

12%

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MARIADB

MYSQL

INNODB

TIME-SERIES

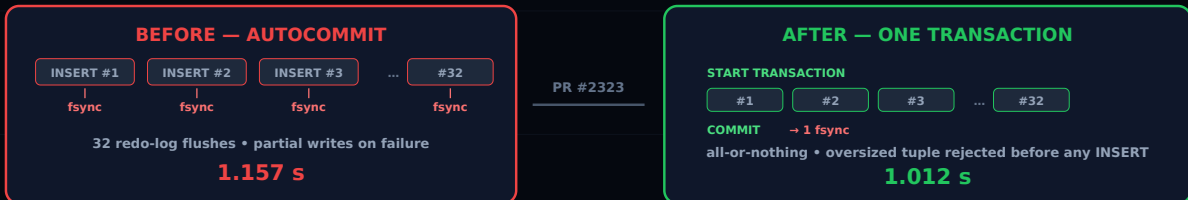
PERFORMANCE

TRANSACTIONS

PMACONTROL

ATOMIC TIME-SERIES INSERTS

32 autocommits → 1 transaction — safety and speed in the same direction



-12.5% median insert time

200,000 tuples • 32 chunks • MariaDB 11.8 • PHP 8.5

□□□PmaControl □□□□□□□□

PmaControl	MariaDB / MySQL	50	igrate::insert value()	DB's value general *
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max allowed packet **chunks** SQL INSERT INTO 200,000 VALUES ((), 32.()), ... 256 KiB

```
auto commit 32 INSERT 32 COMMIT
```

[illegible]

17

1 16 17 32

issue

- #1467 / #1471 — []
- #1468 / #1472 — [max allowed packet]
- #1469 — []

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

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
	1.157 s	1.012 s

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