ABSTRACT

In this day, technological development is very rapid, not least on computer network. In these technological development has emerges a new idea or a concept that was Software-Define Networking (SDN). Software-Define Networking (SDN) is a new approach concept of design, build and manage computer network by seperating the control plane and data plane. The main concept of Software-Define Networking (SDN) is centralized network waith all regulation are in controll plane. SDN have a main protocol, that protocol is OpenFlow. OpenFlow is a standard communication interface define between controll and forwarding layer. In this final project will simulated SDN network on the virtual network. Simulation of virtual network SDN using a tool, that was Mininet. Mininet is tool based on ligh-weight virtualization application which could create a realistic virtual network running real kernel, switch and application code. This research is to understood how SDN network run, measuring performance of SDN network such as delay, jitter and throughput with a few topology scenarios like 2 switches, 4 switches, 8 switches and 16 switches.

Keywords : SDN, OpenFlow, Mininet, delay, jitter and throughput.