

ABSTRACT

The most visited internet application is a website. the content on a the website varies so that people are very interested in continuing to open a website. The greater human growth that results in increased internet application users, this can cause traffic on the website to increase and the workload on servers increases to serve requests from users. While users want to access the website with maximum speed.

Therefore, load balancing is the solution because it can be used to improve server performance with the aim that the server does not experience overload requests..

In this final project, load balancing system was implemented using the least connection algorithm for three types of services, namely a web server, a FTP server, and a VoIP server. Obtained an average value with the connection between the client and the load balancer using wireline that is on the web server for throughput of 105,03 KB/s, response time of 6.501 seconds, request loss of 1.97%. On FTP server for throughput of 120,70 KB/s, response time of 33,97 seconds, request loss of 0,39% and on VoIP servers for block call values of 0,9%. Whereas with the connection between the client and the load balancer using wireless that is on the web server for throughput of 108,38 KB/s, response time of 7,52 seconds, the request loss of 2,07%. On FTP server for throughput of 122,64 KB/s. response time of 33,19 seconds, request loss of 0,27% and on VoIP servers for block call values Of 0,32%.

Keyword : load balancing, least connection, server.