

ABSTRACT

Software Defined Networking (SDN) is a paradigm that is changing the way design, organize and control the network. The essence of SDN is to create a network that can be programmed. One of the network protocol that can support SDN is OpenFlow. OpenFlow is designed and developed by Stanford University which separates control plane and data plane. Reliability is the Major issue to deploy OpenFlow in this network. In this study will be made a prototype algorithm handling link failures and test its performance by comparing the switchover time and the overhead to the methods that already exist on POX controler.

In this research, prototype algorithms link failure handling requires an average time of 59 milliseconds with overhead 10.1%. It showed prototype algorithms still not meet the standards of carrier grade by 50 milliseconds. But the prototype algorithm has better performance compared with existing methods on POX controler.

Key Word : SDN, OpenFlow, Link Failure.