

## Linux 平台下 Mysql 数据库安装指南

关于 mysql 在 linux 下安装，网上资料一抓一大把，本处做图文安装示例说明

Linux 发行版采用 CentOS6.5，因 mysql 的 yum 源版本已经过老，安装形式采用 rpm 包安装

```
[root@YangShuang_CentOS mysqlrpm]# uname -a
Linux YangShuang_CentOS 2.6.32-431.el6.x86_64 #1
```

步骤如下：

1.mysql 官网登录，下载自己需要的 tar 包，i686 字样结尾的为 32 位，x86\_64 为 64 位。

```
631780 Jun  4 14:10 MySQL-server-5.6.19-1.el6.i686.rpm
377160 Jun  4 14:11 MySQL-shared-5.6.19-1.el6.i686.rpm
```

```
:49 MySQL-5.6.19-1.el6.x86_64.rpm-bundle.tar
:17 MySQL-client-5.6.19-1.el6.x86_64.rpm
:17 MySQL-devel-5.6.19-1.el6.x86_64.rpm
:17 MySQL-embedded-5.6.19-1.el6.x86_64.rpm
:18 MySQL-server-5.6.19-1.el6.x86_64.rpm
:19 MySQL-shared-5.6.19-1.el6.x86_64.rpm
:19 MySQL-shared-compat-5.6.19-1.el6.x86_64.rpm
:19 MySQL-test-5.6.19-1.el6.x86_64.rpm
```

可直接下载 bundle 包，我下载的就是 bundle 包

```
tar -tvf MySQL-5.6.19-1.el6.x86_64.rpm-bundle.tar
2014-05-08 16:17 MySQL-embedded-5.6.19-1.el6.x86_64.rpm
2014-05-08 16:17 MySQL-devel-5.6.19-1.el6.x86_64.rpm
2014-05-08 16:17 MySQL-client-5.6.19-1.el6.x86_64.rpm
2014-05-08 16:19 MySQL-shared-compat-5.6.19-1.el6.x86_64.rpm
2014-05-08 16:18 MySQL-server-5.6.19-1.el6.x86_64.rpm
2014-05-08 16:19 MySQL-shared-5.6.19-1.el6.x86_64.rpm
2014-05-08 16:19 MySQL-test-5.6.19-1.el6.x86_64.rpm
```

### 2.Root 账户登录

将下载好的 rpm 包 copy 到 u 盘，接入 linux 系统，挂载 U 盘，将安装包拷到 linux 系统下的指定文件目录，就可以开始安装了。U 盘的挂载请自行百度，很简单，不多说。

我放置的路径如下

```

ng_CentOS usr]# cd /usr/mysqlrpm/
ng_CentOS mysqlrpm]# ll

bot 0 4096 Jun 27 20:30 1686_Mysql
bot 0 4096 Jun 27 20:36 x86_64
ng_CentOS mysqlrpm]# ^C
ng_CentOS mysqlrpm]# ^C
ng_CentOS mysqlrpm]# ^C
ng_CentOS mysqlrpm]# ^C
ng_CentOS mysqlrpm]#

```

进入到我们放安装包的目录

```

]# cd /usr/mysqlrpm/x86_64/
ll

0 Jun  4 13:49 MySQL-5.6.19-1.el6.x86_64.rpm-bundle.tar
6 May  8 16:17 MySQL-client-5.6.19-1.el6.x86_64.rpm
2 May  8 16:17 MySQL-devel-5.6.19-1.el6.x86_64.rpm
6 May  8 16:17 MySQL-embedded-5.6.19-1.el6.x86_64.rpm
2 May  8 16:18 MySQL-server-5.6.19-1.el6.x86_64.rpm
6 May  8 16:19 MySQL-shared-5.6.19-1.el6.x86_64.rpm
0 May  8 16:19 MySQL-shared-compat-5.6.19-1.el6.x86_64.rpm
8 May  8 16:19 MySQL-test-5.6.19-1.el6.x86_64.rpm

```

解压 tar 包

```

1 7155 wheel 3969740 May  8 16:19 MySQL-shared-compat-5.6.19-1.el6.x86_64.rpm
1 7155 wheel 49880768 May  8 16:19 MySQL-test-5.6.19-1.el6.x86_64.rpm
Shuang_CentOS x86_64]# tar -xvf MySQL-5.6.19-1.el6.x86_64.rpm-bundle.tar ^C
Shuang_CentOS x86_64]# ^C
Shuang_CentOS x86_64]# ^C

```

得到 rpm 包文件集合，解压到当前目录

```

13:49 MySQL-5.6.19-1.el6.x86_64.rpm-bundle.tar
16:17 MySQL-client-5.6.19-1.el6.x86_64.rpm
16:17 MySQL-devel-5.6.19-1.el6.x86_64.rpm
16:17 MySQL-embedded-5.6.19-1.el6.x86_64.rpm
16:18 MySQL-server-5.6.19-1.el6.x86_64.rpm
16:19 MySQL-shared-5.6.19-1.el6.x86_64.rpm
16:19 MySQL-shared-compat-5.6.19-1.el6.x86_64.rpm
16:19 MySQL-test-5.6.19-1.el6.x86_64.rpm

```

在 linux 系统下，安装 rpm 包，是有包依赖关系的，意思是说按照包依赖顺序安装。  
安装 mysql，如果在安装过程中，发现有依赖包，会进行依赖包的安装检查，如果已经安

装了依赖包，并且依赖包版本完全匹配，则继续。如果没有，rpm 包安装会失败。

当然如果你采用 yum 安装，则由 yum 替我们管理这些依赖包的安装，工作原理和 nuget 如出一辙。

我在安装的过程中报出如下错误提示

```
file /usr/share/mysql/charsets/armSCII8.xml from inst
kage mysql-libs-5.1.71-1.el6.x86_64
file /usr/share/mysql/charsets/ascii.xml from install
e mysql-libs-5.1.71-1.el6.x86_64
file /usr/share/mysql/charsets/cp1250.xml from instal
ge mysql-libs-5.1.71-1.el6.x86_64
file /usr/share/mysql/charsets/cp1256.xml from instal
ge mysql-libs-5.1.71-1.el6.x86_64
file /usr/share/mysql/charsets/cp1257.xml from instal
ge mysql-libs-5.1.71-1.el6.x86_64
file /usr/share/mysql/charsets/cp850.xml from install
e mysql-libs-5.1.71-1.el6.x86_64
file /usr/share/mysql/charsets/cp852.xml from install
e mysql-libs-5.1.71-1.el6.x86_64
file /usr/share/mysql/charsets/cp866.xml from install
e mysql-libs-5.1.71-1.el6.x86_64
file /usr/share/mysql/charsets/dec8.xml from install
mysql-libs-5.1.71-1.el6.x86_64
```

字面上的意思是，出现了 lib 冲突。恩，我的系统里存在 mysql 的 lib，并且版本跟我要按安装的 mysql 的依赖版本不一致，所以冲突了。这里的原因是因为我曾经用 yum 安装过 mysql 的一些库，如果你首次安装，应该不会出现这种问题的。

解决冲突的办法是，通过 yum，移除所有已经安装的 mysql lib 文件

yum -y remove mysql\*，移除后的提示如下



```

Remove          6 Package(s)

Installed size: 15 M
Downloading Packages:
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
Warning: RPMDB altered outside of yum.
  Erasing      : sysstat-9.0.4-22.el6.x86_64
  Erasing      : cronie-1.4.4-12.el6.x86_64
warning: /etc/cron.deny saved as /etc/cron.deny.rpmsave
  Erasing      : cronie-anacron-1.4.4-12.el6.x86_64
  Erasing      : crontabs-1.10-33.el6.noarch
warning: /etc/crontab saved as /etc/crontab.rpmsave
  Erasing      : 2:postfix-2.6.6-2.2.el6_1.x86_64
  Erasing      : mysql-libs-5.1.71-1.el6.x86_64
  Verifying    : cronie-anacron-1.4.4-12.el6.x86_64
  Verifying    : 2:postfix-2.6.6-2.2.el6_1.x86_64
  Verifying    : mysql-libs-5.1.71-1.el6.x86_64
  Verifying    : crontabs-1.10-33.el6.noarch
  Verifying    : sysstat-9.0.4-22.el6.x86_64
  Verifying    : cronie-1.4.4-12.el6.x86_64

Removed:
  mysql-libs.x86_64 0:5.1.71-1.el6

Dependency Removed:
  cronie.x86_64 0:1.4.4-12.el6          cronie-anacron.x86_64 0:1.4.4-12.el6
  postfix.x86_64 2:2.6.6-2.2.el6_1    sysstat.x86_64 0:9.0.4-22.el6

Complete!

```

移除冲突的 lib 以后，继续安装

Mysql 安装，需要安装三个 rpm 包，devel，server，client

```

49 MySQL-5.6.19-1.el6.x86_64.rpm-bundle.tar
17 MySQL-client-5.6.19-1.el6.x86_64.rpm
17 MySQL-devel-5.6.19-1.el6.x86_64.rpm
17 MySQL-embedded-5.6.19-1.el6.x86_64.rpm
18 MySQL-server-5.6.19-1.el6.x86_64.rpm
19 MySQL-shared-5.6.19-1.el6.x86_64.rpm
19 MySQL-shared-compat-5.6.19-1.el6.x86_64.rpm
19 MySQL-test-5.6.19-1.el6.x86_64.rpm

```

安装命令也比较简单

执行命令 rpm -ivhf MySQL-devel-5.6.19-1.el6.x86\_64.rpm

MySQL-client-5.6.19-1.el6.x86\_64.rpm MySQL-server-5.6.19-1.el6.x86\_64.rpm

包与包空格隔开，包顺序无要求

```

[root@YangShuang_CentOS x86_64]# rpm -ivhf MySQL-devel-5.6.19-1.el6.x86_64.rpm MySQL-client-5.6.19-1.el6.x86_64.rpm MySQL-
-server-5.6.19-1.el6.x86_64.rpm

```

在安装过程中，需要注意安装日志，mysql server 安装的时候，会自动给 root 用户初始化一个随机密码，路径/root/.mysql\_secret，以隐藏文件的形式存在。

```
root@YangShuang_CentOS:/usr/mysqlrpm/x86_64
A RANDOM PASSWORD HAS BEEN SET FOR THE MySQL root USER !
You will find that password in '/root/.mysql_secret'.

You must change that password on your first connect,
no other statement but 'SET PASSWORD' will be accepted.
See the manual for the semantics of the 'password expired' flag.

Also, the account for the anonymous user has been removed.

In addition, you can run:
```

Mysql 数据库配置文件默认在如下位置

```
New default config file was created as /usr/my.cnf and
will be used by default by the server when you start it.
You may edit this file to change server settings

2:MySQL-client      ##### [ 6
3:MySQL-devel       ##### [10
[root@YangShuang_CentOS x86_64]# mysql server status
mysql Ver 14.14 Distrib 5.6.19, for Linux (x86_64) using EditLine wrapper
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affiliates. Other names may be trademarks of their respective
```

接下来使用 mysql server status 检查 mysql 是否已经正确安装

```
[root@YangShuang_CentOS x86_64]# mysql server status
mysql Ver 14.14 Distrib 5.6.19, for Linux (x86_64) using EditLine wrapper
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affiliates. Other names may be trademarks of their respective
owners.

Usage: mysql [OPTIONS] [database]
  -?, --help          Display this help and exit.
  -I, --help          Synonym for -?.
  --auto-rehash       Enable automatic rehashing. One doesn't need to use
                      'rehash' to get table and field completion, but startup
                      and reconnecting may take a longer time. Disable with
                      --disable-auto-rehash.
                      (Defaults to on; use --skip-auto-rehash to disable.)
```

如果出现以上信息，表示 mysql 已经正确安装

接下来找到随机密码文件，登录。

进入 root 根目录

```
[root@YangShuang_CentOS x86_64]# cd /root
[root@YangShuang_CentOS ~]#
```

查找有无此密码文件

执行命令 `ll -al ~| grep mysql*`

```
-rw----- 1 root 0 6177 Jun 15 14:38 .xsession-errors.old
drwxr-xr-x. 2 yangshuang yangshuang 4096 Jun 3 02:58 Yang
[root@YangShuang_CentOS ~]# ll -al ~| grep mysql*
-rw----- 1 root 0 104 Jun 27 21:28 .mysql_secret
[root@YangShuang_CentOS ~]#
```

文件确实存在，如果你执行此命令，没有这个文件，那么你可能进错了目录，仔细检查。

使用 vi 或者 vim 打开此密码文件

执行 `vim .mysql_secret`

```
@YangShuang_CentOS:~
The random password set for the root user at Fri Jun 27 21:28:59 2014 (local time): TFn5vnf4KpE_Fxbw
```

记下来

检查 mysql 数据库服务是否已经启动

```
-rw----- 1 root 0 6177 Jun 15 14:38 .xsession-errors
drwxr-xr-x. 2 yangshuang yangshuang 4096 Jun 3 02:58 Yang
[root@YangShuang_CentOS ~]# ll -al ~| grep mysql*
-rw----- 1 root 0 104 Jun 27 21:28 .mysql_secret
[root@YangShuang_CentOS ~]# vim .mysql_secret
[root@YangShuang_CentOS ~]# service mysql status
SUCCESS! MySQL running (2130)
[root@YangShuang_CentOS ~]#
```

安装完毕，数据库引擎会自动启动的，如果没有启动

执行命令 `service mysql start` 启用 mysql

使用命令 `mysql -u root -p`，提示输入密码时，输入随机密码，登录后如下

```
[root@YangShuang_CentOS ~]#
[root@YangShuang_CentOS ~]# mysql -u root -p
Enter password:
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: YES)
[root@YangShuang_CentOS ~]# vim .mysql_secret
[root@YangShuang_CentOS ~]# mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 3
Server version: 5.6.19

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

登录到 mysql 控制台以后，修改数据库 root 用户的密码

执行命令

SET PASSWORD =PASSWORD('NewPassword') 修改密码

```
mysql> SET PASSWORD = PASSWORD(" ")  
-> ;  
Query OK, 0 rows affected (0.00 sec)  
  
mysql> exit  
Bye
```

修改后，再次退出重新登录，看有无问题。

Mysql 在 linux 下安装到处结束。

剩余的部分是 mysql 数据库的使用，自行学习即可。

2014-6-27