

# Osiris Challenge 5 Documentation

Passphrase: *Scientia Potentia Est!*

Time: 11:33 AM

Description: We first used the Timelock algorithm with the extra character and the given IP address and Epoch time to find the necessary time that should be in sync with our server's time. Then, using the username and password, we logged onto the ftp server. Ran command (`ls -l`) to see a folder names FILES, used `cd` to get into folder and used `get` to get the ciphertext and key. From there we used the python XOR crypto program with the provide key and cipher to decode the cipher into a jpg image. Once we got the h.jpg image file (`python3 steg.py -r -B -o2048 -i8 -wtemp.jpg > two.jpg`), we ran that through the steg code with different intervals and offsets until we found the chapter of the Constitution (`python3 steg.py -r -b -o513 -i2 -wh.jpg > contitution.txt`) and the second image file within h.jpg. Eventually we were able to steg through the Consitution file and find the output that contained the passphrase (`python3 steg.py -r -b -o32 -i64 -wconst.txt`).

## Contribution:

Madeline Ballew - assisted in finding the 2 hidden jpeg files, attempted to steg both jpegs and the constitution file, brainstormed with group, attempted to help with group wide communication.

Keaton Love - Tried to find hidden files. Found constitution text using `python3 steg.py -r -b -o513 -i2 -wh.jpg > contitution.txt`. Continuously provided alternative thinking.

Amiyah Frierson: JPG image decryption attempt; found secret passphrase in constitution.txt with steg.py.

Noah Jones - Found FTP Epoch Time from FTP server, Decrypted first JPG via XOR program.

Jay Reich - Grabbed files from the FTP server, found the interval and offset to find the 2nd hidden image.

Jace Peloquin- Assisted Brainstorming, found answer through social engineering and input secret code into discord, communicated with group to find solutions

Ethan Hebert - Found that the hidden constitution.txt file existed within h.jpg. Jay later found the exact offset of python3 steg.py -r -b -o513 -i2 -wh.jpg > contitution.txt to get the file without any weird characters.