

Abstract

Development of information technology makes management of information and ease of accessing a database become an important element in information systems. A decrease in performance on a centralized architecture causes can be handle by changing to the architecture of a distributed database. In addition, the architecture of cloud on the database is an architecture database that can be accessed by a client with cloud service. This provides a convenience when accessing information on demand.

Therefore, in this Final Project, author implemented how to handling of heterogeneous distributed database that was built as a Database as a Service (DBaaS) on cloud relational architecture. The case study used is the distro database and using 3 different data storage in distributed database that is vertical fragmentation, horizontal fragmentation, and replication.

The results in this Final Project are the performance of DBaaS system using the test parameter of response time, throughput and memory usage. Where performed on the implementation of a distributed database by storing data in vertical fragmentation has a better performance results than horizontal storage, and replication.

Keyword: DBMS, distributed, homogenous, heterogeneous, database, cloud, performance, response time, througput, memory usage, fragmentation, vertical, horizontal, replication