

1. mysql

參考：

安裝：https://blog.csdn.net/tiantang_1986/article/details/94733020

教學的wget 5.6.44下載包會404, 用

wget

https://cdn.mysql.com//Downloads/MySQL-5.6/mysql-5.6.46-linux-glibc2.12-x86_64.tar.gz

解壓

tar -zvxf mysql-5.6.46-linux-glibc2.12-x86_64.tar.gz

移動

mv mysql-5.6.46-linux-glibc2.12-x86_64 /usr/local/mysql

新建mysql用户组

<groupadd mysql>

新建mysql用户并增加到mysql用户组

<useradd -g mysql mysql>

文件夾授權

<cd /usr/local/mysql>

<chown -R mysql:mysql ./>

修改設定檔

vim /etc/my.cnf

以以下內容取代(直接用最後一步的完整設定)

```
[mysqld]
port      = 3306
basedir   = /usr/local/mysql
socket    = /tmp/mysql.sock
datadir   = /data/mysql
tmpdir    = /tmp
log-error = /data/mysql/error.log
pid-file  = /data/mysql/mysql.pid
user      = mysql
key_buffer_size = 64M
max_allowed_packet = 10G
table_open_cache = 256
sort_buffer_size = 1M
net_buffer_length = 8K
read_buffer_size = 1M
read_rnd_buffer_size = 512K
myisam_sort_buffer_size = 16M
thread_cache_size = 32
query_cache_size = 32M
tmp_table_size = 64M
skip-grant-tables

[mysqldump]
quick
max_allowed_packet = 16M
```

创建数据所在目录并把文件所属用户组设置为mysql

```
mkdir -p /data/mysql  
chown -R mysql:mysql /data/mysql
```

mysql初始化操作, 如果已经已经初始化过了 , 最好在修改好配置后再重新初始化 , 保证mysql能成功运行

```
/usr/local/mysql/scripts/mysql_install_db --user=mysql --basedir=/usr/local/mysql  
--datadir=/data/mysql --pid-file=/data/mysql/mysql.pid --tmpdir=/tmp
```

初始化过程中如果出现下面的错误 :

FATAL ERROR: please install the following Perl modules before executing
/usr/local/mysql/scripts/mysql_install_db:

Data::Dumper

请先运行下面命令安装autoconf

```
yum -y install autoconf
```

=>在初始化的時候: /usr/local/mysql/scripts/mysql_install_db --user=mysql
--basedir=/usr/local/mysql --datadir=/data/mysql --pid-file=/data/mysql/mysql.pid
--tmpdir=/tmp

會遇到兩個錯誤如下 :

Installing MySQL system tables.../usr/local/mysql/bin/mysqld: error while loading shared

libraries: libaio.so.1: cannot open shared object file: No such file or directory

Installing MySQL system tables.../usr/local/mysql/bin/mysqld: error while loading shared
libraries: libnuma.so.1: cannot open shared object file: No such file or directory

解決方法:

```
yum -y install numactl  
yum install -y libaio
```

初始化完成之后, 可以设置环境变量

```
export PATH=$PATH:/usr/local/mysql/bin/
```

配置开机启动

```
vim /usr/local/mysql/support-files/mysql.server
```

需要把basedir、datadir两个参数修改成下面

```
# If you change base dir, you must also change datadir. These may get  
# overwritten by settings in the MySQL configuration files.  
  
basedir=  
datadir=  
  
basedir=/usr/local/mysql  
datadir=/data/mysql
```

把mysql服务启动脚本拷贝到系统的启动目录

```
cp /usr/local/mysql/support-files/mysql.server /etc/init.d/
```

正常启动mysql

```
# 启动命令
```

```
/usr/local/mysql/support-files/mysql.server start
```

```
# 停止命令
```

```
/usr/local/mysql/support-files/mysql.server stop
```

```
# 重启命令
```

```
support-files/mysql.server restart
```

安装完成后的信息提示:

```
#####
# Filling help tables...2020-02-20 21:40:49 0 [Warning] option 'max_allowed_packet'
#: unsigned value 10737418240 adjusted to 1073741824
# 2020-02-20 21:40:49 0 [Warning] TIMESTAMP with implicit DEFAULT value is deprecated. Please use --explicit_defaults_for_timestamp server option (see documentation for more details).
# 2020-02-20 21:40:49 0 [Note] Ignoring --secure-file-priv value as server is running with --bootstrap.
# 2020-02-20 21:40:49 0 [Note] /usr/local/mysql/bin/mysqld (mysqld 5.6.46) starting as process 15892 ...
OK
```

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/local/mysql/bin/mysqladmin -u root password 'new-password'  
/usr/local/mysql/bin/mysqladmin -u root -h centos7 password 'new-password'
```

Alternatively you can run:

```
/usr/local/mysql/bin/mysql_secure_installation
```

which will also give you the option of removing the test databases and anonymous user created by default. This is strongly recommended for production servers.

See the manual for more instructions.

You can start the MySQL daemon with:

```
cd . ; /usr/local/mysql/bin/mysqld_safe &
```

You can test the MySQL daemon with mysql-test-run.pl

```
cd mysql-test ; perl mysql-test-run.pl  
Please report any problems at http://bugs.mysql.com/
```

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>

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

WARNING: Default config file /etc/my.cnf exists on the system
This file will be read by default by the MySQL server
If you do not want to use this, either remove it, or use the
--defaults-file argument to mysqld_safe when starting the server

Please report any problems at <http://bugs.mysql.com/>

先啟動再安裝

依據：/usr/local/mysql/bin/mysql_secure_installation

發現錯誤：Can't connect to local MySQL server through socket '/tmp/mysql.sock'
就算my.cnf的socket路徑已經設定了還是沒用

最後只好設定軟連結：<ln -s /data/mysql/mysql.sock /tmp/mysql.sock>

```
[root@qat-mysql mysql]# /usr/local/mysql/bin/mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MySQL
      SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!

In order to log into MySQL to secure it, we'll need the current
password for the root user. If you've just installed MySQL, and
you haven't set the root password yet, the password will be blank,
so you should just press enter here.

Enter current password for root (enter for none):
OK, successfully used password, moving on...

Setting the root password ensures that nobody can log into the MySQL
root user without the proper authorisation.

Set root password? [Y/n] n
... skipping.

By default, a MySQL installation has an anonymous user, allowing anyone
to log into MySQL without having to have a user account created for
them. This is intended only for testing, and to make the installation
go a bit smoother. You should remove them before moving into a
production environment.

Remove anonymous users? [Y/n] Y
... Success!

Normally, root should only be allowed to connect from 'localhost'. This
ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? [Y/n] n
... skipping.

By default, MySQL comes with a database named 'test' that anyone can
access. This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n] Y
- Dropping test database...
... Success!
- Removing privileges on test database...
... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n] Y
```

設置允許外界訪問：https://blog.csdn.net/qaojie_csdn/article/details/80777196

<https://www.jianshu.com/p/481763139ef2>

<https://blog.csdn.net/xizaihui/article/details/52962057>

幾個重點

firewall-cmd --permanent --query-port=3306/tcp ## 檢查端口3306是否已開放

firewall-cmd --permanent --add-port=3306/tcp ## 開放3306端口

```
firewall-cmd --reload ## 刷新防火墙  
开启远程访问权限“%”代表所有人(如果勾了關閉root遠程訪問)  
mysql>use mysql;  
mysql>GRANT ALL PRIVILEGES ON *.* TO 'root'@'%' IDENTIFIED BY  
'123456' WITH GRANT OPTION;  
=====  
帳號密碼:root / 123456  
mysql -u root -p
```

新增數據庫GM:
CREATE DATABASE GM;

命令启动/关闭MySQL实例
service mysqld start/stop
或是在:/usr/local/mysql下
启动命令
.support-files/mysql.server start
停止命令
.support-files/mysql.server stop
重启命令
.support-files/mysql.server restart

解决bash: mysql: command not found 的方法：
这个是因为/usr/local/bin目录下缺失mysql导致，只需要一下方法建立软链接，即可以解决：
ln -s /usr/local/mysql/bin/mysql /usr/local/bin/
source ~/.bash_profile

或是
vim ~/.bash_profile
PATH=\$PATH:\$HOME/bin:/usr/local/bin:/usr/local/mysql/bin/
source ~/.bash_profile

SHOW VARIABLES LIKE 'character%';

* 後續在操作後台時，發現編碼有問題，輸入中文會變成問號

游戏列表				
● 游戏列表 ×				
+ 添加游戏 ■ 批量删除 ↻ 刷新				
游戏搜索:	游戏名称、代码	平台-	类型-	
<input type="checkbox"/>	编号	游戏名称	所属平台/分类	游戏类型
	#1	?? 🇨🇳	BIRD/网页游戏	捕鱼游戏
	#2	水浒传 🇨🇳	FISH/网页游戏	捕鱼游戏

查詢編碼如下：

Variable_name	Value
character_set_client	utf8mb4
character_set_connection	utf8mb4
character_set_database	latin1
character_set_filesystem	binary
character_set_results	utf8mb4
character_set_server	latin1
character_set_system	utf8
character_sets_dir	/usr/local/mysql/share/charsets/

根據此兩篇操作後

<https://www.cnblogs.com/licunsheng/articles/10338535.html>

<https://shazi.info/mysql-%E5%B0%87%E9%A0%90%E8%A8%AD%E8%B3%87%E6%96%99%E5%BA%AB%E7%B7%A8%E7%A2%BC-latin1-%E6%94%B9%E7%82%BA-utf8/>

將/etc/my.cnf, 增加幾行如下：

```
[client]
port = 3306
socket = /data/mysql/mysql.sock
default-character-set=utf8

[mysqld]
character-set-server=utf8
collation-server=utf8_general_ci
datadir = /data/mysql
socket = /data/mysql/mysql.sock

[mysql]
no-auto-rehash
default-character-set=utf8
```

完整的**my.cnf**內容如下：

```
[client]
port = 3306
socket = /data/mysql/mysql.sock
default-character-set=utf8

[mysqld]
port      = 3306
basedir = /usr/local/mysql
character-set-server=utf8
collation-server=utf8_general_ci
datadir = /data/mysql
socket = /data/mysql/mysql.sock
tmpdir   = /tmp
user = mysql
key_buffer_size = 64M
max_allowed_packet = 10G
```

```
table_open_cache = 256
sort_buffer_size = 1M
net_buffer_length = 8K
read_buffer_size = 1M
read_rnd_buffer_size = 512K
myisam_sort_buffer_size = 16M
thread_cache_size = 32
query_cache_size = 32M
tmp_table_size = 64M
#skip-grant-tables

# Disabling symbolic-links is recommended to prevent assorted
security risks
symbolic-links=0
# Settings user and group are ignored when systemd is used.
# If you need to run mysqld under a different user or group,
# customize your systemd unit file for mariadb according to
the
# instructions in http://fedoraproject.org/wiki/Systemd

[mysqld_safe]
log-error = /data/mysql/error.log
pid-file = /data/mysql/mysql.pid

[mysql]
no-auto-rehash
default-character-set=utf8

[mysqldump]
quick
max_allowed_packet = 16M

#
# include all files from the config directory
#
!includedir /etc/my.cnf.d
```

再次查詢編碼如下：

Variable_name	Value
character_set_client	utf8mb4
character_set_connection	utf8mb4
character_set_database	latin1
character_set_filesystem	binary
character_set_results	utf8mb4
character_set_server	utf8
character_set_system	utf8
character_sets_dir	/usr/local/mysql/share/charsets/

可看到database的編碼還是latin1(如果是新建的DB那編碼就會是utf8), 要進入mysql修改:

進入該資料庫:

```
ALTER DATABASE GM CHARACTER SET utf8 COLLATE utf8_general_ci;
再次查詢就正常了:
```

Variable_name	Value
character_set_client	utf8mb4
character_set_connection	utf8mb4
character_set_database	utf8
character_set_filesystem	binary
character_set_results	utf8mb4
character_set_server	utf8
character_set_system	utf8
character_sets_dir	/usr/local/mysql/share/charsets/

mysql:3306

Pw : 6gyQmfv4ithRZuQLr1wH@?

<https://dev.mysql.com/doc/mysql-repo-excerpt/5.6/en/linux-installation-yum-repo.html>

/etc/yum.repos.d/mysql56.repo

```
# Enable to use MySQL 5.6
[mysql56-community]
name=MySQL 5.6 Community Server
baseurl=http://repo.mysql.com/yum/mysql-5.6-community/el/6/$basearch/
enabled=1
gpgcheck=0
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-mysql
```

yum install -y <https://dev.mysql.com/get/mysql80-community-release-el7-3.noarch.rpm>

mysql80.repo

```
[mysql80-community]
name=MySQL 8.0 Community Server
baseurl=http://repo.mysql.com/yum/mysql-8.0-community/el/7/$basearch/
enabled=1
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-mysql
```

gpgkey = <https://dev.mysql.com/doc/refman/8.0/en/checking-gpg-signature.html>

yum repolist enabled | grep "mysql.*-community.*"

yum install -y mysql-community-server.x86_64

```
mkdir /data/mysql  
chown mysql:mysql /data/mysql -R
```

```
vi /etc/my.cnf
```

```
systemctl enable --now mysqld
```

```
cat /var/log/mysqld.log | grep password  
> show "A temporary password is generated for root@localhost:  
>> ALTER USER 'root'@'localhost' IDENTIFIED BY '6gyQmfv4ithRZuQLr1wH@?';  
>>> mysql -u root -p --connect-expired-password -e " ALTER USER 'root'@'localhost'  
IDENTIFIED BY '6gyQmfv4ithRZuQLr1wH@?';"
```

```
mysql -u root -e "SET PASSWORD FOR root@'localhost' =  
PASSWORD('6gyQmfv4ithRZuQLr1wH@?');"  
> ERROR 1819 (HY000): Your password does not satisfy the current policy requirements  
>> UNINSTALL COMPONENT 'file://component_validate_password';  
(https://dev.mysql.com/doc/refman/8.0/en/validate-password-installation.html
```

```
allow mysql user = root , connect from anyhost  
mysql>  
use mysql;  
select user,host from mysql.user;  
update user set host='%' where user="root" and host="localhost";  
GRANT ALL PRIVILEGES ON *.* TO 'root'@'%'
```

mys

```
GRANT ALL PRIVILEGES ON *.* TO      'root'@ '%'      IDENTIFIED BY  
'6gyQmfv4ithRZuQLr1wH@?';  
GRANT ALL PRIVILEGES ON mydb.* TO 'myuser'@ '%' IDENTIFIED  
CREATE USER 'root'@ '%' IDENTIFIED BY '6gyQmfv4ithRZuQLr1wH@?';  
GRANT ALL PRIVILEGES ON *.* TO 'root'@ '%';
```

my.cnf

ori 5.6	ori 8	youda
[mysqld] datadir=/var/lib/mysql socket=/var/lib/mysql/mysql.sock symbolic-links=0 sql_mode=NO_ENGINE_SUBSTITUTION,STRICT_TRANS_TABLES [mysqld_safe] log-error=/var/log/mysqld.log pid-file=/var/run/mysqld/mysqld.pid	[mysqld] datadir=/var/lib/mysql datadir=/data/mysql socket=/var/lib/mysql/mysql.sock log-error=/var/log/mysqld.log pid-file=/var/run/mysqld/mysqld.pid ??mysqlx 33060 port	[client] port = 3306 socket = /data/mysql/mysql.sock default-character-set=utf8 [mysqld] port = 3306 basedir = /usr/local/mysql character-set-server=utf8 collation-server=utf8_general_ci datadir = /data/mysql socket = /data/mysql/mysql.sock tmpdir = /tmp user = mysql key_buffer_size = 64M max_allowed_packet = 10G

```
table_open_cache = 256
sort_buffer_size = 1M
net_buffer_length = 8K
read_buffer_size = 1M
read_rnd_buffer_size = 512K
myisam_sort_buffer_size = 16M
thread_cache_size = 32
query_cache_size = 32M
tmp_table_size = 64M
skip-grant-tables
symbolic-links=0

[mysqld_safe]
log-error = /data/mysql/error.log
pid-file = /data/mysql/mysql.pid

[mysql]
no-auto-rehash
default-character-set=utf8

[mysqldump]
quick
max_allowed_packet = 16M
!includedir /etc/my.cnf.d
```

init schema

```
create database gm character set utf8 collate utf8_general_ci;
create database GM default character set utf8mb4 collate utf8mb4_unicode_ci;
```

```
mysql -u root -p GM < gm.sql
```

```
error> java.sql.SQLException: null, message from server: "Host '10.1.1.152' is blocked because of many connection errors; unblock with 'mysqladmin flush-hosts'"
```

```
my.cnf
```

```
> log_error_verbosity=3
```

```
mysql
```

```
show variables like "log_error_verbosity"; (default is 2
SET GLOBAL log_error_verbosity=3;
```

```
mysql -u root -p (20200810, bfdev; 20200811, bfqat
> SET GLOBAL max_connect_errors=10000;
> show variables like "max_connect_errors";
```

