Abstract

Development of current technology provides multimedia quality service in more intelligent and flexibility way. For this matter, MPLS is considered suitable as network technology based on its capabilities and utilizing SIP as communication signalling which can be implemented on MPLS network. To optimize SIP integration over MPLS, traffic aggregation (TA) technique is proposed. TA act for each SIP local network. Furthermore, on TA attached FCFS-SAB algorithms to authorize call by User Agent. For this purpose Network Simulator 2 (NS-2) is used as network simulator. NS-2 possesses necessary modules, because of this simulation of topology plan can be made. From simulation result showed that with FCFS-SAB algorithm level of bandwidth efficiency follows the value of bandwidth contract that is being used.

Keywords: *MPLS, SIP, traffic aggregation, FCFS-SAB, NS-2.*