Abstract

Human needs of the information through Internet technology has been increasing year after year. Internet technology is widely open to all users who are connected. Therefore, security of information systems are needed for such information can be received by legal users and can not be read by the other users.

To ensure the security, data of video streaming is needed cryptographic technique which consists of data encryption at the sender side and data decryption at the receiver side. There are a variety of cryptographic algorithms that can be used but the algorithms used should be an efficient algorithm, has a good performance and resistance to cryptanalysis. In this final project, cryptography technique is implemented using the Stream Chiper RC4 algorithm and the Block Chiper Rijndael algorithm.

From the results of testing conducted to determine the implementation of the algorithm which of the two algorithms are better used for video streaming. In testing the key length is used for both algorithms are equal 128 bits. From the test results, the RC4 algorithm has more advantages than the Rijndael algorithm, which is faster, better frame-rate and uses less memory in the process of encryption and decryption, and client opinion score with MOS value is higher than the Rijndael algorithm. So the RC4 algorithm is better used than Rijndael algorithm.

Keywords: Video Streaming, Kriptografi, RC4, Rijndael, Brute Force attack