

TRAINING DAY 23 REPORT

Understand Steganography

Today, I learn some important concepts

Introduction to Steganography

Steganography is the practice of hiding secret information within other non-secret data (like images, audio, or video), so that its presence is concealed. Unlike encryption, which hides the *content*, steganography hides the *existence* of the message.

Steganography – Hide Text File in Images

This involves embedding a text file (or text data) within an image file using steganographic techniques. To the human eye, the image appears unchanged, but the hidden text can be extracted using specific software.

Steganography – Hide Text in Video and Audio

Similar to image steganography, this method hides text within the audio or video stream. This can be done by slightly altering audio/video signals in a way that's imperceptible to the human senses.

Hide Files in Images

A technique where entire files (like PDFs, ZIPs, etc.) are embedded within image files using steganographic tools. The image still opens normally, but the hidden file can be extracted with the right tool.

Convert Images into Sound

This refers to a method where image data is encoded into sound waves, effectively turning visual data into audio. It can be used in reverse for decoding, often as a novelty or experimental form of steganography.

Find Hidden Information from Sound

Techniques used to analyze sound files (e.g., WAV, MP3) to detect and extract data hidden through audio steganography. Tools can inspect patterns or frequencies altered to embed secret content.

Find Hidden Information from Sound – Audacity

Using **Audacity**, an open-source audio editing tool, to visually inspect audio waveforms and spectrograms to detect anomalies or hidden messages embedded in sound files.

Steganography – Use of OGR Tool

Likely refers to a tool (possibly OCR – Optical Character Recognition) that extracts hidden or embedded textual information from images or steganographic content.

Steganography – DeepSound Tool

DeepSound is a steganography tool that hides files (like text or documents) in audio files (WAV or FLAC). It allows encoding and decoding hidden content, useful for covert data transmission.

Steganography – DeEgger Tool

DeEgger Embedder is a steganography utility that allows hiding data inside images or other files. It provides a simple interface to embed and extract hidden data from cover files.