Preventing Data loss in Online Sale System Transactions by using Out-of-Place Update Recovery Information (Shadow Paging)

Htet Htet Kyaw, Khine Moe Nwe

University of Computer Studies, Yangon htethtetkyaw27@ucsy.edu.mm, khinemoenwe@ucsy.edu.mm

Abstract

A transaction is a logical unit of work. Transaction Processing Systems (TPS) are the heart of the business operations today. A TPS may fail for many reason such as system failure, human errors, hardware failure, incorrect or invalid data, computer virus, software application errors or natural or man-made disasters. As it is not possible to prevent all TPS failures, a TPS must be able to cope with failures. So, TPS will go through a recovery of the database to cope when the system fails. Transactions are indeed the unit of recovery. Recovery in database system means that restoring the database to a correct state after some failure has rendered the current state inconsistent. In this paper, Out-of-Place update recovery information is used to prevent data loss sale transaction processing online restoring the database to be a consistent state.