- Filename: eccouncil-ceh31250-v12-6-9-1-steganography.md
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- Topic Name: System Hacking Phases and Attack Techniques System Hacking
- Episode Name: Steganography

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## Steganography

## **Objectives:**

- Define Steganography and explain how it is used for malicious purposes
- List and define the different Steganographic classifications
- Explain common Steganography types and tools
- Explain the purpose, process, and challenges of Steganalysis
- List and define common Steganalysis methods and tools
- Today we're taking a look into Steganography and Steganalysis. It seems like this is probably a topic that many are unfamiliar with and they are related, but different, so can we start with an explanation of what Steganography is?
  - Steganography is the hiding of data in the unused space of a file
    - Images
    - Audio files
    - Video files
    - Text files
      - These are called 'Cover Medium'
- So do you just somehow open a jpeg and start typing your data into it, or how does someone hide data in this way? I assume there are tools to do this?
  - stegsnow (ASCII text files)
    - stegsnow -C -p password -m "secret message" infile.txt outfile.txt
  - steghide (image files)
    - steghide embed -ef exfil.txt -cf hacker.jpg -sf hacker2.jpg
- Now that we're aware of Steganography, let's talk about Steganalysis.
  - Steganalysis is discovering and uncovering of steg data
    - Tools
      - Steghunt
      - zsteg (on Mint)
        - zsteg cats.img