

$$\begin{bmatrix} \square & \square & \square & \square & \square & \square & \square \end{bmatrix} = \begin{bmatrix} \square & \square & \square & \square \end{bmatrix}$$

PR #2323 `executeTimeSeriesInsertBatch()`

```
START TRANSACTION;
INSERT INTO ts_value_general_int (...) VALUES (...), (...), ...; -- 1
INSERT INTO ts_value_general_int (...) VALUES (...), (...), ...; -- 2
-- ... 30 ...
COMMIT;
```

—falsy `ROLLBACK`

`INSERT`

## 12%

32 InnoDB undo log

- `insert_value()` → SQL →
- 200,000 `ts_value_general_int` 256 KiB → 32
- MariaDB 11.8 PHP 8.5.8 InnoDB `TRUNCATE` 1 + 5
- LXC

|   | <code>autocommit × 32</code> | 1              |
|---|------------------------------|----------------|
| 1 | 1.127 s                      | 0.927 s        |
| 2 | 1.199 s                      | 0.947 s        |
| 3 | 1.155 s                      | 1.012 s        |
| 4 | 1.168 s                      | 1.019 s        |
| 5 | 1.157 s                      | 1.026 s        |
|   | <b>1.157 s</b>               | <b>1.012 s</b> |

12.5% 173,000 198,000

## COMMIT

COMMIT InnoDB

InnoDB Redo log InnoDB flush\_log\_at\_trx\_commit = 1 fsync()

autocommit INSERT

- 32 = 32 COMMIT = 32 redo log
- 32 = 1 COMMIT = 1 redo log

31 undo log group commit MariaDB

fsync() NVMe

- 
- redo log
  - 
  - PmaControl

2026 7 25 PmaControl