Abstract

In a multiuser database environment, multiple simultaneous transactions may update the same data. Transactions executing simultaneously must produce meaningful and consistent results. In multiuser database environment conflicts are common. If conflicting situations are not dealt properly then it can harm the database. To minimize the concurrency problem the locking approach is used. Our study focus on implementation of optimistic lock through trigger on data objects of temporal database to resolve the conflicts among multiple user sessions. Through step by step graphical representation this study highlights how to acquire and release an optimistic lock on data objects in case of conflict. This experimental study shows each locking, unlocking situations along with conflicting situations graphically through Oracle 12C enterprise manager.

References

1. P.A. Bernstein and N. Goodman, “Concurrency Control in Distributed Database Systems”,


Graphical Representation of Optimistic Locking and Concurrency Control for Temporal Database using Oracle 12c Enterprise Manager


12. Franck Pachot “All about locks: DML, DDL, foreign key, online operations, dbi services", Switzerland


15. Yongdong Wang, Lawrence A. Rowe “Cache Consistency and Concurrency Control in Client/Server DBMS Architecture”.

Index Terms

Computer Science
Databases
Keywords

CC, PCC, OCC, RCN, Oracle 12c.