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New Methods for Text Steganography

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ABSTRACT

I this work first we use systems to limit access as firewall; firewall is a network security system that monitors and controls the incoming and outgoing network traffic. Then we coding information if a non-valid person could access information do not use them. In this paper presents 4 new approaches of text steganography's these procedures can applied by using letters placed other letters.
Keywords: Steganography, Text Steganography, Protection, Information

I. INTRODUCTION

Steganography is the art of science of hidding information inside information without out drawing any suspicion to others.

It came from two Greek words "steganos" meaning to cover and "graphtos" meaning to write. The most common steganography is to hide a file inside another file. The reversal act of steganography is called "steganalysis" which means to extract information.

Steganography can be divided into different branches include sound, image, etc. In this paper we explain text steganography and present some new approach for text steganography. The following graph shows the hierarchy of producing meaning out of information.

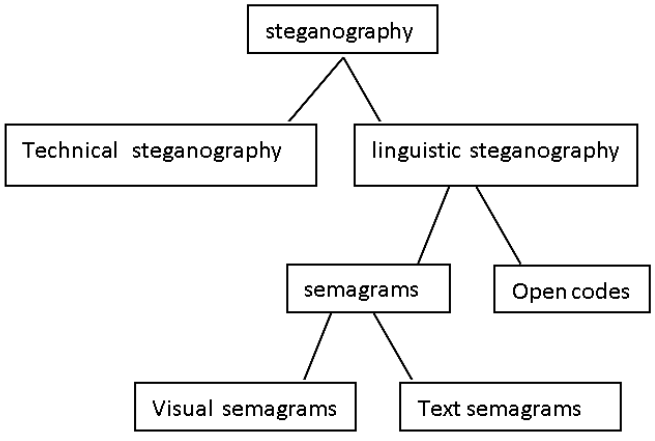

Figure 1: shows a common taxonomy of steganography techniques

Technical steganography uses scientific methods to hide a message. Linguistic steganography hides the message in the carrier in some nonobvious ways and is further categorized as semagrams or open codes. Semagrams hide information by the use of symbols or signs. A visual semagram uses innocent-looking or everyday physical objects to convey a message; a text semagram hides a message by modifying the appearance of the carrier text, such as subtle changes in font size or type, adding extra spaces, or different flourishes in letters or handwritten text. Open codes hide a message in a legitimate carrier message in ways that are not obvious to an unsuspecting observer.

II. METHODS AND MATERIAL

2. Suggested Methods

In this section we describe 4 new methods to steganography with example for each method.

2.1. Sequential Method

In this method we can select number of words which sequential of letters in alphabet is correct as secret words.
Example:
Secret word = buygo sequential in alphabet 15423
Please send money to buy a bag and go …….
Psaleene sdno meoty ybu……

2.2. First Letter Method

In this method we can select n words for generate secret word that first letter of them are same the first word of text.
Example:

This is a book, I like that, I bought two books

The first letter of above text is "t "therefore all words that start with character "t" generate secret word.

It is better that the same letter "t" be delete.

Secret word=that two by delete the first letter we have hatwo.

2.3. Step by Step Method

In this method we consider the number of characters of the first word of text as k1 .

Then we calculate n=k1*2

Then we forward in text n words, and then we consider this word and the number of characters of this word as k2.

Then we calculate m=k2*2

Then forward in text from n"th word length m , …..Example:

She was busy and couldnot work good, she say that my mother help to me.

Length of she = 3
3*2=6 6"th word = good
Length of good=4
4*2=8 8"th word from 6"th word = me

We repeat this procedure to end of text or limit number of words.

2.4. Combine method

In this method we select secret word by any above methods then we use from power and mod to 26 (26 is the number of all english characters) and asci code to calculate situation .

Consider secret words are "she good me "

She start with "s" ascicode of "s" is 83
(83)2=6889 middle digits are 88 88 mod 26 =10 , 88 div 26 =3

Therefore we consider 10'th character in alphabet situate with "s"

But in destination we need to result of div in this example 3 to calculate ascicode, therefore we hold result of divide in array and send to destination

III. CONCLUSION

As we know nowadays we need to share information in the network and internet therefore if we do not protect from them they do not be safe to protect information it is required to use some methods as encoding information. This article suggested 4new method of text steganography, Text oriented methods and using nowadays and increasing information makes it important to network. The suggested methods have no specific limitation but it depends on the individuals to make limitation as they like.

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