Digital Forensics, Investigation, and Response, Fourth Edition - Lab 04

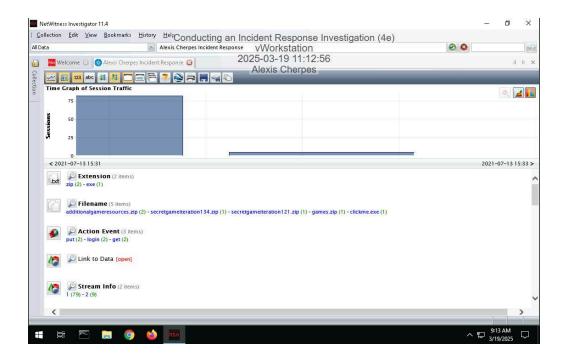
| Student: | Email: |
|---------------------|--------------------|
| Alexis Cherpes | cherpea@ferris.edu |
| | |
| Time on Task: | Progress: |
| 3 hours, 57 minutes | 100% |
| | |

Report Generated: Thursday, May 22, 2025 at 4:48 PM

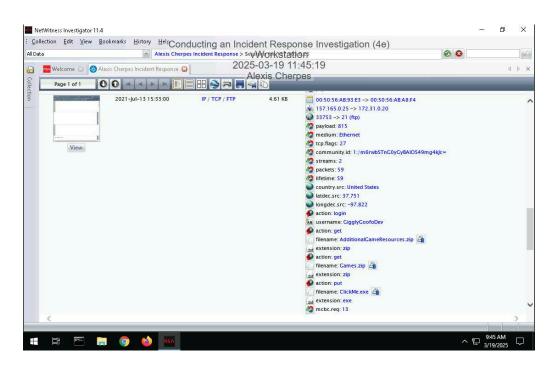
Section 1: Hands-On Demonstration

Part 1: Analyze a PCAP File for Forensic Evidence

10. Make a screen capture showing the Time Graph.

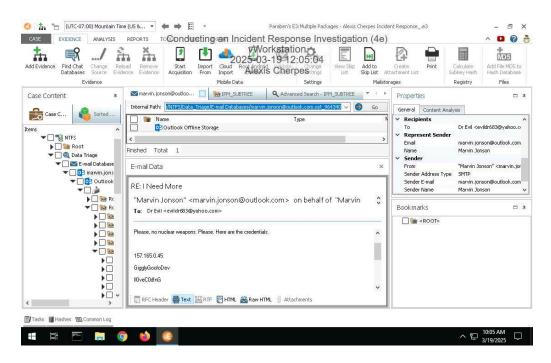


16. Make a screen capture showing the details of the 2021-Jul-13 15:33:00 session.



Part 2: Analyze a Disk Image for Forensic Evidence

18. Make a screen capture showing the email containing FTP credentials and the associated timestamps.



Part 3: Prepare an Incident Response Report

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Date

Insert current date here.

March 19th, 2025

Name

Insert your name here.

Alexis Cherpes

Incident Priority

Define this incident as High, Medium, Low, or Other.

High

Incident Type

Include all that apply: Compromised System, Compromised User Credentials, Network Attack (e.g., DoS), Malware (e.g. virus, worm, trojan), Reconnaissance (e.g. scanning, sniffing), Lost Equipment/Theft, Physical Break-in, Social Engineering, Law Enforcement Request, Policy Violation, Unknown/Other.

Policy Violation,

Incident Timeline

Define the following: Date and time when the incident was discovered, Date and time when the incident was reported, and Date and time when the incident occurred, as well as any other relevant timeline details.

Date and time when the incident was discovered: July 31, 2021 at 10:30am. Date and time when the incident was reported: July 31, 2021 10:40am. Date and time when the incident occurred: started on July 13, 2021 at 3:31pm and ended on July 13, 2021 at 3:33pm.

Incident Scope

Define the following: Estimated quantity of systems affected, estimated quantity of users affected, third parties involved or affected, as well as any other relevant scoping information.

Estimated quantity of systems affected: 53. Estimated quantity of users affected, third parties involved or affected: 815

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Systems Affected by the Incident

Define the following: Attack sources (e.g., IP address, port), attack destinations (e.g., IP address, port), IP addresses of the affected systems, primary functions of the affected systems (e.g., web server, domain controller).

Attack sources: 157.165.0.25 Attack destinations: 172.40.0.1, 172.31.0.20, 172.30.0.2IP addresses of the affected systems: 157.165.0.45 Primary functions of the affected systems: FTP Server

Users Affected by the Incident

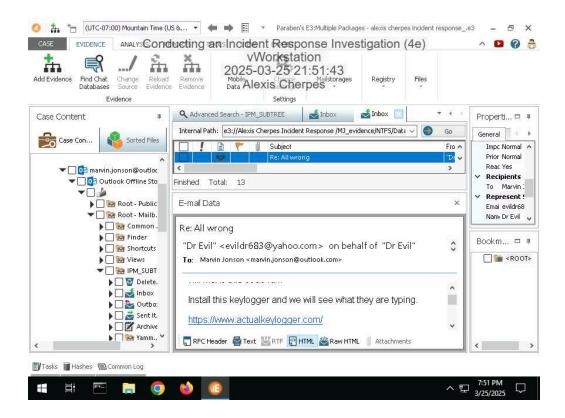
Define the following: Names and job titles of the affected users.

Name: Marvin Jonson Job Titles: Project Manager

Section 2: Applied Learning

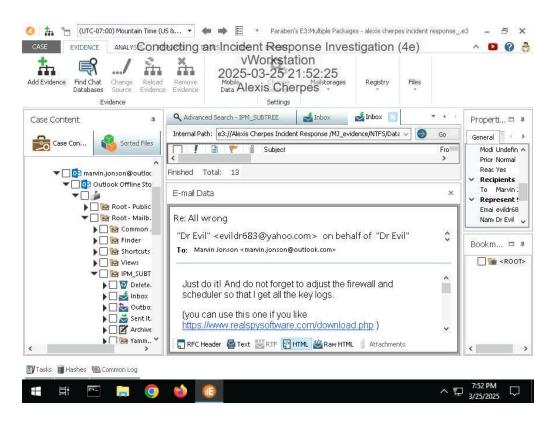
Part 1: Identify Additional Email Evidence

10. Make a screen capture showing the email from Dr. Evil demanding Marvin install a keylogger.



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11. Make a screen capture showing the email from Dr. Evil reminding Marvin to update the firewall and scheduler.



Part 2: Identify Evidence of Spyware

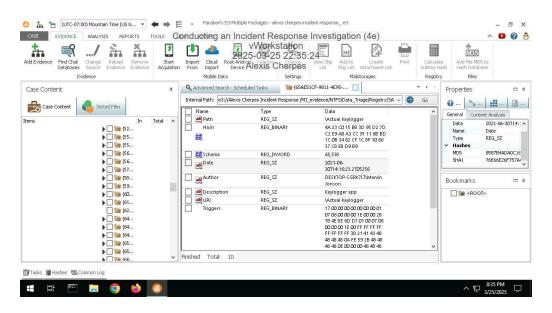
5. **Document** the Author and Date values associated with the scheduled keylogger task.

Author: Marvin Johnson. Date: June 30, 2021 at 2:16pm

7. **Document** the port used for inbound connections to the keylogger and the name and location of the keylogger executable.

Port: 66 Name: Actual Keylogger

9. Make a screen capture showing the registry key value associated with the keylogger and the localSPM service.



15. **Record** the first time and last time the keylogger was started.

First time: Wednesday, June 30, 2021 at 9:11:23 PM Last time: Friday, July 30, 2021 at 3:11:23 PM

17. **Record** whether Marvin interacted with or simply opened the keylogger.

Marvin opened the keylogger

Part 3: Update an Incident Response Report

Date

Insert current date here.

March 25, 2025

Name

Insert your name here.

Alexis Cherpes

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Incident Priority

Has the incident priority changed? If so, define the new priority. Otherwise, state that it is unchanged.

The incident priority has downgraded from high to medium. While the FTP server has been neutralized, the keylogger, firewall, and task scheduler still require further examinations.

Incident Type

Has the incident type changed? If so, define any new incident type categories that apply. Otherwise, state that it is unchanged.

The incident type has changed. We have compromised system and there is malware that is installed. The malware is the keylogger.

Incident Timeline

Has the incident timeline changed? If so, define any new events or revisions in the timeline.

Otherwise, state that it is unchanged.

The timeline has changed. The keylogger was first started on June 30th 2021.

Incident Scope

Has the incident scope changed? If so, define any new scoping information. Otherwise, state that it is unchanged.

The incident scope has changed. The estimated quantity of systems affected is 1, and the estimates quantity of users affected is 1.

Systems Affected by the Incident

Has the list of systems affected changed? If so, define any new systems or new information.

Otherwise, state that it is unchanged.

The attack source is the keylogger installed on the workstation. The attack destination is the firewall and task scheduler. The primary function of the affected systems is the workstation.

Users Affected by the Incident

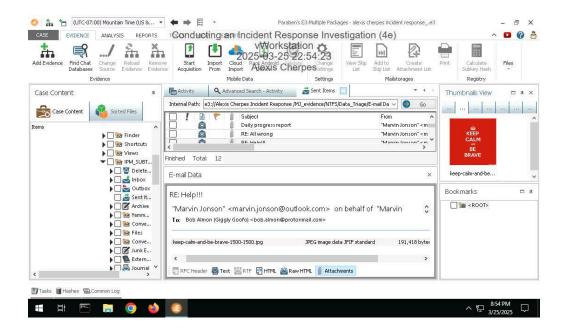
Has the list of users affected changed? If so, define any new users or new information. Otherwise, state that it is unchanged.

The user affected is Marvin Johnson.

Section 3: Challenge and Analysis

Part 1: Identify Additional Evidence of Data Exfiltration

Make a screen capture showing an exfiltrated file in Marvin's Outlook database.



Part 2: Identify Additional Evidence of Spyware

Make a screen capture showing the email with instructions for installing additional spyware.

