## **ABSTRACT**

In this era, internet is growing rapidly and the number of users that keeps increasing accessing an application on the network. It is very difficult for server to receive large number of request and therefore every requests is divided to several servers, to divide that request we need load balancing. In general, a load balancing require its own devices to be implemented, it is not flexible and expensive. Therefore we need another solution that can solve the problem of inflexibility and expensiveness. An SDN technology works by separating the control plane and data plane, it makes every decision in the network performed at centralized control and SDN offers programmability. SDN programmability enabling network control to become directly programmable. In this paper we propose a solution that is applying the method in SDN to create a rule to split traffic based on specific ratio, and automatically change the ratio based on server response time. By using this method it can bring high flexibility in the network and the need of expensive machine.

**Keywords:** Load Balancing, SDN, Response Time, Ratio.