

DISTRICT SERVICE LETTER SECURITY USING AES 128 ALGORITHM AND RC4 ALGORITHM

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ABSTRACT

In an era of rapid technological development, easy internet access has become the main basis in various aspects of life, including in the world of education and work. Especially in government agencies, handling the security of official letter information is a necessity. In Ngadirojo Lor Subdistrict, security in storing official letter files is not sufficiently guaranteed. To minimize the potential for misuse of information by irresponsible parties, the use of additional layers of security is very necessary. This research aims to develop a security system for official letters at the sub-district level by implementing encryption and decryption methods using the AES128 and RC4 algorithms. The focus of the research is on securing official letter files which have PDF and DocX file formats which often contain important information. It is hoped that the results of this research will be able to provide an effective solution in strengthening the security of official documents in the sub-district environment. With the keywords: Security of Official Letters, AES128 and RC4 Algorithms, Village, Encryption and Decryption, this research is expected to make a significant contribution to the development of information security at the regional government level.

Keywords: Service Mail Security, AES128 Algorithm, RC4 Algorithm, Encryption, Decryption, PDF, DOCX.