ABSTRACT

A number of studies show that Hypertext Transfer Protocol (HTTP) data dominates the data path through the internet network by more than 75%. Based on the results of the netcraft web server survey, which is based on the open source apache and nginx web servers, every year the number of users has increased. With the rapid development of the internet, the availability of Internet Protocol version 4 (IPv4) is increasingly limited, to overcome this problem, an allocation of Internet Protocol version 6 (IPv6) is used on the web server because it has a larger number of addresses and better security. In this study, the web server performance is tested with the test parameters, namely Time Taken for Tests, Request Per Second, Transfer Rate (Kb/s), Time per Request (ms), and Memory Usage. Testing with Apache Bench is done by providing client requests with varying amounts, with the number of connection requests from 500 to 500000 requests. The results of this study using Apache Benchmark testing that Nginx is superior to Apache in terms of 4 seconds faster in completing client requests and less memory usage.

Keywords: Web Server, Apache, Nginx, Apache Benchmark