EMPLOYEE SALARY DATA SECURITY APPLICATION USING AES-128 CRYPTOGRAPHY ALGORITHM (Case Study: CV. SINAR MANDIRI KLATEN)

FABIAN BAREP CANNAVARO

Informatics Study Program, Faculty of Science & Technology University of Technology Yogyakarta Jl. Ringroad Utara Jombor Sleman Yogyakarta E-mail: fabiancannavaro8@gmail.com

ABSTRACT

Salary is a wage that must be paid to employees which is a form of appreciation from a company as remuneration or reward to its employees. The confidentiality of data is a very valuable asset and must be maintained so that it is not known by unauthorized parties. Employee salary data is confidential data that can only be managed by the Finance Admin. CV Sinar Mandiri Klaten is one of the companies that safeguards employee salary data so that it is not misused or manipulated by irresponsible people and this will cause losses to the company. In this case, a data security system is needed that can encode and randomize computer-based information. This security is carried out by implementing a cryptographic algorithm which aims to encrypt and decrypt salary data in file form (DOC, PDF, TXT, and XLS) using the AES 128 Bit encryption & decryption method. The results achieved in this research are producing a salary data file that has been encrypted in ciphertext form. The percentage of similarity between the original file and the decrypted file was around 90%, because several font sizes and types were changed.

Keywords: AES-128 Bit, Encryption, Decryption, Salary Data File