ABSTRACT

The use of cloud computing is very capacious, even its use widely used for high-performance computing. The cloud data center relies on virtualization to increase productivity and reduce complexity to be assigned to end-users in accessing the services provided. With the application of virtualization, performance degradation is inevitable. If consumers need to do high computing needs, an alternative solution can be done by computing on baremetal. Openstack is represented as an open-source platform, popular as an Infrastructure as a Service (IaaS) cloud platform that can be implemented as a private cloud or a public cloud. Openstack already supports virtualization as well as acquiring baremetal. Therefore, with this research, there is a performance test between baremetal provisioning and virtualized (virtual machines) to perform some testing. Performance testing based on the resources of the cloud computing infrastructure CPU, RAM, network throughput, disk io read write, jitter and packet loss. The test results show that ironic baremetal performance is better than virtual machines.

Keywords: *Openstack, Ironic, Benchmarking, Provisioning baremetal, Virtualization*