ABSTRACT

Streaming technology is the answer to the *distribution* of video data that is large in size and is *time-sensitive*. This technology allows *file*s to be used directly without waiting for the completion of the upload and takes place continuously without interruption. *Software Defined Network* (SDN) is a concept of separating the *data plane* and *control plane* on a computer *network* device such as *router*s and *switch*es, allowing you to program the device as desired centrally

In this Final Project the application of video *streaming* services is implemented on the SDN *network* by using *Open Shortest Path First* (OSPF) *routing*. As well as comparing conventional *network*s with SDN *network*s and looking for good video formats used on these *network*s, then measuring the *Quality of Service* (QoS) of video *streaming* services. Proof is done by implementing Video *Streaming* services on the SDN *network* consisting of four *switch*es as *data plane*s that are connected to each other with a *control plane* in the form of a PC as the *control* of a *network*.

In this final project shows the value of the three QoS parameters is still at the standard value of ITU-T G.1010. *Bandwidth* measurement on the *server* and *server* using iperf shows an average result of 98.05 Mbps. Comparison of QoS results when given *background traffic* (BT) affects the performance of the *server* and shows that SDN *network*s are better than conventional *network*s.

Keyword : video *streaming*, SDN, IP, OSPF