TION OF PDF FILE ENCRYPTION AND DECRYPTION WITH THE WEB-BASED CHACHA20 ALGORITHM (Case Study: Sumbung Village Government Office)

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ABSTRACT

System security is one aspect that must be considered to prevent data leaks and maintain data integrity. One example is file data security which is prone to data theft. Facing this situation, encryption is considered to be one of the appropriate methods for maintaining data confidentiality. Encryption is a method that utilizes cryptographic algorithms to change original information into new information that cannot be read or known. Based on the number of keys, cryptographic algorithms are divided into 2, namely asymmetric encryption and symmetric encryption. Asymmetric encryption is encryption that uses 2 different keys to carry out encryption and decryption, while symmetric encryption is a type of encryption that uses 1 secret key to carry out encryption and decryption. One cryptographic algorithm that uses one key is the Chacha20 algorithm. The Chacha20 algorithm encrypts data bit by bit, so the Chacha20 algorithm has a fast encryption process. With the Chacha20 algorithm, encrypted files will be difficult for irresponsible parties to know their contents.

Keywords: File Security, Cryptographic Algorithm, Encryption, Decryption, Chacha20 Algorithm.