ABSTRACT

Faculty of Applied Sciences is one of the faculties in Telkom University. Faculty of Applied Sciences is located in Selaru Building. To find out all the academic and non academic activities, in the Selaru Building has been installed CCTV cameras based on IP that are connected to a network that is monitored in one server. IP-based CCTV is a tool used to control all IP-based audio-visual activities with superior Open Standard Protocol, High Image Quality, Event Management and Intelligent Video, Scalability and Flexibility, and Security capability over analogue CCTV cameras. The problems that occur that there are some measurement points that produce images and sounds that are less clear at 5^{th} point of location G4 and point 4 on the 4^{th} floor. At this final project is tested on the CCTV network located at FIT to know the quality of service on CCTV cameras. Test analysis of services performed by testing packet data services .

In this case the measurement process is done with several measurement scenarios. In this measurement UDP capture protocol through wireshark software. The use of UDP protocols whose packets disappear is more tolerable than incoming packets, UDP is also used for realtime realtime applications. The results will be used to analyze the quality of service parameters (QoS) ie throughput, delay and packet loss.

From the measurement of QoS parameters and the analysis performed on the packet data service can know the factors that influence the QoS on the network such as attenuation, distortion and propagation delay and is useful to minimize delay, packet loss and to increase throughput. In this final project obtained the value of delay, packet loss, and throughput that has been measured and standardized with the TIPHON version recommendation. The result of service quality measurement (QoS) on CCTV camera got the average of throughput 667.36 bps, delay 123.65 ms, and packet loss 0%. 0% value in packet loss signifies that the sender interface and destination interface are connected properly. The MOS value obtained is 4 with good opinion.

Keywords : *QoS, CCTV, Packet Loss, Throughput, Delay, Wireshark*