

Abstract

Currently, the Multimedia Messaging Service (MMS) is often used to communicate via phone. The message sent was diverse, ranging from text, audio, image, until the video. The message that is sent there is secret, but the message can be read by people who are not eligible.

Therefore, it is necessary to an MMS message encryption can be safe. One well-known encryption algorithm with reliability is the International Data Encryption Algorithm (IDEA). Operation mode block cipher encryption used is Cipher Block Chaining (CBC). Meanwhile, to overcome the security of the key, the key-hash of the MD5 hashes function.

In this final task, the author makes an encryption application of MMS on the phone that supports Java 2.0. Encryption application is analyzed from time encryption and decryption process, the size of messages before and after encryption, the unused memory in the process of encryption and decryption, and a large percentage of the avalanche effect.

From the results of the experiment, the algorithm is the IDEA algorithm is relatively less appropriate for use in the encryption process on the phone. Although viewed from a large percentage of the resulting avalanche effect qualifies as a good algorithm, but if viewed from the time used to perform encryption and decryption process for large messages, such as audio and image, take a long time.

Keywords: MMS, encryption, IDEA, CBC, MD5, java