IMPLEMENTATION OF ADVANCED ENCRYPTION STANDARD ALGORITHM (AES-128) FOR FILE SECURITY (CASE STUDY OF TULUNG SARI VILLAGE OFFICE, OKU TIMUR SUMSEL DISTRICT)

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ABSTRACT

Information security for data in every aspect that is stored, vulnerable to data theft or transfer of information by unauthorized parties, is very important. The media for storing and disseminating data or information used is one of the reasons why data or information is vulnerable to being easily taken by irresponsible parties. Currently the Tulung Sari Village office does not have a security system, it can be seen from the computers owned by administrative officers that it can be accessed by other unauthorized people other than administrative officers. This can cause unauthorized people to easily find out, change or move data such as village population data reports. This research aims to determine problems in population data file security and design and implement an effective population data file security system. The method used in this research includes the following stages. The results of this research can help the Tulung Sari Village office in securing data files on births of babies and residents, by encrypting the data in ciphertext form. so that it can protect the contents of resident data, and files that have been encrypted are not easy to crack because they are in the form of symbols and characters that are difficult to understand.

Keywords: Security, Population Data, Encryption, Decryption, AES.