version:
Firebird/linux Intel (access method),
  version "LI-V2.1.3.18185 Firebird 2.1"
Firebird/linux Intel (remote server),
  version "LI-V2.1.3.18185 Firebird 2.1/tcp (borkstationx32)/P11"
Firebird/linux Intel (remote interface),
  version "LI-V2.1.3.18185 Firebird 2.1/tcp (borkstationx32)/P11"
on disk structure version 11.1
SQL> quit;
```

If you want a GUI admin tool, you might check FlameRobin, which is included in the Ubuntu repository. It can be installed with a simple:

```
# apt-get install flamerobin
```

If you get an error message like “Statement failed, SQLCODE = -551 no permission for read-write access to database /var/lib/firebird/2.1/data/employee.fdb”, then the server process doesn't have read or write access to the database file. Change the ownership of the database to the user `firebird` with:

```
# cd /var/lib/firebird/2.1/data/
# chown firebird:firebird employee.fdb
```

If you've made it this far, your Firebird installation on Ubuntu has been a success. Have a nice day!

Appendix A: Document history

The exact file history is recorded in the manual module in our CVS tree; see http://sourceforge.net/cvs/?group_id=9028

Revision History

1.0	18 Apr 2007	RG	First edition.
2.0–2.2	2009–2011	MP	Various additions and modifications.
2.3	14 May 2011	PV	Removed superfluous spaces and corrected a number of language and/or logical errors throughout the document. Also inserted some line-breaks in screen elements, lest the text run off the page in the PDF.

Appendix B: License notice

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The Original Documentation is titled *Setting up Firebird on Ubuntu Linux*.

The Initial Writer of the Original Documentation is: Rodney Gedda.

Copyright (C) 2007. All Rights Reserved. Initial Writer contact: rodney at gedda dot info.

Contributors: Marius Popa, Paul Vinkenoog.

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