**Mysql安装教程**

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**一、创建安装mysql的linux用户和组**

以root用户登录服务器；

检测用户组mysql是否存在

shell> grep mysql /etc/group

如果用户组mysql不存在，那么新建一个名为mysql的用户组：

shell> groupadd mysql

检测用户mysql是否存在

shell> grep mysql /etc/passwd

如果不存在，那么新建一个名为mysql的用户：

shell> useradd -r -g mysql -s /bin/false mysql

说明：1、参数-g指定用户mysql所属的用户组；

2、 此用户仅用于运行mysql服务，而不是登录，因此使用useradd -r和-s /bin/false命令选项来创建对服务器主机没有登录权限的用户。

**二、上传mysql的二进制安装文件**

上传mysql安装文件【mysql-5.7.19-linux-glibc2.12-x86\_64.tar.gz】到服务器上的/opt/mysql目录下，并解压安装包。

shell> tar -zxvf /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64.tar.gz -C /opt/mysql/

创建软链接到目录/usr/local/mysql上去：

shell> ln -s /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64 /usr/local/mysql

**三、配置mysql的一些参数**

**1、配置环境变量**

shell> echo "export PATH=$PATH:/opt/mysql/ mysql-5.7.19-linux-glibc2.12-x86\_64/bin" >> /etc/profile

shell> source /etc/profile

**2、配置数据库目录**

创建目录：

shell> mkdir -p /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/{data,log,etc,run}

shell> chown -R mysql:mysql /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64

shell> chmod 750 /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/{data,log,etc,run}

说明：

数据目录：/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/data ；

参数文件my.cnf：/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/etc/my.cnf；

错误日志log-error：/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/log/mysql\_error.log ；

二进制日志log-bin：/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/log/mysql\_bin.log ；

慢查询日志slow\_query\_log\_file：/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/log/mysql\_slow\_query.log ；

套接字socket文件：/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/run/mysql.sock ；

pid文件：/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/run/mysql.pid ；

## ****3、配置my.cnf文件****

在/opt/mysql-5.7.21/etc/下创建my.cnf文件，加入如下参数，其他参数根据需要配置

shell> touch /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/etc/my.cnf

shell> chown mysql:mysql /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/etc/my.cnf

my.cnf内容如下：

[client]

port = 3306

socket = /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/run/mysql.sock

[mysqld]

port = 3306

socket = /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/run/mysql.sock

pid\_file = /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/run/mysql.pid

datadir = /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/data

default\_storage\_engine = InnoDB

max\_allowed\_packet = 128M

max\_connections = 4096

open\_files\_limit = 65535

skip-name-resolve

lower\_case\_table\_names=1

character-set-server = utf8mb4

collation-server = utf8mb4\_unicode\_ci

init\_connect='SET NAMES utf8mb4'

innodb\_buffer\_pool\_size = 128M

innodb\_log\_file\_size = 128M

innodb\_file\_per\_table = 1

innodb\_flush\_log\_at\_trx\_commit = 0

key\_buffer\_size = 16M

log-error = /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/log/mysql\_error.log

log-bin = /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/log/mysql\_bin.log

slow\_query\_log = 1

slow\_query\_log\_file = /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/log/mysql\_slow\_query.log

long\_query\_time = 5

tmp\_table\_size = 16M

max\_heap\_table\_size = 16M

query\_cache\_type = 0

query\_cache\_size = 0

server-id=1

sql\_mode=STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_AUTO\_CREATE\_USER,NO\_ENGINE\_SUBSTITUTION

为mysql文件设置linux用户和组

shell> chown -R mysql:mysql /opt/mysql/

shell> chown -R mysql:mysql /usr/local/mysql

**四、初始化mysql**

cd进入/usr/local/mysql目录下，执行下面命令：

shell> mysqld --initialize --user=mysql --basedir=/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64

此时会生成一个临时密码，可以在mysql\_error.log文件找到

shell> grep 'temporary password' /opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/log/mysql\_error.log

生成ssl

shell> mysql\_ssl\_rsa\_setup --basedir=/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64 --datadir=/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/data/

**五、设置启动项**

CentOS 6：

shell> cd /usr/local/mysql

shell> cp support-files/mysql.server /etc/init.d/mysql.server

shell> chkconfig --add mysql.server

shell> chkconfig mysql.server on

shell> chkconfig --list

CentOS 7：

shell> vim /usr/lib/systemd/system/mysqld.service

编辑内容如下

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#

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#

# systemd service file for MySQL forking server

#

[Unit]

Description=MySQL Server

Documentation=man:mysqld(8)

Documentation=http://dev.mysql.com/doc/refman/en/using-systemd.html

After=network.target

After=syslog.target

[Install]

WantedBy=multi-user.target

[Service]

User=mysql

Group=mysql

Type=forking

PIDFile=/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/run/mysql.pid

# Disable service start and stop timeout logic of systemd for mysqld service.

TimeoutSec=0

# Execute pre and post scripts as root

PermissionsStartOnly=true

# Needed to create system tables

#ExecStartPre=/usr/bin/mysqld\_pre\_systemd

# Start main service

ExecStart=/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/bin/mysqld --daemonize --pid-file=/opt/mysql/mysql-5.7.19-linux-glibc2.12-x86\_64/run/mysql.pid $MYSQLD\_OPTS

# Use this to switch malloc implementation

EnvironmentFile=-/etc/sysconfig/mysql

# Sets open\_files\_limit

LimitNOFILE = 65535

Restart=on-failure

RestartPreventExitStatus=1

PrivateTmp=false

让systemctl加载配置服务

shell> systemctl daemon-reload

shell> systemctl enable mysqld.service

shell> systemctl is-enabled mysqld

**六、启动mysql服务**

shell> systemctl start mysqld.service

登录mysql

shell> mysql –uroot –p

Enter password:

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

Your MySQL connection id is 3

Server version: 5.7.19-log MySQL Community Server (GPL)

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

mysql>

登陆成功后，设置MySQL密码

mysql> ALTER USER 'root'@'localhost' identified by 'root';

或者

mysql> set password=password("root");

刷新权限

mysql> flush privileges;  
mysql> exit;

**七、开启远程登录**

关闭防火墙

shell> systemctl stop firewalld.service

以权限用户root登录mysql;

1、选择mysql库

mysql> use mysql;

2、修改host值（以通配符%的内容增加主机/IP地址），也可以直接增加IP地址

mysql> update user set host = '%' where user ='root';

3、刷新MySQL的系统权限相关表

mysql> flush privileges;

或者

mysql> grant all privileges on \*.\* to 'root'@'%' identified by 'root' with grant option;

mysql> flush privileges;