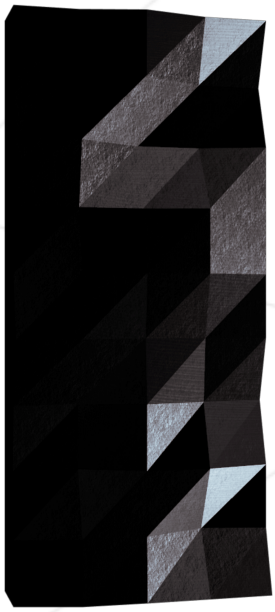

Cybersecurity bootcamp | 42 Madrid

extraction

Summary: Recovering deleted files on NTFS file system

Version: 1

Contents

Chapter I

Forewords

The only system which is truly secure is one which is switched off and unplugged, locked in a titanium lined safe, buried in a concrete bunker, and is surrounded by nerve gas and very highly paid armed guards. Even then, I wouldn't stake my life on it.

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

Chapter II

Introduction

In this project you will familiarize with the MFT (Master File Table) of the NTFS file system (New Technology filesystem). The objective of this project is to develop a tool that is able to recover deleted files on NTFS. As we all know in most filesystems when you delete a file it is not really deleted, it stays there unless its overwritten, because of this reason in a lot of cases you will be able to recover deleted files when performing a forensics analysis.

Chapter III

General Instructions

You'll always work on a Win10 VM. You can use a Vagrant machine for ex this one. You are allowed to use any programming language. In case you decide to use a compiled language you will have to hand in your source code and it will be compiled during the evaluation.

You are allowed to use any library that helps you develop this tool, however you have to be able to justify why you are using them during the evaluation.

Chapter IV

Mandatory Part

You have to develop a program that recovers recently deleted files. For that your program will have to be able to do the following things:

- You will perform a search through the whole disk.
- You will shouw a list of all recovered files.
- You will show if the file can be completely recovered, only partially or if it has been found but its not recoverable.
- In case there are files avaliable for recover the user will be able to select wich ones he wants to recover.

If the user doesnt give your program a time range it should fall back to a default value, for ex: last 24h, last week, last month...

Chapter V

Bonus Part

Bonus evaluations will only be done if your mandatory part is `PERFECT`. Otherwise bonuses will be IGNORED.

You can improve your project with the following functionalities:

- The user can select a directory and perform the search from that point instead of scaning the whole disk.

Chapter VI

Evaluación por pares

Este proyecto será corregido por tus compañeros. Entrega los archivos en el repositorio Git y asegúrate de que todo funciona como se espera.