Mysql Read Replica

1. **Install Mysql server on Master and Slave VM -**

STEP:1 - Update the package list

sudo apt update

STEP:2 - Install the Mysql server package

sudo apt install mysql-server

STEP:3 - Secure the Mysql installation

sudo mysql\_secure\_installation

STEP:4 - Start and enable mysql service

sudo systemctl start mysql

sudo systemctl enable mysql

STEP:5 - Verify the mysql installation

Sudo systemctl status mysql

STEP :6 - Connect to mysql server

mysql -u root -p

1. **Configure replication on server-side VM-**

STEP:1- Open the configuration file named **mysqld.cnf**

sudo vim /etc/mysql/mysql.conf.d/mysqld.cnf

STEP:2- Add the following lines to configuration file

server-id = 1

log-bin = mysql-bin

STEP:3- Locate the bind address in mysqld.cnf and change

to 0.0.0.0 so that mysql listen on all available networks.

bind-address = 0.0.0.0

STEP:4- Save the file and restart mysql service

sudo systemctl restart mysql

STEP:5- Login to Mysql

mysql -u root -p

STEP:6 - Verify Master status

SHOW MASTER STATUS \G

1. **Create user for replication**

STEP:1- Now create user for replication

CREATE USER 'replica'@'%' IDENTIFIED WITH mysql\_native\_password BY 'Replica@';

STEP:2- Now grant replica permissions to user

GRANT REPLICATION SLAVE ON \*.\* TO 'Replica'@'%';

STEP:3- Flush privileges for changes to take effect

FLUSH PRIVILEGES;

1. **Configure replication on replica VM-**

STEP:1- Open the configuration file named **mysqld.cnf**

sudo vim /etc/mysql/mysql.conf.d/mysqld.cnf

STEP:2- Add the following lines to configuration file

server-id = 2

log-bin = mysql-bin

STEP:3- Locate the bind address in mysqld.cnf and change

to 0.0.0.0 so that mysql listen on all available networks.

bind-address = 0.0.0.0

STEP:4- Save the file and restart mysql service

sudo systemctl restart mysql

1. **Configure replication settings on replica**

STOP SLAVE;

RESET SLAVE;

CHANGE MASTER TO MASTER\_HOST='server-side-vm-ip', MASTER\_USER='replication\_user', MASTER\_PASSWORD='password', MASTER\_LOG\_FILE='log-file-from-SHOW MASTER STATUS', MASTER\_LOG\_POS=log-position-from- SHOW MASTER STATUS;

START SLAVE;

1. **Verify the status**

STEP:1- Check the status of the slave

SHOW SLAVE STATUS \G

STEP:2- Create database on server side

CREATE DATABASE xyzok;

STEP:3- Check if the replica of database is created on replica vm

SHOW DATABASES;