ABSTRACT

In Network Computer Laboratory at School of Applied Science Telkom University do not have a tool for testing some web server. The Testing is used to determine the performance of the web server. This testing tools should be cheaper than PC Desktop and not spending space. The testing mehod is distributed testing. Web server testing use clustering method and need three units Raspberry PI and Apache JMeter which is installed in the Raspberry PI and monitored by Ganglia. Raspberry PI cluster with Apache JMeter as a hardware and software can be used as a web server tool test. The highest load with Raspberry PI cluster is 910 threads with memory usage 1.8 GB and monitored by Ganglia. The result of the testing use Aggregate Report feature in Apache Jmeter from 56944 samples get average response time of server 58804 milisecond, shortest response time of server 22 milisecond, highest response time of server 372751 milisecond, Error persentage 36.16% and get average request from server 21.2 request/hour .

Keywords: Raspberry PI, Clustering, Apache JMeter, Ganglia