



Bootcamp Ciberseguridad | 42 Madrid

Stockholm

Summary: Do evil for educational purposes.

Version: 1

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Chapter I

Prologue

Stockholm syndrome is a condition in which hostages develop a psychological bond with their captors during captivity. Stockholm Syndrome results from a rather specific set of circumstances, namely the power imbalances contained in hostage-taking, kidnapping, and abusive relationships. Therefore, it is difficult to find a large number of people who experience Stockholm Syndrome to conduct studies with any sort of power. This makes it hard to determine trends in the development and effects of the condition.

Emotional bonds may be formed between captors and captives, during intimate time together, but these are generally considered irrational in light of the danger or risk endured by the victims. Stockholm syndrome has never been included in the Diagnostic and Statistical Manual of Mental Disorders or DSM, the standard tool for diagnosis of psychiatric illnesses and disorders in the US, mainly due to the lack of a consistent body of academic research. The syndrome is rare: according to data from the FBI, about 5% of hostage victims show evidence of Stockholm syndrome.

This term was first used by the media in 1973 when four hostages were taken during a bank robbery in Stockholm, Sweden. The hostages defended their captors after being released and would not agree to testify in court against them.[3] It was noted that in this case, however, the police were perceived to have acted with little care for the hostages' safety,[7] providing an alternative reason for their unwillingness to testify. Stockholm syndrome is paradoxical because the sympathetic sentiments that captives feel towards their captors are the opposite of the fear and disdain which an onlooker might feel towards the captors.

Source: https://en.wikipedia.org/wiki/Stockholm_syndrome

Chapter II

Introduction

In this project you will develop a small program capable of causing great havoc. Although the greatest virtue of ransomware is its ability to spread through networks of hundreds of computers, in this case, your program will only affect a small part of your files.

Chapter III

Mandatory Part

You will work at all times within a virtual machine. You will create a program called `stockholm` that meets the following specifications.

- It will be developed for the Linux platform.
- Will only act on a `infection` folder in the user's HOME directory.
- The program will act only on files with the extensions that were affected by Wannacry.
- You will include a file of no more than 50 lines called `README.md` with the instructions of use and, if required, to compile it.
- In case of compiled language, you will include all the source code of the program.
- The program will rename all the files in the mentioned folder adding the ".ft" extension.
- If they already have this extension, they will not be renamed.
- Files will be encrypted with a known algorithm of your choice, which is considered secure.
- The key with which the files are encrypted will be at least 16 characters long.
- The program will have the option `"-help"` or `"-h"` to display help.
- The program will have the option `"-version"` or `"-v"` to show the version of the program.
- The program will have the option `"-reverse"` or `"-r"` followed by the key entered as an argument to reverse the infection.
- The program will show each encrypted file during the process unless the option is indicated `"-silent"` or `"-s"`, in which case the program will not produce any output.
- The program will handle errors and will not stop unexpectedly in any case.

You can use any programming language as long as you meet these specifications. You can use encryption libraries such as `openssl` or `libsodium`, but you will need to justify your choice of encryption during evaluation.

Chapter IV

Peer evaluation

This project will be corrected by other students. Deliver the files to the Git repository and make sure everything works as expected.