IMPLEMENTATION OF RSA CRYPTOGRAPHY ALGORITHM FOR SECURING BOOKKEEPING FILE DATA

(Case Study: Mako Brimob Ende)

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ABSTRACT

Brimob Ende is a Mobile Brigade unit of the East Nusa Tenggara (NTT) Regional Police (Polda) in Ende, Flores. They are tasked with maintaining security, public order and handling conflicts. Brimob Ende consists of Unit A (Security), Unit B (Operations), Unit C (Object Escort) and Unit D (VIP Escort). Member bookkeeping data is only stored without using any security, so data confidentiality is not guaranteed. The data encryption method using RSA can improve personnel data security. The implementation of this data security system helps Brimob Ende meet security standards and protect sensitive information. This study develops an Excel bookkeeping file security system using the RSA algorithm to improve Brimob Ende data security. The RSA algorithm was chosen because of its strong encryption capabilities. This system protects sensitive bookkeeping files from unauthorized access and maintains data integrity. The results of the study show that this system is effective in improving data security with strong encryption, access security and guaranteed data integrity.

Keywords: Data security, RSA Algorithm, Excel File, Brimob Ende, Cryptography.