

ABSTRACT

Video Call is a solution of distance communication that can replace face to face directly meetings. This service can be done by various media, such PC and mobile devices that use IP Multimedia Subsystem (IMS) based network, which IMS can provide high QoS services. However, the information that flows between the client and server need to be have a security system, so the user's data and information can't be known by those who are not interested.

In this final, conducted IMS implementation with OpenIMS, and the client application will be developed based on Android. And also, in this study will be comparing the performance of implementation of data security on client and server network using SRTP transport protocol and no security implementation with RTP transport protocol. The data examined in this study is the video data using H.263 protocol and voice data using G.711 protocol.

The result of this study showed that the data which sent by SRTP transport protocol has better performance compared with the data sent by RTP transport protocol. This is evidenced by the value of MOS greater for all the scenarios tested.

Kata kunci : Video Call, IMS, Android, SRTP