

ABSTRACT

Multimedia technology development is really fast and used in many aspect, but the video development produce some problem like access abuse and plagiarism that make some serious problem. New technology improves security needs and also copyright protection. Thus affects security needs in video digital sending becomes very important.

In this paper, video streaming security application designed by DES (Data Encryption Standard) algorithm. This application will implements digital data sending, especially video whereas video data sent to consumer is encrypted first by DES and only user with decryption key can unlock the encryption and enjoy this video, thus could watch the video. This application built in Java programming language.

The system testing done by testing confidentiality of video data which sent by sniffing through the sent video data package. Testing result shows, the sniffing of which video data package is very random and disorganized, so that it cannot be watch since it is well encrypted. In other hand, according to the testing of video quality based on fps (frame per second) and bitrate with or without encryption, the result shows no difference, therefore the encryption algorithm which implemented for video streaming does not change the video quality when streaming process is perform and the video good to watch.

Keyword : video streaming, encryption, decryption, DES algorithm, sniffing, fps, bitrate