

Abstract

The use of Network-attached Storage(NAS) can improve one of the good criteria if database that is scalability. Using NAS, when data is increased, additional storage can be added by adding the NAS device to local network. In addition to availability and performance of the database, RAID can be implemented. The usaga of RAID level can be tailored to the needs of the application using that database.

With local storage scanario, network storage scanario and network storage with RAID, query processing is done. In NAS implementation to store data on the network, there was a significant decreasement in database performance, this happened in queries using temporary tablespaces. While the usage of RAID 0, which theoritically will improve performance, no significant effect on the performance of database system. This happened because eventhough the data transfer is increased, the limitation of network transfer rate the performance is not much effected. For queries using temporary tablespace using RAID 0, the performance is decreased. This because the data transfered through the network more time. In addition, the factor that affect the performance on NAS usage is the network transfer rate. This can be seen from the test using a different network interfaces.

Keyword : NAS, RAID, processing time