

Day 59

Topic: Steganography

Objective: To hide secret data within innocent-looking files (images/audio).

Theoretical Concepts:

Steganography is the art of hiding the *existence* of the message. We discussed LSB (Least Significant Bit) modification techniques.

Practical Work:

We used **Steghide** to embed a secret text file inside a JPEG image. Command: *steghide embed -cf image.jpg -ef secret.txt*. The resulting image looked identical to the original. We then used the extract command with a passphrase to retrieve the hidden data. We also looked at Stegsolve to analyze image layers.

Tools Used: Steghide.

Outcome: Understanding how data can be exfiltrated covertly using media files.