ABSTRACT

MPLS uses the technique of packet forwarding based on labels, to enable the implementation of a simpler high-performance packet forwarding engine. This also de-couples packet forwarding from routing, facilitating to provide varied routing services independent of the packet forwarding paradigm.

Softswitch is an approaching in switching technique that can alocate all type of call from local exchange switches. *Softswitch* is an inteligence service centre for local telephony service. Solution of *softswitch* technology give service to create difference telephony service for each telecommunication company, also make migration to end to end VoIP network easier.

At this final project, the problem has been analized about *interoperability* and performance of MPLS *based on Softswitch* system. To evaluate the performance of system at service time, packet size and buffer capacity variation, a simulation environment for the measurement of performance parameter like *end to end delay* and *throughput* is needed. From the research that have been done, it's possible to combine this two tecnique and MPLS give guarantee that there's no *packet loss* but system would get some trade off such degradation of throughput system.

Key words   : *MPLS, Softswitch, Credit-based Flow Control*