ABSTRACT

Congestion control at internet network with traffic growth which goes up exponentially become one of important effort to give best service for its consumer. Congestion cause packet loss, low link utility, and high delay. Therefore, Internet Engineering Task Force (IETF) developing Active Queue Management (AQM) technique was called Random Early Detection (RED) and REM (Random Exponential Marking) while DropTail could not help this problem.

This final project will compare performance between RED with first mechanism that was implemented DropTail. This AQM management applicate at router. This Queue Management will simulated a simulator, there is Network Simulator 2 (NS2). From that simulators can give accurate and complete data.

From the simulation, got QoS performance RED queuing is better than REM queuing and DropTail. That is shown on comparison of their packet loss. RED has **15.734 %**, REM has **18.715 %** and DropTail has **19.359 %.**

Keywords : Internet traffic, Active Queue Management, Congestion Control, RED, REM.