ABSTRACT

Software Defined Network (SDN) is a paradigm that is changing the way regulate, control and design networks. SDN make a network can be programmed according to the existing needs. One protocol that supports SDN is OpenFlow. In OpenFlow, between the control device (control plane) and the forwarding device (data plane) are separated. The control device is on a controller.

SDN is still in the development of the researchers, there are still some features that are required in the future. One of the features that become a necessity of SDN are monitoring, monitoring can monitor the state of the network that have already implemented SDN. In this thesis, the author gives a solution to the existing problems is to build an application on the SDN web-based monitoring.

Based on the results of alpha testing, the monitoring application can work well. For the beta testing, the rating score is 4,01 from range score between 1-5. In response time testing, the average time to display the data requested is 0.0123 seconds for the test on different switches and 0.0134 seconds for the test on different links.

Keyword : SDN, monitoring, Ryu Controller