

Ex.No.8 Use Steg-Expose to detect hidden data in images

AIM:

To hide a secret text message inside an image file and extract it back using Stegosuite in Kali Linux.

PROCEDURE:

StegExpose is a tool used to detect hidden data in images using steganography analysis. It works by evaluating the statistical properties of an image to estimate whether any hidden data is embedded. Below is a step-by-step guide on how to use StegExpose to detect hidden data in images:

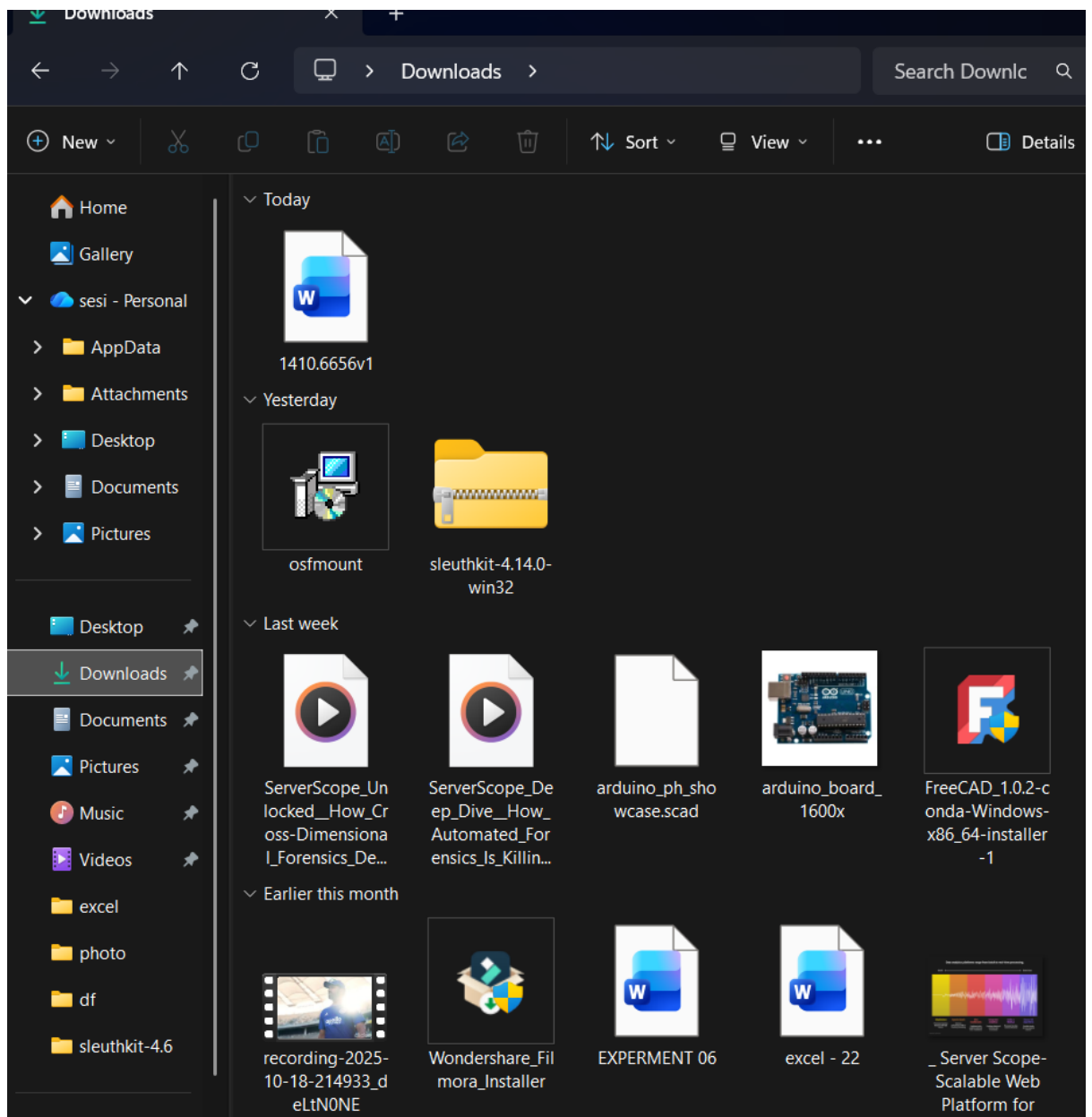
Prerequisites:

1. **Java Runtime Environment (JRE):** StegExpose is a Java-based tool, so ensure you have JRE installed.
2. **StegExpose Tool:** Download StegExpose from the [official GitHub repository](#).

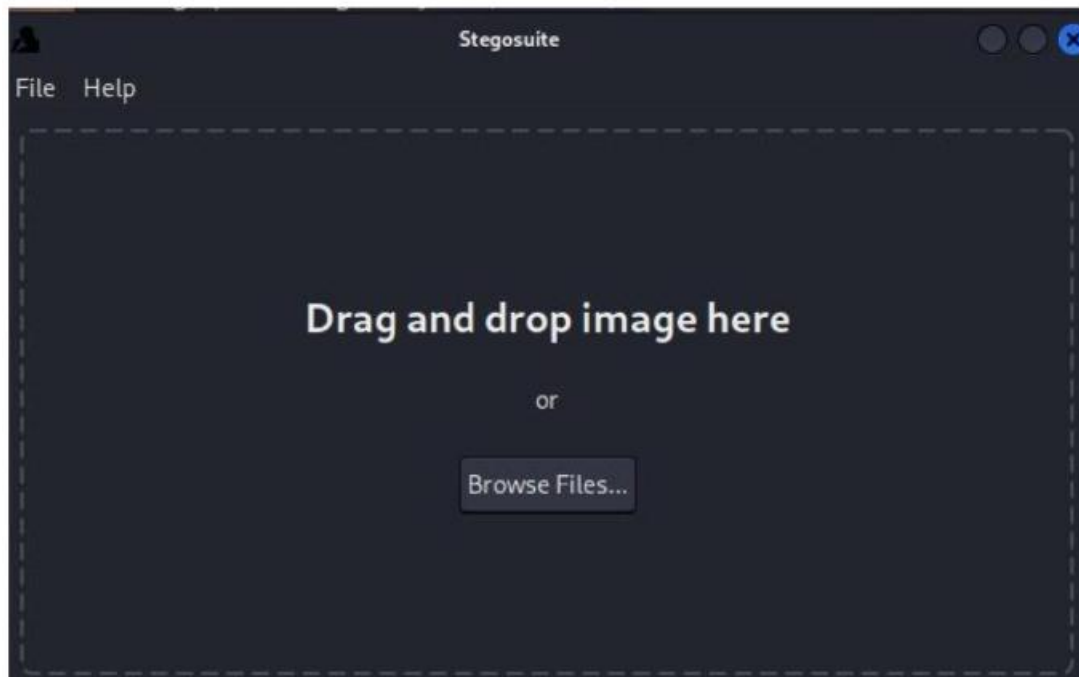
Step-by-Step Process:

1. Download and Set Up StegExpose:


- **Download the tool:** Go to [StegExpose GitHub](#) and download the .jar file.
- **Install Java:** Ensure that Java is installed on your machine. You can download it from the official site.
- **Prepare environment:** Place the .jar file in a folder where you plan to work on the image files.



```
—(kali@kali)—[~]  
$ stegosuite gui
```



< Stegosuite



version: 0.9.0 arch: all

[Stegosuite Homepage](#) | [Package Tracker](#)
[Source Code Repository](#)
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Metapackages

[everything](#)

Tools:

[crypto-stego](#)

Packages and Binaries:

stegosuite

Stegosuite is a graphical steganography tool to easily hide information in image files. It allows the embedding of text messages and multiple files of any type. In addition, the embedded data is encrypted using AES. Currently supported file types are BMP, GIF, JPG and PNG. Stegosuite is written in Java and utilizes the SWT toolkit for the interface.

Installed size: 279 KB

How to install: `sudo apt install stegosuite`

Dependencies:

\$ stegosuite

Steganography tool to hide information in image files

```
(kali㉿kali)-[~]  
$ stegosuite gui  
Loading jpg image from /home/kali/Downloads/Yamirukka-Bayamen-Tamil-A4-Muruga  
n-Poster-For-Room-1-scaled.jpg  
Saving jpg image to /home/kali/Downloads/Yamirukka-Bayamen-Tamil-A4-Murugan-P  
oster-For-Room-1-scaled_embed.jpg  
  
(kali㉿kali)-[~]  
$ stegosuite gui
```

```
kali@kali: ~  
File Actions Edit View Help  
  
(kali㉿kali)-[~]  
$ sudo apt install stegosuite  
[sudo] password for kali:  
Installing:  
  stegosuite  
  
Installing dependencies:  
  libpicocli-java      libswt-gtk-4-java  
  libswt-cairo-gtk-4-jni  libswt-gtk-4-jni  
  
Summary:  
  Upgrading: 0, Installing: 5, Removing: 0, Not Upgrading: 1343  
  Download size: 2,520 kB  
  Space needed: 3,938 kB / 57.1 GB available  
  
Continue? [Y/n] y  
Get:1 http://mirror.kku.ac.th/kali kali-rolling/main amd64 libpicocli-java al  
l 4.6.2-2 [390 kB]  
Get:2 http://kali.download/kali kali-rolling/main amd64 libswt-gtk-4-jni amd6  
4 4.29.0-1 [164 kB]  
Get:4 http://kali.download/kali kali-rolling/main amd64 libswt-gtk-4-java amd  
64 4.29.0-1 [1,737 kB]  
Get:3 http://mirror.kku.ac.th/kali kali-rolling/main amd64 libswt-cairo-gtk-4  
-jni amd64 4.29.0-1 [25.0 kB]  
Get:5 http://kali.download/kali kali-rolling/main amd64 stegosuite all 0.9.0-  
1 [205 kB]  
Fetched 2,520 kB in 13s (193 kB/s)  
Selecting previously unselected package libpicocli-java
```