**In this tutorial, we will explain how to set up a MySQL Master/Slave replication with one master and one slave server on Centos 7**

Prerequisites : We create two servers or vms in same network ,we can using private IP if not support public UP.

**Master-IP : 10.128.0.2**

**Slave-IP : 10.128.0.3**

**- Install MySQL:**Install MySQL on both the Master and Slave servers:

$ sudo yum local install <https://dev.mysql.com/get/mysql57-community-release-el7-> 11.noarch.rpmsudo

$ yum install mysql-community-server  
  
When MySQL server starts for the first time, a temporary password is generated for the MySQL root user. To find the password use the following grep command :

sudo grep 'temporary password' /var/log/mysqld.log  
  
**Note** : if there’s not showing any password , you must delete /var/lib/mysql and reinstall mysql service.

Run the mysql\_secure\_installation command to set your new root password and improve the security of the MySQL instance:

Enter the temporary root password and answer Y (yes) to all questions.

**Configure Master Server :**

To do so open the MySQL configuration file and add the following lines in the [mysqld] section:

$ sudo nano /etc/my.cnf

Add thefollowing lines to my.cnf

bind-address = 10.128.0.2

server-id = 1

log\_bin = mysql-bin

Just done , restart MySQL Service

$ Systemctl restart mysqld

Now , create new user replication & login to mysql server by root user

$ mysql -u root –p

From mysql prompt , we create replica user for grant replication slave to this user

Mysql > CREATE USER 'replica'@'10.128.0.3' IDENTIFIED BY 'strong\_password';

Mysql > GRANT REPLICATION SLAVE ON \*.\* TO 'replica'@'10.128.0.3';

Excute this command from mysql prompt known binary file name and position:

Mysql > show master status\G;

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

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| mysql-bin.000004 | 316

Take note of file name, **‘mysql-bin.000004’** and Position **‘316’**. You’ll need these values when configuring the slave server.

**Configure Slave Server :**

To do so open the MySQL configuration file and add the following lines in the [mysqld] section:

$ sudo nano /etc/my.cnf

Add the following lines to my.cnf

bind-address = 10.128.0.3

server-id = 2

log\_bin = mysql-bin

Restart mysql service:

$ Systemctl restart mysqld

Now , configure the parameters slave for connect to master server & login to mysql server by root user

$ mysql -u root –p

Then , stop slave server :

Mysql > stop slave;

Run the following query for configure slave to replicate the master :

Mysql > MASTER\_HOST='10.128.0.2',

Mysql > MASTER\_USER='replica',

Mysql > MASTER\_PASSWORD='strong\_password',

Mysql > MASTER\_LOG\_FILE='mysql-bin.000004',

Mysql > MASTER\_LOG\_POS=316;

Just Done , Start slave server:  
mysql> start slave;  
  
**Test Everything:**

From master server:

mysql –u root –p

CREATE DATABASE datatest;

Exit;

Login to slave :

Mysql –u root –p

Show databases;

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| Database |

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

| information\_schema |

| mysql |

| performance\_schema |

| datatest |

| sys |

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5 rows in set (0.00 sec)

**Note** : sometimes there are invalid MySQL queries which cause the replication to not working after restart servers .

log in to MySQL:

mysql -u root -p

Run the following from mysql

mysql > SHOW SLAVE STATUS\G

If one of Slave\_IO\_Running or Slave\_SQL\_Running is set to No, then the replication is broken:

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

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

Master\_Host: 10.128.0.2

Master\_User: replica

Master\_Port: 3306

Connect\_Retry: 60

Master\_Log\_File: mysql-bin.000004

Read\_Master\_Log\_Pos: 316

Relay\_Log\_File: slave-mariadb-relay-bin.000013

Relay\_Log\_Pos: 529

Relay\_Master\_Log\_File: mysql-bin.000004

Slave\_IO\_Running: Yes

Slave\_SQL\_Running: Yes

mysql > stop slave;

mysql > SET GLOBAL SQL\_SLAVE\_SKIP\_COUNTER = 1;

mysql > start slave;