ABSTRACT

Information and communication technology in telecommunication had been developing rapidly. The hardware developers start creating hardware with IP based communication. Therefore, the amount of internet users are also increasing, whether they are interaction between machine to human or machine to machine. As the amount of users are increasing, the amount of data packet in internet is also increasing. One of the solution is to add new network device such as router. But it will push the internet provider to spend a lot more money and consume a lot more electrical power instead of solving the problem.

In this final project, a network traffic log application was made for telecommunication system which is simulated and implemented in PC Router. With this application, it was expected that internet providers could use PC Router together and later the user's usage can be calculated.

By simulating and implementing this network traffic log application in PC router, result was gained which is the amount of packet recorded by network traffic log application and wireshark shows a similar result for 100%. The quality of the network is also excellent by implementing PC Router.

Key words: traffic logging, PC router, packet sniffer, ipv4, telecommunication