CHAPTER 1

INTRODUCTION

I.1 Background

Data Security is one of concern for all user who using the internet network. Nowadays, hackers threat all data and hangs it like a Damocles sword. The transmission data through any communication channel needs strong encryption techniques in purpose of the data security. The trends of development in information technology is needed to safe, secure, and protect the transmission of data. Conventional encryption technique methods give failed desired result of data protection. However, unique ID and password, and combination between symbol, alphabets & numerical will give a good impact to account security. One technique to protect any information is Steganography. [1]

Steganography is one of technique for hide information such that the presence of data that can't be detected easily. A message is encrypted with an algorithm that hide any secret information or message inside an object. Steganography combine communication methods, so it can be used to carry out hidden exchanges. Trithemius is author of Polygraphia and Steganographia, invented the word of Steganography and the word is written from Geek words. Steganos, meaning "covered".

Meanwhile graphien, meaning "to write". One of evidence on Steganography being used to transfer messages is the Heredotous story. The story describes about slaves and their shaved heads. Nowadays, encryption method is the most discussed problem, it's because the method with cipher text are very doubtful. Steganography mission is to create a secret channel with totally un-detectable way to evade drawing suspicion on the transporting data. Steganography methods with a secret messages can be embedded into different cover media like image, audio, video, and text.

Among the methods, the hidden message is hard to be detected using Steganography techniques in a text file compared with a picture, markup language, or sound file. One of technique in Steganography is Digital Watermarking. [2]

As an effective way in order to protect digital media copyright is using Digital Watermarking. Digital Watermarking technique has attract the attention of many people and today we have a lot of algorithms in order to use Digital Watermarking. In digital images, the process of embedding accomplished in either spatial domain or frequency domain. It's shown that better compromise of robustness and level of robustness is obtained using frequency domain scheme. [4]

Digital Watermarking is one of technique which used to hidden a message with watermarking technique. On this ISAS, it will describe about one of technique in digital watermarking called Algorithm of Morphological Haar Wavelet Transform (MHWT).

1.2 Writing Objective

The purpose of this ISAS are :

1. Definition of Steganography.
2. Definition of Digital Watermarking.
3. History of Digital Watermarking.
4. Classification of Digital Watermarking.

1.3 Problem Domain

Accordance with the title of ISAS "Architecture Technology of Code Igniter"We will discuss about :

1. Advantages and Disadvantages of Digital Watermarking
2. Technique of Image Watermarking

1.4 Writing Methodology

The method which used in this ISAS is the method of browsing from internet, readingonline journal, and make a survey in problem domain.

1.5 Writing Framework

The paper was written by systematic as follows :

CHAPTER I : INTRODUCTION

1.1 Background

Discusses the result of research in security data, briefly description about steganography , and briefly description about digital watermarking.

1.2 Writing Objective

The purpose of this article is to understand about steganography, digital watermarking, advantages and disadvantages, and technique of image watermarking.

1.3 Problem Domain

First, tell about the advantages and disadvantages of digital watermarking, it’s a comparison between benefit and deficit. Second, tell about the technique of image watermarking which used to protect and hidden a message inside the picture.

1.4 Methodology Writing

To get data which needed, this paper use the method of observing or direct observationtechniques,author reads famous repository online journal.

1.5 Writing Framework

This paper Writing Framework consists of four Chapter, the first chapter is introduction which tells the background, writing objective, several problem domain, methodology writing and writing framework of this paper.

Chapter II Basic of Theory

In chapter II, paper written several sub chapter. The first sub chapter is to tell about definition of Steganography. The second sub chapter is to tell about Definition of Digital Watermarking. The third sub chapter is to tell about History of Digital Watermarking. The fourth sub chapter is to tell about Classification of Digital Watermarking.

Chapter III Problem Analysis

Analyzing and solve the problem that contained in problem domain.

Chapter IV Conclusion and Suggestion

Conclude and suggest related to this paper.