

## Abstract

High Quality of Service Video Conferencing over IMS

Supervisor: **Dr. Maman Abdurahman**

Co-Supervisor: **Vera Suryani ,ST ,MT**

Nowadays the internet network technology is emerging rapidly because the demand of the users next generation of IMS system is being able to provide a variety of applications for users satisfaction.

IMS is an evolving definition of an architecture that solves the continuing demands and frustrations of users and enterprises. IMS is a whole new way to deliver multimedia services (voice, video, data, etc.) regardless of the device (mobile phone, landline phone, cable, Internet, etc.) and will change the way all of us relate to our increasingly digital world. Real-time applications such as voice and video conferencing have a great deal of demand over IMS network. The quality of service (QoS) is the major concern for real-time application such as video conferencing. In order to fulfill the users demand, it is necessary to improve the QoS. In this thesis work, we implement IntServ and DiffServ with MPLS which can have great potential in improving the QoS scheme in IMS for video conferencing. We evaluate the performance of QoS for video conferencing over those mechanism perform with IMS. The performance is evaluated based on some QoS parameters such as packet loss, end-to-end delay, throughput and jitter. In order to investigate the performance of QoS scheme in IMS, we analyze the simulation results. The investigation shows that proper adaptation of QoS provides qualitative transmission of video in wireline.

Finally on the basis of the simulation results, we study the QoS performance and propose difference schemes to enhance the QoS performance in IMS based on the QoS parameters. This frame work will be effective to design the QoS for heterogeneous network in IMS.

**Keywords:** IP Multimedia Subsystem (IMS), Multi-Protocol Label Switching (MPLS), Video Conferencing (VC), Quality of Service (QoS).