

MaxScale Overview

Functionality and a Renewed Approach to GPL Licensing

MariaDB ServerFest Berlin, September 17

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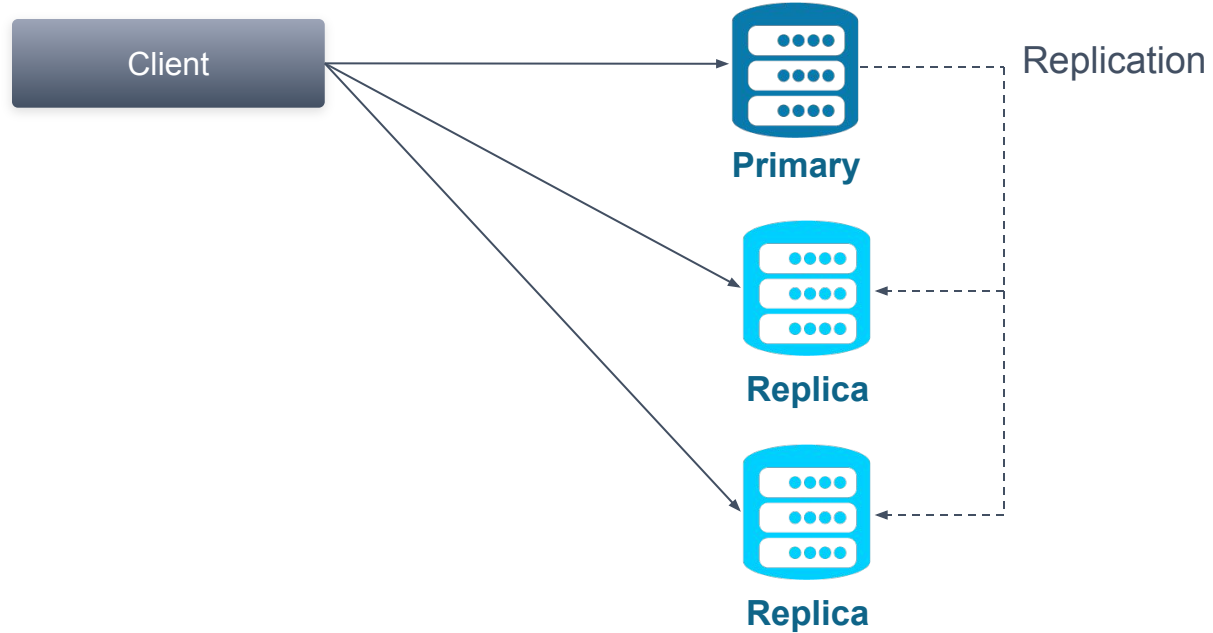
MaxScale Overview

- Functionality
 - Read-Write-Splitting
 - Automatic failover
 - Transaction Replay
- License

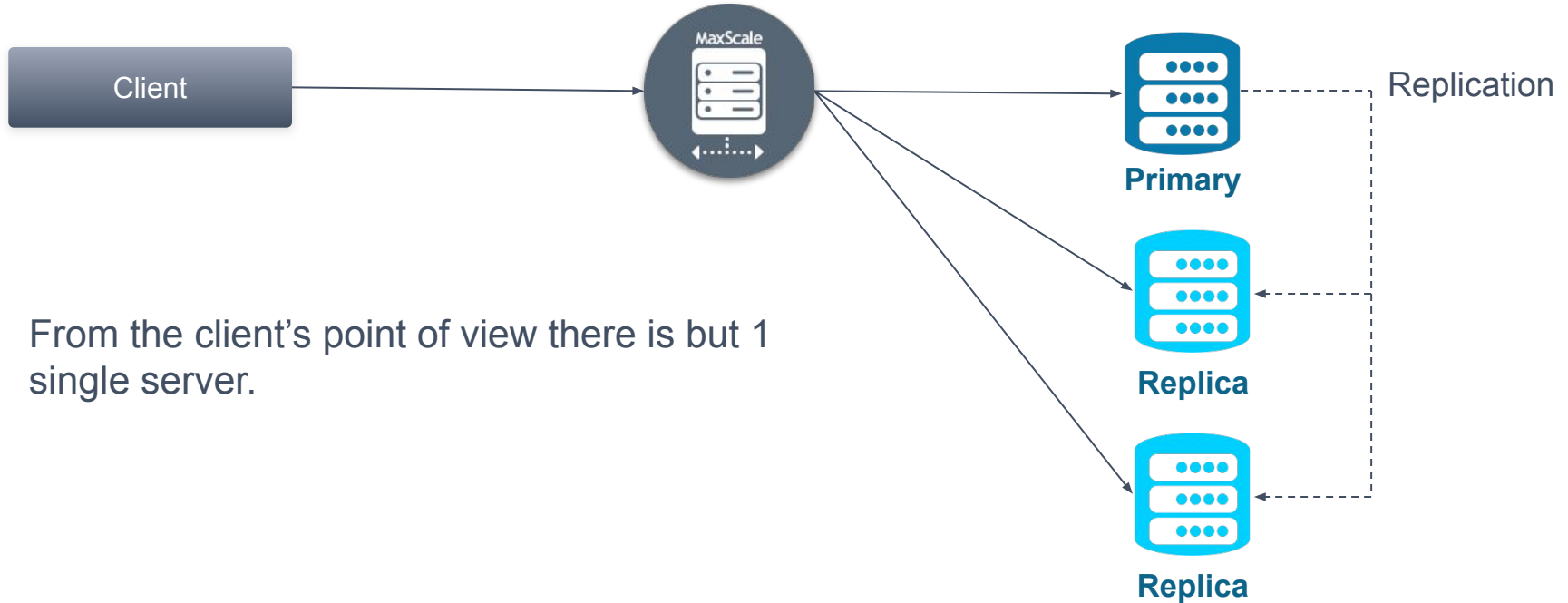
Sometimes things are simple...



...but usually they aren't

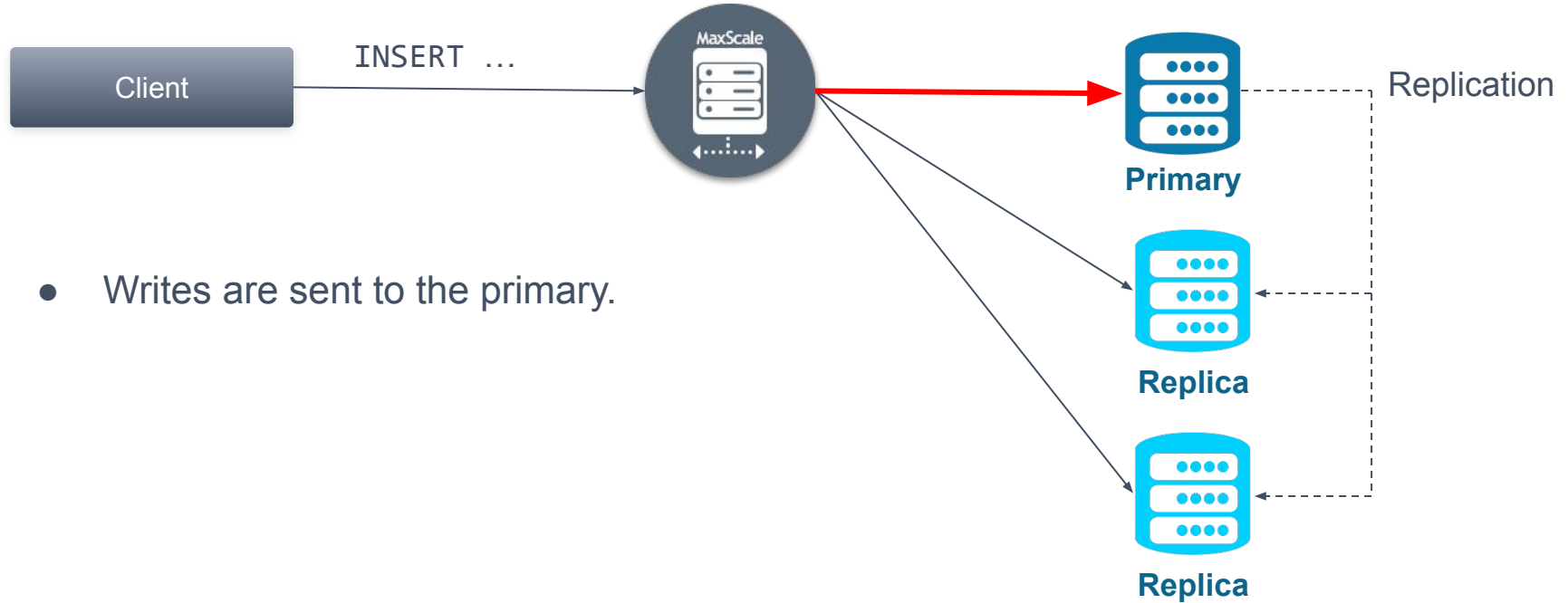


MaxScale Simplifies



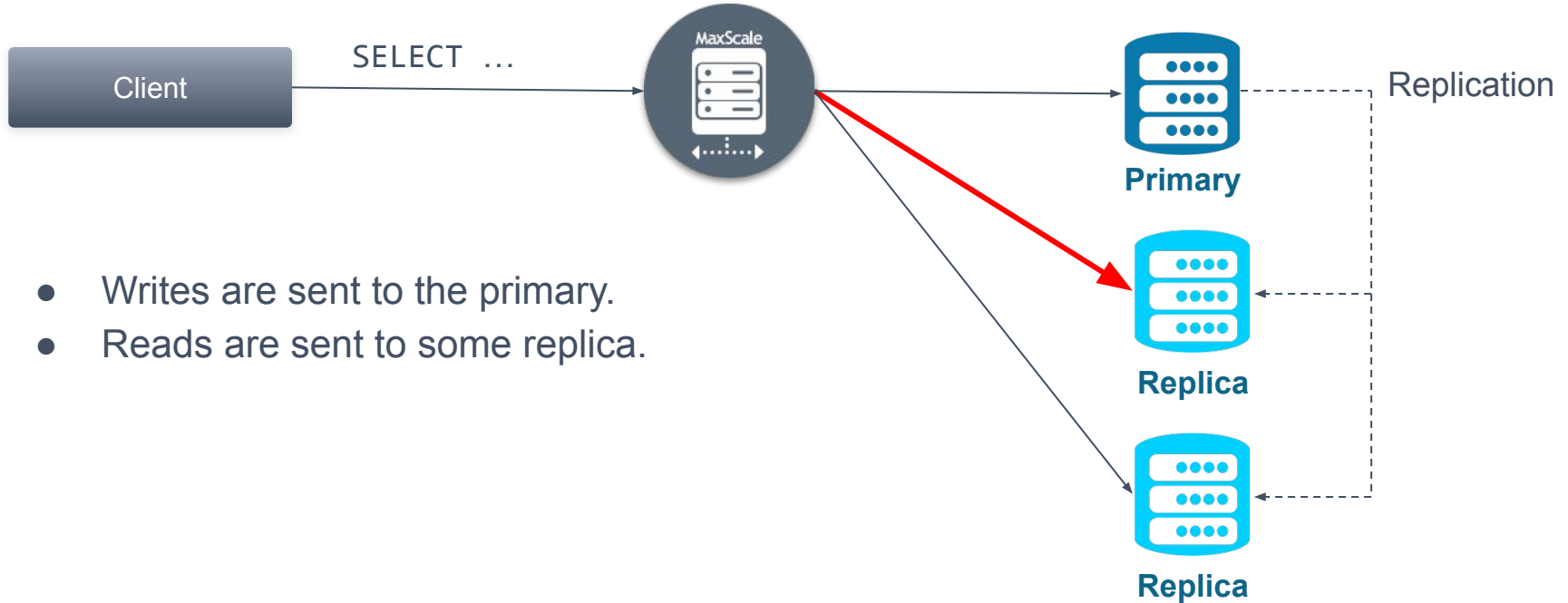
From the client's point of view there is but 1 single server.

Read Write Splitting

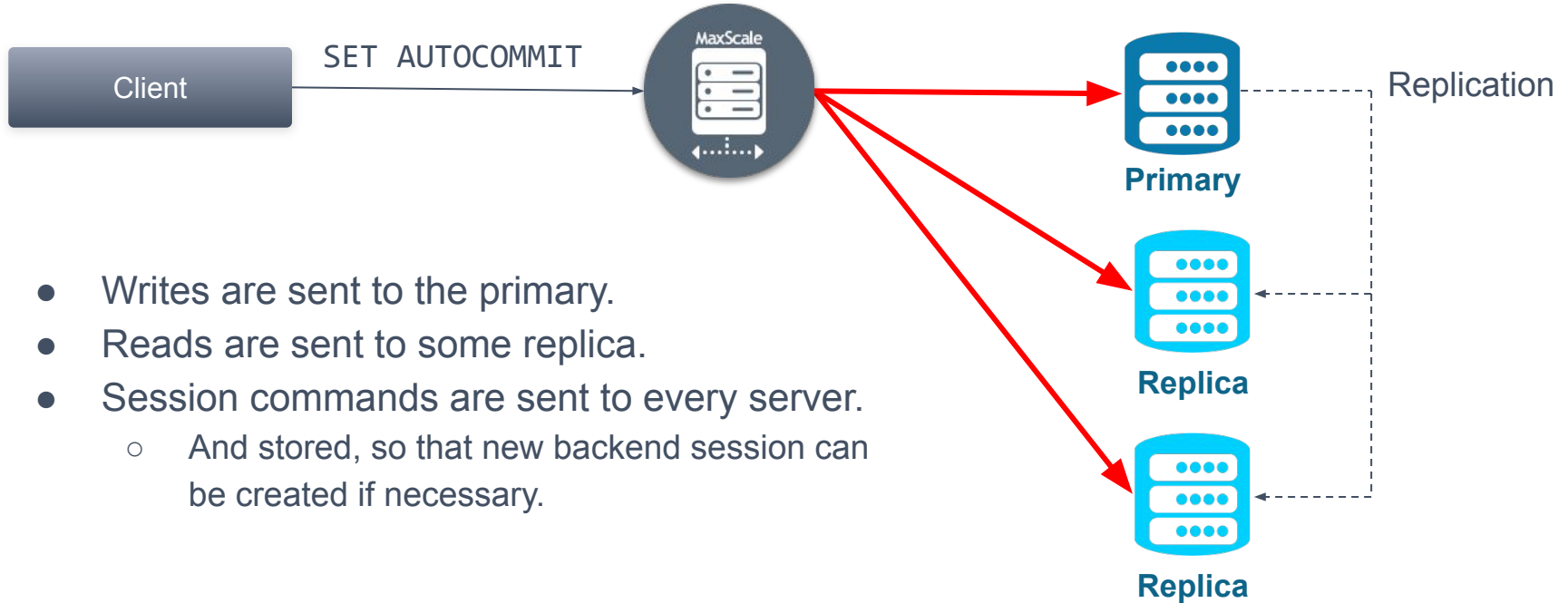


- Writes are sent to the primary.

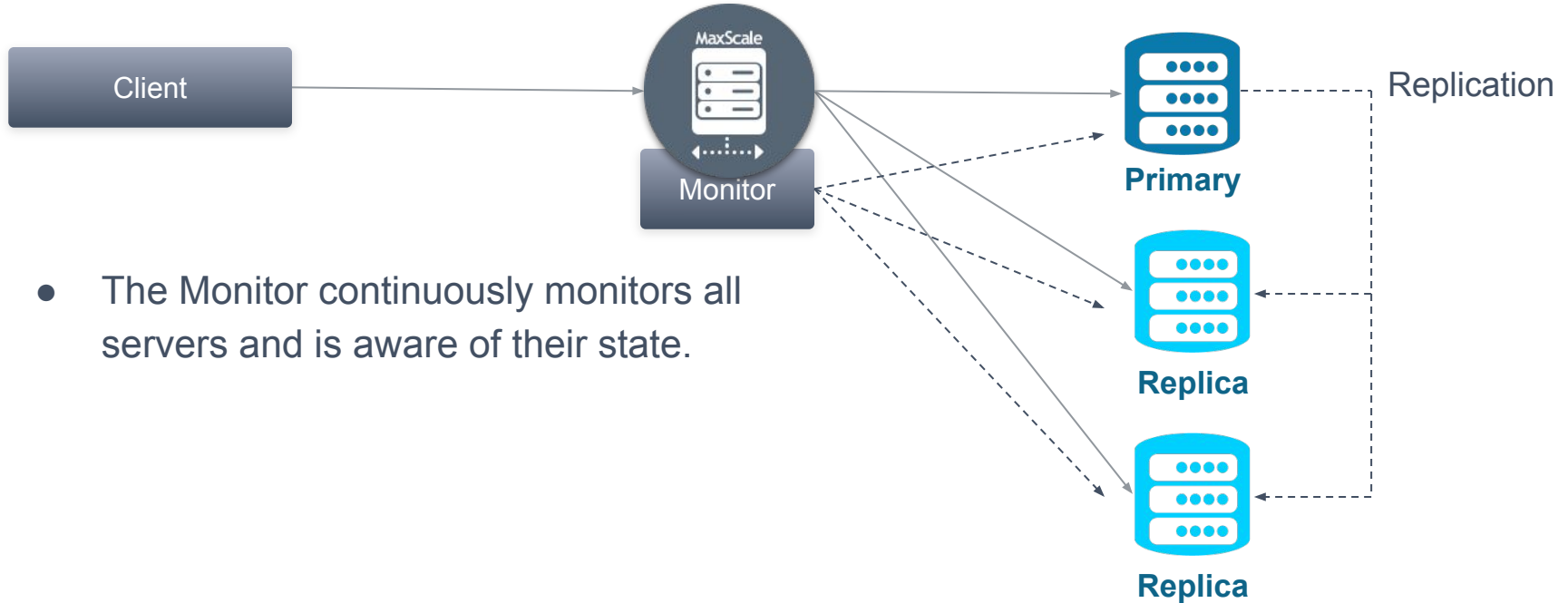
Read Write Splitting



Read Write Splitting

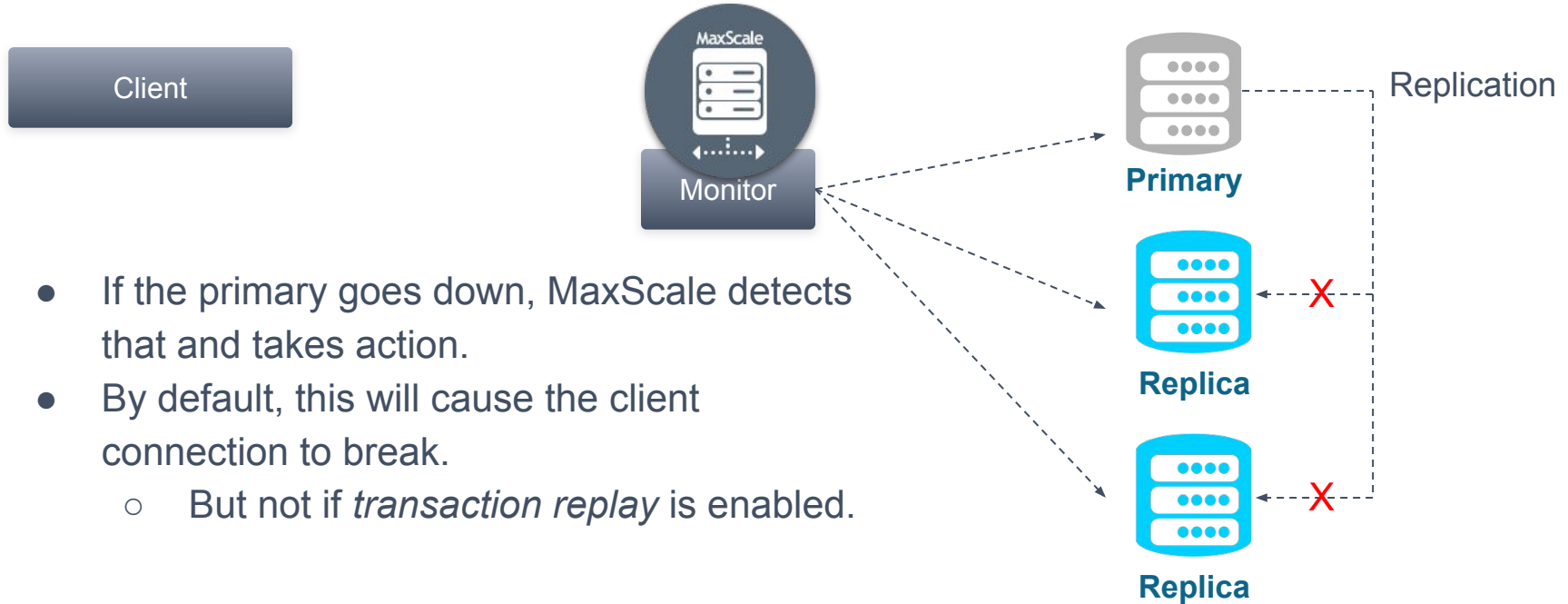


Auto Failover

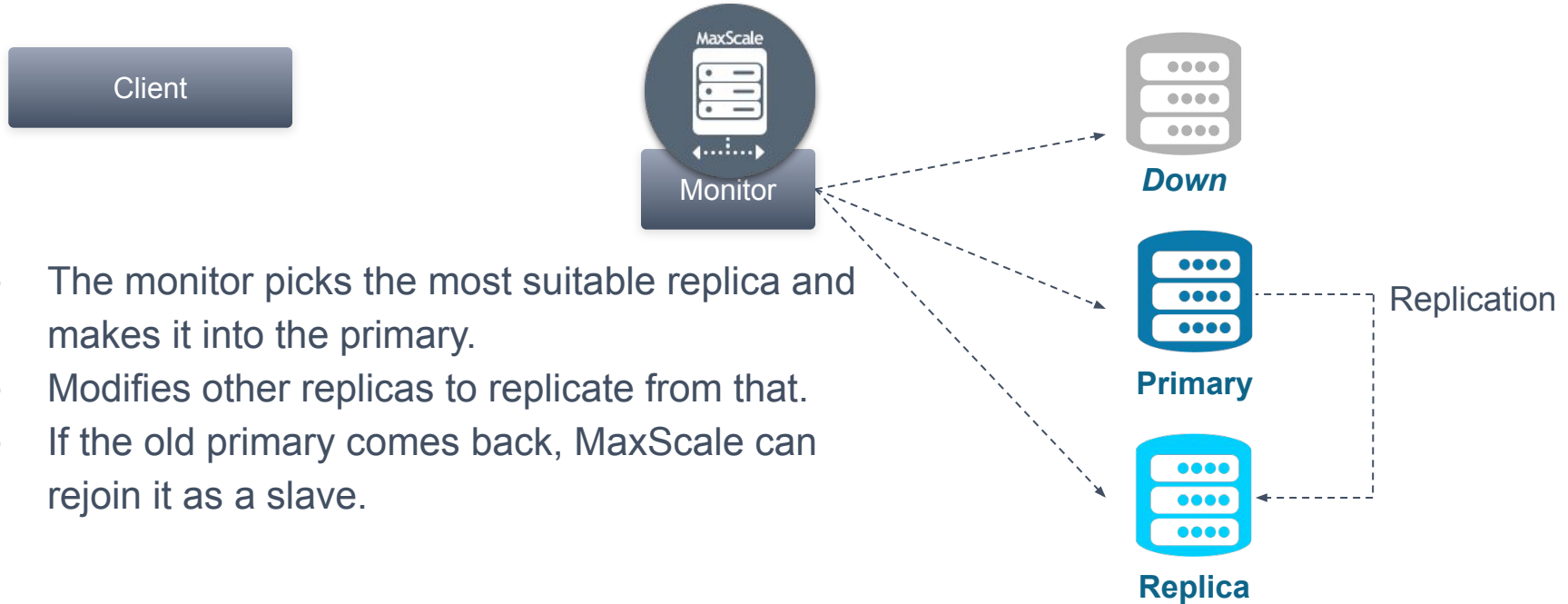


- The Monitor continuously monitors all servers and is aware of their state.

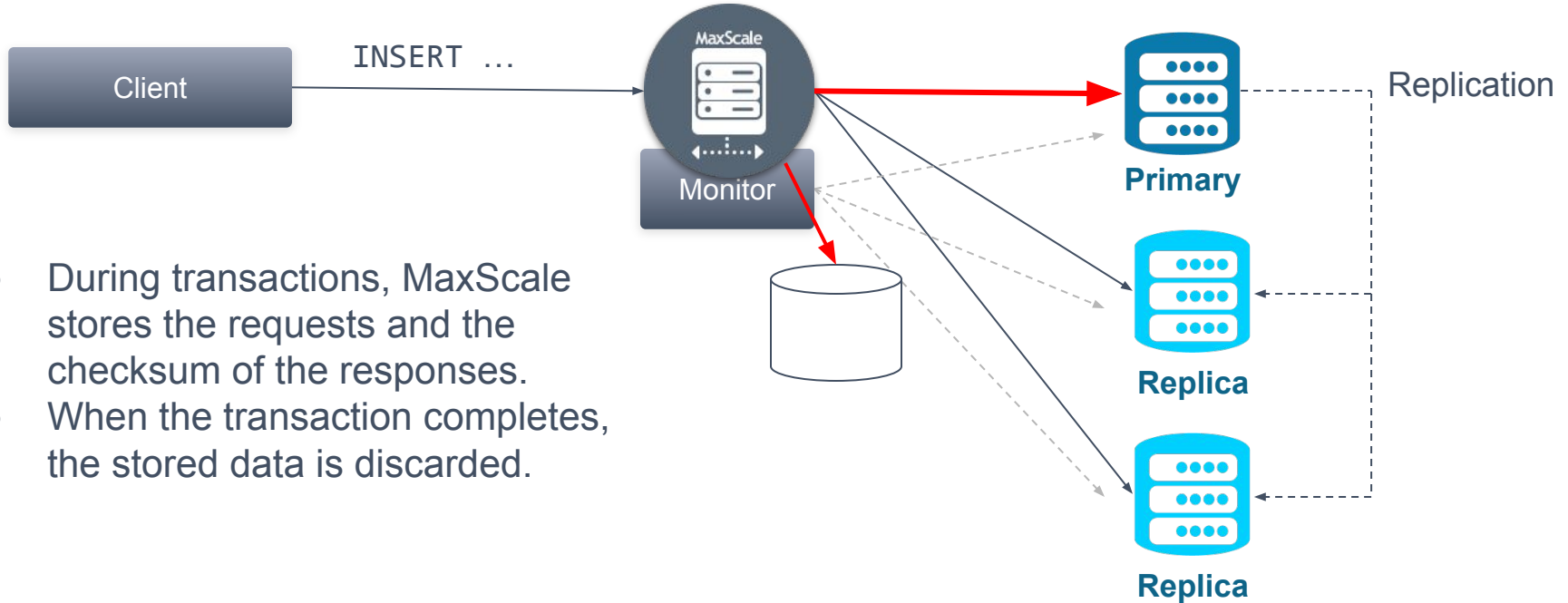
Auto Failover



Auto Failover

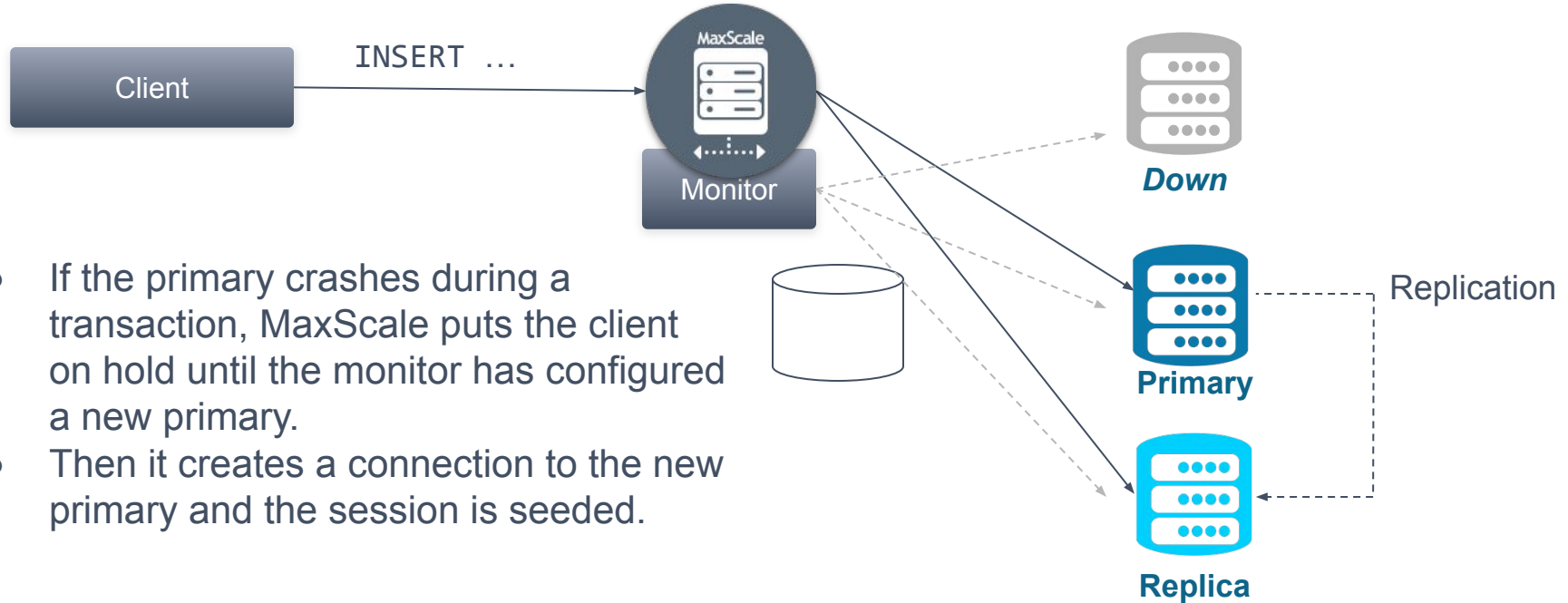


Transaction Replay



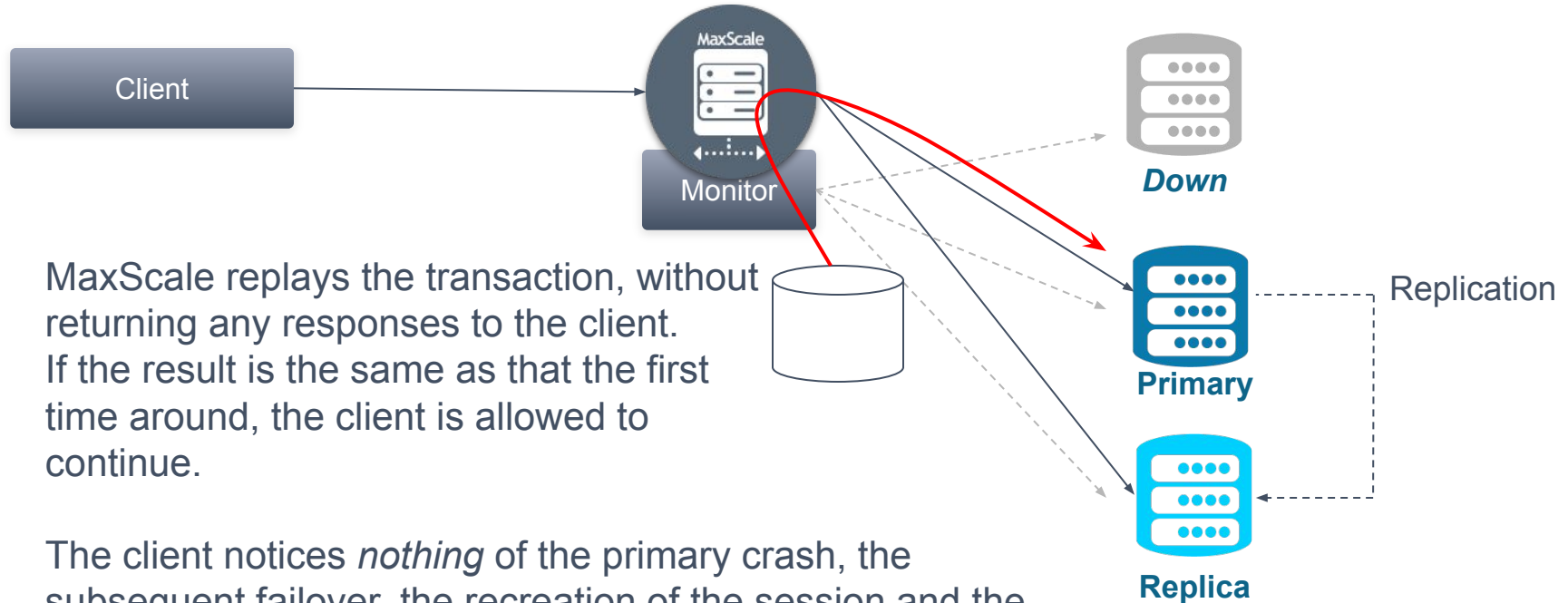
- During transactions, MaxScale stores the requests and the checksum of the responses.
- When the transaction completes, the stored data is discarded.

Transaction Replay



- If the primary crashes during a transaction, MaxScale puts the client on hold until the monitor has configured a new primary.
- Then it creates a connection to the new primary and the session is seeded.

Transaction Replay



- MaxScale replays the transaction, without returning any responses to the client.
- If the result is the same as that the first time around, the client is allowed to continue.
- The client notices *nothing* of the primary crash, the subsequent failover, the recreation of the session and the replay of the transaction.

License - First one, then another.

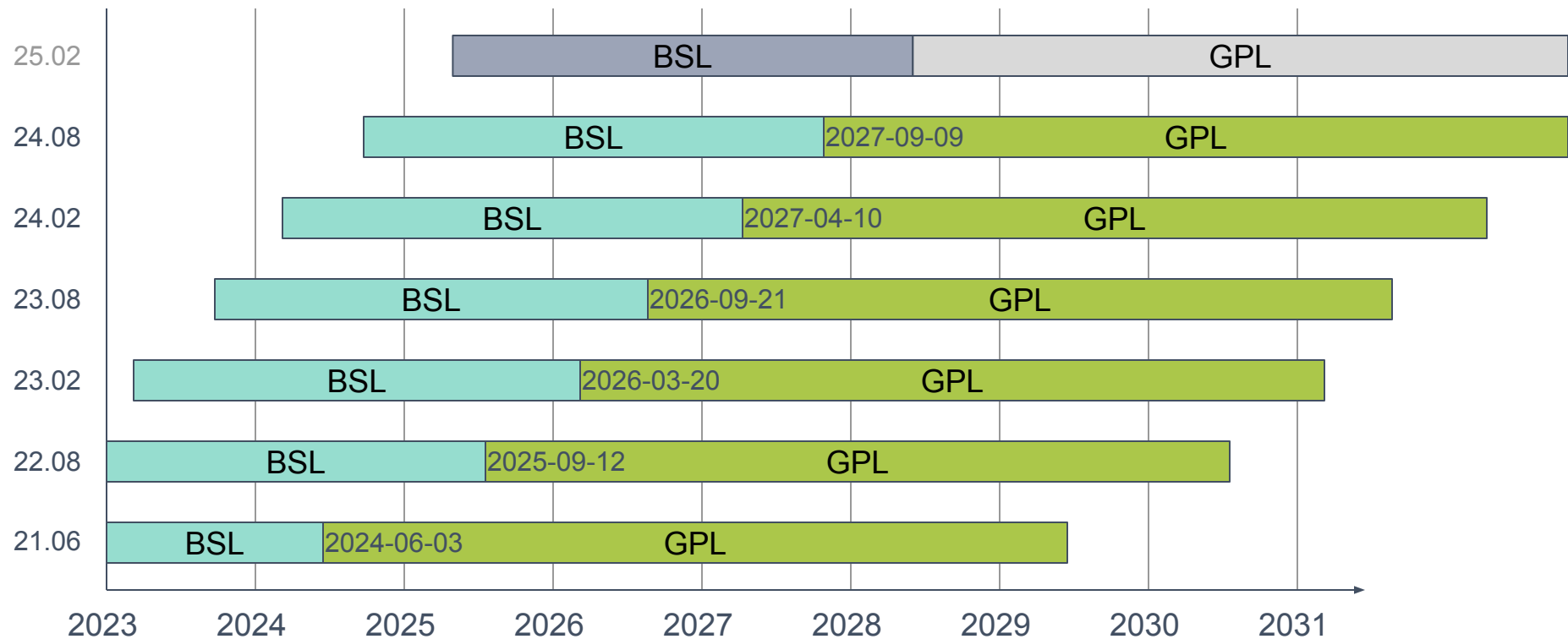
- Business Source License 1.1
 - Free use of the software for non-commercial purposes.
 - Production use permitted, provided no more than two servers are used.
 - Turns into GPL at *Change Date* or unconditionally after 4 years.
- GPL
- Approach
 - Change Date is set as 3 years from the date the first version is released.
 - Earlier Change Date was updated at each maintenance release.
 - We are committed to supporting the GPL version for 5 year.
 - Earlier no explicit commitment.
 - Accept contributions.
- Goal
 - Get MaxScale included in distributions (Fedora first and it is well on its way).

MaxScale Versions

Version	21.06	22.08	23.02	23.08	24.02	24.08
Licence	GPL	BSL	BSL	BSL	BSL	BSL
Change Date	2024-06-03	2025-09-12	2026-03-20	2026-09-21	2027-04-10	2027-09-09

- MaxScale 21.06 became GPL in June 2024.
 - *Read-write-splitting, automatic failover and transaction replay* are all available in 21.06.
 - MaxScale 6.4 was renamed to 21.06 in June 2024, to align all version numbers.

From another angle





THANK YOU