

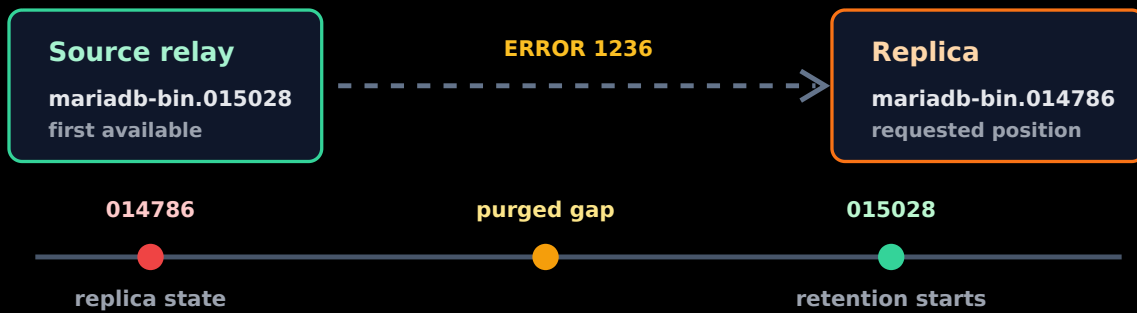
GTID

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MARIADB MYSQL REPLICATION GTID BINLOG PMACONTROL DBA INCIDENT

GTID vs file/position

When the requested binlog is outside the retained window



Lesson

Switching to GTID does not purge source binlogs, but CHANGE MASTER resets local relay logs.



MariaDB file/position GTID IO thread

```
SHOW SLAVE STATUS\G
```

```
Slave_IO_Running: No
Slave_SQL_Running: Yes
Using_Gtid: No
Last_IO_Errno: 1236
Last_IO_Error: Could not find first log file name in binary log index file
```

“GTID relay logs binlogs”

GTID

STOP SLAVE

Slave_IO_Running: No
Slave_SQL_Running: No
Relay_Log_Space: 632576
relay-bin.000002: 632273 bytes

CHANGE MASTER TO MASTER_USE_GTID=slave_pos;

relay logs

Using_Gtid: Slave_Pos
Read_Master_Log_Pos: 3464
Exec_Master_Log_Pos: 3464
Relay_Log_Space: 256
relay-bin.000001: 256 bytes

GTID relay logs

CHANGE MASTER TO MASTER_USE_GTID=no;

file/position relay logs

STOP SLAVE relay logs CHANGE MASTER MASTER_USE_GTID

file/position

mariadb-bin.014786:35578691

relay source binary log index

first available: mariadb-bin.015028
last available: mariadb-bin.015130
retained files: 103
retained size: about 10 GiB

```
binlog_expire_logs_seconds = 864000
expire_logs_days           = 10
binlog_space_limit         = 0
max_binlog_size            = 104857600
```

10 10

10

10 binlogs

10

- 10
- GTID file/position
- purge
- retention
- maintenance rebuild
- upstream master relay source

SHOW BINARY LOGS MariaDB 10

GTID

MariaDB GTID MASTER_LOG_FILE / MASTER_LOG_POS gtid_slave_pos

file/position 1236 IO thread

GTID binlog CHANGE MASTER relay logs relay logs binlogs

CHANGE MASTER

10

```
STOP SLAVE;
CHANGE MASTER TO
  MASTER_LOG_FILE='mariadb-bin.015130',
  MASTER_LOG_POS=97211185,
  MASTER_USE_GTID=no;
```

```
START SLAVE;
```

```
IO thread [ ] SQL thread [ ]
```

```
Last_SQL_Errno: 1452  
Cannot add or update a child row:  
foreign key constraint fails
```

```
[ ]
```

```
[ ]
```

```
[ ]
```

```
[ ]
```

1. []
2. [] source [] relay source []
3. []
4. []
5. [] GTID [] file/position []
6. []
7. []

```
[ ]
```

```
Slave_IO_Running: Yes  
Slave_SQL_Running: Yes  
Seconds_Behind_Master: 0 or decreasing  
Last_IO_Error:  
Last_SQL_Error:
```

```
[ ] slave_skip_counter [ ]
```

```
[ ]
```

```
[ ] GTID [ ] PmaControl [ ]
```

```
SHOW SLAVE STATUS\G
SHOW BINARY LOGS;
SHOW VARIABLES WHERE Variable_name IN (
  'expire_logs_days',
  'binlog_expire_logs_seconds',
  'binlog_space_limit',
  'max_binlog_size'
);
```

||||

- Relay_Master_Log_File |||
- |||
- binlog |||

CHANGE MASTER ||| rebuild

||

GTID ||| binlogs ||| CHANGE MASTER position ||| relay logs

binlog ||| relay logs |||

GTID ||| file/position ||| binlog |||