

MySQL安装操作文档

一、MySQL安装

1、下载并安装MySQL官方的 Yum Repository

```
# wget -i -c http://dev.mysql.com/get/mysql57-community-release-el7-10.noarch.rpm
```

```
[root@localhost test]# wget -i -c http://dev.mysql.com/get/mysql57-community-release-el7-10.noarch.rpm
--2019-02-13 12:23:30-- http://dev.mysql.com/get/mysql57-community-release-el7-10.noarch.rpm
正在解析主机 dev.mysql.com (dev.mysql.com)... 137.254.60.11
正在连接 dev.mysql.com (dev.mysql.com)|137.254.60.11|:80... 已连接。
已发出 HTTP 请求，正在等待回应... 301 Moved Permanently
位置：https://dev.mysql.com/get/mysql57-community-release-el7-10.noarch.rpm [跟随至新的 URL]
--2019-02-13 12:23:34-- https://dev.mysql.com/get/mysql57-community-release-el7-10.noarch.rpm
正在连接 dev.mysql.com (dev.mysql.com)|137.254.60.11|:443... 已连接。
已发出 HTTP 请求，正在等待回应... 302 Found
位置：https://repo.mysql.com//mysql57-community-release-el7-10.noarch.rpm [跟随至新的 URL]
--2019-02-13 12:23:40-- https://repo.mysql.com//mysql57-community-release-el7-10.noarch.rpm
正在解析主机 repo.mysql.com (repo.mysql.com)... 23.35.181.109
正在连接 repo.mysql.com (repo.mysql.com)|23.35.181.109|:443... 已连接。
已发出 HTTP 请求，正在等待回应... 200 OK
长度：25548 (25K) [application/x-redhat-package-manager]
正在保存至：‘mysql57-community-release-el7-10.noarch.rpm’
100%[=====>] 25,548 --.-K/s 用时 0.1s

100%[=====>] 25,548 --.-K/s 用时 0.1s
2019-02-13 12:23:41 (187 KB/s) - 已保存 ‘mysql57-community-release-el7-10.noarch.rpm’
25548/25548)
-c: 没有那个文件或目录
在 -c 中找不到 URL。
FINISHED --2019-02-13 12:23:41--
Total wall clock time: 11s
Downloaded: 1 files, 25K in 0.1s (187 KB/s)
```

使用上面的命令就直接下载了安装用的Yum Repository，大概25KB的样子，然后就可以直接yum安装了。

2、用yum安装mysql依赖包

```
# yum -y install mysql57-community-release-el7-10.noarch.rpm
```

```
[root@localhost test]# yum -y install mysql57-community-release-el7-10.noarch.rpm
已加载插件：fastestmirror, langpacks
正在检查 mysql57-community-release-el7-10.noarch.rpm: mysql57-community-release-el7-10.noarch
mysql57-community-release-el7-10.noarch.rpm 将被安装
正在解决依赖关系
--> 正在检查事务
---> 软件包 mysql57-community-release.noarch.0.el7-10 将被安装
--> 解决依赖关系完成

依赖关系解决


```

Package	架构	版本	源	大小
正在安装:				
mysql57-community-release	noarch	el7-10	/mysql57-community-release-el7-10.noarch	30 k

```

事务概要

安装 1 软件包

总计：30 k
安装大小：30 k

```

```

总计：30 k
安装大小：30 k
Downloading packages:
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
 正在安装      : mysql57-community-release-el7-10.noarch      1/1
 验证中       : mysql57-community-release-el7-10.noarch      1/1

已安装:
  mysql57-community-release.noarch 0:el7-10

完毕！

```

3、再安装mysql服务器

```
# yum -y install mysql-community-server
```

这步可能会花些时间，安装完成后就会覆盖掉之前的mariadb。

```

已安装:
  mysql-community-libs.x86_64 0:5.7.25-1.el7
  mysql-community-libs-compat.x86_64 0:5.7.25-1.el7
  mysql-community-server.x86_64 0:5.7.25-1.el7

作为依赖被安装:
  mysql-community-client.x86_64 0:5.7.25-1.el7
  mysql-community-common.x86_64 0:5.7.25-1.el7

替代:
  mariadb-libs.x86_64 1:5.5.60-1.el7_5

完毕！

```

至此MySQL就安装完成了，然后是对MySQL的一些设置

二、MYSQL配置

1、启动mysql服务

```
# systemctl start mysqld.service
```

查看服务运行状态

```
# systemctl status mysqld.service
```

```
[root@localhost test]# systemctl start mysqld.service
[root@localhost test]# systemctl status mysqld.service
● mysqld.service - MySQL Server
   Loaded: loaded (/usr/lib/systemd/system/mysqld.service; enabled; vendor preset: disabled)
   Active: active (running) since 三 2019-02-13 16:03:15 CST; 39s ago
     Docs: man:mysqld(8)
           http://dev.mysql.com/doc/refman/en/using-systemd.html
   Process: 44274 ExecStart=/usr/sbin/mysqld --daemonize --pid-file=/var/run/mysqld/mysqld.pid $MYSQLD_OPTS (code=exited, status=0/SUCCESS)
   Process: 44185 ExecStartPre=/usr/bin/mysqld_pre_systemd (code=exited, status=0/SUCCESS)
   Main PID: 44277 (mysqld)
      Tasks: 27
     CGroup: /system.slice/mysqld.service
             └─44277 /usr/sbin/mysqld --daemonize --pid-file=/var/run/mysqld/mysqld.pi...

2月 13 16:03:07 localhost.localdomain systemd[1]: Starting MySQL Server...
2月 13 16:03:15 localhost.localdomain systemd[1]: Started MySQL Server.
```

此时MySQL已经开始正常运行，不过要想进入MySQL还得先找出此时root用户的密码，通过如下命令可以在日志文件中找出密码：

```
[root@localhost ~]# mysql -u root -p
Enter password:
```

```
# grep "password" /var/log/mysqld.log
```

```
[root@localhost test]# grep 'password' /var/log/mysqld.log
2019-02-13T08:03:11.914074Z 1 [Note] A temporary password is generated for root@localhost: /YHj6IpsolFr
```

2、进入数据库

```
# mysql -u root -p
```

```
[root@localhost test]# mysql -uroot -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2
Server version: 5.7.25

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owners.

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

mysql> █
```

输入初始密码 (/YHj6lpso1Fr) , 此时不能做任何事情, 因为MySQL默认必须修改密码之后才能操作数据库。

3、修改初始密码

```
mysql> ALTER USER 'root'@'localhost' IDENTIFIED BY 'new password****';
```

```
mysql> ALTER USER 'root'@'localhost' IDENTIFIED BY 'Zhx123456!!!';
Query OK, 0 rows affected (0.04 sec)
```

mysql默认安装了密码安全检查插件 (validate_password) , 默认密码检查策略要求密码必须包含: 大小写字母、数字和特殊符号, 并且长度不能少于8位。否则会提示ERROR 1819 (HY000): Your password does not satisfy the current policy requirements错误。

```
mysql> ALTER USER 'root'@'localhost' IDENTIFIED BY 'zhx123';
ERROR 1819 (HY000): Your password does not satisfy the current policy requirements
mysql> █
```

注意: 结束要输入"; "

Policy	Tests Performed
0 or LOW	Length
1 or MEDIUM	Length; numeric, lowercase/uppercase, and special characters
2 or STRONG	Length; numeric, lowercase/uppercase, and special characters; dictionary file

MySQL完整的初始密码规则可以通过如下命令查看:

```
mysql> SHOW VARIABLES LIKE 'validate_password%';
```

```
+-----+-----+
| variable_name | value |
+-----+-----+
| validate_password_check_user_name | OFF |
| validate_password_dictionary_file | |
| validate_password_length | 8 |
| validate_password_mixed_case_count | 1 |
| validate_password_number_count | 1 |
| validate_password_policy | LOW |
| validate_password_special_char_count | 1 |
+-----+-----+
7 rows in set (0.01 sec)
```

密码的长度是由validate_password_length决定的, 而validate_password_length的计算公式是:

$$\text{validate_password_length} = \text{validate_password_number_count} + \text{validate_password_special_char_count} + (2 * \text{validate_password_mixed_case_count})$$

初始情况下第一个的值是ON, validate_password_length是8。可以通过如下命令修改:

```
mysql> set global validate_password_policy=0;
mysql> set global validate_password_length=1;
```

设置之后密码就可以设置的很简单，例如1234之类的。到此数据库的密码设置就完成了。

但此时还有一个问题，就是因为安装了Yum Repository，以后每次yum操作都会自动更新，需要把这个卸载掉：

```
# yum -y remove mysql57-community-release-el7-10.noarch
```

此时才算真的完成了。尝试一下访问数据库吧！

4、访问数据库

```
mysql> use mysql
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select host,user from user
-> ;
+-----+-----+
| host      | user          |
+-----+-----+
| localhost | mysql.session |
| localhost | mysql.sys     |
| localhost | root          |
+-----+-----+
3 rows in set (0.00 sec)
```

5、设置开机自动启动

```
systemctl enable mysqld
systemctl daemon-reload
```

6、退出mysql

```
Mysql>exit
```

```
mysql> exit:
Bye
[root@localhost ~] #
```

7、数据库授权

数据库没有授权，只支持localhost本地访问

将所有数据库的所有表（.）的所有权限（all privileges），授予通过任何ip（%）访问的root用户，密码为123456。

```
mysql>grant all privileges on *.* to 'root'@'%' identified by 'zhx123456!!';
//远程连接数据库的时候需要输入用户名和密码
//用户名: root
//密码:123456
//指点ip:%代表所有Ip,此处也可以输入Ip来指定Ip
```

```
mysql> grant all privileges on *.* to 'root'@'%' identified by 'Zhx123456!!';  
Query OK, 0 rows affected, 1 warning (0.02 sec)
```

输入后使修改生效还需要下面的语句

```
mysql> FLUSH PRIVILEGES;
```

```
mysql> flush privileges;  
Query OK, 0 rows affected (0.04 sec)
```

也可以通过修改表来实现远程：

```
mysql -u root -p ****  
mysql> use mysql;  
mysql> update user set host = '%' where user = 'root';  
mysql> select host, user from user;
```