

ABSTRACT

**THE IMPLEMENTATION OF CRYPTOGRAPHY FOR DATABASE
SECURITY USING TWOFISH ALGORITHM AT
ILIR TALO HEALTH CENTER**

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Security and confidentiality of data or information is one of the important aspects of data or information. The issue of security and confidentiality of computer data is something that is important in this information era, especially for Ilir Talo Health Center. Various ways are done to protect the data or information. One of them is by using cryptography with Twofish algorithm. Cryptography with a block cipher symmetric key with the length of each block is fixed at 128 bits. System implementation using PHP programming language with MySQL database. The method used in this research is waterfall, this application is designed using UML (Unified Modeling Language). From the analysis and discussion, it is obtained that the encryption results produced by Twofish utilize bit manipulation techniques, permutation/whitening boxes. The result of this research is a software application that is useful for maintaining the security of medical record databases using Twofish method. With this application, it can be one of the solutions in securing the database.

Keywords: Security, Cryptography, Twofish, Medical Records

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