

Cybersecurity Professional Program

Digital Forensics &

**Incident Response** 

## **Data Acquisition**

**DFIR-04-L2 FTK Drive Capture** 

# » Lab Objective

Become familiar with the FTK Imager and OSFMount tools used to mount and view drives.



### **Lab Mission**

Create a disk image with FTK Imager and mount it using OSFMount.



## (S) Lab Duration

20-30 minutes



- · Basic knowledge of the Linux environment
- Knowledge of data acquisition



#### Resources

- **Environment & Tools** 
  - VirtualBox
    - Windows 10
- Extra Lab Files
  - o Window.png
  - o osfmount.exe
  - AccessDataFTKImager.exe



# **Textbook References**

- Chapter 4: Data Acquisition
  - o Section 2: Drive Capture
  - o Section 3: Advanced Capture Tools
  - o Section 4: Evidence Inspection

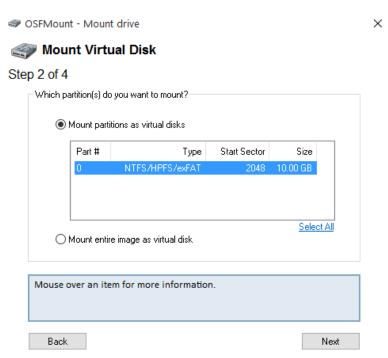
#### Lab Task: Create & Mount a Disk Image

Create a capture of a drive using **FTK Imager** and mount the image using **OSFMount**.

- 1 Copy the provided *Window.png* file to the 10 GB drive in your Windows 10 VM created in DFIR-04-L1.
- Transfer the provided AccessData FTK Imager.exe file to the Windows 10 machine's desktop and install it.
- In **FTK Imager**, go to **File**, click **Create Disk Image** to make an image of the **10 GB** drive, and save it to the **C** drive.
  - **Note**: Be sure to select the 10 GB drive in the dropdown menu within the **Source Drive Selection** window.
- In Image Source, press Add and select *E01*. Then, enter the evidence item information. In the Select Image Destination window, set the destination folder to the desktop, name the image, and set the fragment size to 1500. Click Finish and start the image capture.

| Evidence Item Information   |          |               |        |      | × |
|---|----------|---------------|--------|------|---|
|   |          |               |        |      |   |
| Case Number:  | DFIR-04  | DFIR-04-02    |        |      |   |
| Evidence Number:  | 002      | 002           |        |      |   |
| Unique Description  | : Window | Windows image |        |      |   |
| Examiner:   | Dave     | Dave          |        |      |   |
| Notes:  |          |               |        |      |   |
|   | ,        |               |        |      |   |
|   |          |               |        |      |   |
|   |          |               |        |      |   |
|   |          |               |        |      | _ |
| < Back Next > Cancel Help   |          |               |        |      |   |
|   |          |               |        |      |   |
| Select Image Destina  | ition    |               |        |      | X |
|   |          |               |        |      |   |
| Image Destination Folder  |          |               |        |      |   |
| C:\Users\Dave\Desktop   |          |               |        |      |   |
| Image Filename (Excluding Extension)  |          |               |        |      |   |
| Capture   |          |               |        |      |   |
| Image Fragment Size (MB) For Raw, E01, and AFF formats: 0 = do not fragment |          |               |        |      |   |
| Compression (0=None, 1=Fastest,, 9=Smallest)                                |          |               |        |      |   |
| Use AD Encryption   |          |               |        |      |   |
|   |          |               |        |      |   |
|   |          |               |        |      |   |
|   | < Back   | Finish        | Cancel | Help |   |

- 5 Transfer the *OSFMount.exe* file to the Windows 10 machine and install it.
- 6 Mount the E01 image in **OSFMount** by clicking **Mount New** and selecting the **Capture.E01** file. Make sure you use partition **0** and continue with the default settings.



7 Double-click the mounted device to view the content inside. You should have the same image from the 10 GB drive, which means a successful drive capture.