

Conducting Forensic Investigations on System Memory (4e)

Digital Forensics, Investigation, and Response, Fourth Edition - Lab 10

Student:

Jose Cruz

Email:

jose.cruz2@udc.edu

Time on Task:

9 hours, 50 minutes

Progress:

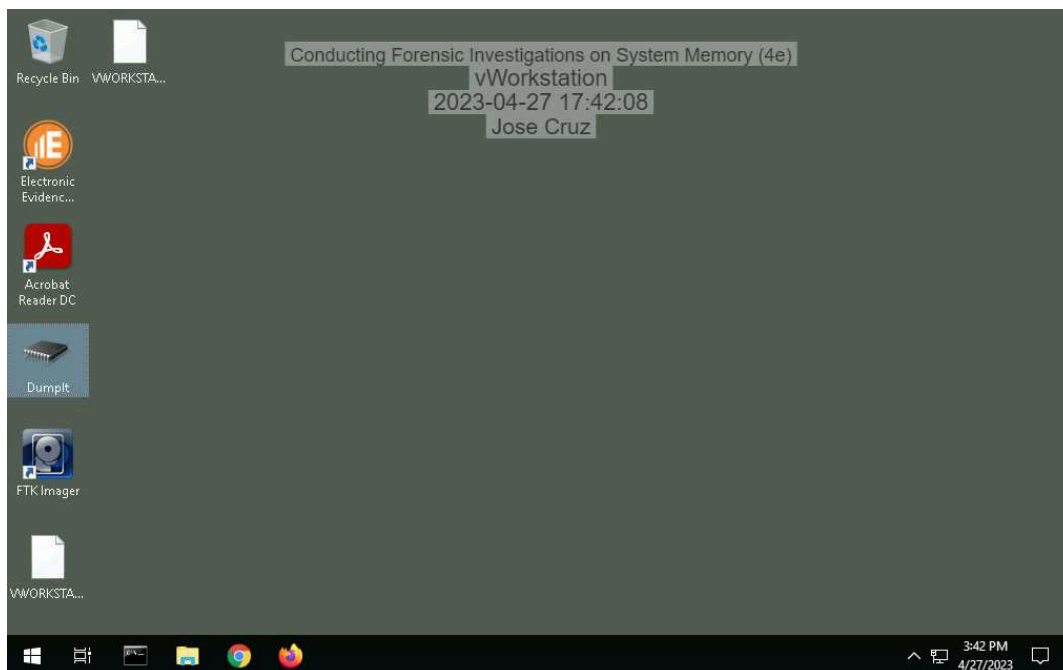
100%

Report Generated: Friday, April 28, 2023 at 7:59 PM

Section 1: Hands-On Demonstration

Part 1: Capture Memory using DumpIt

3. **Make a screen capture** showing the **Dumplt success notification**.

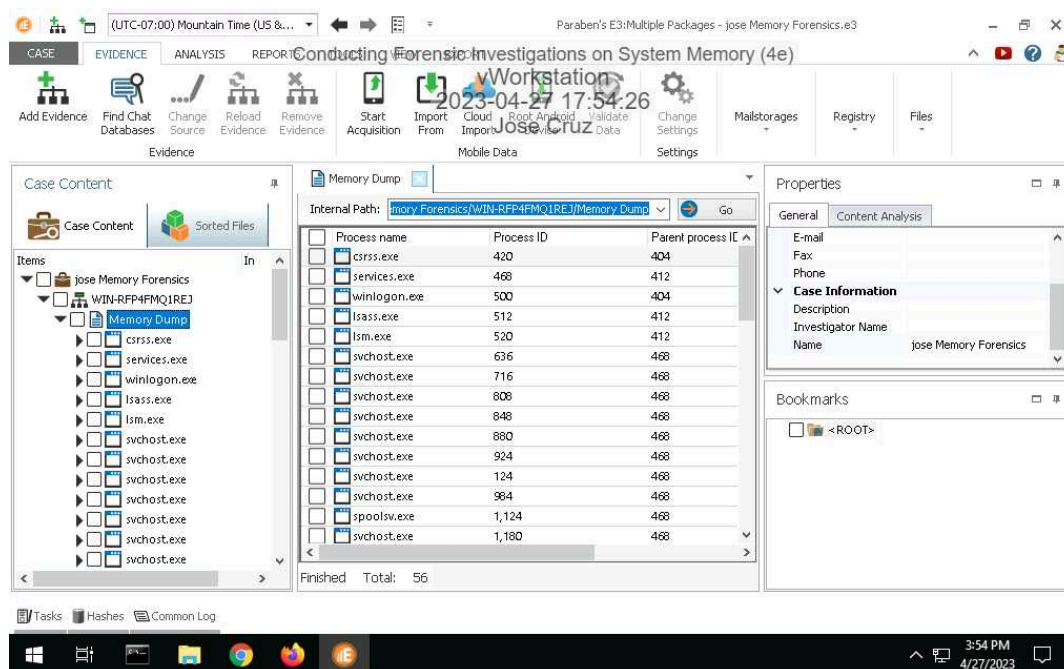


Part 2: Analyze Memory using E3

Conducting Forensic Investigations on System Memory (4e)

Digital Forensics, Investigation, and Response, Fourth Edition - Lab 10

8. Make a screen capture showing the list of processes in the memory dump.



10. Record the start times for the oldest process and the newest process.

The status of the oldest process time is at 4:24:52 AM in 7/12/21.

For the status of the newest process is at 6:42:43 AM in 7/12/21.

15. Document your findings for the conhost.exe process. What is it and what is it used for?

Conhost.exe or Console Host Window Process is a core part of Windows that houses any application that uses the command prompt.

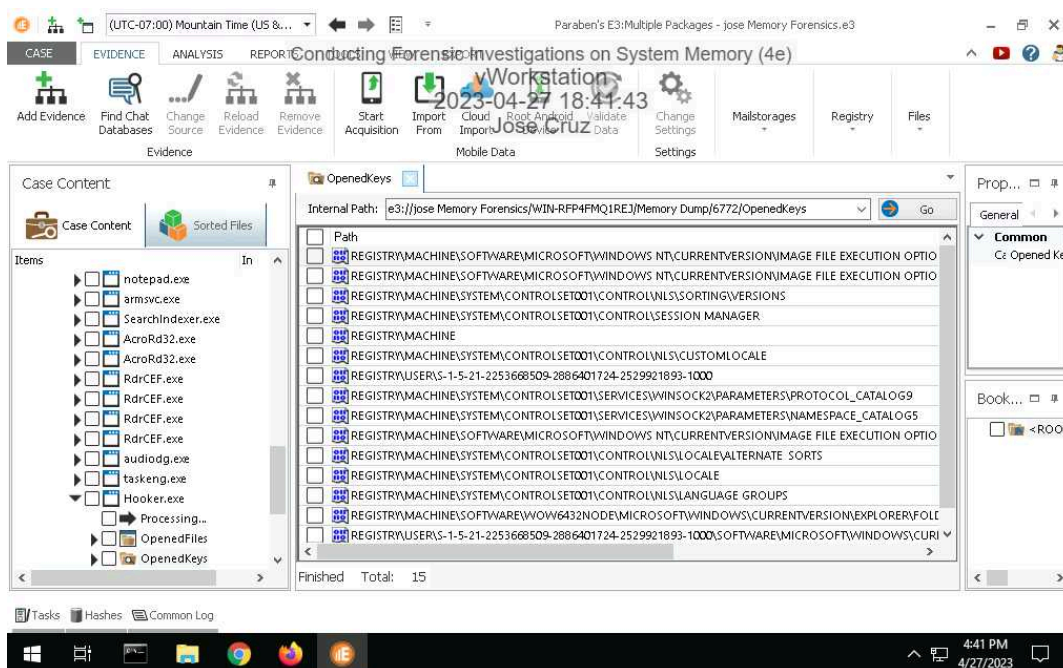
17. Document your findings for the hooker.exe process. What is it and what is it used for?

The hooker.exe file is able to record keyboard inputs. Hooker.exe is not a Windows system file. Hooker.exe is able to connect to the internet, record keyboard.

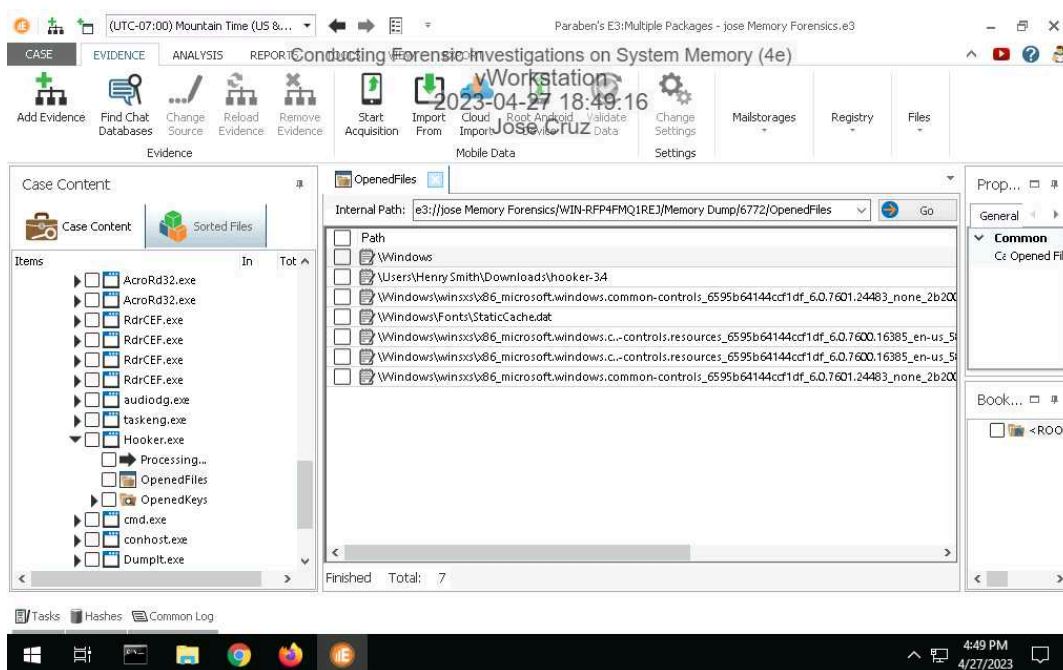
Conducting Forensic Investigations on System Memory (4e)

Digital Forensics, Investigation, and Response, Fourth Edition - Lab 10

21. Make a screen capture showing the registry keys opened by the Hooker.exe process.



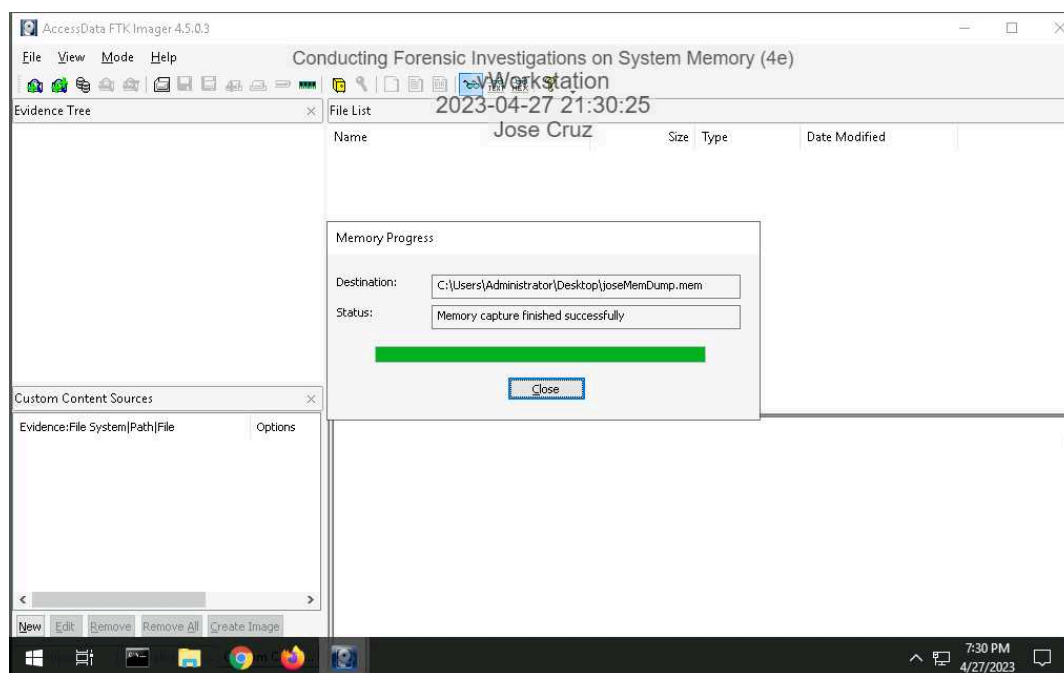
23. Make a screen capture showing the files opened by the hooker.exe process.



Section 2: Applied Learning

Part 1: Capture Memory using FTK Imager

6. **Make a screen capture** showing the *Memory capture finished successfully* confirmation.



Part 2: Analyze Memory using Volatility

7. **Document** your findings for the rvlkl.exe process. What is it and what is it used for?

My finding where that "rvlkl.exe" is a keylogger.

9. **Document** whether any processes are flagged as hidden.

There was not any false statement under pslist in the command line.

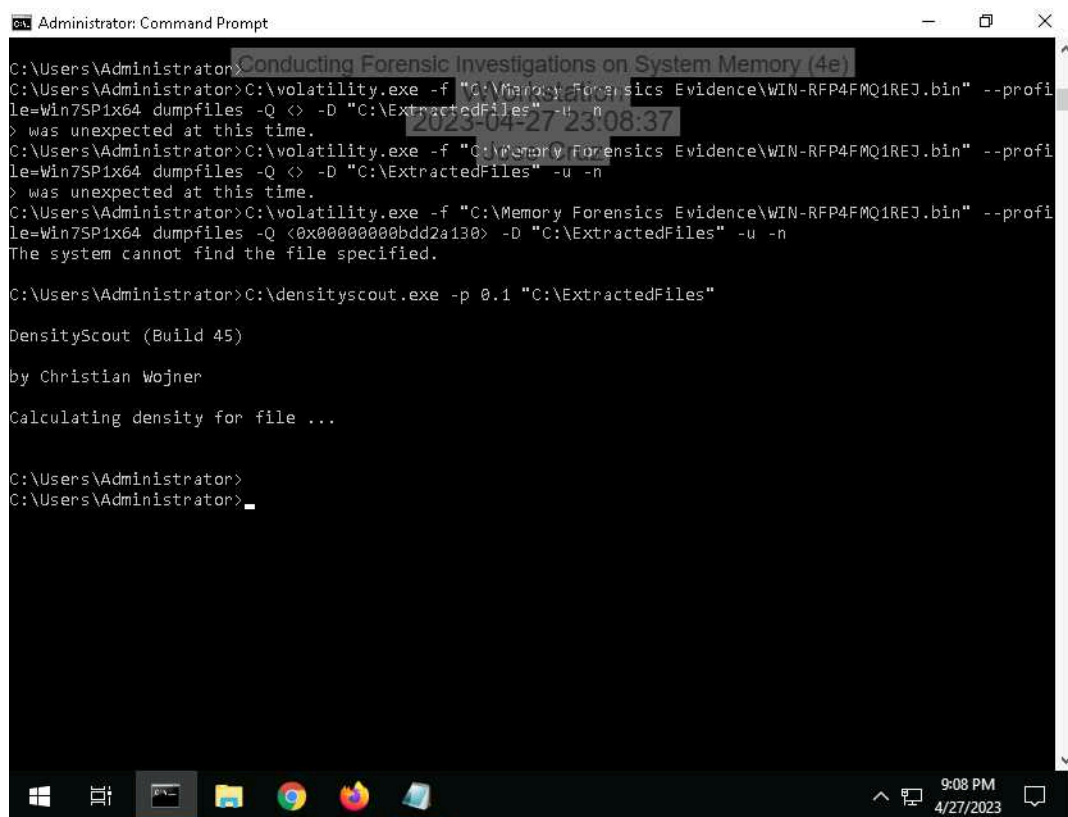
12. **Document** whether the netscan module displays network usage associated with the Hooker.exe or rvlkl.exe processes.

Couldn't find any netscan network usage associated with Hooker.exe or rvlkl.exe processes.

15. **Document** any information you were able to gather about port 56610.

Port 56610 is tcp/udp, TCP enables two hosts to establish a connection and exchange streams of data.

26. **Make a screen capture** showing the **DensityScout** results.

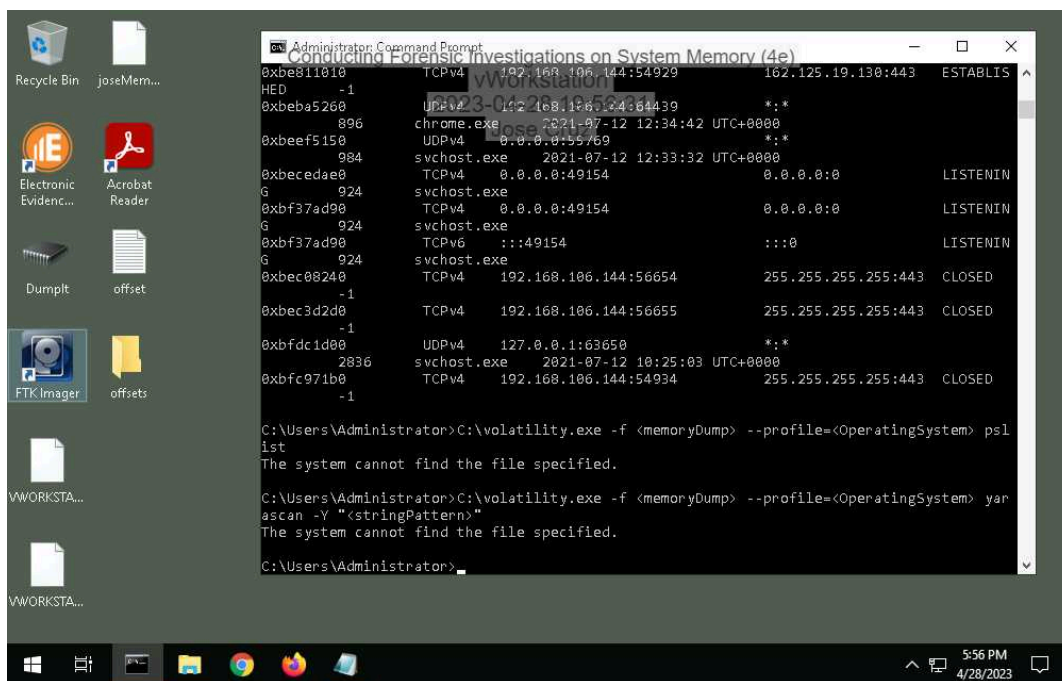


```
Administrator: Command Prompt
C:\Users\Administrator>C:\volatility.exe -f 'C:\Memory Forensics Evidence\WIN-RFP4FMQ1REJ.bin' --profile=Win7SP1x64 dumpfiles -Q <> -D 'C:\ExtractedFiles' -u -n
> was unexpected at this time.
C:\Users\Administrator>C:\volatility.exe -f 'C:\Memory Forensics Evidence\WIN-RFP4FMQ1REJ.bin' --profile=Win7SP1x64 dumpfiles -Q <> -D 'C:\ExtractedFiles' -u -n
> was unexpected at this time.
C:\Users\Administrator>C:\volatility.exe -f 'C:\Memory Forensics Evidence\WIN-RFP4FMQ1REJ.bin' --profile=Win7SP1x64 dumpfiles -Q <0x0000000bdd2a130> -D 'C:\ExtractedFiles' -u -n
The system cannot find the file specified.
C:\Users\Administrator>C:\densityscout.exe -p 0.1 'C:\ExtractedFiles'
DensityScout (Build 45)
by Christian Wojner
Calculating density for file ...
C:\Users\Administrator>
C:\Users\Administrator>
```


Conducting Forensic Investigations on System Memory (4e)

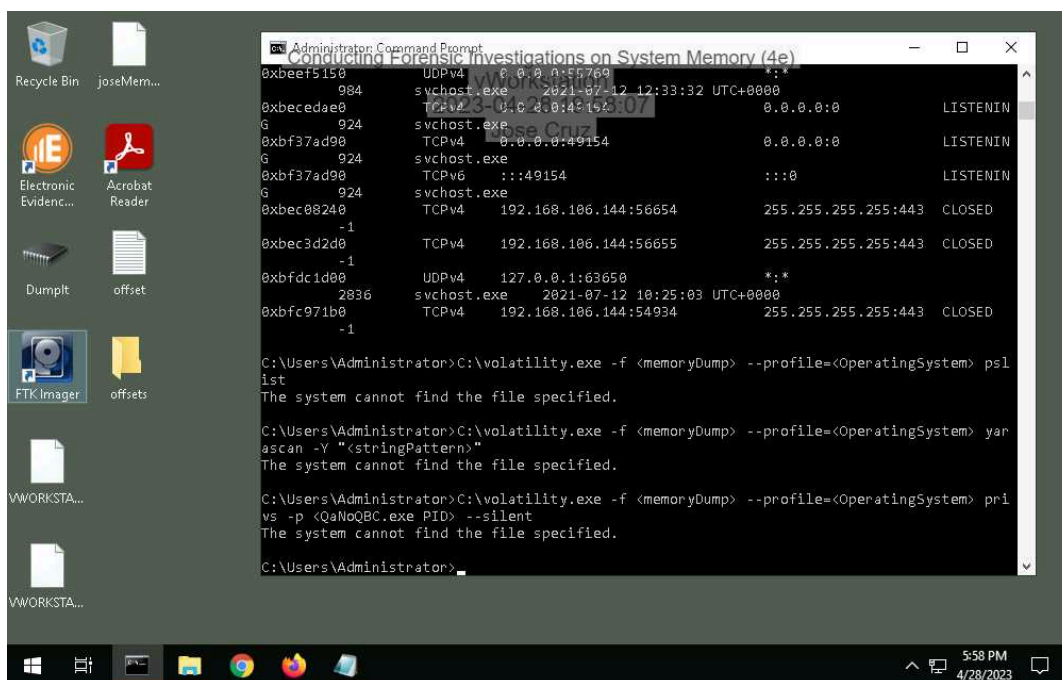
Digital Forensics, Investigation, and Response, Fourth Edition - Lab 10

Make a screen capture showing the output of the yarascan.



Part 3: Identify Privilege Escalation

Make a screen capture showing the output of your privilege comparison.



Conducting Forensic Investigations on System Memory (4e)

Digital Forensics, Investigation, and Response, Fourth Edition - Lab 10
