ABSTRACT

Gateway Load Balancing Protocol (GLBP) is a method to devide router

performance that the value is same or balance. The Gateway Load Balancing Protocol

(GLBP) was come from load Balancing concept, where the concept use to balancing load

at some link where come to the same network remote. So that the network link will not

disturbed if trouble came by one of the router.

This final task try to explained the GLBP concept, effort to increase network

performance with any queuing mechanism that can use at GLBP router, consist of FIFO

(First In First Out), DRR (Deficit Round Robin), RED (Random Early Detection), dan

REM (Random Exponential Marking) in GLBP network with simulation tool: network

simulator-2 (NS-2).

The results that get from the simulation are in the rare network, DDR show good

performance and balance. REM show the worse performance with high percentage in

packetloss and jitter. In the busy network, FIFO (DropTail) and RED that can control the

congestion that give small percentage delay.

Keywords: : GLBP, Load Balancing, FIFO, DRR, RED, REM.