**ABSTRACT** 

The needy for Internet connections increased along with the variation of

devices in the market which can be used to explore in the virtual domain. Web server

is a access service provider to the user via Hypertext Transfer Protocol (HTTP) over

the files contained on a web site. Due to the increasing number of user requests to a

web server for the files contained on a web site, it needs load balancer to distribute

the load on two or more access lines so there will no centered connection to only one

network device.

This load balancer technology uses Nginx web server. Nginx is one piece of

software for the server due to the high performance, stable, having lots of features,

easy to configure, and using only few resources on the server.

This final project will be implemented in a network that consists of load

balancer server, web server and database server using a Virtual Private Server (VPS).

The result will be a network that can serves the files contained on the website to

divide the load that wants to access to the multiple servers, so it will not centered to

only one network device.

Keywords: Web server, load balancer, Nginx, VPS

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