## IMPLEMENTATION OF CRYPTOGRAPHIC SECURITY OF AES ALGORITHM (ADVANCED ENCRYPTION STANDARD) FOR WEBSITE-BASED ENCRYPTION OF MEMBER FILE AND FINANCIAL DATA OF GP ANSOR ORGANIZATION IN JATI VILLAGE (Case Study: GP. Ansor Branch Management, Jati Village, Purworejo Regency)

**EVAN OKMAWANTO** 

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

## ABSTRACT

Data security is currently an essential element in almost all fields, especially in the field of information technology and digital. The more advanced a method for distributing data and the more crimes to take advantage of a transacted data, such as cybercrime which is currently developing so rapidly in its methods and strategies, causing massive and dangerous impacts on communities, companies, and individuals, in this study, the main problem to be discussed is how to collect and retrieve data from an organization, both when archiving data and when data. The purpose of this study is to implement a cryptographic security method for member data files and finances of the Ansor Youth Movement of Jati Village so that they have good security when distributed to PAC or to interested stakeholders. The method used to secure population data files is the cryptographic encryption and decryption method of the AES (Advanced Encryption Standard) algorithm which functions to change the text in the data file so that it cannot be read and requires a secret code to open it so that the text file can be read again. The data used for research and implementation of security are member and financial data files containing personal data from members of the GP organization. Ansor Jati village and financial transactions carried out. The final result of this study is to provide security for member data files and GP organization finances. Ansor Jati village with the AES algorithm cryptography method and can maintain integrity when distributing data to parties who need the data file.

Keywords: Data Security, Cryptography, Encryption, AES Algorithm, Website.