ABSTRACT

Computer network is a media transform information which grows rapidly, almost all of communication activities utilize it as a media to transform information. However, there are several things that must be taken into account in the term of using the computer networks suchlike traffic and the quality of sending information from one device to another. Whit abundance of devices which are connected together, it simply lead to gain problem in monitoring the traffic and its network. In the term of network monitoring.

In order to cope with mentioned problem, through this Final Project, Monitoring System Configuration using Router Mikrotik is made as a monitoring device which integrated with three monitoring PCs completed with SNMP Traffic Grapher (STG) software, WhatsUp Gold, and Wireshark. Those used softwares have functions to monitor information traffic and to find Metro Akses's network quality.

This Final Project aims for a traffic monitoring system, and Metro Access network monitoring so as to facilitate students in measuring traffic and knowing the value of Quality of Service from the Metro Access network. In this Final Project after 10 attempts were obtained, the average value of service data throughput is 0.04231 Mbps. Jitter value 2.02 ms voice service, packet loss value of 0.108% and average delay of 184.6 ms. The delay value on video service with an average of 2,8266 ms shows good quality. Then software SNMP Traffic Grapher and WhatsUp Gold has been successfully implemented to monitor traffic and links on Metro Access Network.

Keywords : Access Metro, Monitoring, Traffic, Switching, QoS