Abstract

The initial steps in creating a system with the aim of optimum database is making a *database* design. With the database design, a practitioner can reduce a processing time for business operations in some cases. However, the design process is not enough to improve a database performance. One way is by increasing the speed of data transaction which is determining the speed of query processing. This can be increase performance between 25% and 100%, can sometimes be more.

The database design can be achieved by creating a model from the beginning to be improved to obtain a data model which is closer to the actual situation. In this thesis, we analyze several different query models on *RAID-1* and *DAS*, then develop them into the software to generate a *cost query* of accessing the disk.

From the experiment and testing, we can conclude that from a case study which has a block data and different forms of queries, DAS superior than RAID-1 because accessing the disk to read data on the RAID-1 to be doubled because of the demand made on the second disk. Both the RAID-1 and DAS, the performance of a query processing is influenced by several factors including the type of operation involved in the query, the number of records, size attributes, the existence of indexes, types or forms of queries that are used.

Keyword *:Database , cost query, RAID-1, DAS.*