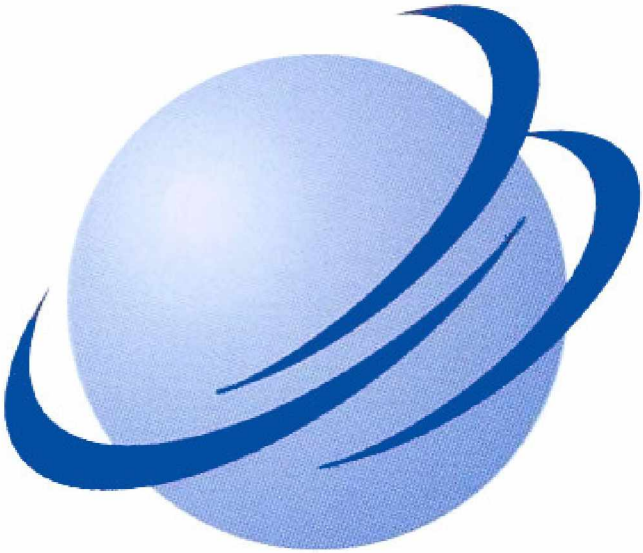
ABSTRACT

For the application of information real-time, network IP own the weakness from facet of guarantee QoS. *Multi Protocol Label Switching* (MPLS) is an method of forwarding data through an network by using information in lable attached at packet IP. Scheme QoS which can be used in network IP is *Integrated Service (Intserv)* and *Differentiated Services (Diffserv)*. *Intserv* and *Diffserv* at network MPLS represent the technique which is equiping each other implementation which can at one particular network IP. *Intserv* and *Diffserv* give the mechanism Qos while MPLS give the ability of *Traffic Engineering* (TE) and technique *routing* so that can improve the optimation *resources* network. By using MPLS-TE, *service provider* can give the *warranty bandwidth*, *warranty of delay* and burden controler and also able to serve assorted of service class (*Class Of Services*) with the guarantee QoS to all customer.

This Final project evaluate the performance from some queue algorithm to overcome the congestin of traffic internet. Algorithm to be evaluated among other things : FIFO *(First In First Out),* WRR *(Weighted Round Robin),* WFQ *(Weighted Fair Queueing),* LLQ *(Low Latency Queuing)* and WRR *(Weighted Round Robin).* As for accurate problems is how comparison of Quality of Service (Qos) to each, every each algorithm of queue MPLS. Parameter QoS perceived is *delay, packetloss and throughput* got by simulation of tool *Network Simulator-2* (NS-2).

The results of this observation are in not overload network, WFQ give the best delay value, LLQ and FIFO have a same perform. In overload network, only LLQ and WFQ can control the congestion with give a good result of *packetloss*.

Keyword: MPLS, FIFO, WFQ, LLQ, WRR



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