

Steganography

Time required: 30 minutes

Lab Description

Note: It is not unusual for websites to change the location of files. If the URL no longer functions, open a search engine and search for the program.

Steganography is the art and science of hiding information by embedding messages within other, seemingly harmless messages. When a message is encrypted, it has no meaning, but it's apparent that since it's encrypted, it contains sensitive information. Steganography solves this problem by hiding the sensitive information in a harmless file called a "carrier file".

Steganography can also be used maliciously.

- <https://netlok.com/the-rise-of-steganography-bots-and-ai-strategic-analysis-for-2025/>
- <https://gca.isa.org/blog/the-rise-of-steganography-based-ot-cyberattacks>
- <https://cisomag.com/how-to-prevent-steganography-attacks/>
- <https://www.esecurityplanet.com/threats/how-steganography-allows-attackers-to-evade-detection/>

Lab

1. Go to: <https://futureboy.us/stegano/encinput.html>
2. Find or create a jpg picture file. Make sure it's not too big or too small. Name or rename the file with your last name, first initial. (Example: Sampsons.jpg.)
3. On the Encode tab:
 1. Click Browse to upload your image.
 2. Password: cyber123
 3. Type your name, class name and current date and time into the text box.
 4. Click Submit Query.
 5. Save the image.

4. Open this file with the decode a file link to make sure the encoding process worked.

Submit Assignment

1. Send [your last name, first initial].jpg file to the instructor via email.
loringw@wncc.edu Make sure you are sending the file located at the location you saved it.
2. In response, you will receive a message from the instructor with a picture file and a Word document attached. Save the attachments.
3. Go to: <https://futureboy.us/stegano/decinput.html>
4. Browse for the image.
5. Type the password **cyber123**
6. Submit Query.
7. Follow instructions in the textbox to finish the assignment!