

Steganography – Hiding Data in ‘plain’ sight

Data can be hidden in many ways. A quick & effective method is embedding data into an image. This activity is designed to give you some experience with [Steganography](#).

Appending text to an image:

On your Windows 10 VMs, one simple method is to combine an image file and a text file into a bigger file.

- Find a small image on the Internet, open it in MS Paint & then save it as a 24bit bitmap (bmp) named **image**.
 - Record the file size. _____
- Using Notepad, create a file called ‘SuperSecretCyberData’, and then insert “Passwords are yummy!”
 - What is the file size? _____
- Open a CMD window & combine the two file using the **copy** command.
 - Pro Tip: This uses the /b , binary option and + for joining files.
 - **copy /b image.bmp + SuperSecretCyberData.txt stego.bmp**
- Open stego.bmp with MS Paint (don’t judge). You should still see the image.
- Open it with Notepad, and at the bottom/end is your message.
 - It is messy with the bmp encoding, but it is there.

Thus hides your message *inside* the image file. However, the text is still visible in its normal form.

What is the file size of stego.bmp?_____

How much has the file size changed from image.bmp?_____

Submit answers & snips of your successful results via Canvas.