ABSTRACT

Data security is an aspect that needs attention, because losing data or information will be fatal. In the transaction process, the level of security must be considered, so that the data sent is not known by irresponsible parties. There are several methods for securing secret message data, such as cryptographic techniques and steganographic techniques. In cryptographic techniques, there are many existing algorithms, in this study the authors use double cryptographic algorithms, namely, RC6 and Blowfish for the process of encryption and decryption of messages. As for the steganography technique, the writer uses the Least Significant Bit (LSB) method for the technique of hiding messages into a media, the media that the author uses is audio. To check data integrity also use Message Digest 5 (MD5). It is known that the results of security testing on this system show that out of 10 attempts to crack the password, the failure percentage is 100%, this proves that the system created cannot be penetrated by brute force attacks. In testing the results, the PSNR value is said to be all good because it is above 30dB.

Keywords - Audio, Blowfish, Least Significant Bit (LSB), RC6, Transaction