**windows下MySQL5.6实现主从数据库同步数据**

**一.单向同步**

主数据库（mysql5.6）192.168.1.104

从数据库（mysql5.6）192.168.1.105

略去创建库的步骤,这里认为你同步的数据库已经存在，而且主从数据库的库和表结构均相同

1.在主数据库上创建用户

insert into mysql.user(host,user,password)

values('localhost','admin',password('123456'));

flush privileges;

2.主数据库提供用户，赋值访问权限

仅仅192.168.1.105这个机器使用admin/123456同步

grant replication slave,reload,super on \*.\* to 'admin'@'192.168.1.105' identified by '123456' with grant option;

所有人都只用admin/123456同步

grant replication slave,reload,super on \*.\* to 'admin'@'%' identified by '123456' with grant option;

3.修改104主数据库的my.ini

在[mysqld]节点下配置一下代码

#设置服务器id，为1表示主服务器，注意：如果原来的配置文件中已经有这一行，就不用再添加了。

server\_id=1

log\_bin=mysql-bin #启动MySQ二进制日志系统，注意：如果原来的配置文件中已经有这一行，就不用再添加了。

binlog\_do\_db=test #需要同步的数据库名，如果有多个数据库，可重复此参数，每个数据库一行

binlog\_ignore\_db=mysql #不同步mysql系统数据库

binlog\_ignore\_db=information\_schema #不同步information\_schema系统数据库

然后保存my.ini配置文件

管理员打开cmd

先停止mysql服务，net stop mysql

然后重启mysql服务，net start mysql

服务启动成功后，登陆mysql

mysql -u root -p123456 注意，-p和123456之间不用空格

在查看主数据库的状态，show master status\G;

+------------------+----------+--------------+------------------+  
| File                        | Position  | Binlog\_Do\_DB | Binlog\_Ignore\_DB |  
+------------------+----------+--------------+------------------+  
| mysql-bin.000001 |    120     | test     | mysql                  |  
+------------------+----------+--------------+------------------+  
1 row in set (0.00 sec)

注意：这里记住File的值：mysql-bin.000001和Position的值：120，后面会用到。

4.修改105从数据库的my.ini文件

server\_id=2

log\_bin=mysql-bin

replicate\_do\_db=test

replicate\_ignore\_db=mysql

replicate\_ignore\_db=information\_schema

保存my.ini

然后停止mysql服务，net stop mysql

在启动mysql服务，net start mysql

然后进入mysql -u root -p123456

先停止从数据库同步，stop slave,

再输入：change master to master\_host='192.168.1.104',master\_user='admin',master\_password='123456',master\_log\_file='mysql-bin.000001',master\_log\_pos=120; #执行同步语句

开启同步，start slave

注:经测试，stop slave ,start slave 和 slave start,slave stop一样都可以，

最后查看一下状态：show slave status;

mysql> show slave status\G;

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Slave\_IO\_State: Waiting for master to send event

Master\_Host: 192.168.1.104

Master\_User: test01

Master\_Port: 3306

Connect\_Retry: 60

Master\_Log\_File: mysql-bin.000001

Read\_Master\_Log\_Pos: 120

Relay\_Log\_File: mysql-bin.000001

Relay\_Log\_Pos: 283

Relay\_Master\_Log\_File: mysql-bin.000001

Slave\_IO\_Running: Yes

Slave\_SQL\_Running: Yes

Replicate\_Do\_DB:

Replicate\_Ignore\_DB: mysql,information\_schema

Replicate\_Do\_Table:

Replicate\_Ignore\_Table:

Replicate\_Wild\_Do\_Table:

Replicate\_Wild\_Ignore\_Table:

Last\_Errno: 0

Last\_Error:

Skip\_Counter: 0

Exec\_Master\_Log\_Pos: 120

Relay\_Log\_Space: 465

Until\_Condition: None

Until\_Log\_File:

Until\_Log\_Pos: 0

Master\_SSL\_Allowed: No

Master\_SSL\_CA\_File:

Master\_SSL\_CA\_Path:

Master\_SSL\_Cert:

Master\_SSL\_Cipher:

Master\_SSL\_Key:

Seconds\_Behind\_Master: 0

Master\_SSL\_Verify\_Server\_Cert: No

Last\_IO\_Errno: 0

Last\_IO\_Error:

Last\_SQL\_Errno: 0

Last\_SQL\_Error:

Replicate\_Ignore\_Server\_Ids:

Master\_Server\_Id: 1

Master\_UUID: f44dc946-f462-11e4-81cc-00ffb613a054

Master\_Info\_File: D:\GreenProgramFiles\MySQL Server 5.6\data\master

.info

SQL\_Delay: 0

SQL\_Remaining\_Delay: NULL

Slave\_SQL\_Running\_State: Slave has read all relay log; waiting for the sla

ve I/O thread to update it

Master\_Retry\_Count: 86400

Master\_Bind:

Last\_IO\_Error\_Timestamp:

Last\_SQL\_Error\_Timestamp:

Master\_SSL\_Crl:

Master\_SSL\_Crlpath:

Retrieved\_Gtid\_Set:

Executed\_Gtid\_Set:

Auto\_Position: 0

1 row in set (0.00 sec)

注：Slave\_IO\_Running: Yes

Slave\_SQL\_Running: Yes

这两个都是yes的时候同步才会成功发生，否则不能实现同步

5.最后在主数据库上执行插入，更改，删除语句，在从数据库上查看，数据保持一致了，

**二.双向同步**

在上述配置保持不变的情况下，各自增加主从配置项

104:主数据库已经配置完毕，需要配置从数据库

log\_bin=mysql-bin

replicate\_do\_db=test

replicate\_ignore\_db=mysql

replicate\_ignore\_db=information\_schema

重启mysql，登陆后输入：

stop slave;

change master to master\_host='192.168.1.105',master\_user='admin',master\_password='123456',master\_log\_file='mysql-bin.0000001',master\_log\_pos=120;

# master\_log\_file='mysql-bin.0000001',master\_log\_pos=120;

其中这两个参数是根据master主数据库的二进制日志文件和为止固定的

start slave;

show slave status\G;

105：从数据库已经配置完毕，需要配置主数据库

log\_bin=mysql-bin

binlog\_do\_db=test

binlog\_ignore\_db=mysql

binlog\_ignore\_db=information\_schema

重启mysql，登陆输入：

flush tables with read lock;

show master status\G;得到主数据库的信息

根据这这个命令的结果在跟新104主从数据库的同步日志和位置

mysql>change master to master\_log\_file='mysql-bin.00002',master\_log\_pos=120;

同时要为用户开放权限

仅仅192.168.1.105这个机器使用admin/123456同步

grant replication slave,reload,super on \*.\* to 'admin'@'192.168.1.105' identified by '123456' with grant option;

所有人都只用admin/123456同步

grant replication slave,reload,super on \*.\* to 'admin'@'%' identified by '123456' with grant option;

GRANT REPLICATION SLAVE ON \*.\* TO 'admin'@'%' IDENTIFIED BY '123456';

GRANT FILE,SELECT,REPLICATION SLAVE ON \*.\* TO 'admin'@'%' IDENTIFIED BY '123456';

最后配置完毕的结果

104: 主从数据库

#主数据库配置项

server\_id=1

#auto\_increment\_increment=2

#auto\_increment\_offset=1

log\_bin=mysql-bin

binlog\_do\_db=test

binlog\_ignore\_db=mysql

binlog\_ignore\_db=information\_schema

#从数据库配置项

replicate\_do\_db= test #同步的数据库

replicate\_ignore\_db=mysql

replicate\_ignore\_db=information\_schema

105:主从数据库

#从数据库配置项

server\_id=2

#auto\_increment\_increment=2

#auto\_increment\_offset=1

log\_bin=mysql-bin

replicate\_do\_db= test #同步的数据库

replicate\_ignore\_db=mysql

replicate\_ignore\_db=information\_schema

#主数据库配置项

binlog\_do\_db=test

binlog\_ignore\_db=mysql

binlog\_ignore\_db=information\_schema

遇到的问题总结：

1.经测试，主mysql5.6,从mysql5.5,不能实现同步，

Slave\_IO\_Running: No

Slave\_SQL\_Running: Yes

错误提示：Last\_IO\_Error: Got fatal error 1236 from master when reading data from binary log:

问题：一般版本不一致

2.

Slave\_IO\_Running: Yes

Slave\_SQL\_Running: No

3. Last\_IO\_Error: Fatal error: The slave I/O thread stops because master and slave have equal MySQL server UUIDs; these UUIDs must be different for

replication to work.

mysql>show variables like ‘server\_id';

+—————+——-+  
| Variable\_name | Value |  
+—————+——-+  
| server\_id | 3 |  
+—————+——-+

主从并不一样，排除该问题。

找到原因在于，拷贝整个data目录，把auto.cnf文件也拷贝过来了，里面记录了数据库的uuid，每个库的uuid应该是不一样的。

[auto]  
server-uuid=6dcee5be-8cdb-11e2-9408-90e2ba2e2ea6

解决办法，按照这个16进制格式，随便改下，重启mysql即可。

4. 111010 17:35:49 [ERROR] Error reading packet from server: Client requested master

to start replication from impossible position ( server\_errno=1236)

111010 17:35:49 [ERROR] Slave I/O: Got fatal error 1236 from master when reading data

from binary log: 'Client requested master to start replication from impossible

position', Error\_code: 1236

111010 17:35:49 [Note] Slave I/O thread exiting, read up to log 'mysql-bin.000288',

position 627806304

解决方法：

mysql> stop slave;

mysql> change master to master\_log\_file='mysql-bin.000288',master\_log\_pos=627625751;

mysql> start slave;

5.在一台主机上配置一台从机，启动的时候报 ERROR 1872 (HY000): Slave failed to initialize relay log info structure from the

repository(双向配置后，启动从机报错)

解决方法：配置relay\_log=relay-，

然后再重新停止net stop mysql,

启动net start mysql,

登陆mysql -u root -p123456

运行reset slave

然后启动从机start slave