

Replikasi Database Master-Slave pada Linux Ubuntu



Dibuat Oleh :

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- Install MariaDB pada Kedua Ubuntu yang akan dipakai

sudo apt install mariadb-server

- Ubah Konfigurasi MariaDB Master

sudo nano /etc/mysql/mariadb.conf.d/50-server.cnf

baris 29, ubah IP bind-address

Ip Master 192.168.100.96

bind-address = 192.168.100.96

baris 74, lepas comment server-id = 1

baris 75, lepas comment log_bin = /var/log/mysql/mysql-bin.log

```
File Edit View Search Terminal Help
GNU nano 6.2 /etc/mysql/mariadb.conf.d/50-server.cnf

# The following can be used as easy to replay backup logs or for
# note: if you are setting up a replication slave, see README.Deb
# other settings you may need to change.
server-id                = 1
log_bin                  = /var/log/mysql/mysql-bin.log
expire_logs_days         = 10
#max_binlog_size         = 100M

#
# * SSL/TLS
#
```

- Restart service MariaDB

sudo systemctl restart mysql

- Buat user untuk akses replikasi

mysql -u root -p

GRANT REPLICATION SLAVE ON *.* TO 'replica'@'192.168.100.95'

IDENTIFIED BY 'secret';

FLUSH PRIVILEGES;

```
MariaDB [(none)]> GRANT REPLICATION SLAVE ON *.* TO 'replica'@'192.168.100.95' IDENTIF
IED BY 'secret';
Query OK, 0 rows affected (0,003 sec)
```

```
MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0,001 sec)
```

- Tampilkan status master. File dan Position dibutuhkan pada saat konfigurasi Slave.

```
MariaDB [(none)]> SHOW MASTER STATUS;
+-----+-----+-----+-----+
| File           | Position | Binlog_Do_DB | Binlog_Ignore_DB |
+-----+-----+-----+-----+
| mysql-bin.000002 |      667 |              |                  |
+-----+-----+-----+-----+
1 row in set (0.000 sec)
```

- Konfigurasi Server MariaDB Slave
`sudo nano /etc/mysql/mariadb.conf.d/50-server.cnf`
Ip Slave 192.168.100.95
 # baris 29, ubah IP bind-addressbind-address = 192.168.100.65
 # baris 74, lepas comment. Ganti dengan nomor lain, server-id = 2
 # baris 75, lepas comment log_bin = /var/log/mysql/mysql-bin.log

```
root@slave-VirtualBox: /home/slave
File Edit View Search Terminal Help
GNU nano 6.2 /etc/mysql/mariadb.conf.d/50-server.cnf *
# Broken reverse DNS slows down connections considerably and name res
# safe to skip if there are no "host by domain name" access grants
#skip-name-resolve
# Instead of skip-networking the default is now to listen only on
# localhost which is more compatible and is not less secure.
bind-address = 192.168.100.95
#
# * Fine Tuning
#
```

- Restart service MariaDB

```
root@slave-VirtualBox:/home/slave# sudo systemctl restart mysql
```

- Konfigurasi koneksi ke Master

```
root@slave-VirtualBox:/home/slave# mysql -u root -p
```

```
MariaDB [(none)]> CHANGE MASTER TO MASTER_HOST='192.168.100.96', MASTER_USER='re
plica', MASTER_PASSWORD='secret', MASTER_LOG_FILE='mysql-bin.000002', MASTER_LOG
_POS=667;
Query OK, 0 rows affected (0.032 sec)
```

- Jalankan slave
 START SLAVE;

```
MariaDB [(none)]> START SLAVE;
Query OK, 0 rows affected (0.001 sec)
```

Jika tidak ada masalah pada saat menjalankan slave, lepas kunci database pada server master
`mysql -u root -p`

UNLOCK TABLES;

```
MariaDB [(none)]> mysql -u root -p
```

```
MariaDB [(none)]> UNLOCK TABLES;  
Query OK, 0 rows affected (0,000 sec)
```

- Tampilkan status slave
SHOW SLAVE STATUS \G

```
root@slave-VirtualBox: /home/slave  
File Edit View Search Terminal Help  
MariaDB [(none)]> SHOW SLAVE STATUS \G  
***** 1. row *****  
Slave_IO_State: Waiting for master to send event  
Master_Host: 192.168.100.96  
Master_User: replica  
Master_Port: 3306  
Connect_Retry: 60  
Master_Log_File: mysql-bin.000002  
Read_Master_Log_Pos: 667  
Relay_Log_File: mysqld-relay-bin.000002  
Relay_Log_Pos: 555  
Relay_Master_Log_File: mysql-bin.000002  
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
```

Pengujian

Membuat Database pada Master

```
MariaDB [(none)]> SHOW DATABASES;  
+-----+  
| Database |  
+-----+  
| information_schema |  
| mysql |  
| performance_schema |  
| sys |  
+-----+  
4 rows in set (0,000 sec)  
  
MariaDB [(none)]> CREATE DATABASE Fitri;  
Query OK, 1 row affected (0,000 sec)  
  
MariaDB [(none)]> SHOW DATABASES;  
+-----+  
| Database |  
+-----+  
| Fitri |  
| information_schema |  
| mysql |  
| performance_schema |  
| sys |  
+-----+  
5 rows in set (0,000 sec)
```

Show Databases pada Slave

```
MariaDB [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0,000 sec)

MariaDB [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| Fitri |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0,001 sec)
```