

## ABSTRACT

Softswitch is a switching technology which contains call control, call management etc. Softswitch as a solution for development of Next Generation Network (NGN) - is expected to having ability to acomodate all of information and communication service like voice, data, and multimedia. Softswitch technology have an important role in the migration from circuit network to the packet network. Softswitch class 5 could be a substitution for circuit network class 5 (local central), that can accommodate implementation of IP based telecommunication network.

There are two kind of protocol used to control and signaling in softswitch technology which are H.323 protocol and SIP (Session Initiation Protocol). H.323 is VoIP recommendation standard from ITU-T for LAN based real time video conference service. SIP is VoIP recommendation from IETF to describe control architecture of IP based telephony service.

This Final Assignment analyzing the advantages and disadvantages of H323 and SIP protocol in order to knowing which protocol more superior – and more suitable to used in some cases - than the other. This Final Assignment is compose using literature study and data sampling methods to the mapping protocol, message and call setup delay parameter of procedure protocol and visualizing call setup and clear down.

Key word : *Softswitch Class 5, H.323, SIP, MGC, SG, Proxy, Gatekeeper.*