ABSTRACT

After information exchange with sending and receiving electronic mail, multimedia services being a trend in development of computer networking application such as multimedia-based communication services which combine video with voice. Mostly, traditional application on TCP/IP network involving only two-host communication. During development, network user desired to communicate with more than two hosts at once. One such video conference being a trend in computer networking application recently featured with multimedia, real-time, interactive and solution for multipoint communication needs.

In this final project, implementation of video conference in wireless LAN network is done with Java Media Framework (JMF). Java Media Framework API (Application Program Interface) is a development with java language which enables sending or receiving live media broadcast, such as live radio and television broadcast, or real time teleconference through internet or intranet. The aim of java language usage is enabling the application to be executed in many platforms.

After done with several test on sent and received packages, knows that user quantity of user on sent package do not effect on bit rate, delay, jitter and loss package. Otherwise user addition increasing bit rate, delay, jitter audio and video, and loss package in received packages. On the other hand sent packages have better video loss package at 0.053 Mbps, 17.004 ms, 1.93 ms, and 1% from netmeeting. Received packages have better jitter video and audio at 22.86 ms and 7.95 ms from netmeeting.

Keywords: Multimedia Services, Real Time, Interactive, Multipoint, Wireless LAN, Java Media Framework API, Bit Rate, Delay, Jitter, Loss Package.