

**Abstract**

*P4 is a high level language for expressing how packets are processed by the data plane. OpenFlow and P4 work closely with SDN controllers. OpenFlow makes it possible to add or remove forward entries for about 50 different header types. Issues of concern in OpenFlow is going more headers that increases a few years, this led to the P4. Load balancing is a technique for distributing traffic loads on two or more connection lines in a balanced manner, so that traffic can run more optimally. To determine the effectiveness of load balancing implemented in the P4-Programmable Switch, the authors use Round Robin and Weighted Round Robin algorithms. Based on the test results using the throughput, jitter and latency parameters, it shows that the weighted round robin algorithm has better performance than the round robin algorithm.*

**Keywords:** *P4-Programmable Switch, Load Balancing, Round Robin, Weighted Round Robin.*