ABSTRACT

ANALYSIS OF METRIC CPU AND MEMORY PERFORMANCE IN WINDOWS AZURE VIRTUAL MACHINE (VM) AND AMAZON WEB SERVICE ELASTIC COMPUTE CLOUD (EC2)

By

FAHREZA MUHAMMAD GHIFFARI

1202164079

In this technological era, the role of cloud computing is helping both human users and corporate individuals. Cloud computing itself is a technology information service where resources are taken from the internet through web-based tools and applications and not a direct connection to the server. And data and software are stored on the server. There are two examples of cloud computing services namely Windows Azure and Amazon Web Services. Windows Azure is a service from Microsoft while this service is a form of Platform implementation as a Service (PaaS) of a cloud computing. Through Amazon Web Services is a cloud-based service provided by Amazon since 2002.

In this final project, Windows Azure VM and Amazon Web Service EC2 will be tested. This study aims to find out which provider is better and commensurate with the price provided by conducting performance tests on memory and CPU parameters. Testing is done by testing each of the parameters of 5 (five) using the Phononix-test-suite for RAMspeed testing and 7zip-compression and Sysbench for CPU intensive testing.

From the results of testing and analysis it can be concluded that AWS EC2 T2.large, T2.medium, and T2.small beat the performance of Windows Azure VM on each parameter tested.

Keyword *: Cloud Computing, Windows Azure, Amazon Web Service.*