Implementation of Distributed Database System using Merge Replication

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Abstract

A distributed database is a database with its data elements are stored at several sites of a computer network. Certain data items may be redundantly stored at more than one site for reliability reasons. A replicated database is a distributed database in which multiple copies of the same data items are stored at different sites. Replication is the one of the good way to increase the performance of database system by maintaining different servers. Database replication is used to provide high availability and performance for accessing data. In order to distribute database load to different database servers rather having a single mainframe server, replicate data. In this way, work load on single server can be decreased. In this system, the merge replication technique of data replication is used to ensure consistency and ease of access from any remote location. The user can perform any type of banking operation (Deposit, Withdraw, Transfer) at their convenient bank and no need to concern to go their account registered bank. Although, the operations are performed at the branch of desire location, the system replicates the committed processes to all branch via the merge server for the future time of accessing to be a consistence state data.