

Abstract

In this information era, the role of databases have become important in many ways. However, when there is a possibility of failure in a database so that the recovery process that requires a company's operations can continue. In coping with failure in the database, but needed a quick recovery time, also needed a way to minimize missing data in the database. One solution that can be done to overcome this is to use fast-start failover to the standby database.

Standby database is a duplication of data from the primary database. Each transaction on the primary database, redo log data is sent and on-apply to standby databases so that data on the two databases will be synchronized. Fast-start failover is a feature that enables failover and reinstatement automatically without human intervention manually. This can minimize the time required for recovery when there is failure on the standby database. In order to fast-start failover can be done, then the required fast-start failover observer on duty to monitor the connection between the primary database to standby database. At the time of experiencing the primary database failure, the observer will perform automatic failover process. Once the primary database is up again, the observer will also perform automatic reinstatement.

This final task of implementing the fast-start failover to the standby database and performed an analysis of the time it takes a long time observer to perform failover and reinstatement in the event of failure, and conducted an analysis of the availability of data in both databases, then made an application to simulate a DML transaction insert, update and delete in order to facilitate the performance analysis of fast-start failover on the physical standby database.

Keyword : observer, fast-start failover, standby database, primary database