ABSTRACT

In a cloud computing service, good quality of service require to adapt to the number of users and computational level of service. The adaptability and sustainability of cloud computing services, the virtual machine migration, will have an impact on cloud computing services can be seen from service response time and cpu resource usage. So, by looking at service response time and resource cpu usage, it will be obtained the condition of number of users and the condition of computational level that is good to do virtual machine migration.

In this bachelor thesis, a virtual machine migration system will be made with a service that is able to represent the computational level, the parameter of number of users is also become a variable of testing, and the result is a data of response time and cpu resource usage.

The result shows that many number of user and high level of computing will make the virtual machine migration has a faster response time on two virtual machines case, but for one virtual machine case, the migration will make response time get longer time because of migration process and cpu resource usage shows the same value for both cases.

Keyword: virtual machine migration, cloud computing, computation, response time, cpu resource, number of user