Fortytwo Security
Trusted in Information Security

Write-up

Hidden objects in images

1. Write-up

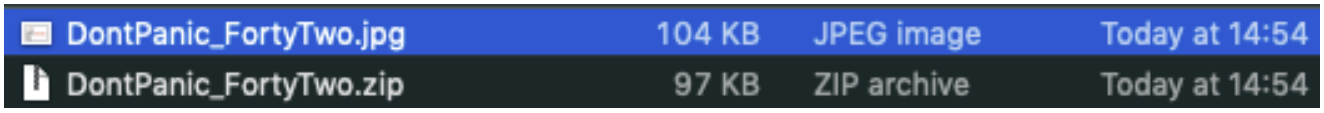
TL: DR

We have downloaded a JPG file containing a secret message. The steps to solve this puzzle are included in the table below.

	Step	Output
	Play with colours and noise levels	Got a random text what could it be?
	Try text export with tool – no password	Nothing
	Try text export with tool – with password	Retrieved the flag!

What do we have

In this challenge we will have a ZIP file which contains a picture. Our goal is to retrieve a flag somewhere.

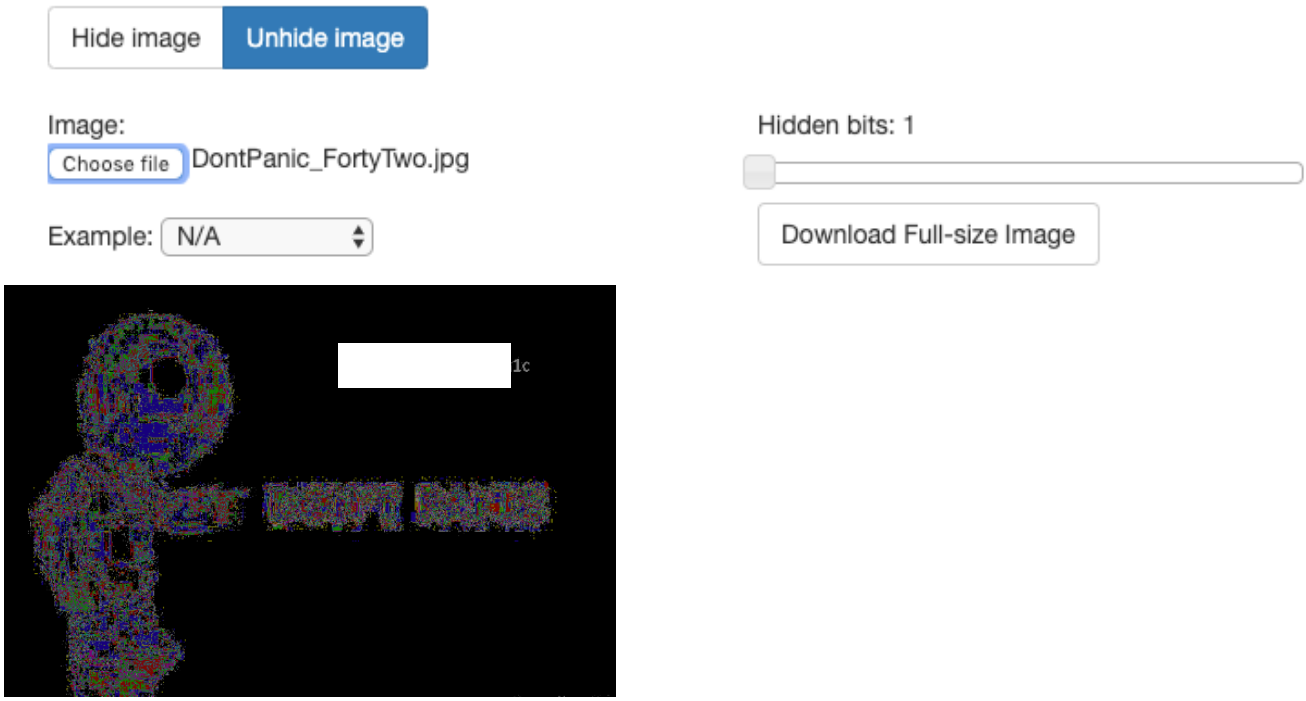


2. Step 1

There are multiple ways to do a colour change on the picture. For example, the inbuild colour adjuster of you image viewer or a tool that searches for any noise in the colours.

In our option a tool is the best option. I used the online tool: https://incoherency.co.uk/image-steganography

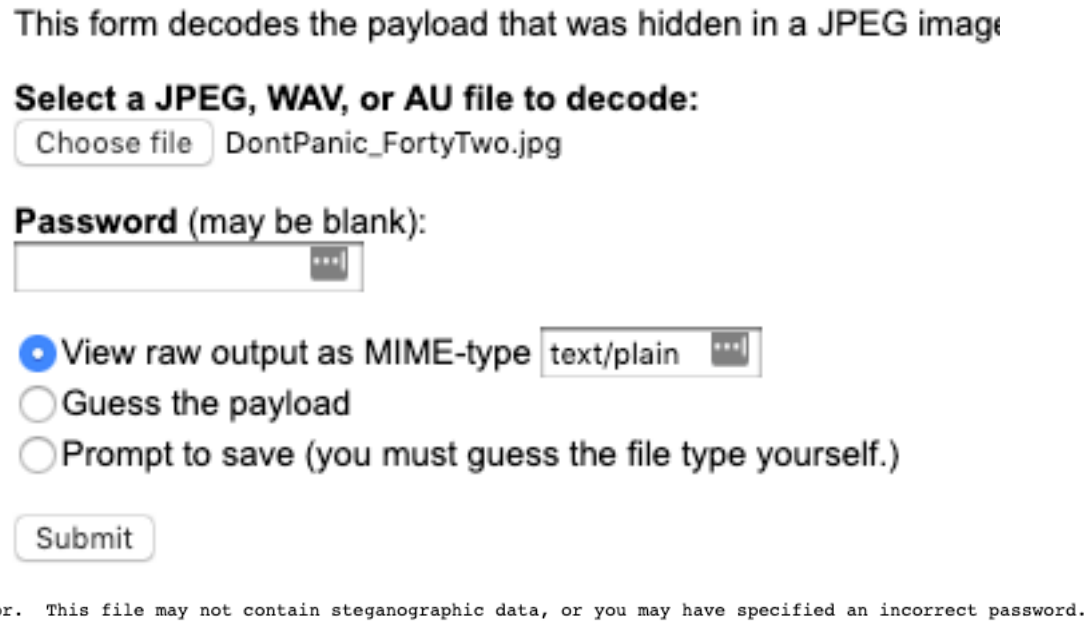
SPOILER:



3. Step 2

In this step we need to use a special tool, that searches for the secret text or files.
As we process it with the tool: https://futureboy.us/stegano/decinput.html.
We see nothing in the output so it couldn't find anything without a password given.

SPOILER:



4. Step 3

When you use the tool with the password. You get a different output. Now you can see the flag that was hidden.

SPOILER:

Select a JPEG, WAV, or AU file to decode:

Choose file DontPanic_FortyTwo.jpg

Password (may be blank):

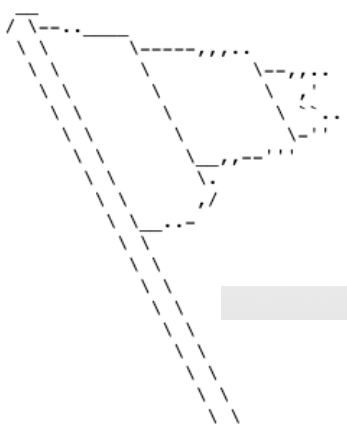
Y0uMa

View raw output as MIME-type text/plain

Guess the payload

Prompt to save (you must guess the file type yourself.)

Submit



Congrats, you found the flag!