Manipulation BDD

I-Documentation

1) Un dump de base de données est un fichier qui contient une structure et un contenu de base de données. On l'utilise à des fins de sauvegarde.

2) La réplication de base de données est un processus de partage d'information qui assure la cohérence de données entre plusieurs sources de données redondantes, pour améliorer la fiabilité, la tolérance aux pannes, ou la disponibilité.

3) Cela permet de réduire les conflits liés aux modifications de données et requêtes impliquant plusieurs utilisateurs ; en effet, les données peuvent être distribuées sur l'ensemble du réseau et partitionnées en fonction des besoins des différents utilisateurs ou unités de l'entreprise.

4) On distingue couramment la réplication *passive* et *active*. Lors de *réplication active*, les calculs effectués par la source (ou maître) sont répliqués, alors que lors de *réplication passive*, seul le serveur maître procède au calcul et il ne propage que les modifications finales de la mémoire à effectuer.

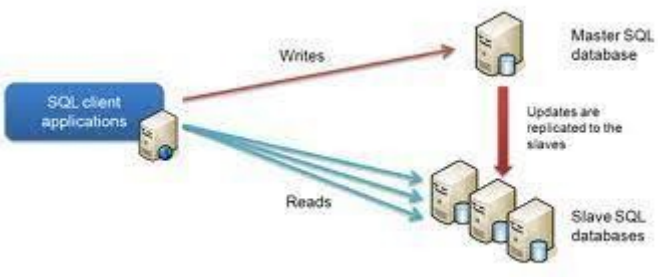
Si à tout moment un unique maître est désigné pour effectuer toutes les requêtes, on parle d'un schéma primaire (schéma maître-esclave) : c'est souvent l'architecture employée pour des clusters de serveurs à haute disponibilité.

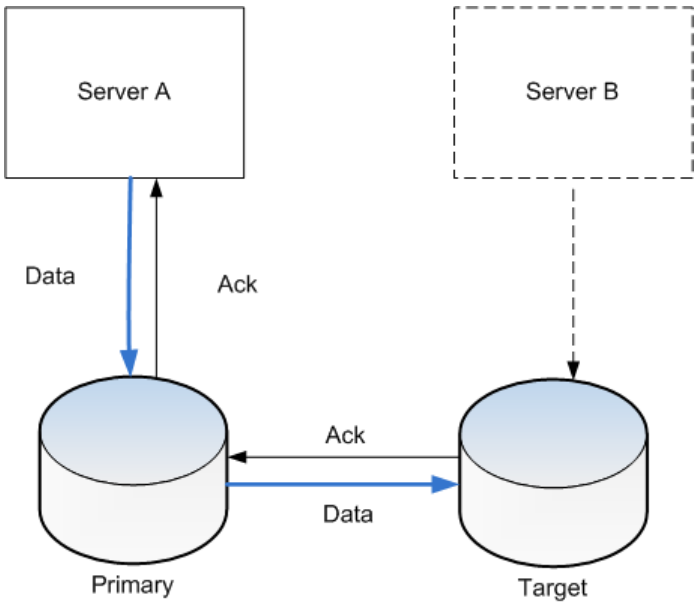
Si par contre, n'importe quel serveur peut traiter une requête, on parle de schéma multi-maître (*multi-master replication*). Cette architecture pose des problèmes de contrôle de concurrence : plusieurs processus qui travailleraient de manière incontrôlée sur les mêmes données pourraient remettre en cause la cohérence globale du système.

On peut profiter des avantages de la réplication des données s'il existe une copie cohérente des données dans toute l'organisation. Voici un aperçu des étapes qui aident à accomplir le processus de réplication des données en temps réel:

1.La première étape consiste à affiner les données système source et cible.
2.Ensuite, choisissez les tables et les colonnes à copier à partir de la source.
3.Ensuite, identifiez la fréquence à laquelle les mises à jour doivent être effectuées.
4.Sélectionnez une technique de réplication de données (complète, partielle ou basée sur le journal).
5.Ensuite, écrire un code personnalisé ou utilisez un logiciel d'entreprise pour effectuer le processus.
6.Enfin, surveiller de près la façon dont les données sont extrait, filtrés, transformés et chargés pour garantir la qualité.

Schéma réplication :





II-Mise en place

Création de la table :

```
| performance_schema |
| replicationglpidb  |
| testTC4            |
+--------------------+
7 rows in set (0,059 sec)

MariaDB [(none)]> CD replicationglpi
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for t
he right syntax to use near 'CD replicationglpi' at line 1
MariaDB [(none)]> use replicationglpidb
Database changed
MariaDB [replicationglpidb]> SHOW TABLE
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for t
he right syntax to use near '' at line 1
MariaDB [replicationglpidb]> SHOW TABLES;
Empty set (0,001 sec)

MariaDB [replicationglpidb]> create table replication();
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for t
he right syntax to use near ')' at line 1
MariaDB [replicationglpidb]> create table replication(id int auto_increment,nom varchar(50) not null,prenom varchar(50)not null,
primary key (id));
Query OK, 0 rows affected (0,149 sec)

MariaDB [replicationglpidb]> show tables;
+-----------------------------+
| Tables_in_replicationglpidb |
+-----------------------------+
| replication                 |
+-----------------------------+
1 row in set (0,002 sec)

MariaDB [replicationglpidb]> use replication
ERROR 1049 (42000): Unknown database 'replication'
MariaDB [replicationglpidb]> show columns from replicationglpidb.replication
    -> ;
+--------+-------------+------+-----+---------+----------------+
| Field  | Type        | Null | Key | Default | Extra          |
+--------+-------------+------+-----+---------+----------------+
| id     | int(11)     | NO   | PRI | NULL    | auto_increment |
| nom    | varchar(50) | NO   |     | NULL    |                |
| prenom | varchar(50) | NO   |     | NULL    |                |
+--------+-------------+------+-----+---------+----------------+
3 rows in set (0,050 sec)

MariaDB [replicationglpidb]> _
```

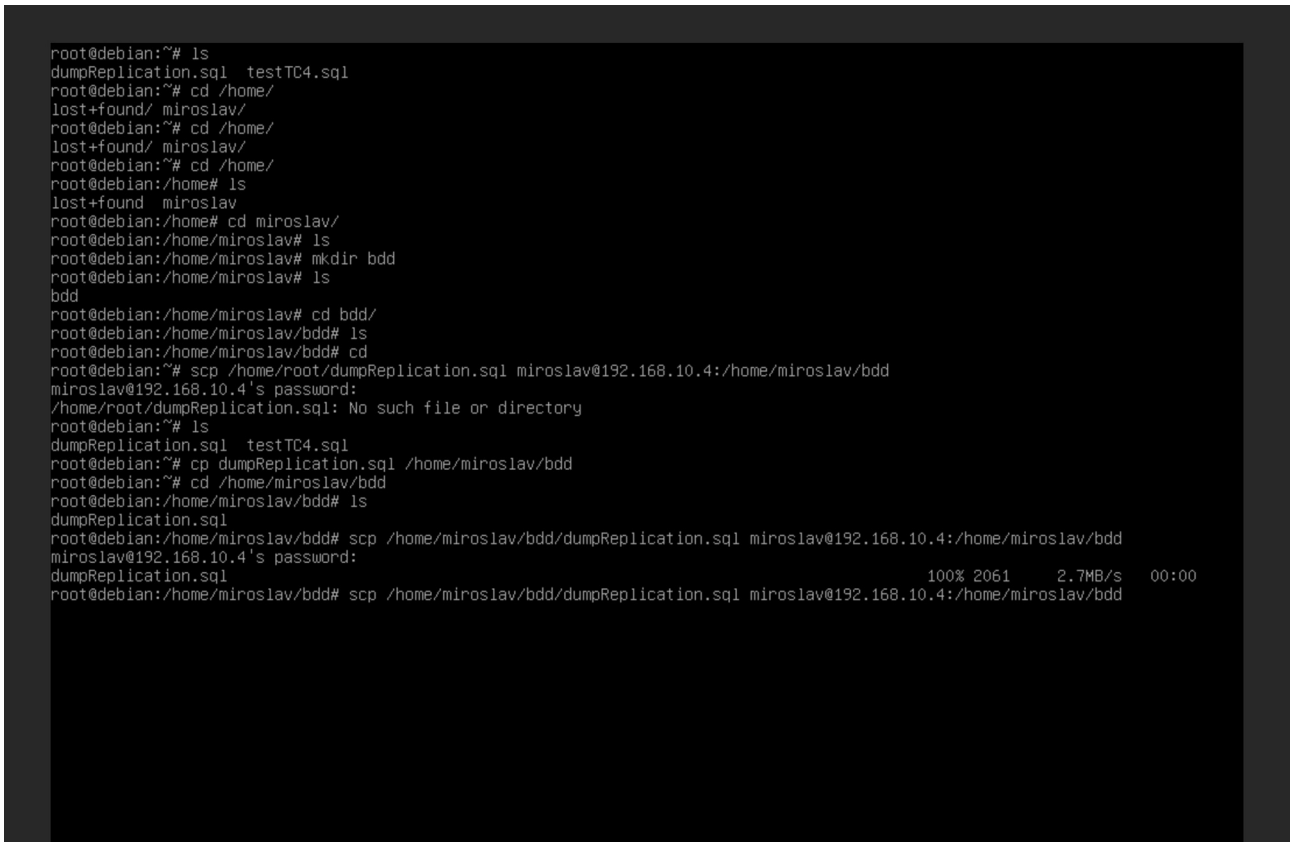
```
MariaDB [replicationglpidb]> create table replication();
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for t
he right syntax to use near ')' at line 1
MariaDB [replicationglpidb]> create table replication(id int auto_increment,nom varchar(50) not null,prenom varchar(50)not null,
primary key (id));
Query OK, 0 rows affected (0,149 sec)

MariaDB [replicationglpidb]> show tables;
+----------------------------+
| Tables_in_replicationglpidb |
+----------------------------+
| replication                |
+----------------------------+
1 row in set (0,002 sec)

MariaDB [replicationglpidb]> use replication
ERROR 1049 (42000): Unknown database 'replication'
MariaDB [replicationglpidb]> show columns from replicationglpidb.replication
    -> ;
+--------+-------------+------+-----+---------+----------------+
| Field  | Type        | Null | Key | Default | Extra          |
+--------+-------------+------+-----+---------+----------------+
| id     | int(11)     | NO   | PRI | NULL    | auto_increment |
| nom    | varchar(50) | NO   |     | NULL    |                |
| prenom | varchar(50) | NO   |     | NULL    |                |
+--------+-------------+------+-----+---------+----------------+
3 rows in set (0,050 sec)

MariaDB [replicationglpidb]> insert into replication values(1,'PENKOV','Miroslav');
Query OK, 1 row affected (0,034 sec)

MariaDB [replicationglpidb]> insert into replication values(2,'CUGNET','Lucas');
Query OK, 1 row affected (0,005 sec)

MariaDB [replicationglpidb]> insert into replication values(NULL,'LAFOND','Theo');
Query OK, 1 row affected (0,002 sec)

MariaDB [replicationglpidb]> select* from replication;
+----+--------+----------+
| id | nom    | prenom   |
+----+--------+----------+
|  1 | PENKOV | Miroslav |
|  2 | CUGNET | Lucas    |
|  3 | LAFOND | Theo     |
+----+--------+----------+
3 rows in set (0,001 sec)

MariaDB [replicationglpidb]>
```

```
root@debian:~# mysqldump -u root -p replicationglpidb > dumpReplication.sql
Enter password:
root@debian:~# ls
dumpReplication.sql  testTC4.sql
root@debian:~# _
```

```
 GNU nano 3.2                                  dumpReplication.sql

-- MySQL dump 10.19  Distrib 10.3.36-MariaDB, for debian-linux-gnu (x86_64)
--
-- Host: localhost    Database: replicationglpidb
-- ------------------------------------------------------
-- Server version       10.3.36-MariaDB-0+deb10u2

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;

--
-- Table structure for table `replication`
--

DROP TABLE IF EXISTS `replication`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!40101 SET character_set_client = utf8 */;
CREATE TABLE `replication` (
  `id` int(11) NOT NULL AUTO_INCREMENT,
  `nom` varchar(50) NOT NULL,
  `prenom` varchar(50) NOT NULL,
  PRIMARY KEY (`id`)
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=utf8mb4;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `replication`
--

LOCK TABLES `replication` WRITE;
/*!40000 ALTER TABLE `replication` DISABLE KEYS */;
INSERT INTO `replication` VALUES (1,'PENKOV','Miroslav'),(2,'CUGNET','Lucas'),(3,'LAFOND','Theo');
/*!40000 ALTER TABLE `replication` ENABLE KEYS */;
UNLOCK TABLES;
/*!40103 SET TIME_ZONE=@OLD_TIME_ZONE */;

                                [ Lecture de 52 lignes ]
^G Aide       ^O Écrire     ^W Chercher   ^K Couper      ^J Justifier  ^C Pos. cur.  M-U Annuler   M-A Marquer
^X Quitter    ^R Lire fich. ^\ Remplacer  ^U Coller     ^T Orthograp. ^_ Aller lig. M-E Refaire   M-6 Copier
```

DOCUMENTATION MISE EN PLACE MASTER/SLAVE

https://www.activpart.com/replication-de-bases-de-donnees-mariadb/


root@debian:~# ls
dumpReplication.sql testTC4.sql
root@debian:~# cd /home/
lost+found/ miroslav/
root@debian:~# cd /home/
lost+found/ miroslav/
root@debian:~# cd /home/
root@debian:/home# ls
lost+found miroslav
root@debian:/home# cd miroslav/
root@debian:/home/miroslav# ls
root@debian:/home/miroslav# mkdir bdd
root@debian:/home/miroslav# ls
bdd
root@debian:/home/miroslav# cd bdd/
root@debian:/home/miroslav/bdd# ls
root@debian:/home/miroslav/bdd# cd
root@debian:~# scp /home/root/dumpReplication.sql miroslav@192.168.10.4:/home/miroslav/bdd
miroslav@192.168.10.4's password:
/home/root/dumpReplication.sql: No such file or directory
root@debian:~# ls
dumpReplication.sql testTC4.sql
root@debian:~# cp dumpReplication.sql /home/miroslav/bdd
root@debian:~# cd /home/miroslav/bdd
root@debian:/home/miroslav/bdd# ls
dumpReplication.sql
root@debian:/home/miroslav/bdd# scp /home/miroslav/bdd/dumpReplication.sql miroslav@192.168.10.4:/home/miroslav/bdd
miroslav@192.168.10.4's password:
dumpReplication.sql 100% 2061 2.7MB/s 00:00
root@debian:/home/miroslav/bdd# scp /home/miroslav/bdd/dumpReplication.sql miroslav@192.168.10.4:/home/miroslav/bdd

```
Your MariaDB connection id is 49
Server version: 10.3.36-MariaDB-0+deb10u2 Debian 10

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

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

MariaDB [(none)]> use replicationglpidb
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MariaDB [replicationglpidb]> show tables
    -> ;
+-----------------------------+
| Tables_in_replicationglpidb |
+-----------------------------+
| replication                 |
+-----------------------------+
1 row in set (0,000 sec)

MariaDB [replicationglpidb]> use replication;
ERROR 1049 (42000): Unknown database 'replication'
MariaDB [replicationglpidb]> select* from replication
    -> ;
+----+--------+----------+
| id | nom    | prenom   |
+----+--------+----------+
|  1 | PENKOV | Miroslav |
|  2 | CUGNET | Lucas    |
|  3 | LAFOND | Theo     |
+----+--------+----------+
3 rows in set (0,002 sec)

MariaDB [replicationglpidb]> exit
Bye
root@debian:/home/miroslav# mysql -u root -p replicationglpidb < /home/miroslav/bdd
```

```
root@debian:~# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 37
Server version: 10.3.36-MariaDB-0+deb10u2-log Debian 10

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE USER 'replication_user'@'192.168.10.4' IDENTIFIED BY 'caribou';
Query OK, 0 rows affected (0,002 sec)

MariaDB [(none)]> GRANT REPLICATION SLAVE ON *.* TO 'replication_user'@'192.168.10.4';
Query OK, 0 rows affected (0,002 sec)

MariaDB [(none)]> SHOW MASTER STATUS
    -> ;
+------------------+----------+--------------+------------------+
| File             | Position | Binlog_Do_DB | Binlog_Ignore_DB |
+------------------+----------+--------------+------------------+
| mysql-bin.000003 |      704 |              |                  |
+------------------+----------+--------------+------------------+
1 row in set (0,000 sec)
```

```
               Relay_Log_Pos: 555
       Relay_Master_Log_File: mysql-bin.000004
            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: 342
              Relay_Log_Space: 865
              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_SSL_Crl:
           Master_SSL_Crlpath:
                   Using_Gtid: No
                  Gtid_IO_Pos:
      Replicate_Do_Domain_Ids:
  Replicate_Ignore_Domain_Ids:
                Parallel_Mode: conservative
                    SQL_Delay: 0
          SQL_Remaining_Delay: NULL
      Slave_SQL_Running_State: Slave has read all relay log; waiting for the slave I/O thread to update it
           Slave_DDL_Groups: 0
Slave_Non_Transactional_Groups: 0
    Slave_Transactional_Groups: 0
1 row in set (0,000 sec)
```

dans le slave

```
Database changed
MariaDB [replicationglpidb]> use replication
ERROR 1049 (42000): Unknown database 'replication'
MariaDB [replicationglpidb]> select* from replication;
+----+--------+----------+
| id | nom    | prenom   |
+----+--------+----------+
|  1 | PENKOV | Miroslav |
|  2 | CUGNET | Lucas    |
|  3 | LAFOND | Theo     |
+----+--------+----------+
3 rows in set (0,001 sec)

MariaDB [replicationglpidb]> select* from replication;
+----+--------+----------+
| id | nom    | prenom   |
+----+--------+----------+
|  1 | PENKOV | Miroslav |
|  2 | CUGNET | Lucas    |
|  3 | LAFOND | Theo     |
|  4 | HERQUE | Maxime   |
+----+--------+----------+
4 rows in set (0,002 sec)
```

dans le maitre

```
MariaDB [replicationglpidb]> INSERT INTO replication VALUES (4,'HERQUE','Maxime');
Query OK, 1 row affected (0,014 sec)

MariaDB [replicationglpidb]> show tables;
+----------------------------+
| Tables_in_replicationglpidb |
+----------------------------+
| replication                |
+----------------------------+
1 row in set (0,001 sec)

MariaDB [replicationglpidb]> select* from replication;
+----+--------+----------+
| id | nom    | prenom   |
+----+--------+----------+
|  1 | PENKOV | Miroslav |
|  2 | CUGNET | Lucas    |
|  3 | LAFOND | Theo     |
|  4 | HERQUE | Maxime   |
+----+--------+----------+
4 rows in set (0,000 sec)
```

```
RESET SLAVE;
```

de MASTER A MASTER on crée un user dans le SLAVE pour le master 1 puis on répéter les étapes du SLAVE dans SQL

```
MariaDB [(none)]> CREATE USER 'replication_master'@'192.168.10.3' IDENTIFIED BY 'caribou';
Query OK, 0 rows affected (0,002 sec)

MariaDB [(none)]> GRANT REPLICATION SLAVE ON *.* TO 'replication_master'@'192.168.10.3';
Query OK, 0 rows affected (0,001 sec)

MariaDB [(none)]> SHOW MASTER STATUS;
```

```
MariaDB [(none)]> CREATE USER 'replication_master'@'192.168.10.3' IDENTIFIED BY 'caribou';
Query OK, 0 rows affected (0,002 sec)

MariaDB [(none)]> GRANT REPLICATION SLAVE ON *.* TO 'replication_master'@'192.168.10.3';
Query OK, 0 rows affected (0,001 sec)

MariaDB [(none)]> SHOW MASTER STATUS;
+------------------+----------+--------------+------------------+
| File             | Position | Binlog_Do_DB | Binlog_Ignore_DB |
+------------------+----------+--------------+------------------+
| mysql-bin.000007 |      694 |              |                  |
+------------------+----------+--------------+------------------+
1 row in set (0,001 sec)

MariaDB [(none)]> _
```

```
MariaDB [(none)]> STOP SLAVE;
Query OK, 0 rows affected, 1 warning (0,001 sec)

MariaDB [(none)]> CHANGE MASTER TO MASTER_HOST='192.168.10.4',
    -> MASTER_USER='replication_master',
    -> MASTER_PASSWORD='caribou',
    -> MASTER_LOG_FILE='mysql-bin.000007',
    -> MASTER_LOG_POS=694;
Query OK, 0 rows affected (0,008 sec)

MariaDB [(none)]> START SLAVE;
Query OK, 0 rows affected (0,001 sec)

MariaDB [(none)]> _
```

dans le master1

```
|  3 | LAFOND | Theo     |
|  4 | HERQUE | Maxime   |
|  5 | HENRY  | Mathis   |
|  6 | HENRY  | Mathis   |
|  7 | HENRY  | Mathis   |
+----+--------+----------+
7 rows in set (0,000 sec)

MariaDB [replicationglpidb]> INSERT INTO replication VALUES (9,'MASTER','TO SLAVE');
Query OK, 1 row affected (0,003 sec)

MariaDB [replicationglpidb]> select* from replication;
+----+--------+----------+
| id | nom    | prenom   |
+----+--------+----------+
|  1 | PENKOV | Miroslav |
|  2 | CUGNET | Lucas    |
|  3 | LAFOND | Theo     |
|  4 | HERQUE | Maxime   |
|  5 | HENRY  | Mathis   |
|  6 | HENRY  | Mathis   |
|  7 | HENRY  | Mathis   |
|  9 | MASTER | TO SLAVE |
+----+--------+----------+
8 rows in set (0,001 sec)

MariaDB [replicationglpidb]> select* from replication;
+----+--------+-----------+
| id | nom    | prenom    |
+----+--------+-----------+
|  1 | PENKOV | Miroslav  |
|  2 | CUGNET | Lucas     |
|  3 | LAFOND | Theo      |
|  4 | HERQUE | Maxime    |
|  5 | HENRY  | Mathis    |
|  6 | HENRY  | Mathis    |
|  7 | HENRY  | Mathis    |
|  9 | MASTER | TO SLAVE  |
| 10 | MASTER | TO MASTER |
+----+--------+-----------+
9 rows in set (0,001 sec)
```

dans le master2 :

```
|  6 | HENRY   | Mathis    |
|  7 | test    | TEST      |
|  8 | MASTER  | TO MASTER |
+----+---------+-----------+
8 rows in set (0,000 sec)

MariaDB [replicationglpidb]> select* from replication;
+----+--------+-----------+
| id | nom    | prenom    |
+----+--------+-----------+
|  1 | PENKOV | Miroslav  |
|  2 | CUGNET | Lucas     |
|  3 | LAFOND | Theo      |
|  4 | HERQUE | Maxime    |
|  5 | HENRY  | Mathis    |
|  6 | HENRY  | Mathis    |
|  7 | test   | TEST      |
|  8 | MASTER | TO MASTER |
|  9 | MASTER | TO SLAVE  |
+----+--------+-----------+
9 rows in set (0,001 sec)

MariaDB [replicationglpidb]> insert into replication VALUES(10,'MASTER','TO MASTER')
Query OK, 1 row affected (0,002 sec)

MariaDB [replicationglpidb]> select* from replication;
+----+--------+-----------+
| id | nom    | prenom    |
+----+--------+-----------+
|  1 | PENKOV | Miroslav  |
|  2 | CUGNET | Lucas     |
|  3 | LAFOND | Theo      |
|  4 | HERQUE | Maxime    |
|  5 | HENRY  | Mathis    |
|  6 | HENRY  | Mathis    |
|  7 | test   | TEST      |
|  8 | MASTER | TO MASTER |
|  9 | MASTER | TO SLAVE  |
| 10 | MASTER | TO MASTER |
+----+--------+-----------+
10 rows in set (0,000 sec)
```

```
               Relay_Log_Pos: 763
       Relay_Master_Log_File: mysql-bin.000008
            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: 758
             Relay_Log_Space: 1074
             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: 2
              Master_SSL_Crl:
          Master_SSL_Crlpath:
                  Using_Gtid: No
                 Gtid_IO_Pos:
     Replicate_Do_Domain_Ids:
 Replicate_Ignore_Domain_Ids:
               Parallel_Mode: conservative
                   SQL_Delay: 0
         SQL_Remaining_Delay: NULL
     Slave_SQL_Running_State: Slave has read all relay log; waiting for the slave I/O thread to update it
          Slave_DDL_Groups: 0
Slave_Non_Transactional_Groups: 0
    Slave_Transactional_Groups: 1
1 row in set (0,000 sec)
```

dans le master1

```
               Relay_Log_Pos: 762
       Relay_Master_Log_File: mysql-bin.000008
            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: 753
             Relay_Log_Space: 1073
             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_SSL_Crl:
          Master_SSL_Crlpath:
                  Using_Gtid: No
                 Gtid_IO_Pos:
     Replicate_Do_Domain_Ids:
 Replicate_Ignore_Domain_Ids:
               Parallel_Mode: conservative
                   SQL_Delay: 0
         SQL_Remaining_Delay: NULL
     Slave_SQL_Running_State: Slave has read all relay log; waiting for the slave I/O thread to update it
          Slave_DDL_Groups: 0
Slave_Non_Transactional_Groups: 0
    Slave_Transactional_Groups: 1
1 row in set (0,000 sec)
```

dans le master2

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