# docker or compose 部署mysql

## docker部署

docker run -d --name db-01 \  
-p 3306:3306 \  
-e MYSQL\_ROOT\_PASSWORD=123.com \  
-v /etc/localtime:/etc/localtime \  
-v mysql01\_conf:/etc/mysql/conf.d \  
-v mysql01\_data:/var/lib/mysql \  
-v mysql01\_logs:/var/log \  
mysql:5.7.32

## docker-compose部署

mkdir conf log  
chown -R polkitd.root log/

version: '3'  
services:  
 mysql:  
 image: mysql:5.7  
 container\_name: mysql\_3306   
 hostname: mysql  
 restart: always   
 privileged: true  
 volumes:  
 - "/etc/localtime:/etc/localtime:ro"  
 - "./conf/my.cnf:/etc/mysql/my.cnf"  
 - "./data:/var/lib/mysql"  
 - "./log/mysqld:/var/log/mysqld"  
 - "./docker-entrypoint-initdb.d:/docker-entrypoint-initdb.d" # 可执行初始化sql脚本的目录 -- tips:`/var/lib/mysql`目录下无数据的时候才会执行(即第一次启动的时候才会执行)  
 environment: # 设置环境变量,相当于docker run命令中的-e  
 TZ: Asia/Shanghai  
 LANG: en\_US.UTF-8  
 MYSQL\_ROOT\_PASSWORD: root # 设置root用户密码  
 #MYSQL\_DATABASE: demo # 初始化的数据库名称  
 ports: # 映射端口  
 - "3306:3306"

### vim conf/my.cnf

[client]  
default-character-set = utf8  
  
[mysqld]  
character-set-server=utf8  
log-bin=mysql-bin  
server-id=1  
pid-file = /var/run/mysqld/mysqld.pid  
socket = /var/run/mysqld/mysqld.sock  
datadir = /var/lib/mysql  
log\_error=/var/log/mysqld/mysqld\_error.log  
sql\_mode=STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_AUTO\_CREATE\_USER,NO\_ENGINE\_SUBSTITUTION  
symbolic-links=0  
secure\_file\_priv =  
wait\_timeout=120  
interactive\_timeout=120  
#default-time\_zone = '+8:00'  
skip-external-locking  
skip-name-resolve  
open\_files\_limit = 10240  
max\_connections = 1000  
max\_connect\_errors = 6000  
table\_open\_cache = 800  
max\_allowed\_packet = 40m  
sort\_buffer\_size = 2M  
join\_buffer\_size = 1M  
thread\_cache\_size = 32  
query\_cache\_size = 64M  
transaction\_isolation = READ-COMMITTED  
tmp\_table\_size = 128M  
max\_heap\_table\_size = 128M  
log-bin = mysql-bin  
sync-binlog = 1  
binlog\_format = ROW  
binlog\_cache\_size = 1M  
key\_buffer\_size = 128M  
read\_buffer\_size = 2M  
read\_rnd\_buffer\_size = 4M  
bulk\_insert\_buffer\_size = 64M  
lower\_case\_table\_names = 1  
explicit\_defaults\_for\_timestamp=true  
skip\_name\_resolve = ON  
event\_scheduler = ON  
log\_bin\_trust\_function\_creators = 1  
innodb\_buffer\_pool\_size = 512M  
innodb\_flush\_log\_at\_trx\_commit = 1  
innodb\_file\_per\_table = 1  
innodb\_log\_buffer\_size = 4M  
innodb\_log\_file\_size = 256M  
innodb\_max\_dirty\_pages\_pct = 90  
innodb\_read\_io\_threads = 4  
innodb\_write\_io\_threads = 4  
  
#slow\_query  
slow\_query\_log=ON  
slow\_query\_log\_file=/var/log/mysqld/mysql\_slow\_query.log  
long\_query\_time=2

[client]  
default-character-set = utf8  
  
[mysqld]  
character-set-server=utf8  
log-bin=mysql-bin  
server-id=1  
pid-file = /var/run/mysqld/mysqld.pid  
socket = /var/run/mysqld/mysqld.sock  
datadir = /var/lib/mysql  
log\_error=/var/log/mysqld/mysqld\_error.log  
sql\_mode=STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_AUTO\_CREATE\_USER,NO\_ENGINE\_SUBSTITUTION  
symbolic-links=0  
secure\_file\_priv =  
wait\_timeout=120  
interactive\_timeout=120  
#default-time\_zone = '+8:00'  
skip-external-locking  
skip-name-resolve  
open\_files\_limit = 10240  
max\_connections = 1000  
max\_connect\_errors = 6000  
table\_open\_cache = 800  
max\_allowed\_packet = 40m  
sort\_buffer\_size = 2M  
join\_buffer\_size = 1M  
thread\_cache\_size = 32  
query\_cache\_size = 64M  
transaction\_isolation = READ-COMMITTED  
tmp\_table\_size = 128M  
max\_heap\_table\_size = 128M  
sync-binlog = 1  
binlog\_format = ROW  
binlog\_cache\_size = 1M  
key\_buffer\_size = 128M  
read\_buffer\_size = 2M  
read\_rnd\_buffer\_size = 4M  
bulk\_insert\_buffer\_size = 64M  
lower\_case\_table\_names = 1  
explicit\_defaults\_for\_timestamp=true  
skip\_name\_resolve = ON  
event\_scheduler = ON  
  
server-id=1022  
  
#innodb  
innodb\_flush\_log\_at\_trx\_commit = 2  
innodb\_buffer\_pool\_size = 1G #20-65% memory  
innodb\_buffer\_pool\_instances = 8  
#innodb\_lru\_scan\_depth = 2000 #ssd下配置2000以上  
innodb\_lock\_wait\_timeout = 60  
#innodb\_io\_capacity\_max = 8000 #ssd 8000  
innodb\_io\_capacity = 4000   
innodb\_flush\_method = O\_DIRECT   
innodb\_file\_format = Barracuda  
innodb\_file\_format\_max = Barracuda  
#innodb\_flush\_neighbors = 0 #ssd  
innodb\_log\_file\_size = 256M  
innodb\_log\_buffer\_size = 16M  
innodb\_print\_all\_deadlocks = 1  
innodb\_strict\_mode = 1  
innodb\_file\_per\_table = 1  
  
#binlog  
log-bin = mysql-bin  
log-slave-updates = 1   
binlog-format=row  
sync-master-info = 1  
expire\_logs\_days = 15  
max\_binlog\_size = 100M   
log\_bin\_trust\_function\_creators=1  
binlog\_gtid\_simple\_recovery=1  
  
#slow\_query  
slow\_query\_log=ON  
slow\_query\_log\_file=/var/log/mysqld/mysql\_slow\_query.log  
long\_query\_time=2  
  
#GTID   
gtid-mode=on  
enforce-gtid-consistency=on  
master-info-repository=TABLE  
relay-log-info-repository=TABLE  
slave-parallel-workers=0  
binlog-checksum=CRC32  
master-verify-checksum=1  
slave-sql-verify-checksum=1  
binlog-rows-query-log\_events=1  
auto-increment-increment = 2  
auto-increment-offset = 1  
skip\_slave\_start=1  
log\_slave\_updates=1

windows

[mysqld]  
port=63306  
character\_set\_server=utf8  
basedir=Y:\mysql-5.7.38-winx64  
datadir=Y:\mysql-5.7.38-winx64\data  
max\_connections=1000  
max\_connect\_errors=10  
default-storage-engine=INNODB  
server-id=1  
skip\_name\_resolve = 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"  
lower\_case\_table\_names=1  
innodb\_file\_per\_table = 1  
log\_timestamps=SYSTEM  
log-error = error.log  
slow\_query\_log = 1  
slow\_query\_log\_file = slow.log  
long\_query\_time = 5  
log-bin = binlog  
binlog\_format = row  
expire\_logs\_days = 15  
log\_bin\_trust\_function\_creators = 1  
log-bin=Y:\mysql-5.7.38-winx64\logs\mysql-bin.log  
log-error=Y:\mysql-5.7.38-winx64\logs\mysql\_error.log  
  
slow\_query\_log=ON  
slow\_query\_log\_file=Y:\mysql-5.7.38-winx64\logs\mysql\_slow\_query.log  
long\_query\_time=2  
#skip-grant-tables  
  
[client]  
port=63306  
default-character-set=utf8

### 启动

chmod -R 777 log  
chown -R polkitd.root log/  
docker-compose up -d

<https://gitee.com/zhengqingya/docker-compose/blob/master/Linux/mysql/docker-compose-mysql5.7.yml#>

<https://blog.51cto.com/riverxyz/2956641>

<https://zhuanlan.zhihu.com/p/550812951>

<https://blog.csdn.net/m0_67265464/article/details/124525899>