

ABSTRACT

In the development of network technology, where development makes it easier for us to build, monitor or maintain computer networks. The increasing development of internet use has also led to increased demand for service quality. It's not enough just to be able to connect to the internet, connectivity performance is an important factor in current internet usage.

Load balancing is one mechanism to divide computational load to several servers. Load balancing aims to optimize resources, maximize throughput, minimize response time, and avoid overloading in one resource.

This Final Project discusses the analysis of Network Definend Network (SDN) network for enhancements and optimizations applied using Load Balancing techniques. Parameters are taken through the response time that goes to one server and to several clients that will be monitored with the Mininet controller.

This system is designed with the queue method and track determinant, namely ANN (Neural Network) which is able to classify and channel input data into certain categories or paths that have been determined with the main role in balancing the load in the Definend Network Network Software network to determine and change weight which means the ability to process data input without having to have an optimization target.

Keywords: Load Balancing, SDN (Software Definend Network), ANN (Artificial Neural Network), response time, optimization