Information Hiding Using Image Steganography

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***Abstract***

*The process of hiding data and information is known to be steganography it is done to provide secure communication, in present world there is a demand of sending and displaying data in a hidden format especially when the exchange of information and data is taking place publically, and this is the reason because of which many methods have been proposed for data and information hiding.. For data hiding there are so many techniques are more useful and what are their requirements and also it shows which application will have more compatibility with which steganography technique. focuses to present Steganography overview, its demand, advantages and the techniques*

The secret data is then extracted from the encoded non-secret message as its destination .The use of the Steganography can be combined with encryption as an extra step for hiding or protecting data. the original or plain text from using the decryption key.

The word **Steganography** , derived from the Greek word **Steganos** means covered or secret and **graphic** means writing or drawing. It’s objective is to hide the secret data into some other unsuspected cover media.

* 1. Steganography Mediums

There are many Steganography techniques available relying on the kind of item to be protected in a way to achieve security.

*Keywords:, , Data hiding, Digital Image.*

**INTRODUCTION**

The Internet is one of the most popular and the easiest medium for transmission of digital data among people, but one of the common threats during transmission is that anybody can access these data and Internet itself does not provide any protection on these data. To protect the confidentiality of the encryption process transforms the secret data, i.e., known as plain text into cipher text using an encryption key. The cipher text appears as unreadable form; only the decryption process of the cryptography can convert the cipher text into transmission

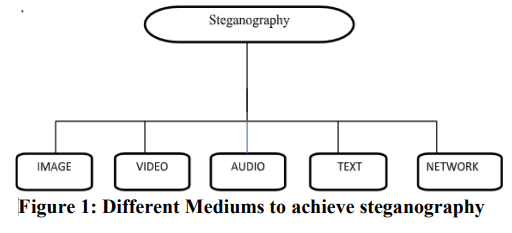
1.1.1. **Image Steganography**: To hide the information use of pixel intensities is done, if the cover object taken is image then it is known as image steganography.

1.1.2. **Video Steganography**: Digital video format is use to hide any type of information in video steganography. In this technique for hiding information in images in the video the discrete cosine transform (DCT) adjusts the value which is not conspicuous through human eye. ,AVI ,Mp4, etc video formats are used by video steganography.

1.1.3. **Audio Steganography**: Audio steganography is one of the most significant medium due to demand of Voice Over Internet Protocol (VOIP). As in this technique audio is chosen for information hiding, that’s why it is called Audio Steganography. WAVE,MPEG, etc. digital audio formats are used in audio steganography.

1.1.4. **Network Steganography**: In this technique the cover object chosen is as network protocol, such as UDP, ICMP etc and these protocols are used as carrier.

1.1.5. **Text Steganography**: In this technique, for information hiding, capital letters, white spaces, number of tabs and many others are used.

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