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| --- | --- | --- |
| **Course** | **:** | **Distributed System** |
| **Name** | **:** | **Luu Duc Thanh** |
| **Student ID** | **:** | **20176873** |
| **Class** | **:** | **ICT 04 K62** |

# Lab-work

# Chap 5: Consistency and Replication

Question 1:

The output of the query is:

mysql> select \* from pet;

+----------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+----------+--------+---------+------+------------+------------+

| Whistler | Gwen | bird | NULL | 1997-12-09 | NULL |

| Fluffy | Harold | cat | f | 1993-02-04 | NULL |

| Claws | Gwen | cat | m | 1994-03-17 | NULL |

| Buffy | Harold | dog | f | 1989-05-13 | NULL |

| Fang | Benny | dog | m | 1990-08-27 | 1997-04-04 |

+----------+--------+---------+------+------------+------------+

5 rows in set (0,00 sec)

The command used to add another entry to the table pet is:

***INSERT INTO pet VALUE (‘Dawgo’, ‘Tony', ‘chicken', ‘f', ‘1999-03-30', NULL);***

The result after adding the new entry is:

mysql> select \* from pet;

+----------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+----------+--------+---------+------+------------+------------+

| Whistler | Gwen | bird | NULL | 1997-12-09 | NULL |

| Fluffy | Harold | cat | f | 1993-02-04 | NULL |

| Claws | Gwen | cat | m | 1994-03-17 | NULL |

| Buffy | Harold | dog | f | 1989-05-13 | NULL |

| Fang | Benny | dog | m | 1990-08-27 | 1997-04-04 |

| Dawgo | Tony | chicken | f | 1999-03-30 | NULL |

+----------+--------+---------+------+------------+------------+

6 rows in set (0,00 sec)

Question 2:

The name of the log file is ***mysql-bin.000001*** and the position is ***8250***, both of which are read from the output of the query ***SHOW MASTER STATUS;***

mysql> show master status;

+------------------+----------+--------------+------------------+-------------------+

| File | Position | Binlog\_Do\_DB | Binlog\_Ignore\_DB | Executed\_Gtid\_Set |

+------------------+----------+--------------+------------------+-------------------+

| mysql-bin.000001 | 8250 | petdatabase | | |

+------------------+----------+--------------+------------------+-------------------+

1 row in set (0,00 sec)

Question 3:

Yes, the file ***petdatabase.sql*** has been sent successfully to the Slave machine.

thanhld@thanhld-02:~$ ls

Desktop Documents Downloads Music petdatabase.sql Pictures Public Templates Videos

As the url given in the ***scp*** command is “.” the file is stored in the ***home folder*** of the user used in the command ***scp***. In my case, it is ***/home/thanhld/petdatabase.sql***

Question 4:

The status information that I received is:

mysql> show slave status\G

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

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

Master\_Host: 192.168.56.7

Master\_User: slave\_user

Master\_Port: 3306

Connect\_Retry: 60

Master\_Log\_File: mysql-bin.000003

Read\_Master\_Log\_Pos: 156

Relay\_Log\_File: mysql-relay-bin.000005

Relay\_Log\_Pos: 371

Relay\_Master\_Log\_File: mysql-bin.000003

Slave\_IO\_Running: Yes

Slave\_SQL\_Running: Yes

Replicate\_Do\_DB:

Replicate\_Ignore\_DB:

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: 156

Relay\_Log\_Space: 795

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: cf6a1aca- d001-11eb-8db3-080027ff7052

Master\_Info\_File: mysql.slave\_master\_info

SQL\_Delay: 0

SQL\_Remaining\_Delay: NULL

Slave\_SQL\_Running\_State: Slave has read all relay log; waiting for more updates

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

Replicate\_Rewrite\_DB:

Channel\_Name:

Master\_TLS\_Version:

Master\_public\_key\_path:

Get\_master\_public\_key: 0

Network\_Namespace:

1 row in set, 1 warning (0.00 sec)

By checking 3 following fields, I ensure that the slave thread is OK and running.

Last\_IO\_Errno: 0

Last\_IO\_Error:

Last\_SQL\_Errno: 0

It’ because at the first attempt, I got some error and these fields are where I found out the problem and fix it.

Last\_IO\_Errno: 2003

Last\_IO\_Error: error connecting to master 'slave\_user@192.168.56.8:3306' - retry-time: 60 retries: 1 message: Can't connect to MySQL server on '192.168.56.8:3306' (111)

Last\_SQL\_Errno: 0

Question 5:

In the Slave machine, the new entry has been successfully replicated. The command to verify is ***SELECT \* FROM petdatabase.pet;***

The check result is:

mysql> select \* from pet;

+----------+--------+---------+------+------------+------------+

| name | owner | species | sex | birth | death |

+----------+--------+---------+------+------------+------------+

| Whistler | Gwen | bird | NULL | 1997-12-09 | NULL |

| Fluffy | Harold | cat | f | 1993-02-04 | NULL |

| Claws | Gwen | cat | m | 1994-03-17 | NULL |

| Buffy | Harold | dog | f | 1989-05-13 | NULL |

| Fang | Benny | dog | m | 1990-08-27 | 1997-04-04 |

| Dawgo | Tony | chicken | f | 1999-03-30 | NULL |

| Puffball | Diane | hamster | f | 1999-03-30 | NULL |

+----------+--------+---------+------+------------+------------+

7 rows in set (0.00 sec)