

## ABSTRACT

On a LAN connected to the Internet with multiple users needed an arrangement that can maximize bandwidth resources owned. So that all users get good quality service.

A network cafe in general have yet to implement for each PC connected to the LAN network, but with increasingly diverse user activity then the need for a system that can restrict bandwidth is needed. Similarly, as the network grows and Atmosphere Network services, that requires a right method of bandwidth management. The implementation is performed in real conditions on the network Atmosphere cafe by observing the average throughput obtained in each *client* PC and the CPU Load on MikroTik Routers with a scenario many users to access various services.

The main target of this thesis is to implement bandwidth management method using MikroTik RouterOS method Simple Queue and Queue Tree, a case study on Atmosphere Networks, the average throughput analysis on the customer with simple queue method by using a proxy of 118.7 kbps and using no-proxy for 111.5 kbps, compared with the method queue trees by using a proxy and no-proxy for 241 kbps and 115.5 kbps and establish what methods are appropriate to conditions in the network Atmosphere network.

*Keywords: Bandwidth Management, MikroTik, Simple Queue, Queue Tree*