oracle事务隔离级别,用jdbc体验 PDF转换可能丢失图片或格式,建议阅读原文

https://www.100test.com/kao\_ti2020/255/2021\_2022\_oracle\_E4\_B A 8B E5 c67 255777.htm Oracle 支持的 2 种事务隔离级别 Read committed , Serializable 用 JDBC 进行了测试和学习,根 据自己的理解写点心得,这里全部是我个人的看法和理解, 如果错误之处请大家告诉我,以便误导他人同时也会使我学 习到更多的东西。 所需数据准备如下: item item\_value action time id aaa LOOCKY 06-12-2006 15:23:54 1 tsindex users 06-12-2006 15:23:54 2 tstemp temp 06-12-2006 15:23:54 3 来自 oracle 官方网站的 Read committed , Serializable 的解释 Isolation Level Description Read committed This is the default transaction isolation level. Each query executed by a transaction sees only data that was committed before the query (not the transaction) began. An Oracle query never reads dirty (uncommitted) data. Because Oracle does not prevent other transactions from modifying the data read by a query, that data can be changed by other transactions between two executions of the query. Thus, a transaction that runs a given query twice can experience both nonrepeatable read and phantoms. Serializable Serializable transactions see only those changes that were committed at the time the transaction began, plus those changes made by the transaction itself through INSERT, UPDATE, and DELETE statements. Serializable transactions do not experience nonrepeatable reads or phantoms. 2 者的区别也是来自官方网站 summarizes key differences between read committed and serializable transactions in

Oracle. Table 13-2 Read Committed and Serializable Transactions Read Committed Serializable Dirty write Not possible Not possible Dirty read Not possible Nonrepeatable read Possible Not possible Phantoms Possible Not possible 上面的 2 个表来自 http://download-west.oracle.com/docs/cd/B19306\_01/server.102/b 14220/consist.htm 都可以随时查询 Isolation Level Description Read committed This is the default transaction isolation level. Each query executed by a transaction sees only data that was committed before the query (not the transaction) began. An Oracle query never reads dirty (uncommitted) data. Because Oracle does not prevent other transactions from modifying the data read by a query, that data can be changed by other transactions between two executions of the query. Thus, a transaction that runs a given query twice can experience both nonrepeatable read and phantoms. 默认的隔离级 别设置。事务中的查询只能看到在此查询之前(而非事务开 始之前)提交的数据。 由于 oracle 不会因为查询数据而阻止 另外一个事务修改数据,因此数据可以在一个事务中的2次 查询中,查到不同的结果。因此可能出现 nonrepeatable read and phantoms 的情况 Serializable Serializable transactions see only those changes that were committed at the time the transaction began, plus those changes made by the transaction itself through INSERT, UPDATE, and DELETE statements. Serializable transactions do not experience nonrepeatable reads or phantoms. 根绝我的理解解释 一下: serializable transactions 在事务执行: 2次同一条数据查 询的时候(就是两次执行查询,就是说执行完第一个 .executeQuery , 然后执行第二个 .executeQuery ) , 如果在第

一个 .executeQuery 开始执行而另外一个事务已经开始修改数据,并且已经提交,那么两次读取的数据是另外一个事务修改前的数据。 如果在第一个 .executeQuery 之前,另外一个事务修改了数据,那么两次读取的数据是另外一个事务修改后的数据。 这恰恰反映了, repeatable read ,两次结果一致 这与 Read committed 完全不同, 要是 Read committed ,第一个 .executeQuery 未执行完第二事务,而在第二个 .executeQuery 前第二个事务执行完毕,那么第一个 .executeQuery 得到的是初始数据,而第二个 .executeQuery 得到的是修改后的数据恰恰说明了 nonrepeatable read ,两次结果不一致的情况 100Test 下载频道开通,各类考试题目直接下载。详细请访问 www.100test.com