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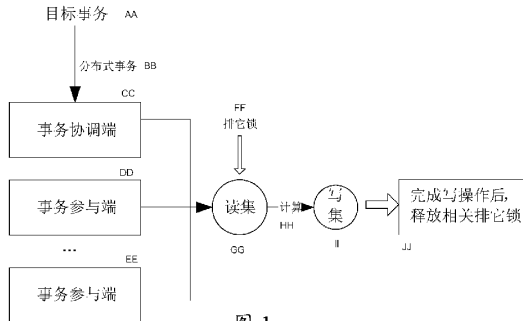
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(54) Title: TRANSACTION PROCESSING METHOD, AND DEVICE AND STORAGE MEDIUM

(54) 发明名称: 一种事务的处理方法、设备及存储介质



AA Target transaction
BB Distributed transaction
CC Transaction coordination end
DD Transaction participation end
EE Exclusive lock
FF Read set
GG Calculation
HH Write set
II After a write operation is completed, release a related exclusive lock

(57) Abstract: Provided in the embodiments of the present application are a transaction processing method, and a device and a storage medium. For a distributed transaction, it is innovatively proposed that exclusive locks are added to a read link for data records which are involved in a read set of the distributed transaction; and a write operation for a write set can be directly executed in a write link on the basis of these exclusive locks, and after the write operation is completed, the exclusive locks on the related data records are immediately released. The exclusive locks added for the data records in the write link can maintain the exclusivity of the distributed transaction for these data records, which can avoid the problem of write operation interruption in the write link, that is, all write operations of the distributed transaction are necessarily successful, which ensures the atomicity of distributed-transaction processing; in addition, since the exclusive locks are immediately released after the write operation is completed, a lock holding time of the distributed transaction

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is merely a time which is inherently required to execute a transaction logic of the distributed transaction, which greatly shortens the lock holding time of the distributed transaction, such that the throughput of the distributed transaction can be effectively improved, and the transaction processing efficiency is thus improved.

(57) 摘要: 本申请实施例提供一种事务的处理方法、设备及存储介质。针对分布式事务, 创新性地提出在读环节为其读集中所涉及到的数据记录添加排它锁; 在写环节可基于这些排它锁直接执行针对写集的写操作, 并在完成写操作后立即释放相关数据记录上的排它锁。在写环节中为数据记录添加的排它锁可保持分布式事务对这些数据记录的独占性, 这可避免写环节中发生写操作中止问题, 也即是, 分布式事务的所有写操作必然成功, 这保证了分布式事务处理的原子性, 另外, 由于在写操作完成后立即释放排它锁, 因此, 分布式事务的持锁时间仅为执行其事务逻辑固有所需的时间, 这大大缩短了分布式事务的持锁时间, 从而可有效提高对分布式事务的吞吐量, 改善事务处理效率。