

DASCALE Client

Requested Data



① Checking the current active instance

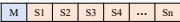
Master Instance

Active Instance

② Calculating Participated Instance

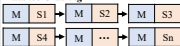
Participating Manager

Active Instance list



Instance Calculator

Instance Ordering



Transaction Manager

Transaction Executor

③ Transferring Instance ordering information

Participating Instance Check



Memory Buffer

④ Flushing Requested Data

Log management

Flush

LCP Controller

⑤ Processing Local checkpoint

LCP 1



LCP

LCP Status Manager

LCP 2



LCP

LCP Status Manager

LCP N



LCP

LCP Status Manager

Wait Slave 1

Complete Local Checkpoint 1

Wait Slave 2

Complete Local Checkpoint 2

Wait Slave N

Complete Local Checkpoint N

Slave Instance 1

⑥ Transferring LCP flag(Start) to Slave Instance

Slave Instance N

LCP Executor

⑦ Processing transaction in slave instance

LCP 1



Flush

LCP

LCP Status Manager

...

LCP Executor

LCP N



Flush

LCP

LCP Status Manager

⑧ Transferring LCP flag(End) to Master Instance