

“Replikasi Database Master-Slave pada Linux Ubuntu”



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Ip Master 192.168.100.96

Ip Slave 192.168.100.95

- 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

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

```
GNU nano 6.2 /etc/mysql/mariadb.conf.d/50-server.cnf
bind-address = 192.168.100.96

#
# * Fine Tuning
#

#key_buffer_size = 128M
#max_allowed_packet = 1G
#thread_stack = 192K
#thread_cache_size = 8
# This replaces the startup script and checks MyISAM tables if needed
# the first time they are touched
#myisam_recover_options = BACKUP
#max_connections = 100
#table cache = 64
```

- 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' IDENTIFIED 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
```

baris 29, ubah IP bind-address bind-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 resolu
# 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 Ikhsan;
Query OK, 1 row affected (0,001 sec)

MariaDB [(none)]> 

```

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 |
+-----+
| Ikhsan |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0,000 sec)

```