Abstract

STUDY AND IMPLEMENTATION OF CRYPTOGRAPHY ALGORITHM RIJNDAEL AND COMPRESSION ALGORITHM LZW FOR DIGITAL FILES IN PT. PROSPERA CONSULTING ENGINEERS

By
Lazuardi Qayuma
10107237

PT. Prospera Consulting Engineers is a consulting firm that has been well known in Indonesia. Founded in 1980 in response to the demands of national development consulting services that require a lot of planning techniques. Several years after the founding, in line with increasing demand / need for consulting services, services provided and progress to more widely, ranging from general planning, survey services, feasibility studies, technical planning, public, transportation, tourism, post and telecommunications, agriculture , industrial, mining and energy, as well as other areas. There are major issues that are owned PT. Prospera Consulting Engineers, which is data security. Survey data and other vital data field is easily accessible by all sections of the companies that do not have the right to know. Due to user error as well, a computer virus is endemic also damage the company's important data. Therefore needed a system to protect the data from those who are not responsible and able to protect data from virus attacks.

Cryptography and compression is a technique for securing data. Rijndael cryptographic algorithm and key size are the same block, which is 128 bits, 192 bits and 256 bits. LZW compression algorithm encodes a sequence of 8 bit data into 12 bit code. Based on the results of the study and the Rijndael algorithm LZW algorithm, the algorithm can be applied to application data security system for the processing of the application file will be opened again by this application. Application data security system is built to help protect vital corporate data, such as field survey data and personal data of the company.

Their conclusion is based on the implementation and testing performed to the user, the system is able to provide strong safeguards on data, protecting data from virus attacks, and easy to use and has a fast performance.

Keyword: *encryption, compression, rijndael, lzw, cryptography, algorithm*