ABSTRACT

Along the developments of technology at this point, there is an attack which can disrupt a computer user or server that connected each other on the network. One of the attack is Distributed Denial of Service (DDoS). This attack can make sure the user cannot access internet services because of the traffic is increased on the network. Therefore, we need a system to handle the attack efficiently.

In this final task, the simulation to perform preventive system against attack is applying traffic shaping on the network. Using router non agent-based system which can perform optimizing network traffic with the output is rate limiting bandwidth. For the simulation using software Network Simulator and network performance analysis will be conducted to know the value of the parameter of quality of services (QoS).

The test results obtained from the used traffic shaping methods is the value quality of services such as throughput, delay, jitter and packet loss. System traffic shaping using token bucket filter will be able to mitigate the attack to become normal condition traffic on the network.

Keywords: DDOS, network simulator, non agent, traffic shaping, QoS, Token bucket filter