ABSTRACT

At this time, where has been done a lot of research, design, and manufacture of the Internet of Things to facilitate peoples, in performing daily activities such as Smart home, Smart city. It is conceivable that there will be how many IoT devices that will connect to the internet, with these conditions the user needs a section to manage his device. Therefore a Platform for IoT is required, the IoT Platform usually handles the task of managing and continuing data visualization. That allows users to automate their environment. So in an IoT Platform load balancing is required to balance the work load on each server.

In this final project has done research about load balancing implementation with Linux virtual server Direct routing (LVS-DR) method using Round Robin and Least Connection algorithm on IoT Platform. In both algorithms have their respective logic to serve the requests addressed to the server, this research aims to find out which algorithm is better at dividing the queue with data characteristics on the IoT device so as to improve the performance of each server.

From testing and analysis, it is known that server performance using load balancing is much better than without using load balancing, with an increase in request / per second value reaching 98.8% and throughput value reaching 104.21% in LVS-DR with the least connection algorithm. Load sharing with load balancing provides a 45% reduction in RAM usage compared to without load balancing.

Keywords : *IoT Platform*, *Load Balancing, Linux Virtual Server(LVS)*