

Abstract

Nowdays music industry in Indonesia has been developing. In music industry, commonly information which is usually used, is audio file. This causes sending and storing activity of audio file almost be used, hence security of audio file mus be protected. To protect the security of audio file, we must do an encryption data becomes unidentifying form of information. This encryption consists of two process, which is encryption and decryption

In this final project has been implemented an Mars cryptography algorithm to encrypt data. Analysis of implementation result has been done in two ways, which is objective and subjective way. In objective way, we analyze the changing of file input size, time of encryption, and property of audio file by calculating the changing of file input size, time of encryption and decryption process and drawing signal graphic of file audio. While, in subjective way we analyze vocal chord of file audio from decryption result in human hearing.

From testing shows size of file will increase 20 bytes after encryption process, time of file decryption longer than encryption process and result of property of audio file same with the original.

Keywords: *encryption, decryption, audio file, Mars Cryptography Algorithm*