

# How to Install MySQL 5.0.X on Red Hat ES 4.0

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## References:

<http://dev.mysql.com/downloads/mysql/5.0.html>  
<http://dev.mysql.com/doc/>  
<http://bugs.mysql.com/bug.php?id=17035>

## Installing MySQL 5.0.X

In my example, I don't have any pre-existing databases to upgrade. I do, however, have the 4.1.X version of MySQL installed on my server – installed by my full install of Red Hat ES 4.0. Therefore, I will uninstall the previous version of MySQL (as well as any dependencies):

Step 1: Shutdown the *mysqld* daemon, if it is running:

```
# /etc/init.d/mysql stop
```

Step 2: Verify your Operating System version and download the appropriate server, client, and shared binary distributions of MySQL from <http://dev.mysql.com/downloads/mysql/5.0.html>:

```
[root@tuxboy opt]# uname -a
Linux tuxboy 2.6.9-22.EL #1 Mon Sep 19 18:20:28 EDT 2005 i686 i686 i386 GNU/Linux
[root@tuxboy opt]# cat /etc/redhat-release
Red Hat Enterprise Linux ES release 4 (Nahant Update 2)
```

Step 3: When trying to install the binary distribution with a pre-existing MySQL installation, you may experience the following dependency errors; uninstall pre-existing distributions as well as any dependencies thereof:

```
[root@tuxboy opt]# rpm -Uvh MySQL-server-standard-5.0.24-0.rhel4.i386.rpm
warning: MySQL-server-standard-5.0.24-0.rhel4.i386.rpm: V3 DSA signature: NOKEY, key ID 5072elf5
error: Failed dependencies:
    libmysqlclient.so.14 is needed by (installed) mod_auth_mysql-2.6.1-2.2.i386
    libmysqlclient.so.14 is needed by (installed) php-mysql-4.3.9-3.8.i386
    libmysqlclient.so.14 is needed by (installed) cyrus-sasl-sql-2.1.19-5.EL4.i386
    libmysqlclient.so.14 is needed by (installed) dovecot-0.99.11-2.EL4.1.i386
    libmysqlclient.so.14 is needed by (installed) perl-DBD-MySQL-2.9004-3.1.i386
    libmysqlclient.so.14 is needed by (installed) freeradius-mysql-1.0.1-3.RHEL4.i386
```

I uninstalled the following (which packages you need to uninstall may differ):

```
[root@tuxboy opt]# rpm -ev mod_auth_mysql-2.6.1-2.2.i386 \
> php-mysql-4.3.9-3.8.i386 \
> cyrus-sasl-sql-2.1.19-5.EL4.i386 \
> dovecot-0.99.11-2.EL4.1.i386 \
> perl-DBD-MySQL-2.9004-3.1.i386 \
> freeradius-mysql-1.0.1-3.RHEL4.i386 \
> mysql-server-4.1.12-3.RHEL4.1.i386 \
> mysql-bench-4.1.12-3.RHEL4.1 \
> mysql-devel-4.1.12-3.RHEL4.1 \
> mysql-4.1.12-3.RHEL4.1 \
> libdbi-dbd-mysql-0.6.5-10.RHEL4.1 \
> MySQL-python-1.0.0-1.RHEL4.1 \
> qt-MySQL-3.3.3-9.3 \
> MyODBC-2.50.39-21.RHEL4.1 \
> mysqlclient10-3.23.58-4.RHEL4.1 \
> mysqlclient10-devel-3.23.58-4.RHEL4.1
```

#### Step 4: Install the MySQL binaries:

```
[root@tuxboy opt]# rpm -Uvh MySQL-shared-standard-5.0.24-0.rhel4.i386.rpm \  
> MySQL-server-standard-5.0.24-0.rhel4.i386.rpm \  
> MySQL-client-standard-5.0.24-0.rhel4.i386.rpm  
warning: MySQL-shared-standard-5.0.24-0.rhel4.i386.rpm: V3 DSA signature: NOKEY, key ID 5072elf5  
Preparing... ##### [100%]  
 1:MySQL-client-standard ##### [ 33%]  
 2:MySQL-shared-standard ##### [ 67%]  
 3:MySQL-server-standard ##### [100%]  
PLEASE REMEMBER TO SET A PASSWORD FOR THE MySQL root USER !  
To do so, start the server, then issue the following commands:  
/usr/bin/mysqladmin -u root password 'new-password'  
/usr/bin/mysqladmin -u root -h tuxboy password 'new-password'  
See the manual for more instructions.
```

Please report any problems with the /usr/bin/mysqlbug script!

The latest information about MySQL is available on the web at  
<http://www.mysql.com>  
Support MySQL by buying support/licenses at <http://shop.mysql.com>  
Starting MySQL[ OK ]

#### Step 5: Initialize the grant tables:

```
[root@tuxboy bin]# ./mysql_install_db --user=mysql  
Installing all prepared tables  
Fill help tables
```

To start mysqld at boot time you have to copy support-files/mysql.server  
to the right place for your system

PLEASE REMEMBER TO SET A PASSWORD FOR THE MySQL root USER !  
To do so, start the server, then issue the following commands:  
/usr/bin/mysqladmin -u root password 'new-password'  
/usr/bin/mysqladmin -u root -h tuxboy password 'new-password'  
See the manual for more instructions.

NOTE: If you are upgrading from a MySQL <= 3.22.10 you should run  
the /usr/bin/mysql\_fix\_privilege\_tables. Otherwise you will not be  
able to use the new GRANT command!

You can start the MySQL daemon with:  
cd / ; /usr/bin/mysqld\_safe &

You can test the MySQL daemon with the benchmarks in the 'sql-bench' directory:  
cd sql-bench ; perl run-all-tests

Please report any problems with the /usr/bin/mysqlbug script!

The latest information about MySQL is available on the web at  
<http://www.mysql.com>  
Support MySQL by buying support/licenses at <http://shop.mysql.com>

#### Step 6: Ensure the data directories are owned by a non-root user; customarily, *mysql*:

```
[root@tuxboy mysql]# ls -lart  
total 20548  
drwxr-xr-x  2 mysql mysql    4096 Aug 30 18:34 test  
drwxr-xr-x 34 root  root    4096 Aug 30 18:34 .  
drwx--x--x  2 mysql mysql    4096 Aug 30 18:34 mysql  
-rw-rw----  1 mysql mysql     5 Aug 30 18:34 tuxboy.pid  
-rw-rw----  1 mysql root    1068 Aug 30 18:34 tuxboy.err  
srwxrwxrwx  1 mysql mysql     0 Aug 30 18:34 mysql.sock  
-rw-rw----  1 mysql mysql 5242880 Aug 30 18:34 ib_logfile1  
-rw-rw----  1 mysql mysql 5242880 Aug 30 18:34 ib_logfile0  
-rw-rw----  1 mysql mysql 10485760 Aug 30 18:34 ibdata1  
drwxr-xr-x  4 mysql mysql    4096 Aug 30 18:42 .
```

## Step 7: Verify that you can successfully bounce MySQL:

```
[root@tuxboy mysql]# mysqladmin shutdown
[root@tuxboy mysql]# ps -ef | grep mysqld
root      7842  2565  0 18:47 pts/1    00:00:00 grep mysqld

[root@tuxboy mysql]# mysqld_safe --user=mysql --log &
[1] 7843
[root@tuxboy mysql]# Starting mysqld daemon with databases from /var/lib/mysql
```

## Step 8: Verify that the server is running; that the *mysql* and *test* databases are installed; and that you can issue a simple query (Note: Output from certain commands -- *'mysqladmin variables,'* for example -- is far too verbose to include in this note):

```
[root@tuxboy mysql]# mysqladmin version
[root@tuxboy mysql]# mysqladmin variables

[root@tuxboy mysql]# mysqlshow
+-----+
|      Databases      |
+-----+
| information_schema |
| mysql               |
| test                |
+-----+

[root@tuxboy mysql]# mysql -e "SELECT Host, Db, User FROM db" mysql
+-----+-----+-----+
| Host | Db      | User |
+-----+-----+-----+
| %    | test   |      |
| %    | test\_%|      |
+-----+-----+-----+
```

## Step 9: Configure automatic startup/shutdown; Optionally, configure the */etc/my.cnf* file; Test as appropriate:

```
[root@tuxboy opt]# ls -lart /etc/init.d/mysql
-rwxr-xr-x 1 root root 9359 Jul 27 15:39 /etc/init.d/mysql
[root@tuxboy opt]# touch /etc/my.cnf
[root@tuxboy opt]# vi /etc/my.cnf
[root@tuxboy opt]# more /etc/my.cnf
[mysqld]
log=/var/tmp/mylog.log
[root@tuxboy opt]# chkconfig --add mysql
[root@tuxboy opt]# chkconfig --list mysql
mysql      0:off  1:off  2:on   3:on   4:on   5:on   6:off
[root@tuxboy opt]# service mysql stop
[root@tuxboy opt]# service mysql start
```

## Step 10: Delete the anonymous users:

```
[root@tuxboy opt]# mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 3 to server version: 5.0.24-standard-log

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> DELETE FROM mysql.user WHERE User='';
Query OK, 2 rows affected (0.00 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT Host, User from mysql.user;
+-----+-----+
| Host      | User |
+-----+-----+
| localhost | root |
| tuxboy    | root |
+-----+-----+
2 rows in set (0.01 sec)
```

## Step 11: Set the roots users' passwords (alter values as appropriate):

```
mysql> select Host, User, Password from user;
+-----+-----+-----+
| Host      | User | Password |
+-----+-----+-----+
| localhost | root |          |
| tuxboy    | root |          |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> UPDATE user set Password = PASSWORD('pa$$w!rd');
Query OK, 2 rows affected (0.00 sec)
Rows matched: 2  Changed: 2  Warnings: 0

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

mysql> select Host, User, Password from user;
+-----+-----+-----+
| Host      | User | Password |
+-----+-----+-----+
| localhost | root | *49C77AEDAAEDE6B380A0EF8A48F62A277ECFAE6B |
| tuxboy    | root | *49C77AEDAAEDE6B380A0EF8A48F62A277ECFAE6B |
+-----+-----+-----+
```