

Mysql 安装与部署

2017/12/20

1 单实例二进制安装 mysql 数据库

1.1 Mysql 数据库安装准备

```
[root@test-1 tools]# cat /etc/redhat-release
```

CentOS Linux release 7.4.1708 (Core)

```
[root@test-1 tools]# uname -rm
```

3.10.0-693.11.1.el7.x86_64 x86_64

```
[root@test-1 ~]# yum -y install make gcc-c++ cmake bison-devel ncurses-devel
```

```
libaio libaio-devel perl-Data-Dumper net-tools
```

```
[root@test-1 ~]# yum -y install boost boost-devel
```

1.2 建立 Mysql 账户

1.2.1 首先以 root 身份登录到 linux 系统中 ,然后执行如下命令创建 mysql 组及用户

```
[root@test-1 tools]# groupadd mysql
```

```
[root@test-1 tools]# useradd -g mysql -M mysql -s /sbin/nologin
```

1.2.2 检查创建的用户

```
[root@test-1 tools]# tail -1 /etc/passwd
```

```
mysql:x:1001:1001::/home/mysql:/sbin/nologin
```

1.2.3 创建下载安装文件目录

```
[root@test-1 /]# mkdir -p /tools
```

1.2.4 创建安装目录、数据存放目录，日志目录

```
[root@test-1 tools]# mkdir -p /usr/local/mysql
```

```
[root@test-1 tools]# mkdir -p /data/mysql/
```

```
[root@test-1 tools]# mkdir -p /var/log/mysql/
```

1.3 下载 mysql 软件

1.3.1 获得 mysql 地址

<http://mysql.ntu.edu.tw/MySQL/Downloads/>

1.3.2 本次下地址二进制包，直接解压就可以用了

```
[root@test-1 ~]# cd /tools/
```

```
[root@test-1 tools]# wget
```

[http://mysql.ntu.edu.tw/MySQL/Downloads/MySQL-5.7/mysql-5.7.20-linux-glibc2.](http://mysql.ntu.edu.tw/MySQL/Downloads/MySQL-5.7/mysql-5.7.20-linux-glibc2.12-x86_64.tar.gz)

[12-x86_64.tar.gz](http://mysql.ntu.edu.tw/MySQL/Downloads/MySQL-5.7/mysql-5.7.20-linux-glibc2.12-x86_64.tar.gz)

1.4 直接解压安装 mysql

1.4.1 解压 mysql

```
[root@test-1 tools]# tar -zxf mysql-5.7.20-linux-glibc2.12-x86_64.tar.gz
```

```
[root@test-1 tools]# ll
```

总用量 827360

```
-rw-r--r--. 1 root root 8738691 12月 15 18:06 apache-maven-3.5.2-bin.tar.gz
```

```
-rw-r--r--. 1 root root 9323896 12月 15 18:06 apache-tomcat-8.0.43.tar.gz
```

```
-rw-r--r--. 1 root root 15080 10月 3 01:52 epel-release-latest-7.noarch.rpm
```

```
-rw-r--r--. 1 root root 185540433 12月 15 18:07 jdk-8u131-linux-x64.tar.gz
```

```
drwxr-xr-x 2 root root 6 12月 19 18:03
```

mysql-5.7.20-linux-glibc2.12-x86_64

```
-rw-r--r-- 1 root root 641127384 9月 13 23:45
```

mysql-5.7.20-linux-glibc2.12-x86_64.tar.gz

```
drwxr-xr-x 9 root root 186 12月 18 15:07 nginx-1.10.3
```

```
-rw-r--r-- 1 root root 911509 1月 31 2017 nginx-1.10.3.tar.gz
```

```
drwxrwxr-x 6 root root 307 12月 18 17:44 redis-3.2.6
```

```
-rw-r--r-- 1 root root 1544806 12月 6 2016 redis-3.2.6.tar.gz
```

1.4.2 把已经解压，移动到安装目录就可以直接使用，不需要再次编译 MySQL

```
[root@test-1 tools]# mv mysql-5.7.20-linux-glibc2.12-x86_64/* /usr/local/mysql/
```

```
[root@test-1 tools]# ll /usr/local/mysql/
```

总用量 36

```
drwxr-xr-x  2 mysql mysql  4096 12月 19 18:00 bin
-rw-r--r--  1 mysql mysql 17987 9月  13 23:48 COPYING
drwxr-xr-x  2 mysql mysql   55 12月 19 18:00 docs
drwxr-xr-x  3 mysql mysql  4096 12月 19 18:00 include
drwxr-xr-x  5 mysql mysql  229 12月 19 18:00 lib
drwxr-xr-x  4 mysql mysql   30 12月 19 18:00 man
-rw-r--r--  1 mysql mysql  2478 9月  13 23:48 README
drwxr-xr-x 28 mysql mysql  4096 12月 19 18:00 share
drwxr-xr-x  2 mysql mysql   90 12月 19 18:00 support-files
```

1.4.3 进入 mysql 目录下，初始化 mysql

1.4.3.1 设置目录权限

```
[root@test-1 tools]# chown -R mysql.mysql /usr/local/mysql/
```

```
[root@test-1 tools]# chown -R mysql.mysql /data/mysql/
```

```
[root@test-1 tools]# chown -R mysql.mysql /var/log/mysql/
```

1.4.3.2 创建或修改/etc/my.cnf 文件

```
[root@test-1 tools]# vim /etc/my.cnf
```

```
[root@test-1 tools]# cat /etc/my.cnf
```

```
[client]
```

port = 3306

socket=/tmp/mysql.sock

default-character-set=utf8

[mysqld]

basedir = /usr/local/mysql

datadir = /data/mysql

socket=/tmp/mysql.sock

pid-file = /data/mysql/mysql.pid

character_set_server=utf8

[mysqld_safe]

log-error = /var/log/mysql/error.log

pid-file = /data/mysql/mysql.pid

1.4.4 初始化 mysql

```
[root@test-1 tools]# /usr/local/mysql/bin/mysqld --initialize --user=mysql
```

```
--basedir=/usr/local/mysql --datadir=/data/mysql
```

```
2017-11-12T14:06:27.150049Z 0 [Warning] TIMESTAMP with implicit DEFAULT value is deprecated. Please use --explicit_defaults_for_timestamp server option (see documentation for more details).
```

```
2017-11-12T14:06:29.285338Z 0 [Warning] InnoDB: New log files created, LSN=45790
```

```
2017-11-12T14:06:29.516354Z 0 [Warning] InnoDB: Creating foreign key constraint
```

system tables.

2017-11-12T14:06:29.623677Z 0 [Warning] No existing UUID has been found, so we assume that this is the first time that this server has been started. Generating a new UUID: ae0c4a8c-c7b2-11e7-a1cd-00163e102209.

2017-11-12T14:06:29.627181Z 0 [Warning] Gtid table is not ready to be used. Table 'mysql.gtid_executed' cannot be opened.

2017-11-12T14:06:29.627612Z 1 [Note] A temporary password is generated for root@localhost: rdCixlilG2*D

提示：

记住上面的初始密码：rdCixlilG2*D

1.5 添加系统服务

```
[root@test-1 mysql]# cp support-files/mysql.server /etc/init.d/mysqld
```

1.5.1 添加/etc/init.d/mysqld 的安装路径和数据保存路径

```
[root@test-1 mysql]# vim /etc/init.d/mysqld
```

```
basedir=/usr/local/mysql
datadir=/usr/local/mysql/data
```

1.5.2 启动数据库

```
[root@test-1 mysql]# service mysqld start
```

Starting MySQL.Logging to '/var/log/mysql/error.log'.

. SUCCESS!

[root@test-1 mysql]# ll /data/mysql/

总用量 385164

```
-rw-r----- 1 mysql mysql      56 12月 19 18:17 auto.cnf
-rw-r----- 1 mysql mysql  14470 12月 20 15:19 ib_buffer_pool
-rw-r----- 1 mysql mysql 281018368 12月 20 15:20 ibdata1
-rw-r----- 1 mysql mysql  50331648 12月 20 15:20 ib_logfile0
-rw-r----- 1 mysql mysql  50331648 12月 20 15:20 ib_logfile1
-rw-r----- 1 mysql mysql  12582912 12月 20 15:20 ibtmp1
drwxr-x--- 2 mysql mysql    4096 12月 19 18:17 mysql
-rw-r----- 1 mysql mysql      6 12月 20 15:20 mysql.pid
drwxr-x--- 2 mysql mysql    8192 12月 19 18:17 performance_schema
drwxr-x--- 2 mysql mysql    8192 12月 19 18:17 sys
drwxr-x--- 2 mysql mysql    4096 12月 19 18:31 yanwei_git
drwxr-x--- 2 mysql mysql   20480 12月 19 18:33 yanwei_jira
drwxr-x--- 2 mysql mysql   12288 12月 19 19:25 yanwei_mall
drwxr-x--- 2 mysql mysql    8192 12月 19 18:52 yanwei_mall_aliyun
drwxr-x--- 2 mysql mysql   12288 12月 19 19:15 yanwei_mall_online
drwxr-x--- 2 mysql mysql   12288 12月 19 19:39 yanwei_mall_test
```

[root@test-1 mysql]# ll /var/log/mysql/

总用量 4

```
-rw-r----- 1 mysql mysql 3567 12月 20 15:20 error.log
```

1.6 添加环境变量

```
[root@test-1 mysql]# mysql
```

```
-bash: mysql: command not found
```

提示：没有这个命令

```
[root@test-1 mysql]# echo 'PATH=/usr/local/mysql/bin:$PATH' >> /etc/profile
```

```
[root@test-1 mysql]# echo $PATH
```

```
/usr/lib64/qt-3.3/bin:/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin:/root/bin
```

```
[root@test-1 mysql]# . /etc/profile
```

1.7 进入 mysql

```
[root@test-1 mysql]# mysql
```

```
mysql: [Warning] Using a password on the command line interface can be insecure.
```

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
```

```
Your MySQL connection id is 3
```

```
Server version: 5.7.20 MySQL Community Server (GPL)
```

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```

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```

```
owners.
```

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

mysql>

为了安全考虑，给 mysql 加上密码

1.8 给 mysql 加上密码

```
[root@test-1 mysql]# mysqladmin -uroot password"Yw2017"
```

```
mysqladmin: Unknown command: 'passwordYw2017'
```

这是错误了，注意空格

```
[root@test-1 mysql]# mysqladmin -uroot password "Yw2017"
```

```
[root@test-1 mysql]# mysql
```

```
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password:
NO)
```

现在直接输入 mysql 报错，拒绝

```
[root@test-1 mysql]# mysql -u root -p'Yw2017'
```

```
mysql: [Warning] Using a password on the command line interface can be insecure.
```

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
```

```
Your MySQL connection id is 3
```

```
Server version: 5.7.20 MySQL Community Server (GPL)
```

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

mysql>

这样才能进入 mysql

到此 mysql 已经安装完成