

## ABSTRACT

*In the process of searching the information server is needed as a container from the web server to accommodate the information sought, one of which is a website. As technology develops, there are more website users and of course a web server is needed that is reliable and fast in sending the required information. Currently, there are many web server presences with their respective advantages. The most used web servers are Apache and Nginx. Currently, there is an alternative web server that has performance equivalent to Apache and Nginx but has never compared it with OpenliteSpeed.*

*In this final project, the author compares the performance of the three web servers, namely Apache, Nginx and OpenliteSpeed based on containers in a virtual private server. Performance testing is done by providing 10000, 20000 and 30000 load requests with 1, 100 and 1000 concurrent connections in category Static and Dinamic Website. Performance can be measured by parameters Cpu Usage, Memory Usage, Time per Request, Transfer Rate and Time Taken for Tests.*

*Based on the test results, using containers each web servers uses small server resource. From the three web servers with high loads, Openlitespeed is far superior in cpu usage and transfer rate. Nginx is superior in memory usage, time per request. and time taken for test. From the three web servers, fastest web server is Openlitespeed, second is Nginx and third is Apache. Apache is more optimally used for web servers with small request load, while Nginx and Openlitespeed are more optimally used to handle large loads with minimal hardware specifications.*

**Keywords :** *Virtual Private Server, Container, Docker, Web Server, Apache, Nginx, Openlitespeed*