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OPERATION NARCOS

DIGITAL FORENSIC EXAMINATION OF STEVE KOWHAI

Version 2.0

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EXECUTIVE SUMMARY

This forensic investigation is related to Operation Narcos, as it began with two passengers intercepted and searched by a Wellington Customs Officer, following intelligence provided by the Australian Government. The suspects, who were found in possession of methamphetamine and other illegal materials, are believed to be involved in a more extensive drug distribution network.

Forensic analysis was required in this case as digital devices, including two laptops and a desktop computer, were seized from the suspect's residence, which may hold evidence of illicit activities. Various digital forensic tools like FTK imager, Autopsy, Bulk extractor, software write blocker, etc., along with the best practices, were employed to maintain the sanctity of the evidence acquired. The artifacts collected are summarized in the report.

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1. INTRODUCTION

This report focuses on the forensic examination of Steve Kowhai's uncovering communications, documents, and other digital artifacts that provide insight into the suspect's motives and involvement in the drug trafficking operation.

The investigation includes multiple areas of digital forensics, such as examining OS and partition details, email forensics, unallocated space and recovered files, relevant files and folders, registry analysis, and live memory forensics using Bulk Extractor for RAM artifacts.

Moreover, this analysis report will detail the investigative procedures taken and the evidence uncovered, emphasizing timestamps, dates, and maintaining the chain of custody to ensure the integrity and reliability of the findings.

2. ENGAGEMENT AND SCOPE

2.1 Interrogation and Search

Following the statement provided by Jane Esteban during the interrogation, she was aware of the hidden drug John Fredricksen had instructed her to deliver the suitcase to the "Eastbourne Library." If any issues arose, she was told to take it to 666 Rewera Avenue, Petone in Wellington.

However, when authorities arrived at the specified address, they found drugs, firearms, and a desktop computer in the living room, but no one was present during the search.

2.2 Suspect Involvement

To gain insight into the case, the following sections will detail the forensic evidence of Steve Kowhai, covering both forensic images and Live RAM acquisitions that can shed light on his involvement in events related to the case.

2.3 Our Role

Through a detailed analysis of digital artifacts, our role as Forensic Investigator aims to build a thorough understanding of Steve's potential involvement, such as downloading sensitive files and revealing critical information to a compelling case.

3. SCOPE OF INVESTIGATION

3.1 Evidence Acquisition

a. Acquisition of images for Steve Kowhai's computer:

- We acquired the images for Steve's drive and memory with a software write blocker (as we must copy from the remote location). This was done to ensure that we do not add or modify the mages inadvertently and that the sanctity of the suspect's file remains intact.
- We re-ensured this with the hash analysis by stating that both files have identical hashes before and after copying.
- We stored this copied image as original on our computer and made a copy with the same hash for further analysis.

b. We maintained a 'chain of custody' of images in the required format throughout our analysis. This was to ensure the reliability and sanctity being preserved for further audit. (see section 4.6 of this report).

3.2 Data Integrity

The digital hash value of the evidence collected at the scene was verified to ensure no modifications have occurred, and this is considered to have remained intact and unaltered.

- *Refers to Appendix SO58, SO59, SO60.*

4. FINDINGS AND DISCUSSIONS

4.1. Timeline - Steve Kowhai

The investigation involves acquiring forensic images of a Desktop found during searches by law enforcement. Specifically, more details are provided in section 5.7 of this report. The analysis utilizes forensic tools to examine the image files exclusively focusing on the user activity timelines for relevant evidence such as:

4.2 Registry Analysis, OS, and Partition Information

- User login: Steve
- Computer Name: SK-Desktop (*initials for Steven Kowhai*)

The artifacts and property owner of the found desktop are believed to be known as Steve Kowhai.

In recent open documents, referring to Appendix S030, S061, S062, S063 for timestamps, we found records of:

a) Recent Pictures and Document files (dates 31/01/2019 and 02/02/2019 refer to Appendix S064)

We know Steve has brought a return ticket to meet John in Brisbane.

Images provide plans of the whereabouts of Janes's package destination.

- C:/Users/Steve/Documents/Misc/flightbooking (refer to Appendix S026)
- C:/Users/Steve/Documents/Misc/dropoff.jpg, package.jpg, airport crystal.jpg, method run.jpg (refer to Appendix S064 for timestamps)

b) Recent Downloads (dates 31/01/2019 and 02/02/2019 refer Appendix S065)

- C:/Users/Steve/Downloads/BNE.jpg:
- C:/Users/Steve/Downloads/ccsetup.com
- TrueCrypt C:/Users/Steve/Downloads/TruCryprt7.Setup.exe

The time of events indicates that Steve Kowhai may be actively attempting to conceal evidence of illegal activities. The download of images with hidden steganographic data, cleaning tools, and the acquisition of encryption software suggest that he is trying to cover up his involvement in criminal activities, possibly related to illicit drug operations.

4.3 Examination of Communication Logs (dates from 28/01/2019 to 01/02/2019)

Analyzing email communication to uncover details related to the Drug trafficking operation. This included email accounts, attachments, messages, and more.

- Discord setup.exe and Protonmail were downloaded and installed (refer to appendix S068)
- Email records found (email sent/received, keywords, proton email account, phone number)

- Discord chatroom examining logs record of a conversation between Steve and John extracted from Autopsy (refer to findings section 4.6) discussing the smuggling operation.
- Also, a file 'Secret' was discovered received by crayfish1980@protonmail.com from an email sent by heresjohnny1@protonmail.com
- John sent BNE.png image via discord attachment.

4.4 Examination of unallocated files and recovered files:

a) Recycle Bin (refer S020, S021, S022 and S064 for timestamps)

During the forensic examination, several documents were found that had been recently accessed by the suspect, including files related to illicit drug operations. They contained timestamps that are critical for establishing a timeline of events. As referenced in Appendix S064, these documents were opened shortly before specific deleted files were retrieved from the Recycle Bin.

4.5 Detailed Chain of Custody

Chain of Custody History					
Case Name: Operation Narcos					
Date/Time Acquired: 14/10/2024 12.00 pm					
Investigators: Shishir Saxena (SS) and Hope Posesione (HP)					
Artifacts: Disk Image Narcos-1.00-021 | Narcos_Mem-1.001 -003					
Location of seizure: 666 Rewera Avenue, Petone Wellington					
SN	**Time**	**Date**	**Description**	**Investigator**	**Purpose**
1	12.00 PM	14/10/2024	Operation Narcos (Steve) case was allocated	S.S and H. P	To acquire digital extraction assignment for court report
2	12:36 PM	14/10/2024	Digital extraction was initiated, and disk images were copied	S. S	Preparing evidence for analysis
3	10:20 PM	14/10/2024	A copy of the image file was loaded into FTK Imager.	H. P	Ensuring evidence integrity and security
4	10:00 AM	15/10/2024	Disk Image loaded into the Autopsy Tool	S. S	Collect preliminary evidence
5	10:00 AM	16/10/2024	Live RAM extracted using Bulk Extractor	S. S	Extracting evidence
6	12:00 PM	17/10/2024	Image file loaded in Registry Explorer	S. S	Viewing Registry Explorer
7	2:00 PM	17/10/2024	Web Search, history, keywords search analyzed findings	S. S and H. P	Analysed information related to the case.
8	8.:00AM	18/10/2024	OS and Partitioned analyzed findings	H. P	Analysed user access and activity history
9	12:00 PM	18/10/2024	Web Downloads analysed findings	H. P	Review download files evidence
10	4:00 PM	18/10/2024	Unallocated files, recycle bin files analyzed.	S. S	Analyzed images and deleted files
11	12:00 PM	26/10/2024	Email findings analyzed	S. S	Analysed email messages
12	9:00 PM	26/10/2024	Image Steganography Captured	S. S	Revealed hidden messages
13	10:00 AM	31/10/2024	Discord Chat analysed	H. P	Analysed Discord conversation
14	4:00 PM	21/11/2024	Summary Report Compile Findings	H. P	Report Summary Audit
15	1:00 PM	22/11/2024	Summary Report QA	S.S	Finalizing Report Summary

4.6 Findings

- Desktop computer SK-Desktop has a user Steve Kowhai who was searching for the Scope of selling drugs (refer S012) and Global meth flow and countries shared in the world (refer S010 and S011)
- User Crayfish1980 on domain protonmail belongs to user Steve (refer to S045 and S046)
- An encrypted email conversation between Crayfish1980 and heresjohnny1 (refer S050) suggests that they were in talk about methamphetamine.
- User Steve obtained an encrypted file BNE.png image from John's protonmail, which contained meth packets in a suitcase
- He also shared Flight bookings from Brisbane to Wellington and back (refer to S026 for site and S027 for confirmed booking)
- They were due to meet at Eastbourne Library and an alternate place, 666 Rewera Avenue, if they missed each other. (as shown below in the transcript)
- **Discord Chat Interception**

John	Timestamp	Steve	Timestamp
"New supplier, eh? Definitely Interested! Can I get 10 keys of it delivered to Wellington"	2019-01-28 02.38.38.174 NZDT	"Yeah, yeah probably wiser, good one. In fact, I have already put a document together in anticipation of chatting with you. I'll send it through now. It contains some information regarding how I see this working out. Let me know what you think once you have read it S.O"}	2019-01-30 12:04:09 NZDT
"Good Thinking, I already know how. Heard of steganography?"	2019-01-30 02:56:12.835 NDZT	"A way of hiding one image within another. There's a simple application called 'Image Steganography'."	2019-01-30 02:56:12.35NZDT
"Ya. I just told you about the tool: face_palm: Received it. Will check to see if it works and confirm soon. "	2019-02-01 13:11:39 NZDT	"Good. Meet at the Eastbourne library and if we miss each other come to 666 Rewera Avenue, Petone."	2019-01-31 02:10:36.655NZDT

5. DIGITAL EXAMINATION

5.1 Forensic Procedures and Tools

We used the following Forensic procedures and best practices:

- Utilized a software write blocker – to ensure evidence is protected without tampering or damages.
- Utilized HashCalc - To verify MD5 hashes.
- Maintained an auditable Chain of Custody to record historical procedures, including timestamps and screenshots of evidence.
- Preserving original evidence and working on the copy.
- Maintaining records of day, date, and time of all acquired files and artifacts from the suspect's images. *Please refer to the Appendix to view the collected evidence.*
- Analysing the artifacts without any preconceived bias or favour.
- Preparing a report based only on the facts of the case.

Tools used in our examination as we started:

5.2 FTK Imager

FTK Imager tool creates forensic images for data preservation and verifies evidence's authenticity in legal proceedings.

5.3 Registry Explorer

An essential digital forensics tool to analyse the Windows Registry, it provides system preferences, application settings, user profiles, and other important system information.

5.4 Bulk Extractor

Our team primarily used the Bulk Extractor tool to extract data from Live RAM Memory, specifically to collect digital evidence such as phone numbers, IP addresses, and email addresses.

5.5 Image Steganography Tool

We used this software to extract secrets within image files to reveal messages during our investigation.

5.6 Autopsy tool

The autopsy tool platform analyses digital evidence by examining disk images, files, and folders and creating timelines. It is also used to recover and analyse deleted data.

5.7 Detailed examination of user Steve Kowhai's desktop and tools used

5.7.1 Desktop details from Registry Explorer, Autopsy, and Partition from FTK Imager

- Name of the desktop: SK-DESKTOP, dated 29/01/2019 (refer to S003)
- Hardware: 17763.1.AMD64FRE.RS5 release 180914-1434 loaded on 15/09/2018 (refer to S002)
- Software: Microsoft Windows 10 (refer to S003)
- Time: NZ standard time (refer to S004)
- Partition scheme: MBR with four partitions, NTFS (refer to S001)
- Devices ever plugged onto the desktop: refer to S030

5.7.2 User data/activity from Autopsy and Registry Explorer. Personal details from Bulk extractor

- User Steve: information under 1001 group (refer S005) under path C:\users\Steve
- Last logon: 02/02/2019 02:39:26 GMT
- Internet activity from registry: refer to S006
- Internet setting from registry: Mozilla 5.0 (refer to S007)
- Start-up information from registry: refer to S028
- Past and present IP profile: refer to S034 and S033
- TCP / IP setting from the registry: refer to S032
- Devices mounted by Steve from the registry: refer to S031
- Autoform and login details for Protonmail from Autopsy: username crayfish1980 (refer to S018 and S019)
- Recent documents accessed by Steve from the registry (refer to S029)
- Password from bulk extractor (refer to S056)
- Credit cards and telephone no. used (refer S047 and S048)

5.7.3 Web Activity from Autopsy

- Keyword searches: refer S016
- URL searches from Bulk extractor (refer to S049)
- Searches online done by user Steve (31/01/2019 15:55:01 NZDT):

a) What is Methamphetamine? What is crystal meth? How is meth used? (refer to Appendix S008)
b) Best places to trade drugs (refer to S009)
c) Scope of selling drugs (refer to S012)
d) Search for gangs in New Zealand (refer to S013)
e) Search for encrypted email, i.e., protonmail (refer to S017)

5.7.4 Images Downloaded from Autopsy

- Global meth flow and countries share in world (refer S010 and S011)
- Downloads of software TrueCrypt and Protonmail, Discord, image Steganography version 1.5.2 (refer S015)
- Encrypted file BNE.png image from John from protonmail
- Flight bookings from Brisbane to Wellington and back (refer S026 for the site and S027 for confirmed booking) and refer S039 for registry entries
- Route for Eastbourne Library from the airport (refer to S023)
- Methods to run from Home marked by user Steve (S025)

5.7.5 Email/chat activity from Autopsy and Bulk Extractor

- Discord chat between the two channels (refer to S044)
- History of discord chat activity Steve asking: *"Good. Meet at the Eastbourne Library, and if we miss each other, then come to 666 Rewera Avenue, Peton" (refer to* S043)
- Registry activity to Discord handoff (refer to S041)
- Flight details shared on Discord (refer to S042)
- Attachment Steve_k.png to Discord (refer S051)

5.7.6 Encrypted conversation from Bulk extractor

- User Crayfish1980 on domain proton mail belongs to Steve (refer to S045 and S046)
- Encrypted email conversation between Crayfish1980 and heresjohnny1 (refer S050)
- Jumplist login details for protonmail (refer to S055)

5.7.7 Deleted files recovered: earlier stored in the pictures folder of Steve

- Eight_col_patches (refer S020 and S037 for registry data)
- Crystal meth bust (refer S021 and S036 for registry data)
- Crystal meth packets (refer S022 and S038 for registry data)

5.7.8 Steganographic activity

- Hidden file link of 3300kb with 16 files found (refer to S052)
- RSA keyname found against user Steve. The file named BNE.png 4376kb is found in the download folder. (refer S053) Password Elchapo2 was deciphered by another team. With the image Steganography tool, the hidden file was discovered (refer to S054)

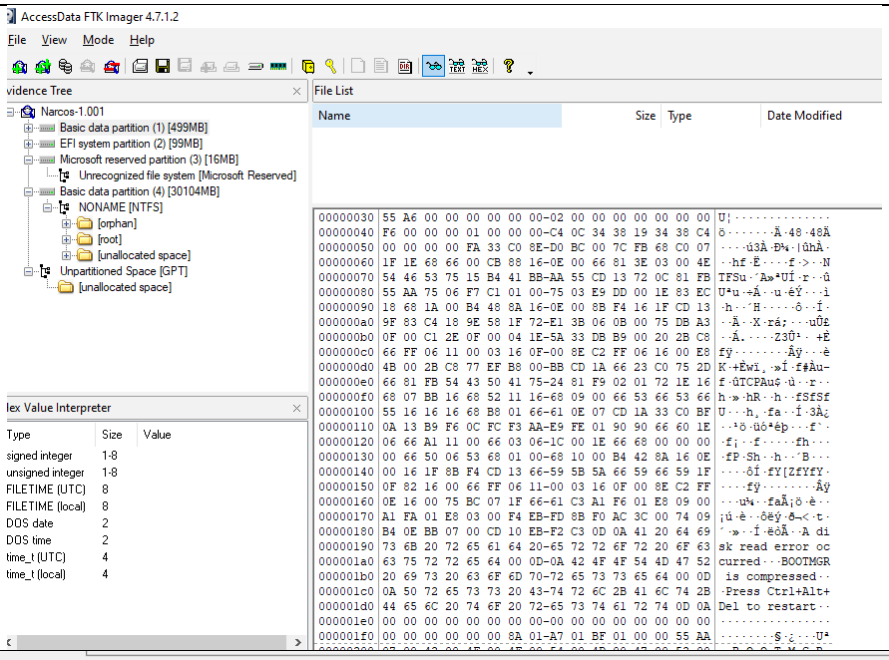
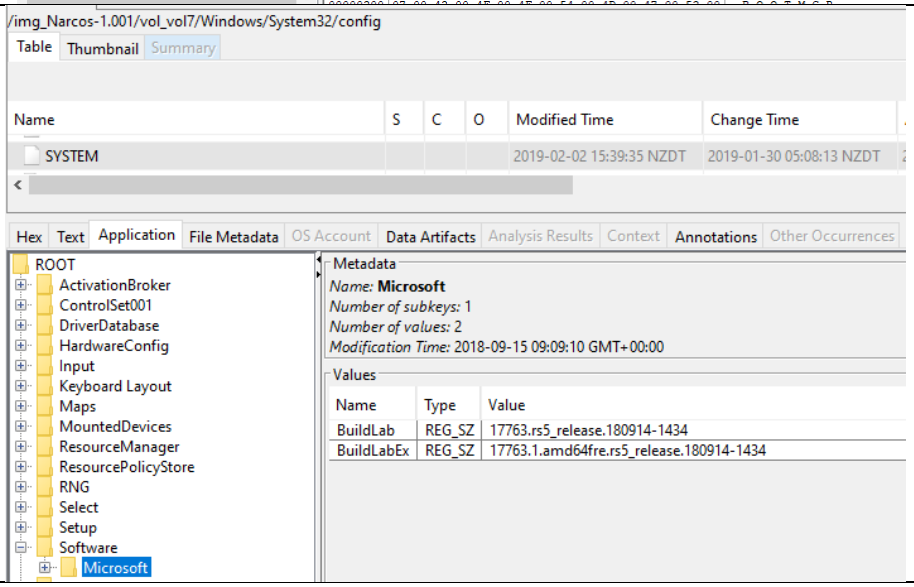
6. CONCLUSION

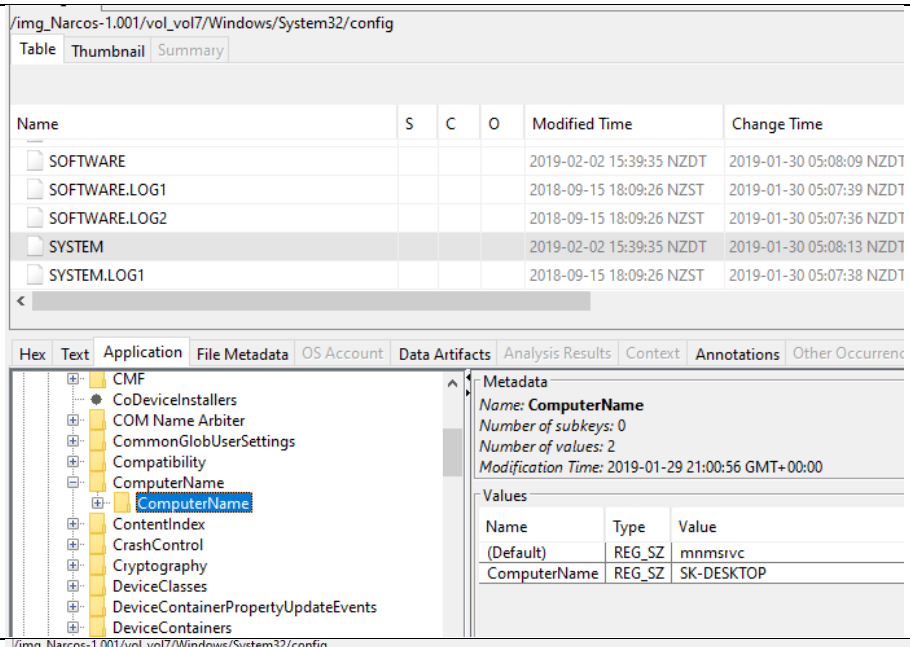
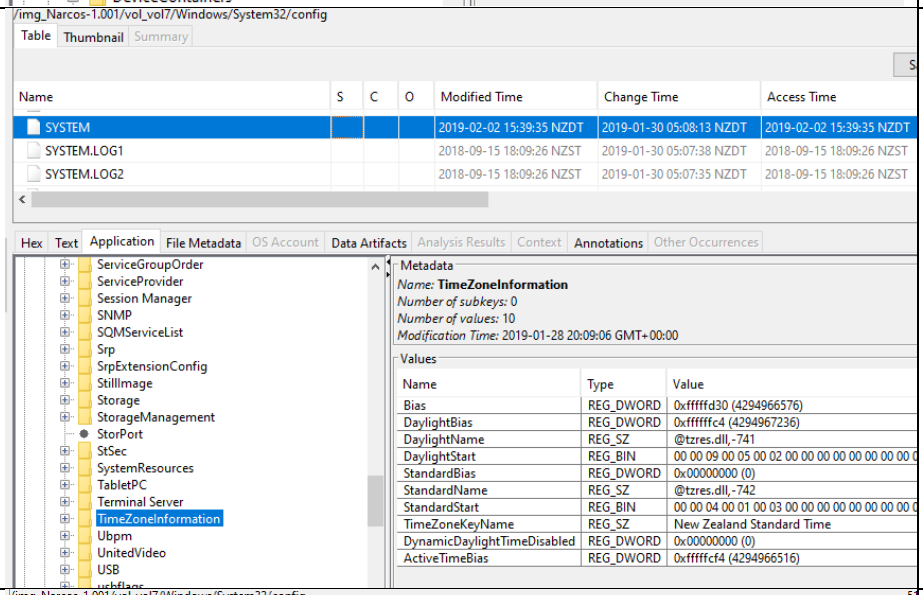
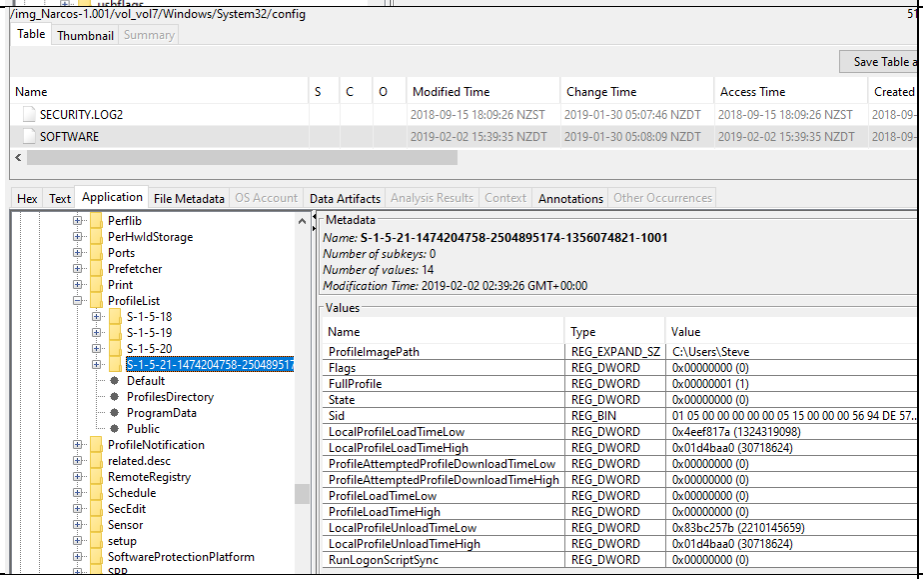
The user with login, Steve, was logged on to a desktop named SK-desktop, and he searched about the drug trade, the price of methamphetamine, and the gangs of New Zealand. Besides, he downloaded pictures of meth busts, meth packets, and the logo for the 'Mongrel Mob' with the intention of trading drugs. He was in contact with another user named heresjohnny1 on Discord and Protonmail for delivery of the drugs. They finalized to start with 1gm of meth and take further if it goes through and shared flight details on Discord. They were due to meet at 'Eastbourne Library' and another place if they miss. He also had a plan ready to escape, as found in one of the photos.

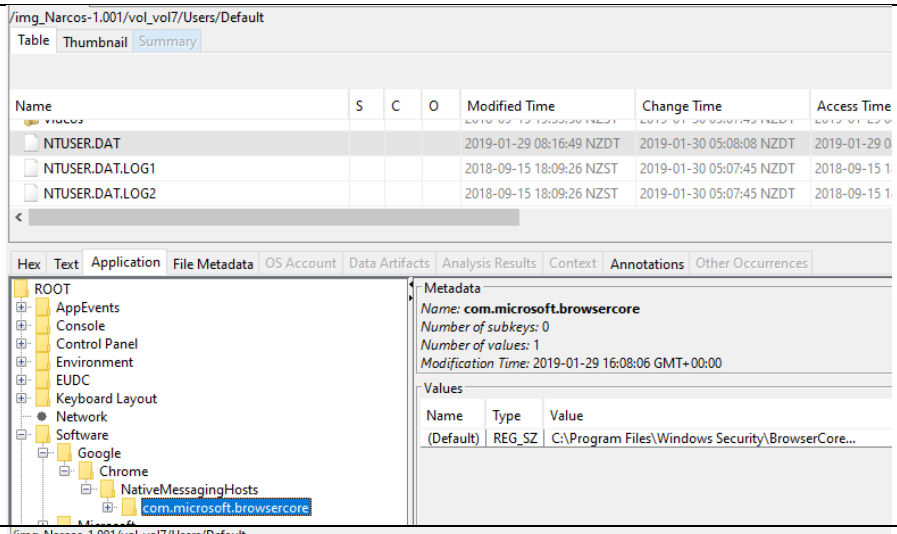
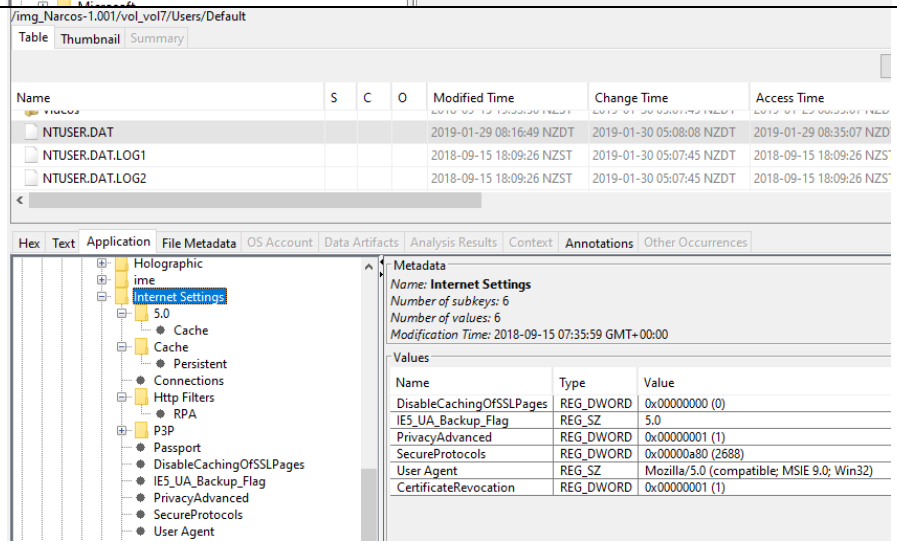
User Steve had downloaded the Protonmail and image steganography for safe and encrypted messaging. He also downloaded a picture that had a hidden photo of a suitcase with meth in packets sent by John.

This can safely be concluded with the above facts that user Steve used the computer SK-Desktop to search and finalize the trade of meth with John and delivery to be done at Eastbourne library.

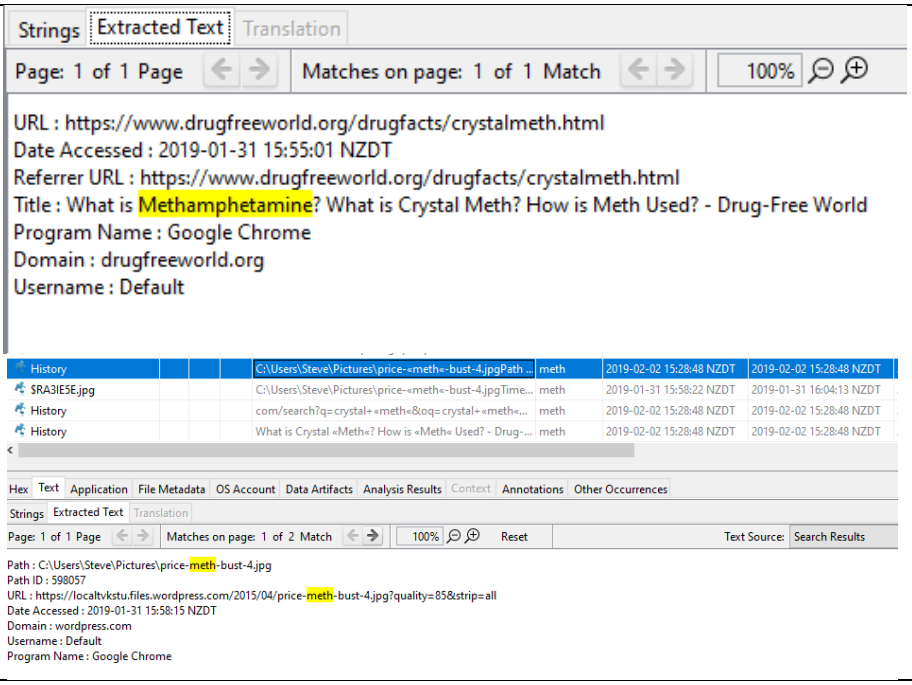
7 APPENDIX FOR ARTEFACTS

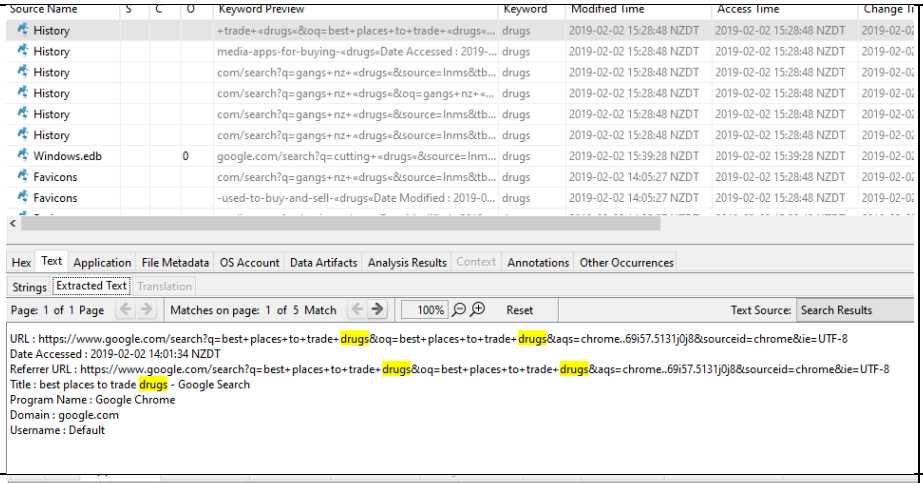
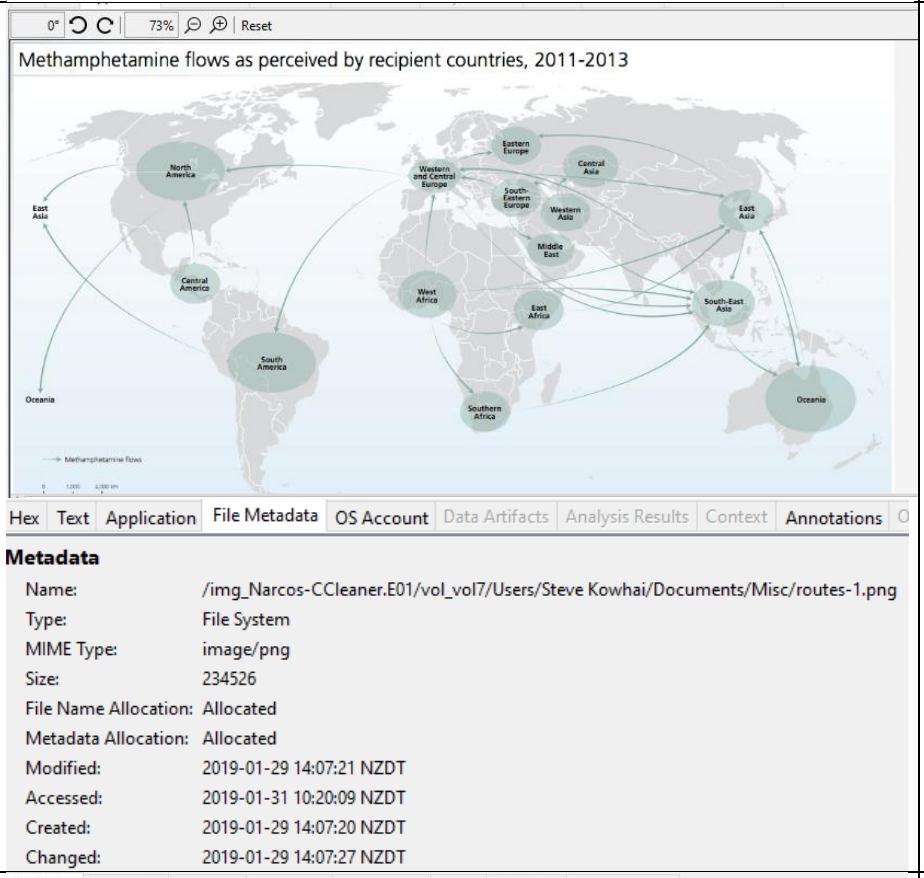
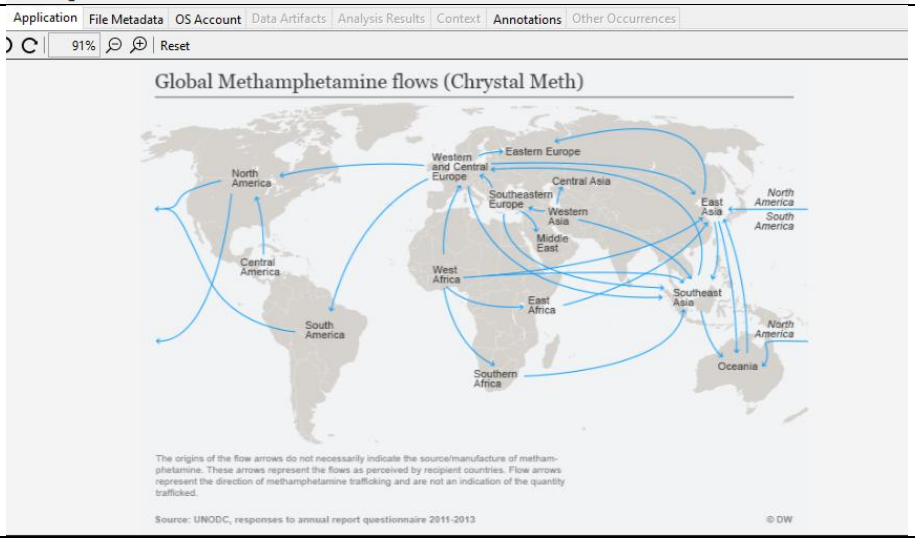
Exhibit No.	Item	Image Evidence	Date and Time Obtained
		Disk and User Information	
S001	Partition system from FTK Imager		14/10/24, 10:36 pm
S002	Computer System Information		18/10/24 8:33 pm

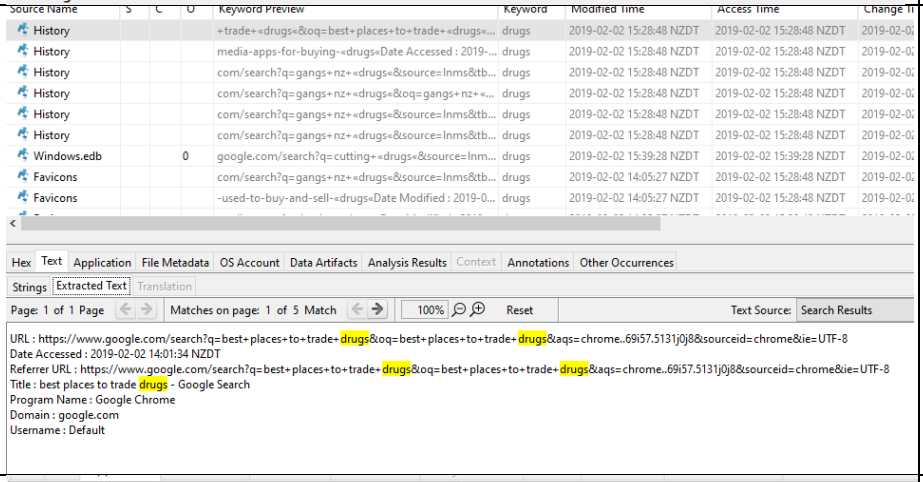
S003	Computer Name		18/10/24 8:47 pm
S004	Time zone of Computer		18/10/24 9:17 pm
S005	Various users on the computer and Steve's Information		18/10/24 9:48 pm
S006	Internet activity by Steve		18/10/24 10:36 pm

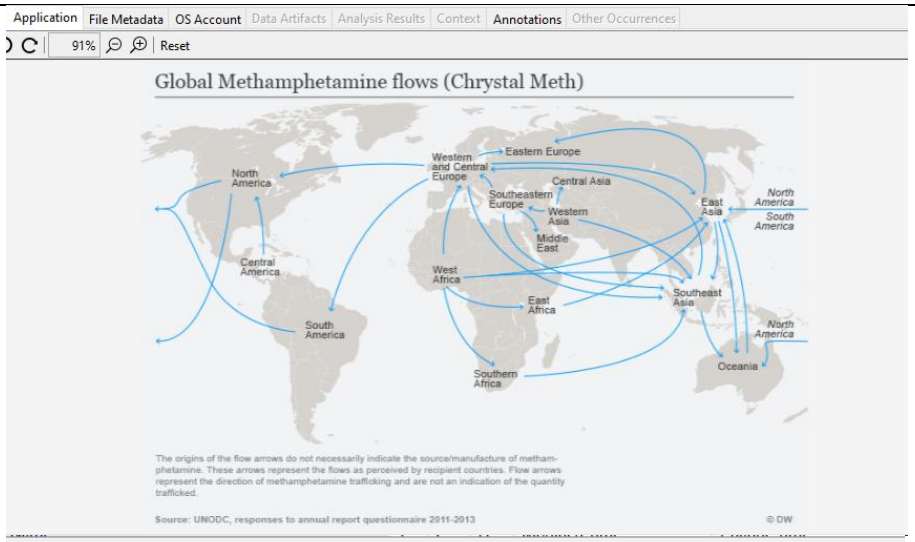
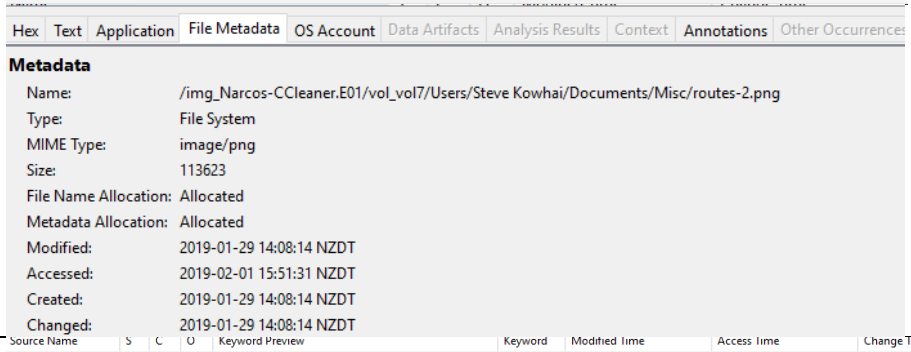
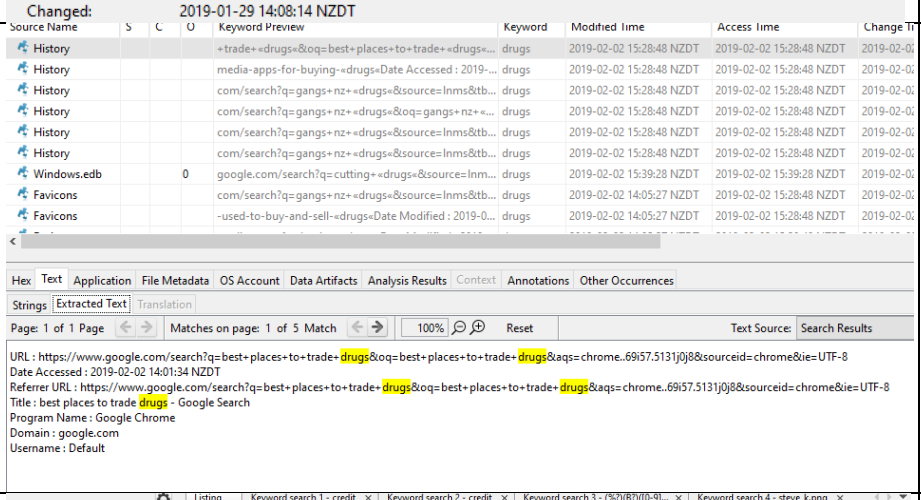
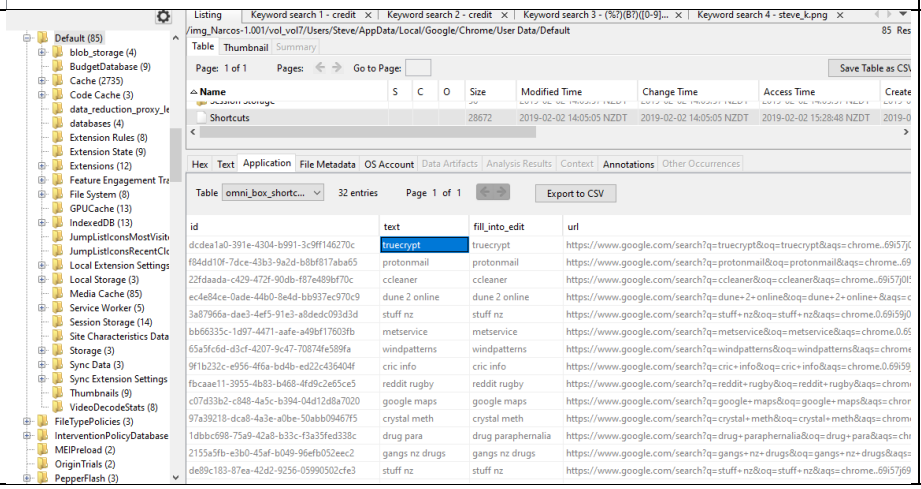
			
S007	Internet Settings		18/10/24 11:02 pm

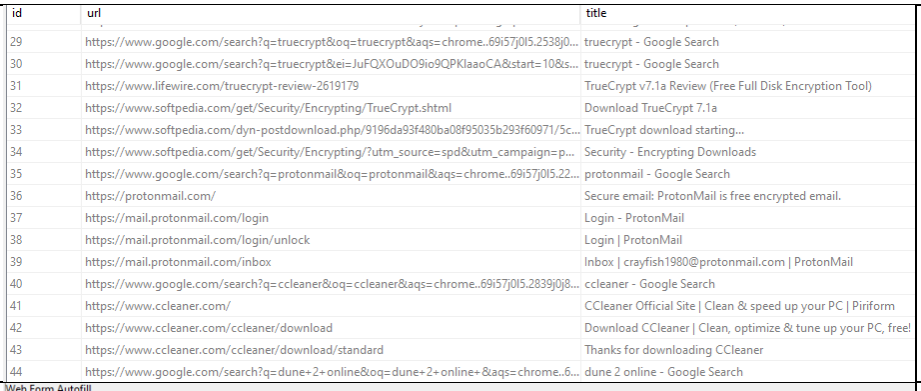
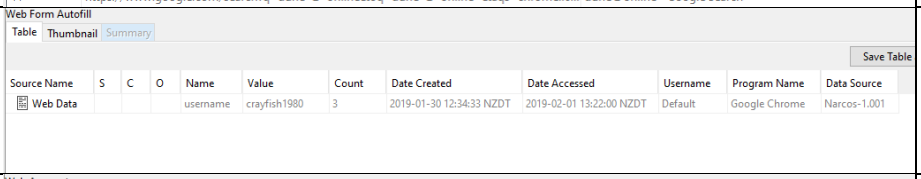
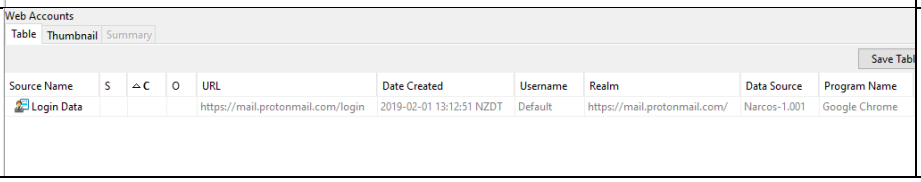
Searches performed and Sites Visited by Steve

S008	Search For methamphetamine, Crystal meth		17/10/24 8:30 pm

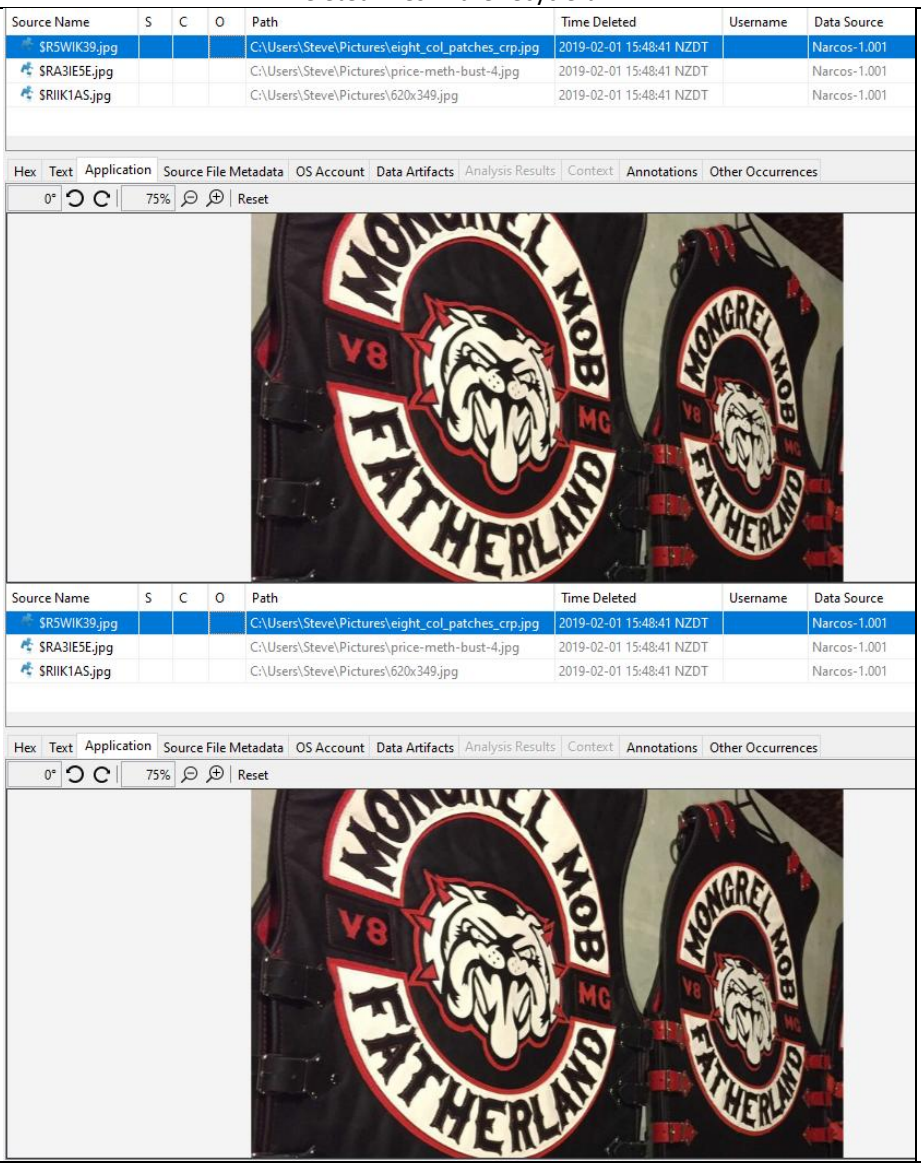
S009	Search for the Drug trade.		17/10/24 8:38 pm
S010	Methamphetamine flows as perceived by recipient countries.		17/10/24 8:55 pm
S011	Global meth flows		17/10/24 8:58 pm

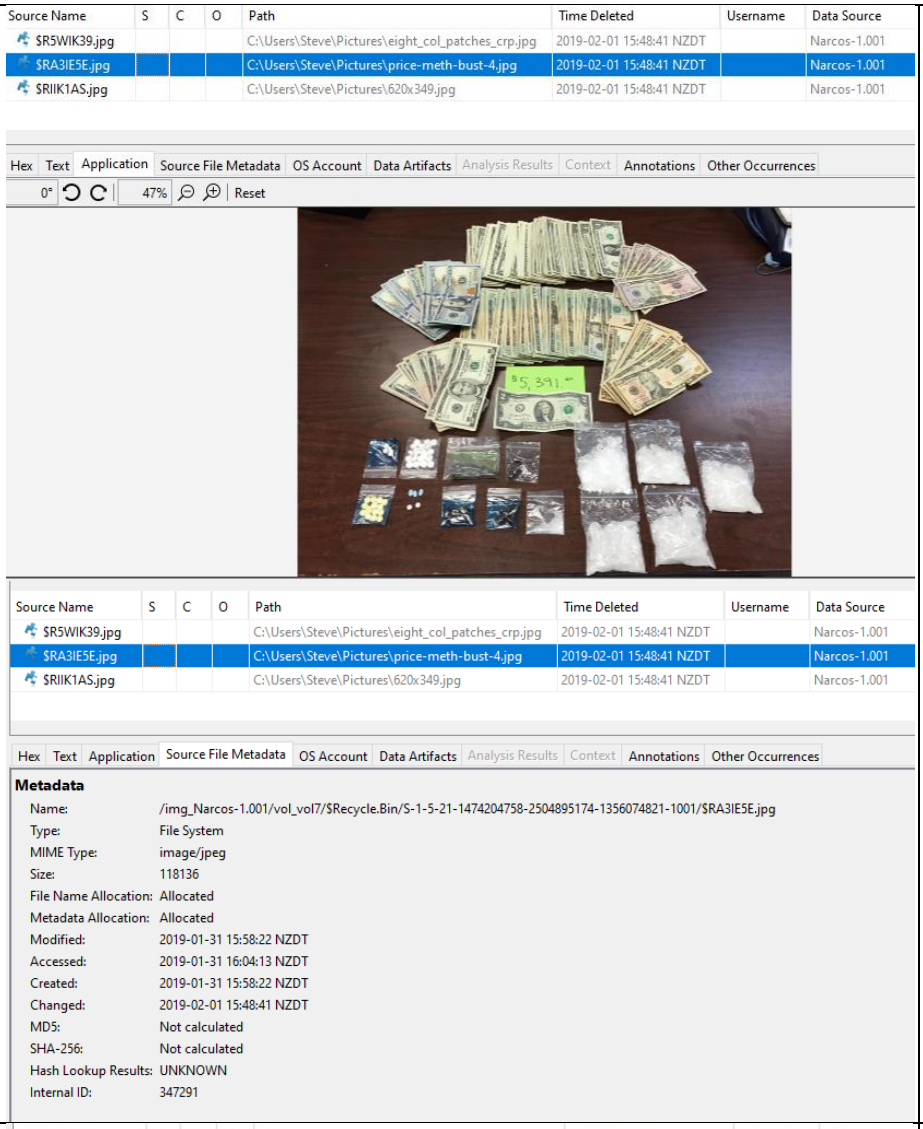
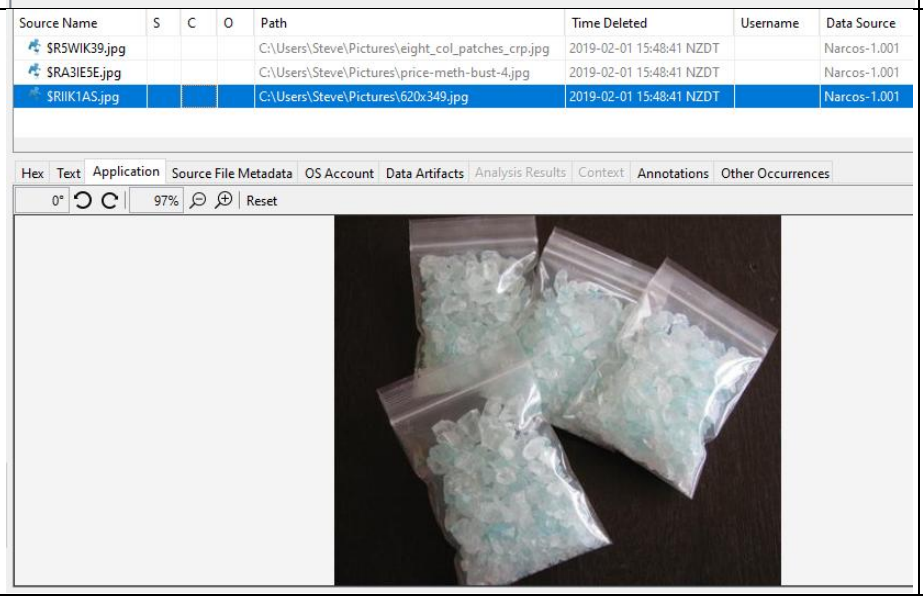
		Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences **Metadata** Name: /img_Narcos-CCleaner.E01/vol_vol7/Users/Steve Kowhai/Documents/Misc/routes-2.png Type: File System MIME Type: image/png Size: 113623 File Name Allocation: Allocated Metadata Allocation: Allocated Modified: 2019-01-29 14:08:14 NZDT Accessed: 2019-02-01 15:51:31 NZDT Created: 2019-01-29 14:08:14 NZDT Changed: 2019-01-29 14:08:14 NZDT	
S009	Search for the Drug trade.		17/10/24 8:38 pm
S010	Methamphetamine flows as perceived by recipient countries.	 Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations O **Metadata** Name: /img_Narcos-CCleaner.E01/vol_vol7/Users/Steve Kowhai/Documents/Misc/routes-1.png Type: File System MIME Type: image/png Size: 234526 File Name Allocation: Allocated Metadata Allocation: Allocated Modified: 2019-01-29 14:07:21 NZDT Accessed: 2019-01-31 10:20:09 NZDT Created: 2019-01-29 14:07:20 NZDT Changed: 2019-01-29 14:07:27 NZDT	17/10/24 8:55 pm

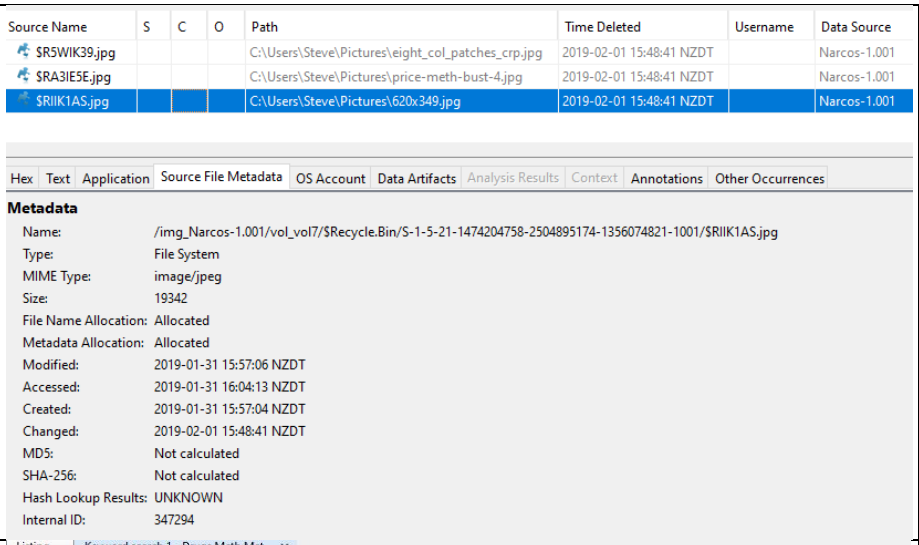
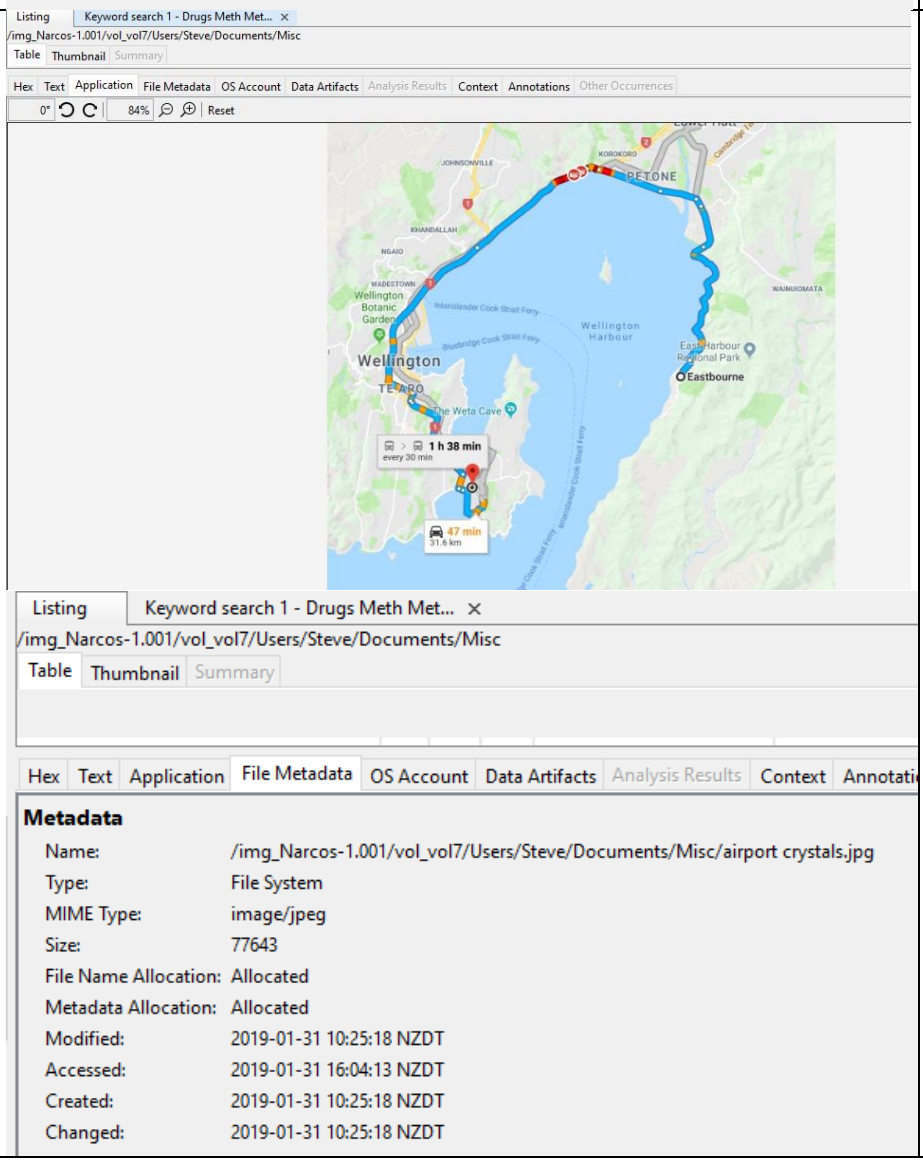
S011	Global meth flows	 	17/10/24 8:58 pm
S009	Search for the Drug trade.		17/10/24 8:38 pm
S016	Keyword searches		17/10/24 9:54 pm

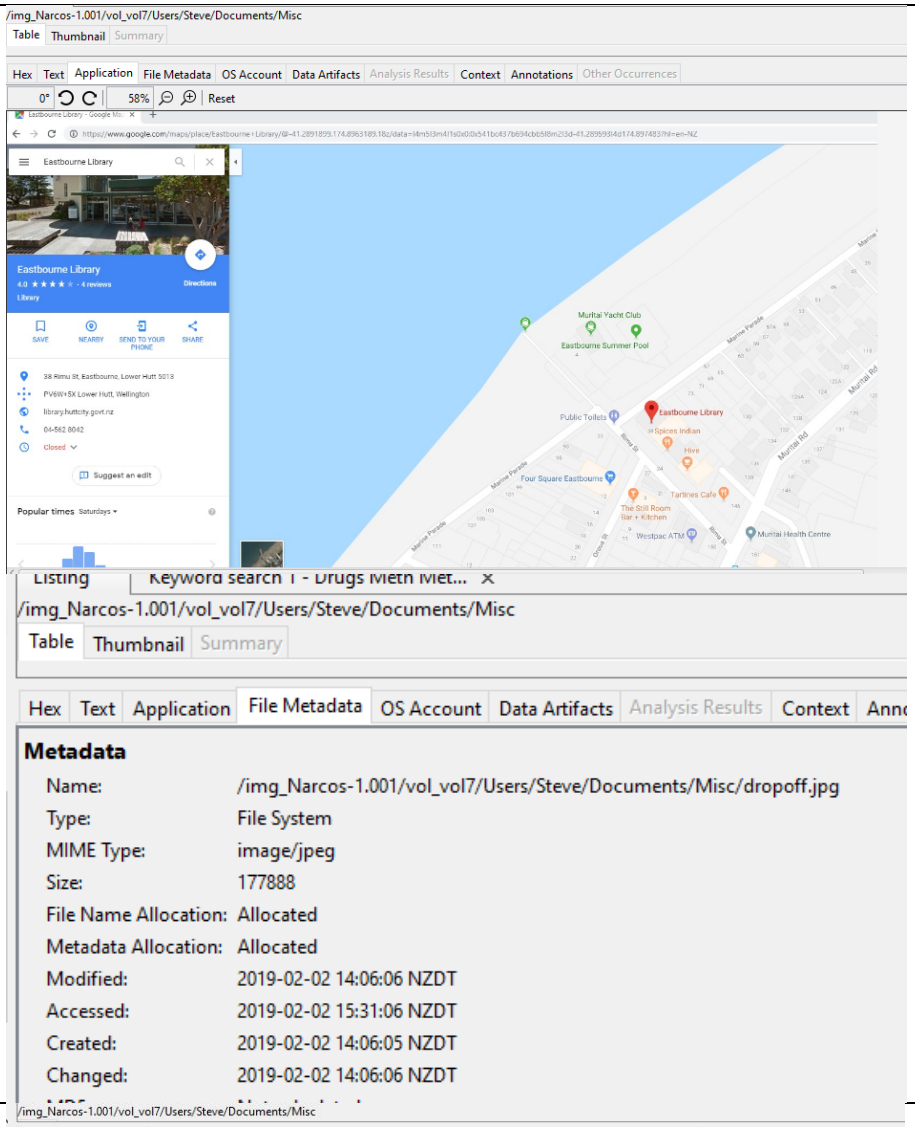
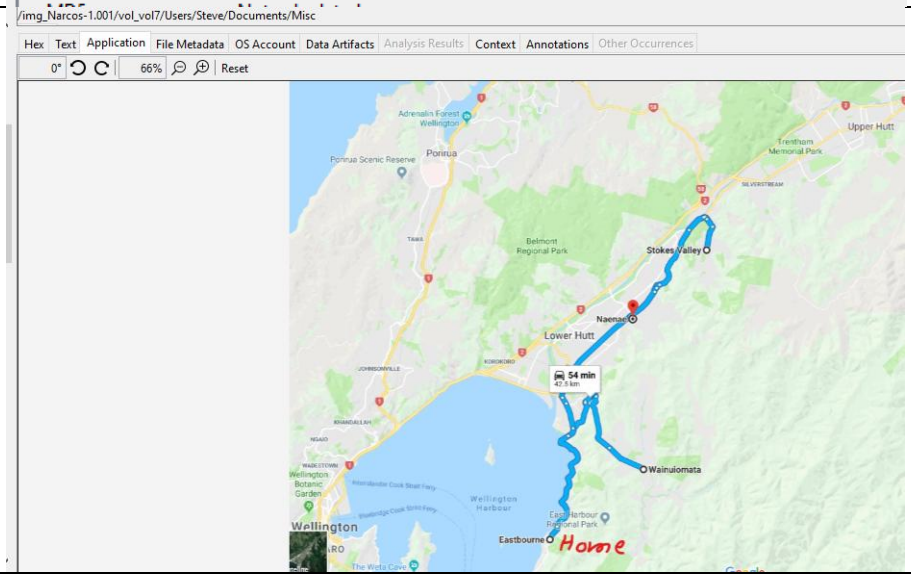
S017	Search for encrypted email Protonmail and steganography.		17/10/24 10:06 pm
S018	Auto-fill web form		17/10/24 10:14 pm
S019	Login for email		17/10/24 10:19 pm

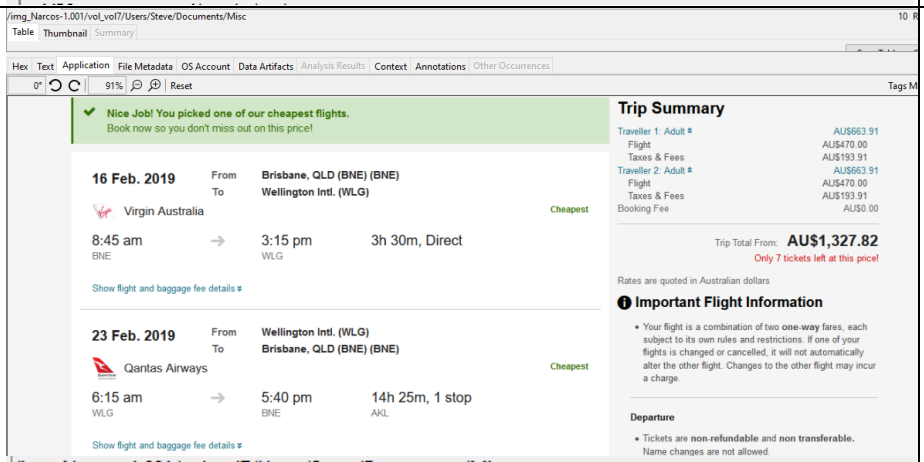
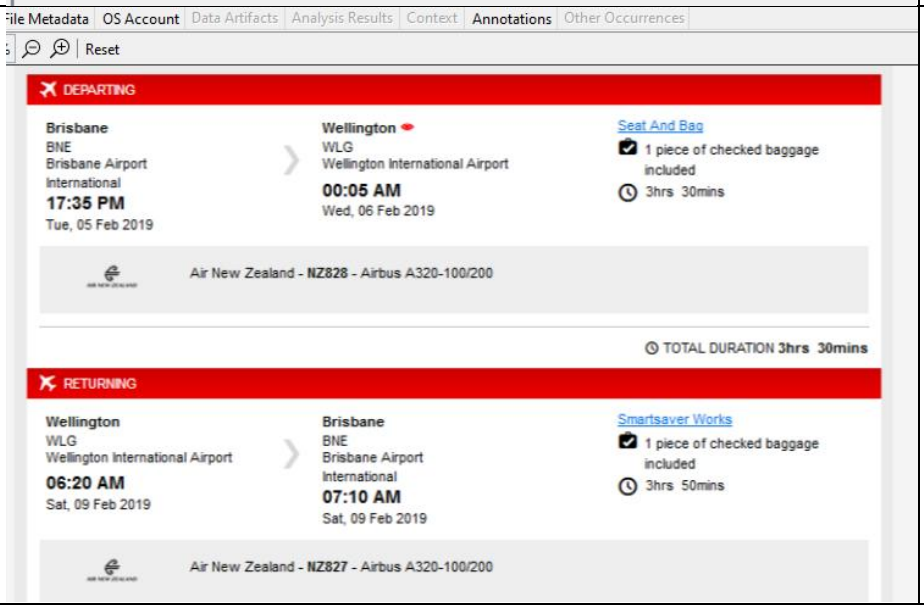
Deleted Files in the recycle bin

S020	Recycle Bin – Mongrel Mob Patches		17/10/24 10:32 pm

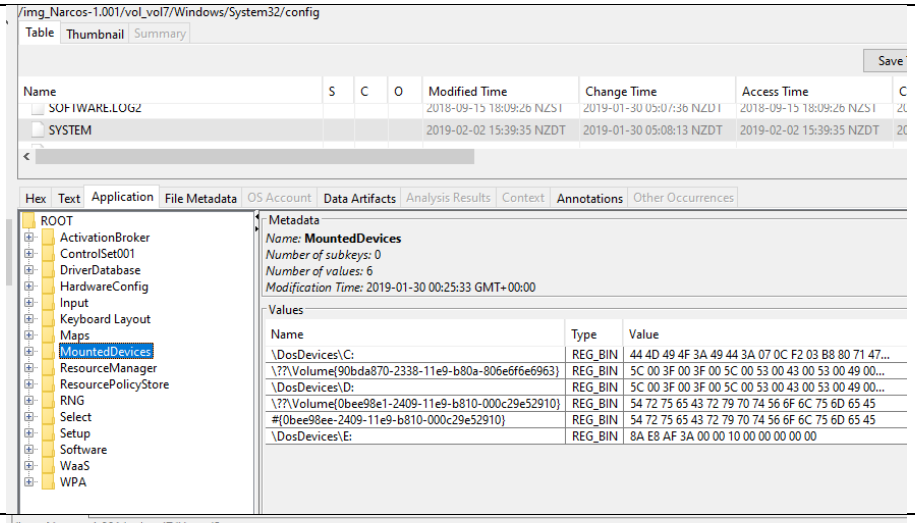
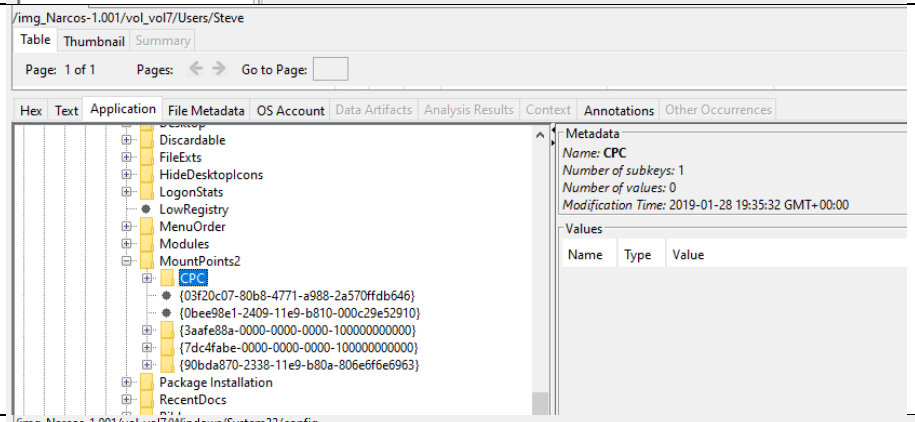
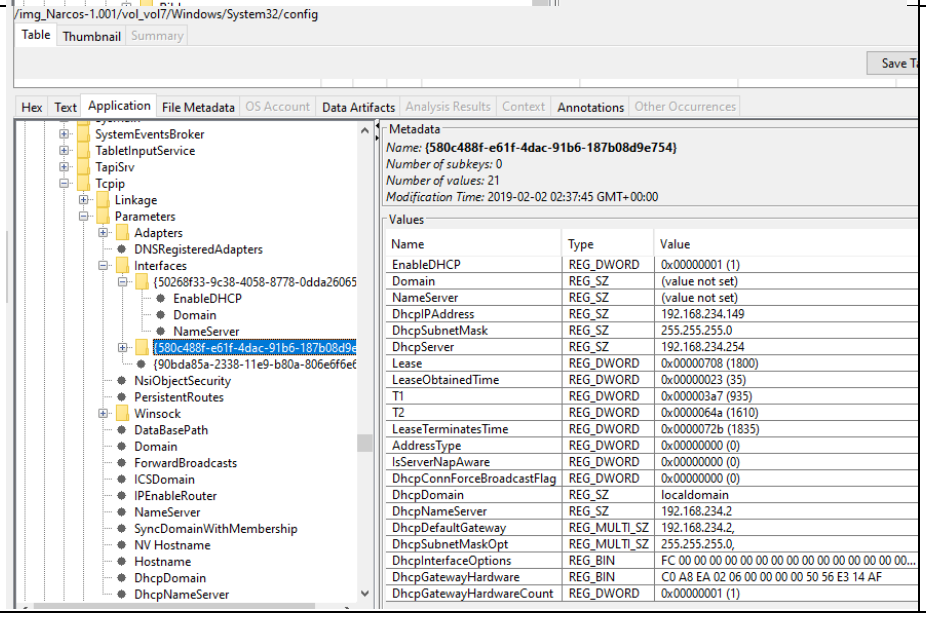
S021	Recycle Bin – Crystal Meth and Money obtained from Meth Bust		17/10/24 10:33 pm
S022	Recycle Bin – Crystal Meth Packets		17/10/24 10:34 pm

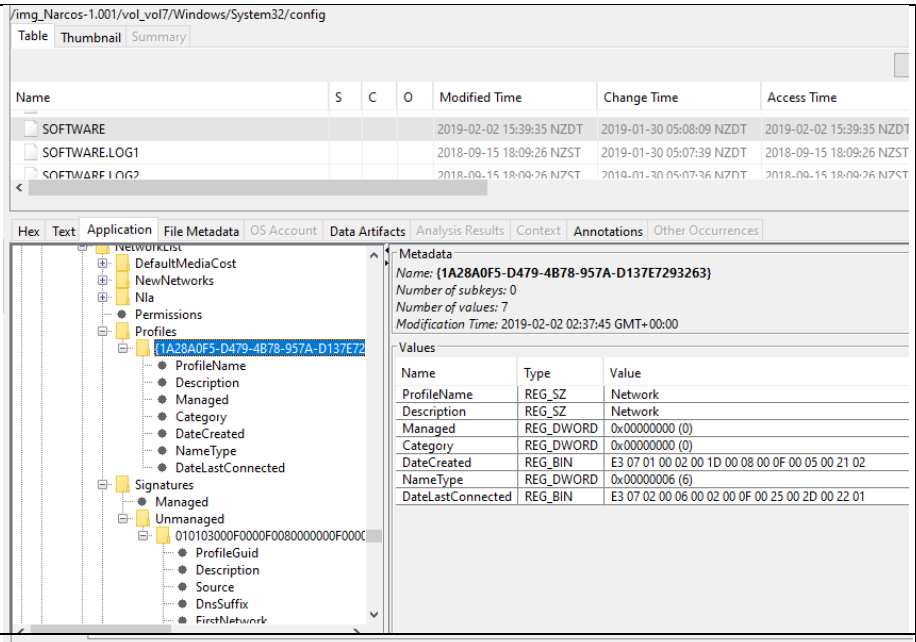
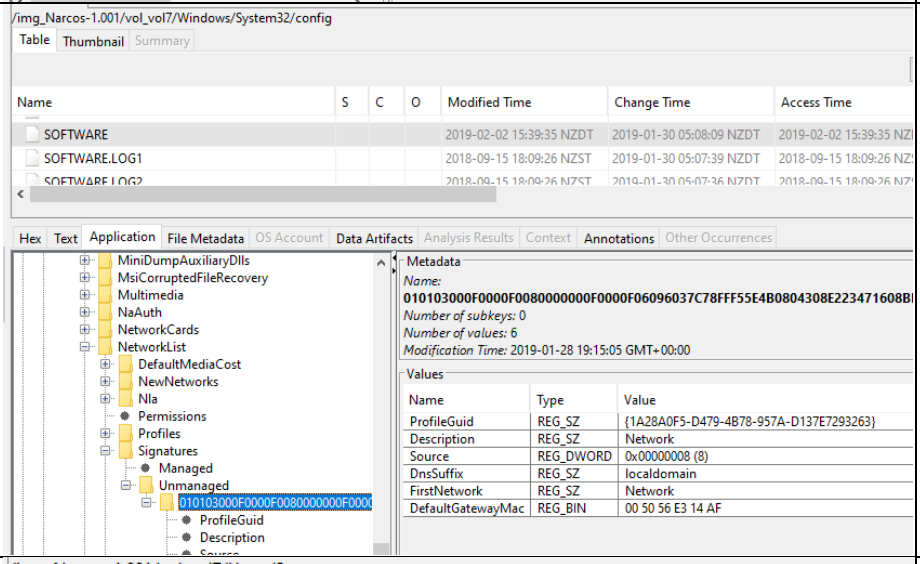
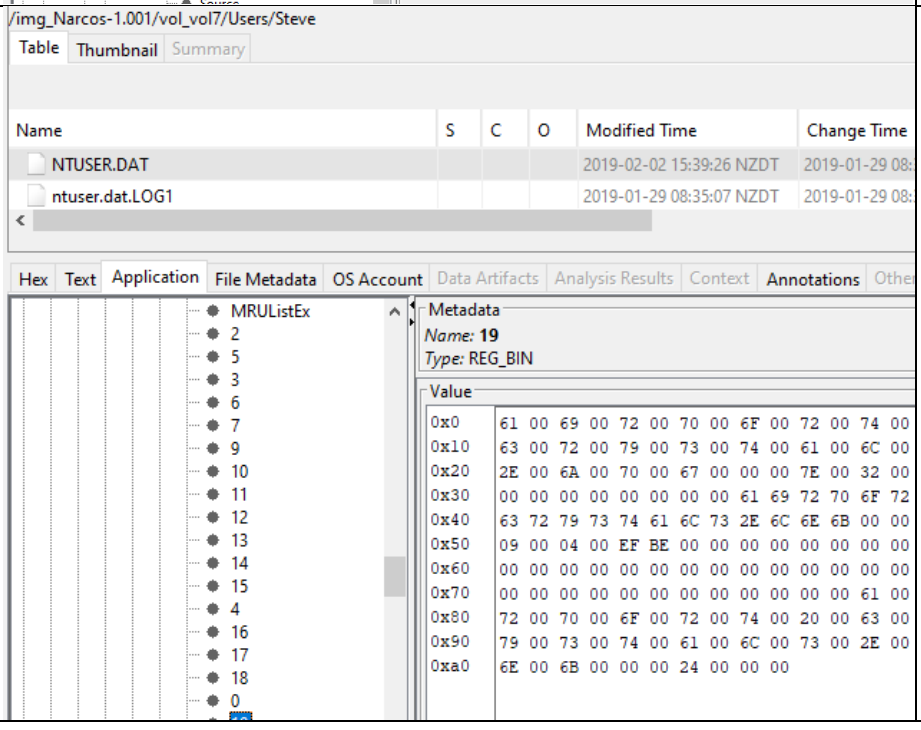
			
S023	Route for Eastbourne Library from Wellington Airport		17/10/24 10:46 pm

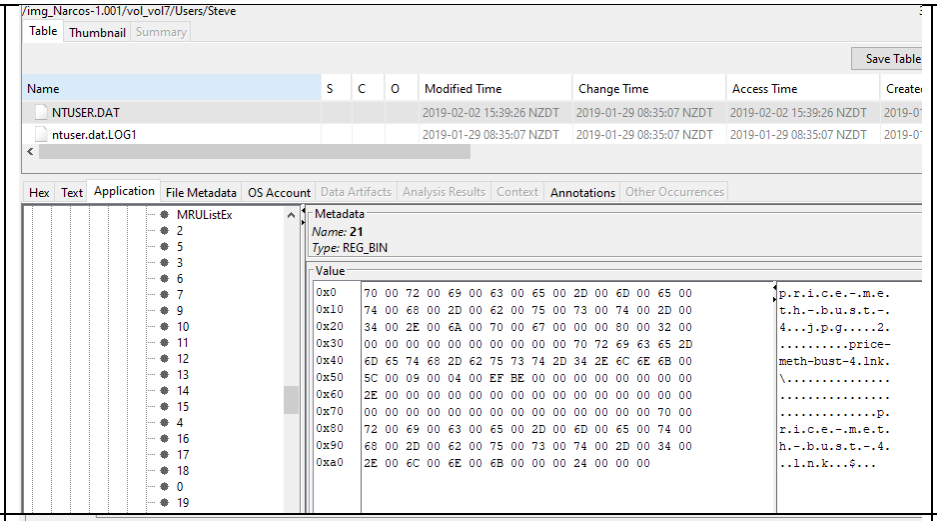
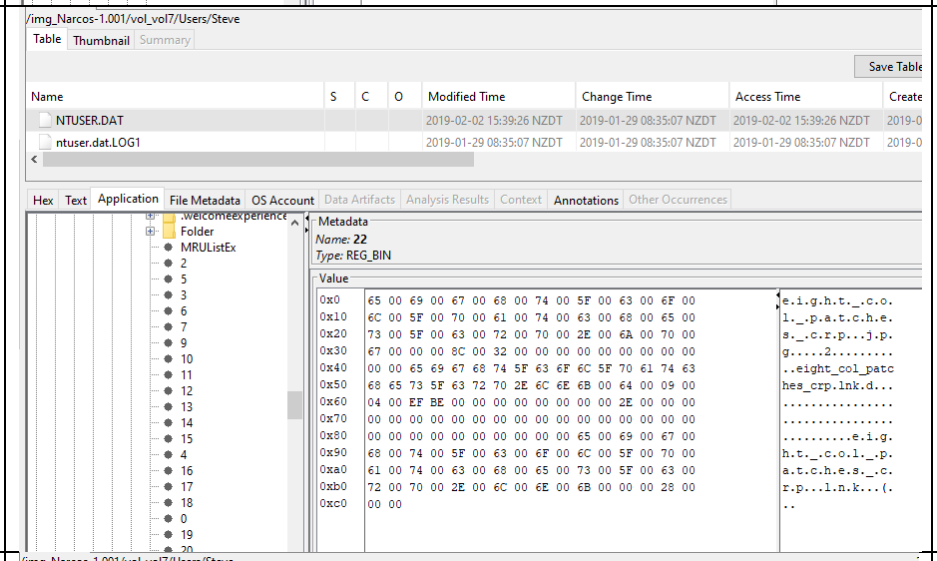
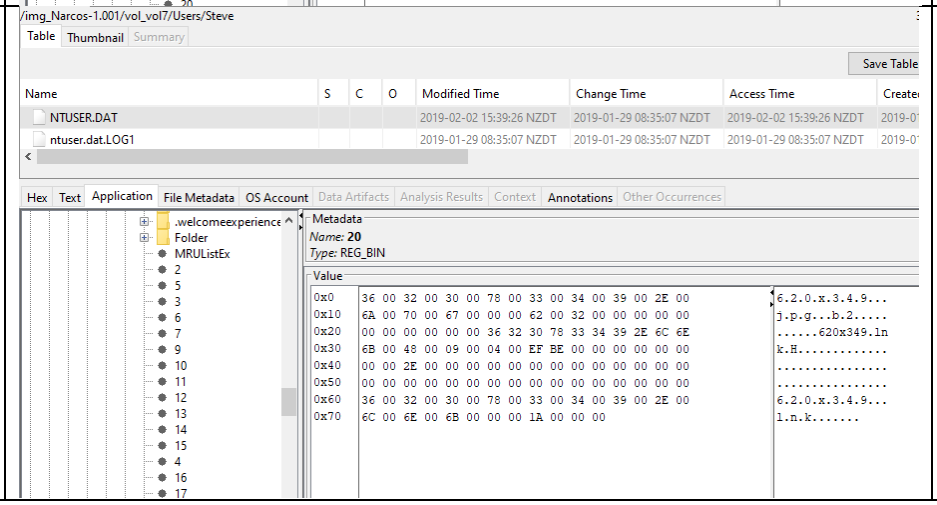
S024	Drop off point		17/10/24 10:51 pm
S025	Method to Run		17/10/24 10:53 pm

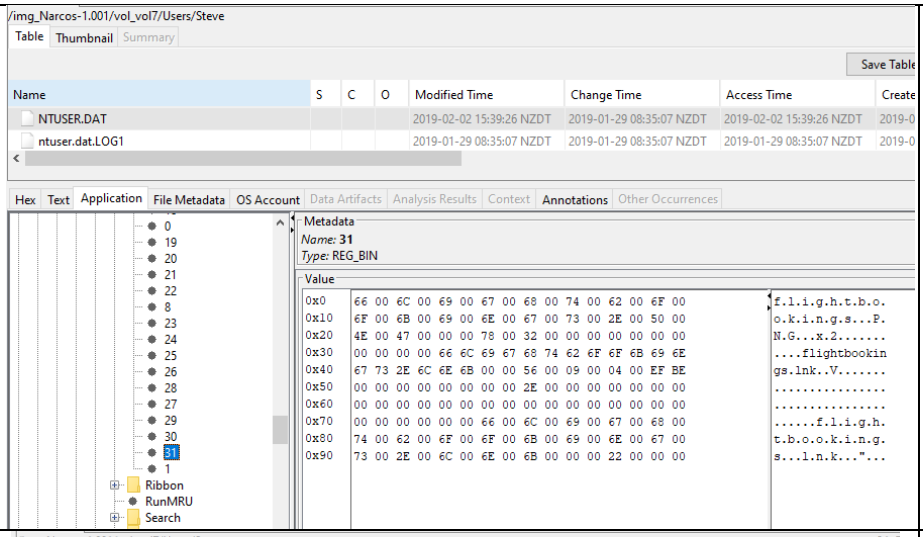
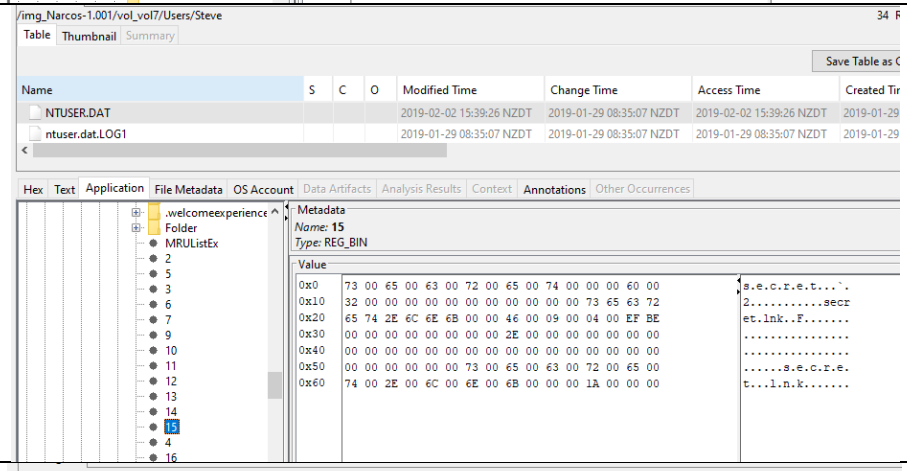
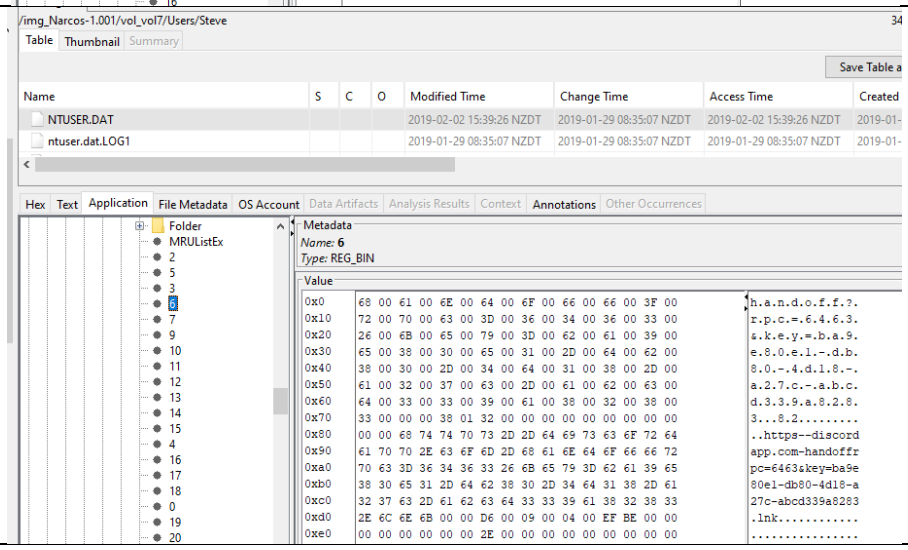
		/img_Narcos-1.001/vol_vol7/Users/Steve/Documents/Misc Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences **Metadata** Name: /img_Narcos-1.001/vol_vol7/Users/Steve/Documents/Misc/Method run.jpg Type: File System MIME Type: image/jpeg Size: 145213 File Name Allocation: Allocated Metadata Allocation: Allocated Modified: 2019-01-31 10:22:24 NZDT Accessed: 2019-01-31 16:04:13 NZDT Created: 2019-01-31 10:21:24 NZDT Changed: 2019-01-31 10:22:24 NZDT	
S026	Flight bookings – site	 Nice Job! You picked one of our cheapest flights. Book now so you don't miss out on this price! 16 Feb. 2019 From Brisbane, QLD (BNE) (BNE) To Wellington Intl. (WLG) Virgin Australia Cheapest 8:45 am BNE → 3:15 pm WLG 3h 30m, Direct Show flight and baggage fee details 23 Feb. 2019 From Wellington Intl. (WLG) To Brisbane, QLD (BNE) (BNE) Qantas Airways Cheapest 6:15 am WLG → 5:40 pm BNE 14h 25m, 1 stop Show flight and baggage fee details Trip Summary Traveller 1: Adult AU$663.91 Flight AU$470.00 Taxes & Fees AU$193.91 Traveller 2: Adult AU$663.91 Flight AU$470.00 Taxes & Fees AU$193.91 Booking Fee AU$0.00 Trip Total From: AU$1,327.82 Only 7 tickets left at this price! Rates are quoted in Australian dollars Important Flight Information • Your flight is a combination of two one-way fares, each subject to its own rules and restrictions. If one of your flights is changed or cancelled, it will not automatically alter the other flight. Changes to the other flight may incur a charge. Departure • Tickets are non-refundable and non transferable. Name changes are not allowed. /img_Narcos-1.001/vol_vol7/Users/Steve/Documents/Misc Table Thumbnail Summary Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annot **Metadata** Name: /img_Narcos-1.001/vol_vol7/Users/Steve/Documents/Misc/flightbookings.PNG Type: File System MIME Type: image/png Size: 52971 File Name Allocation: Allocated Metadata Allocation: Allocated Modified: 2019-02-02 15:28:45 NZDT Accessed: 2019-02-02 15:31:06 NZDT Created: 2019-02-02 15:28:44 NZDT Changed: 2019-02-02 15:28:45 NZDT	17/10/24 11:09 pm
S027	Flight bookings – confirmation	 File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences Reset DEPARTING Brisbane BNE Brisbane Airport International 17:35 PM Tue, 05 Feb 2019 Wellington WLG Wellington International Airport 00:05 AM Wed, 06 Feb 2019 Seat And Bag 1 piece of checked baggage included 3hrs 30mins Air New Zealand - NZ828 - Airbus A320-100/200 TOTAL DURATION 3hrs 30mins RETURNING Wellington WLG Wellington International Airport 06:20 AM Sat, 09 Feb 2019 Brisbane BNE Brisbane Airport International 07:10 AM Sat, 09 Feb 2019 Smartsaver Works 1 piece of checked baggage included 3hrs 50mins Air New Zealand - NZ827 - Airbus A320-100/200	17/10/24 11:10 pm

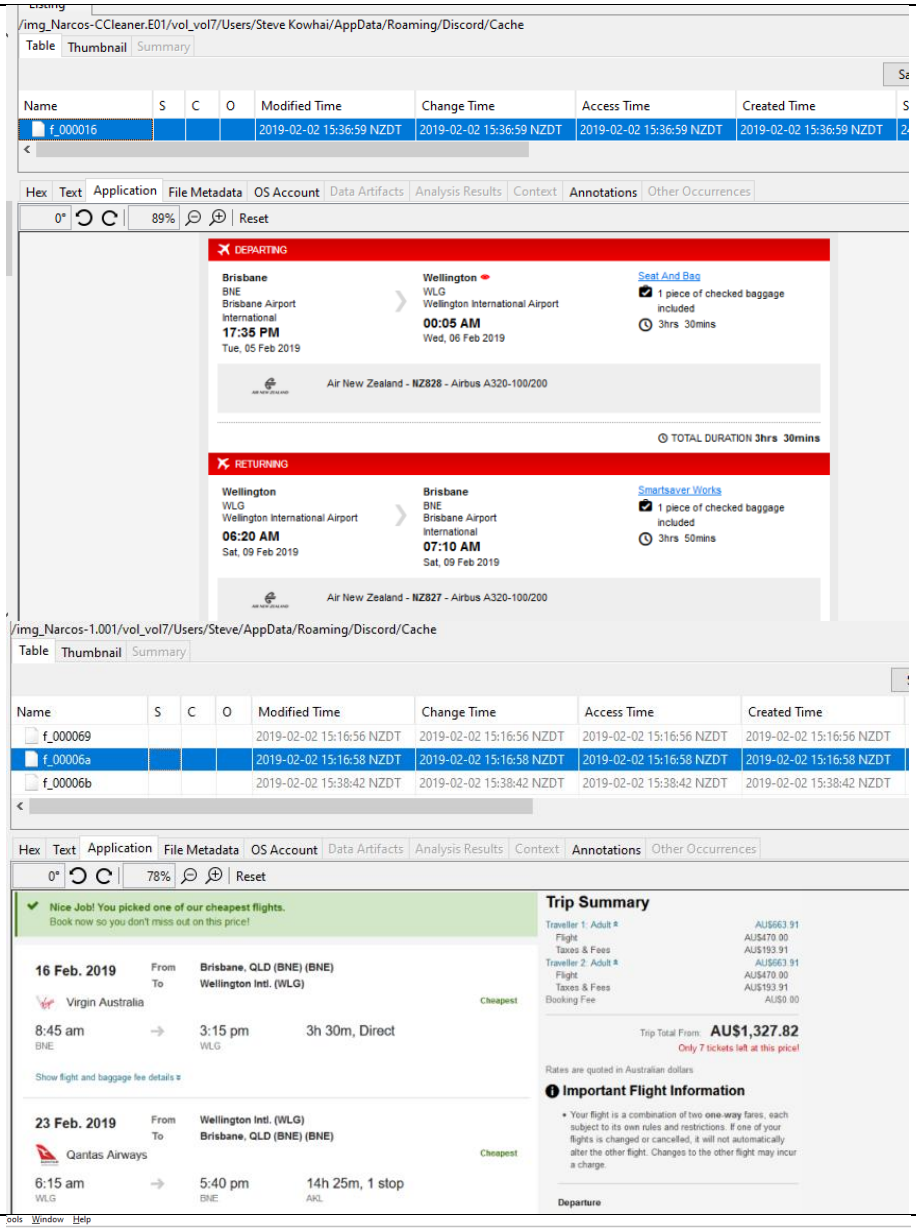
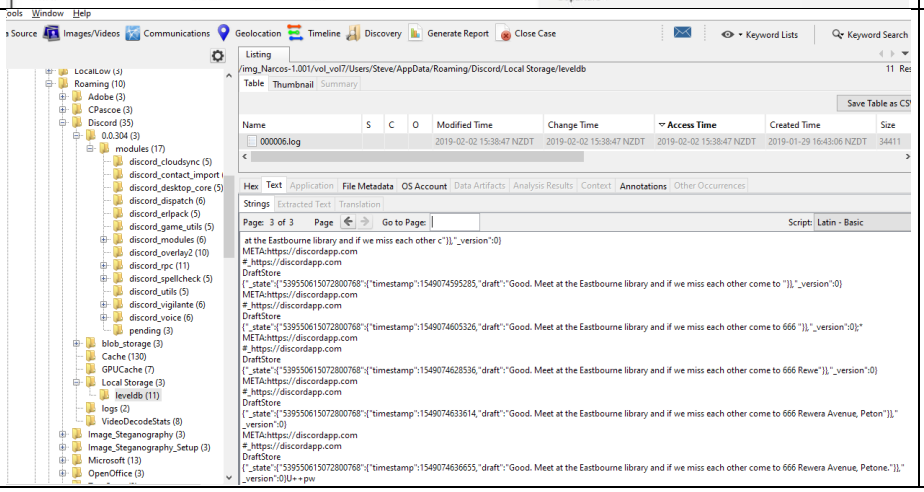
		Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurren **Metadata** Name: /img_Narcos-CCleaner.E01/vol_vol7/Users/Steve Kowhai/Documents/Misc/Flight_booking.PNG Type: File System MIME Type: image/png Size: 24445 File Name Allocation: Allocated Metadata Allocation: Allocated Modified: 2019-02-02 15:28:21 NZDT Accessed: 2019-02-02 15:36:33 NZDT Created: 2019-02-02 15:28:21 NZDT Changed: 2019-02-02 15:28:21 NZDT	
S028	Startup information	/img_Narcos-1.001/vol_vol7/Users/Steve Table Thumbnail Summary Name S C O Modified Time Change Time Access Time NTUSER.DAT 2019-02-02 15:39:26 NZDT 2019-01-29 08:35:07 NZDT 2019-02-02 15:39:26 NZDT ntuser.dat.LOG1 2019-01-29 08:35:07 NZDT 2019-01-29 08:35:07 NZDT 2019-01-29 08:35:07 NZDT Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences InstallService, Internet Settings, Live, Lock Screen, Mobility, Notifications, PenWorkspace, Policies, PrecisionTouchPad, Prelaunch, Privacy, PushNotifications, RADAR, Run, RunOnce, Screensavers, Search Metadata *Name:* **Run** *Number of subkeys:* 0 *Number of values:* 3 *Modification Time:* 2019-01-29 23:42:16 GMT+00:00 Values Name Type Value OneDrive REG_SZ "C:\Users\Steve\AppData\Local\Microsoft\OneDr... Discord REG_SZ C:\Users\Steve\AppData\Local\Discord\app-0.0.... CCleaner Smart Cleaning REG_SZ "C:\Program Files\CCleaner\CCleaner64.exe" /M...	20/10/24 3:15 pm
S029	Recent Documents accessed by Steve	/img_Narcos-1.001/vol_vol7/Users/Steve Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences MenuOrder, Modules, MountPoints2, Package Installation, RecentDocs, .gif, .jpg, .odt, .PNG, .welcomeexperie, Folder, MRUListEx, 2, 5, 3, 6, 7, 9, 10, 11, 12, 13, 14, 15, 4, 16, 17, 18, 0, 19, 20, 21, 22 Metadata *Name:* **RecentDocs** *Number of subkeys:* 6 *Number of values:* 33 *Modification Time:* 2019-02-02 02:28:44 GMT+00:00 Values Name Type Value MRUListEx REG_BIN 01 00 00 00 1F 00 00 00 1E 00 00 00 1D 00 00 00... 2 REG_BIN 44 00 6F 00 63 00 75 00 6D 00 65 00 6E 00 74 00... 5 REG_BIN 44 00 6F 00 77 00 6E 00 6C 00 6F 00 61 00 64 00... 3 REG_BIN 54 00 68 00 69 00 73 00 20 00 50 00 43 00 00 00... 6 REG_BIN 68 00 61 00 6E 00 64 00 6F 00 66 00 66 00 3F 00... 7 REG_BIN 64 00 69 00 76 00 69 00 6E 00 67 00 2D 00 63 00... 9 REG_BIN 39 00 36 00 34 00 38 00 64 00 65 00 31 00 62 00... 10 REG_BIN 62 00 6F 00 6D 00 62 00 61 00 2D 00 65 00 74 00... 11 REG_BIN 65 00 65 00 39 00 61 00 33 00 31 00 30 00 66 00... 12 REG_BIN 37 00 69 00 32 00 74 00 36 00 74 00 6B 00 2E 00... 13 REG_BIN 35 00 39 00 34 00 62 00 63 00 36 00 62 00 64 00... 14 REG_BIN 33 00 33 00 64 00 34 00 39 00 63 00 35 00 32 00... 15 REG_BIN 73 00 65 00 63 00 72 00 65 00 74 00 00 00 60 00... 4 REG_BIN 4D 00 65 00 6D 00 6F 00 20 00 54 00 68 00 69 00... 16 REG_BIN 3F 00 73 00 6F 00 75 00 72 00 63 00 65 00 3D 00... 17 REG_BIN 4D 00 65 00 74 00 68 00 6F 00 64 00 20 00 72 00... 18 REG_BIN 3F 00 73 00 6F 00 75 00 72 00 63 00 65 00 3D 00... 0 REG_BIN 3F 00 73 00 6F 00 75 00 72 00 63 00 65 00 3D 00... 19 REG_BIN 61 00 69 00 72 00 70 00 6F 00 72 00 74 00 20 00... 20 REG_BIN 36 00 32 00 30 00 78 00 33 00 34 00 39 00 2E 00... 21 REG_BIN 70 00 72 00 69 00 63 00 65 00 2D 00 6D 00 65 00... 22 REG_BIN 65 00 69 00 67 00 68 00 74 00 5F 00 63 00 6F 00... 8 REG_BIN 50 00 69 00 63 00 74 00 75 00 72 00 65 00 73 00... 23 REG_BIN 3A 00 3A 00 7B 00 46 00 39 00 34 00 32 00 43 00... 24 REG_BIN 53 00 79 00 73 00 74 00 65 00 6D 00 20 00 61 00... 25 REG_BIN 41 00 64 00 6D 00 69 00 6E 00 69 00 73 00 74 00...	20/10/24 3:26 pm

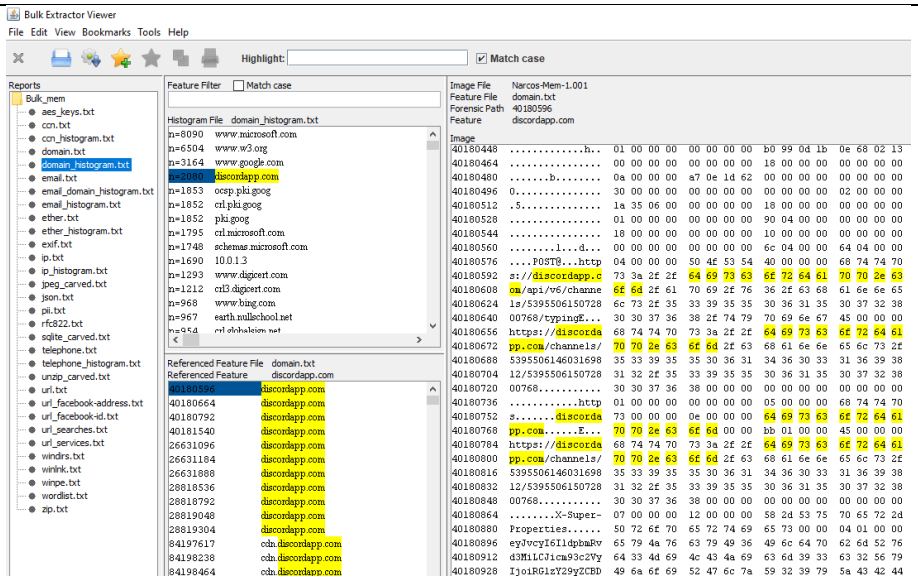
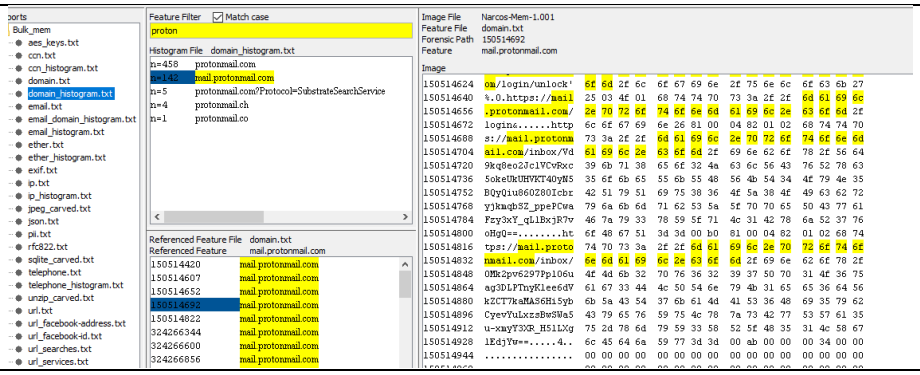
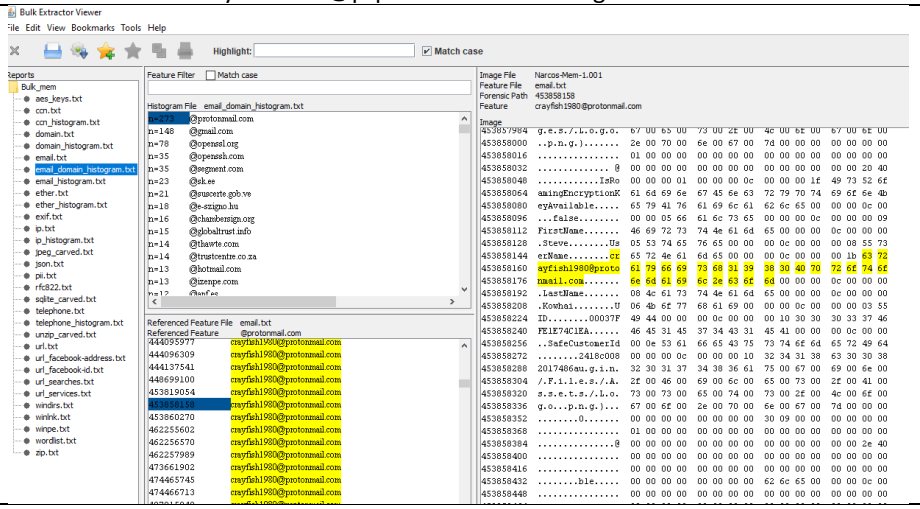
S030	Devices on computer		20/10/24 3:38 pm
S031	Mounted devices by Steve		20/10/24 3:44 pm
S032	TCP/ IP Setting		20/10/24 3:56 pm

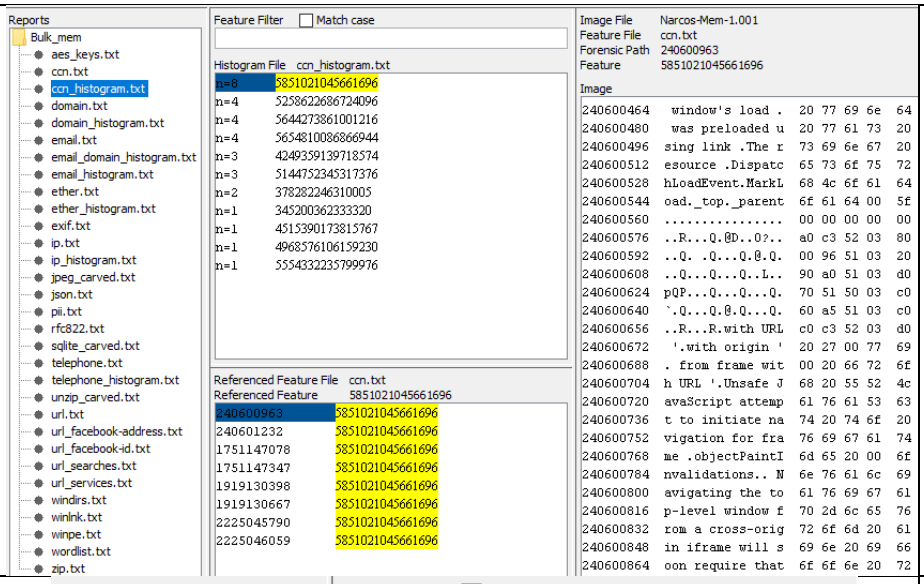
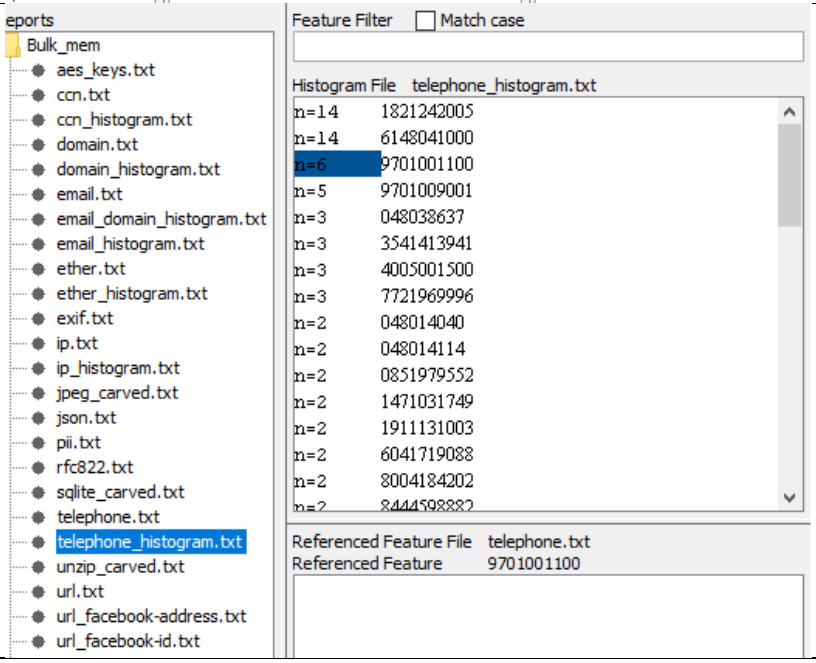
S033	Profile for IP		20/10/24 4:18 pm
S034	Past IP		20/10/24 4:32 pm
S035	REG		20/10/24 10:09 pm

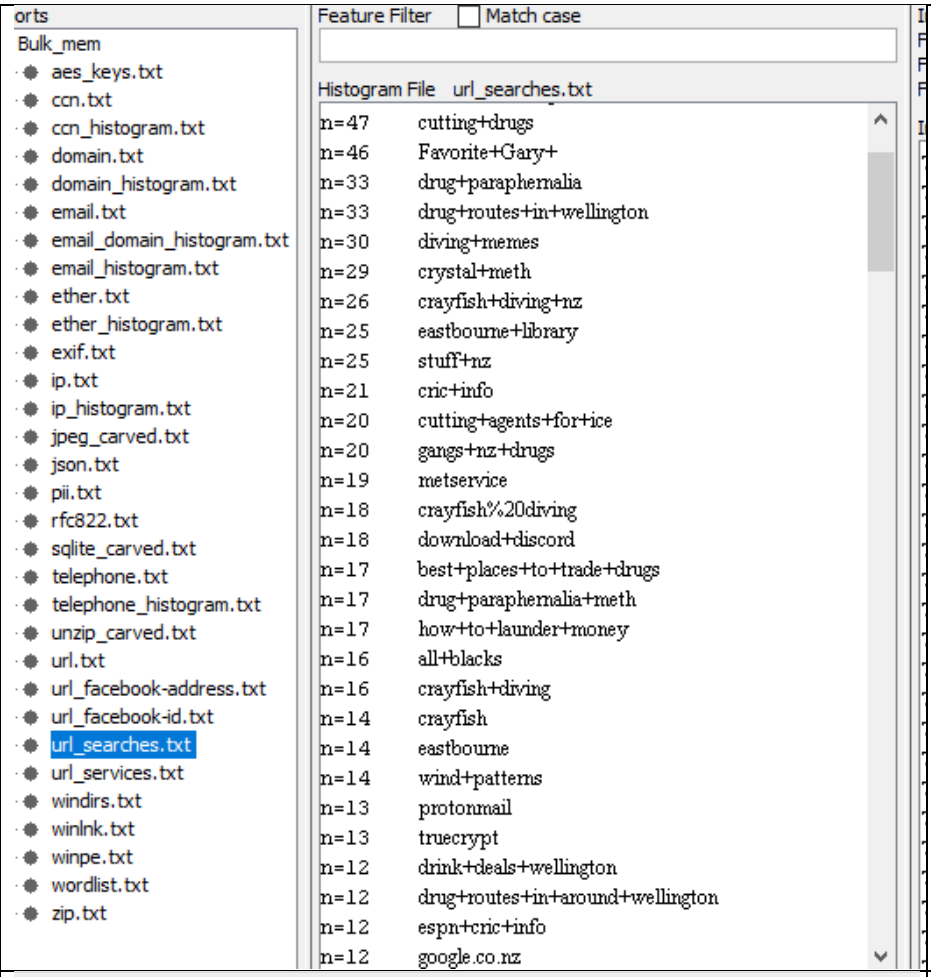
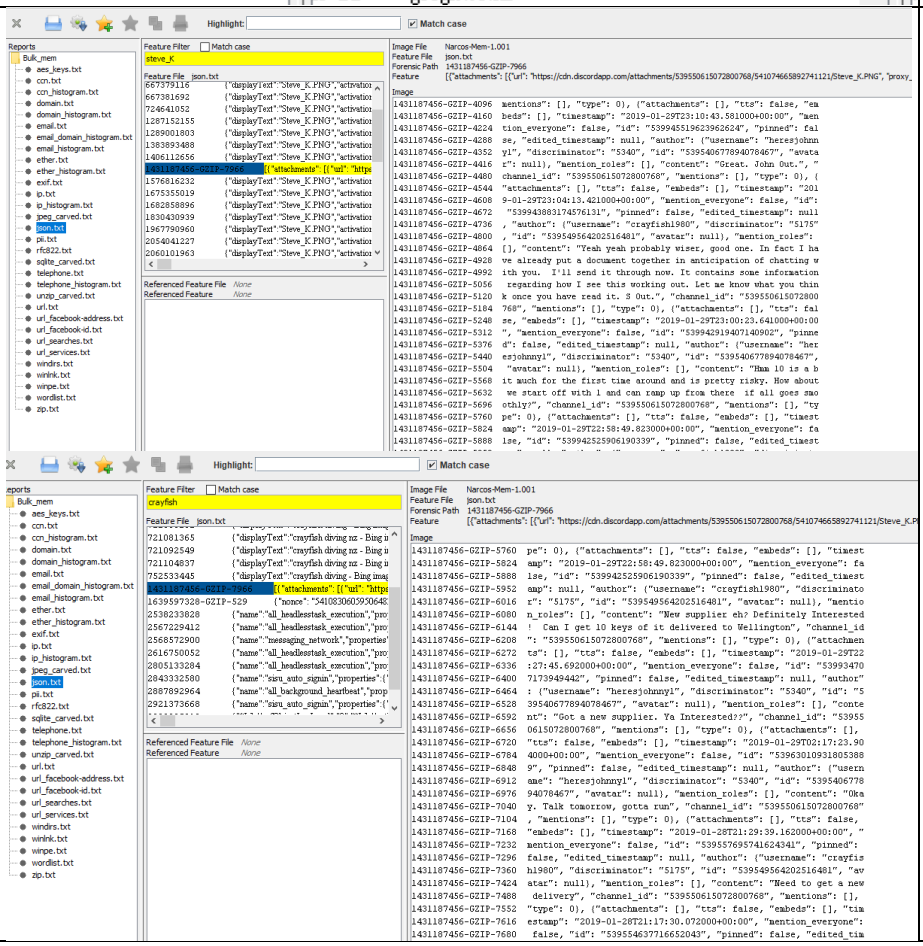
S036	REG related to S021, recycle bin meth bust image		20/10/24 10:23 pm
S037	REG related to S020, recycle bin gang patch image		20/10/24 10:27 pm
S038	REG related to S022, recycle bin crystal meth bags image		20/10/24 10:33 pm

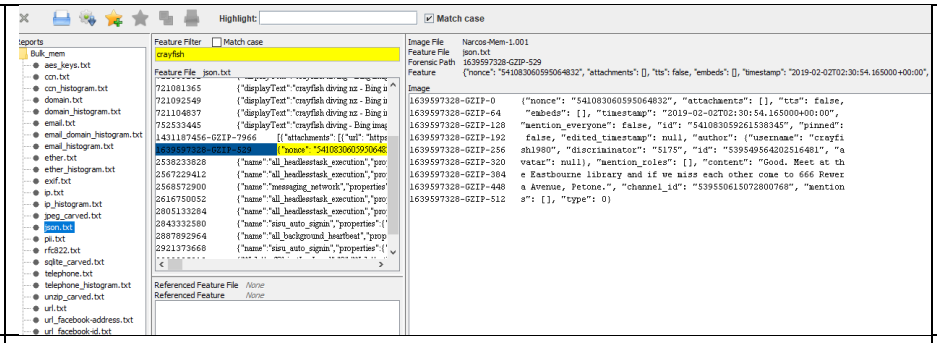
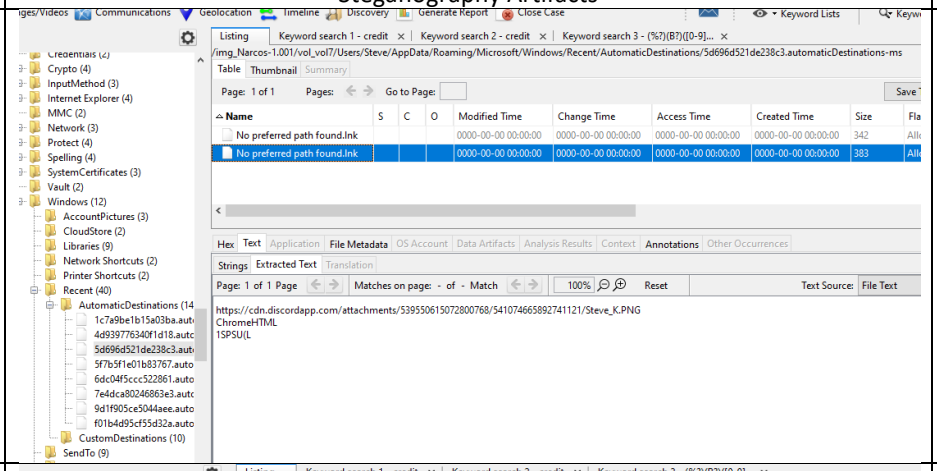
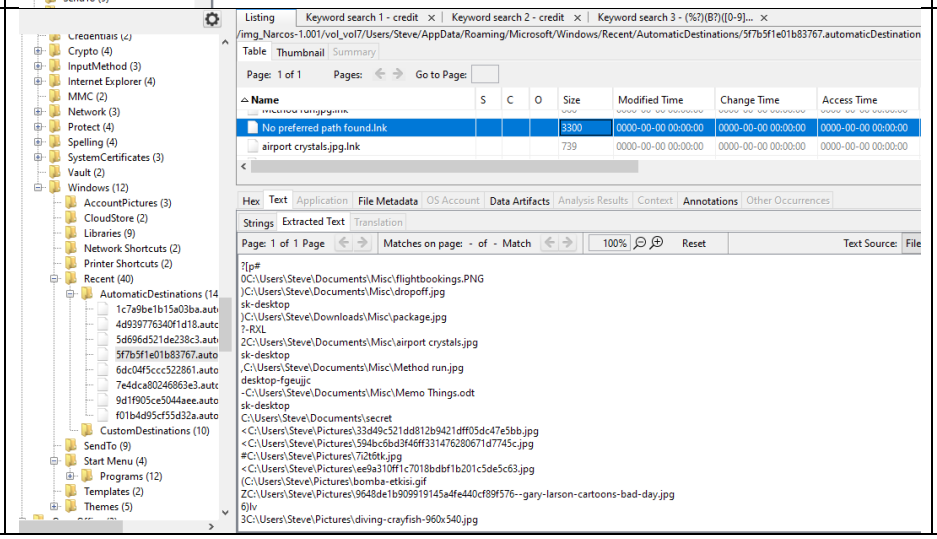
S039	REG related to S026, flight bookings site image		20/10/24 10:41 pm
S040	REG related to secret		20/10/24 10:49 pm
S041	REG related to discord handoff		20/10/24 10:56 pm
		Data from Discord	

S042	Flight details are shared in Discord.		20/10/24 11:08 pm
S043	History of Chat		20/10/24 11:18 pm

S044	Discord chat	 chat.txt	31/10/24 10:02 am
S045	Protonmail		26/10/24 12:43 pm
		Email: crayfish1980@prptonmail.com belongs to Steve Kowahi	
S046	Email domain		26/10/24 12:52 pm

S047	Credit cards Numbers		26/10/24 1:08 pm
S048	Telephones		26/10/24 1:27 pm

S049	URL searches		26/10/24 1:49 pm
S050	Wordlist		02/11/24 4:03 pm

			
		Steganography Artifacts	
S051	Attachment to Discord		26/10/24 6:10 pm
S052	Files Hidden		26/10/24 7:23 pm

/img_Narcos-1.001/vol_vol7/Users/Steve/AppData/Roaming/Microsoft/Windows/Re

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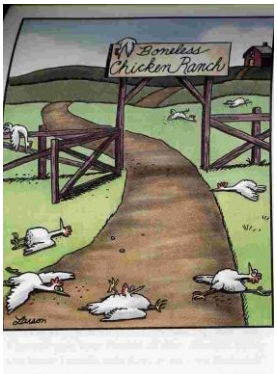
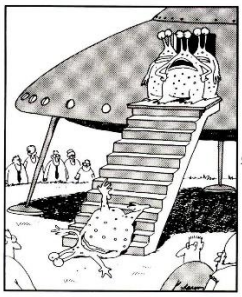
flightbookings.PNG.lnk				731
package.jpg.lnk				855
secret.lnk				753

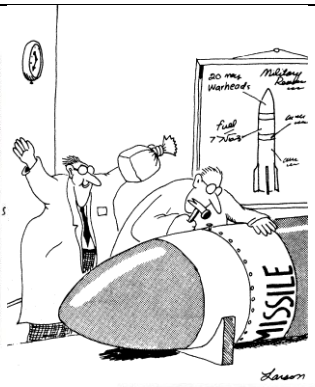
"I've got it, too, Omar … a strange feeling like we've just been going in circles."

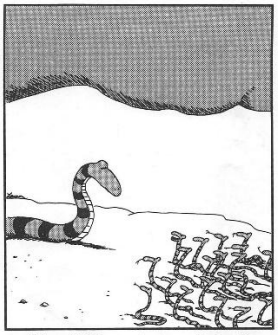
"Whoa! Mr. Lewis! We don't know what that thing is or where it came from, but after what happened to the dog last week, we advise people not to touch it."



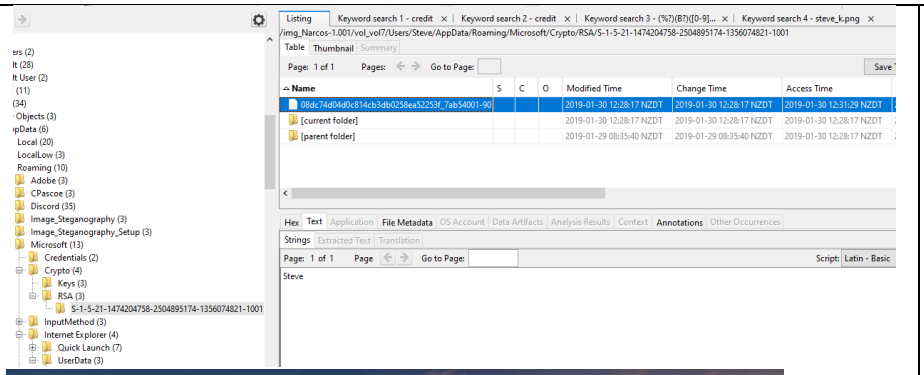
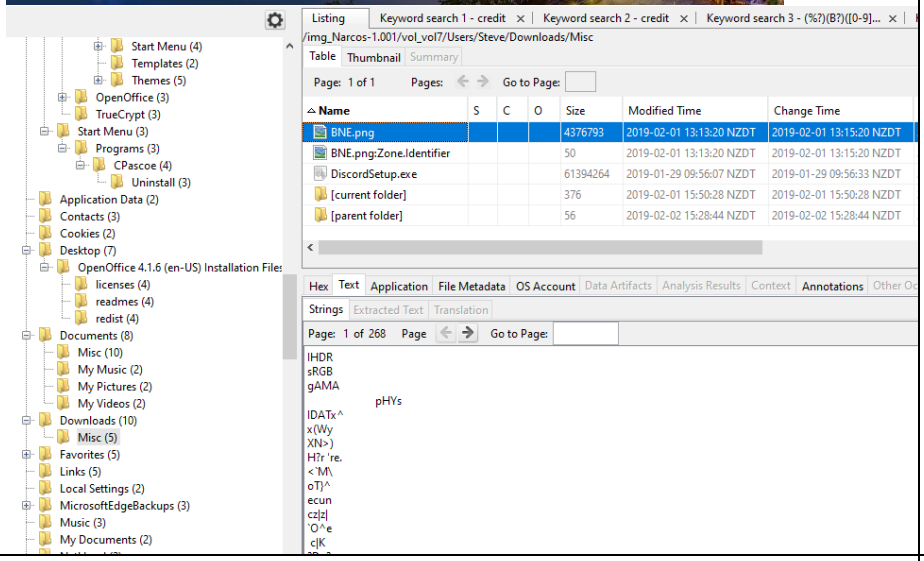


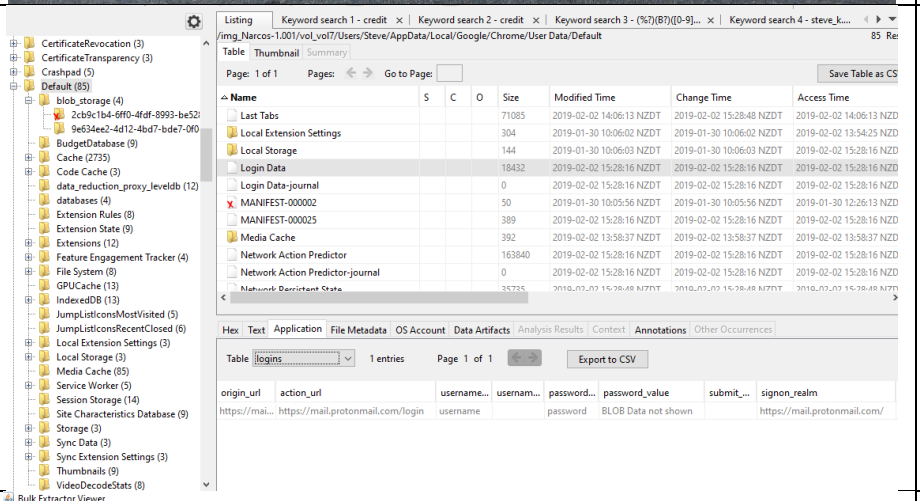
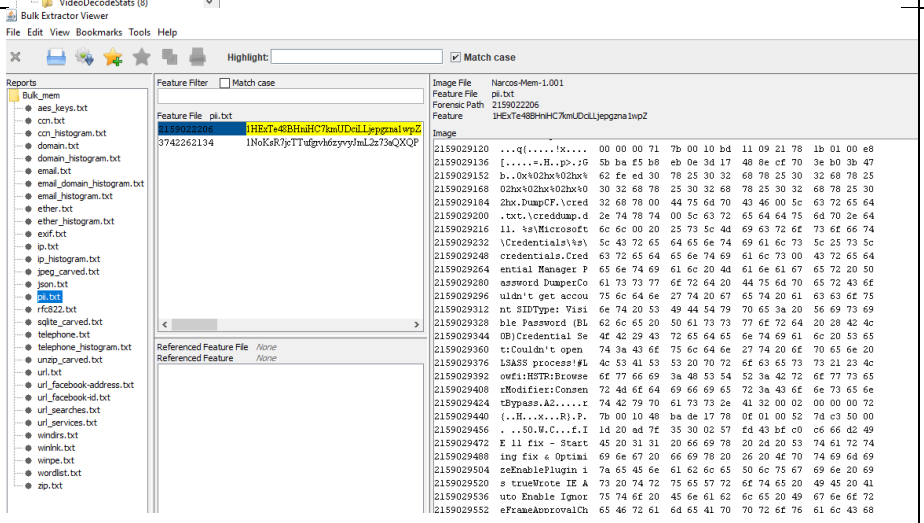
"Wonderful! Just wonderful! ... So much for instilling them with a sense of awe."



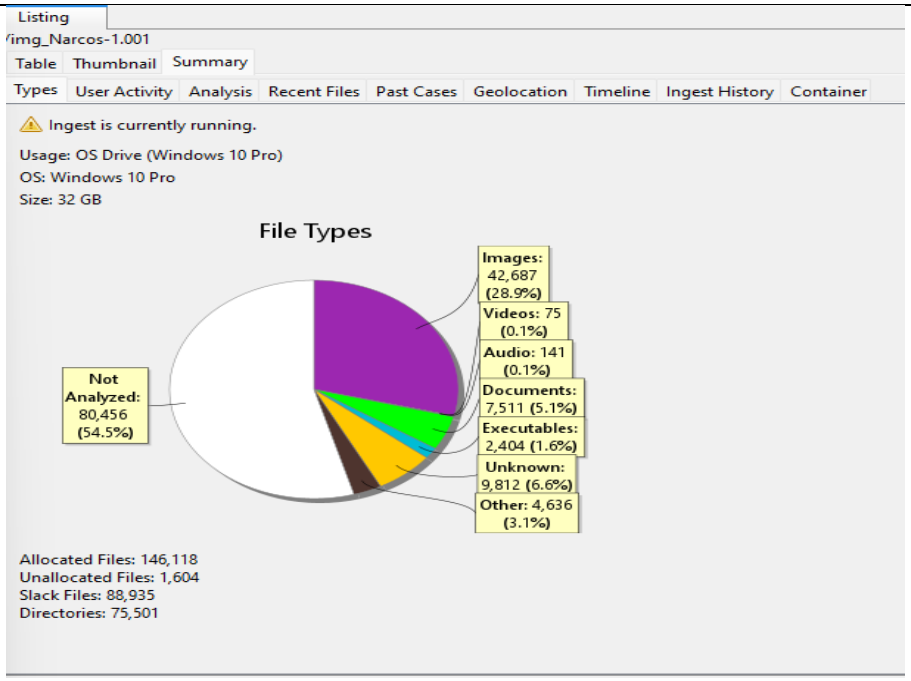
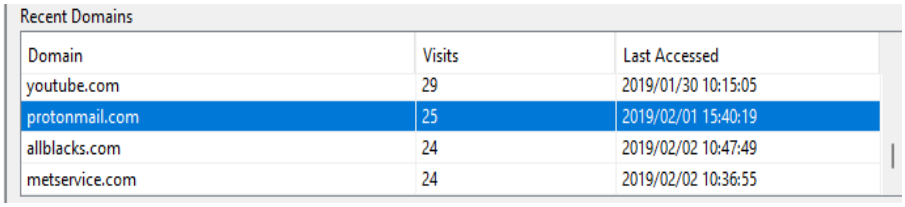
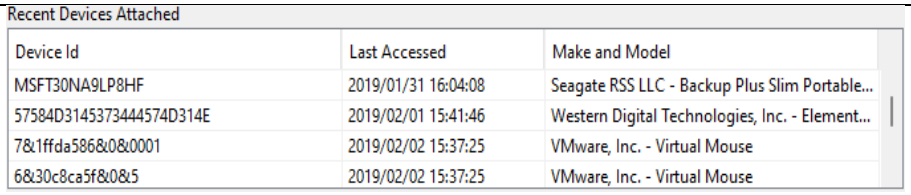
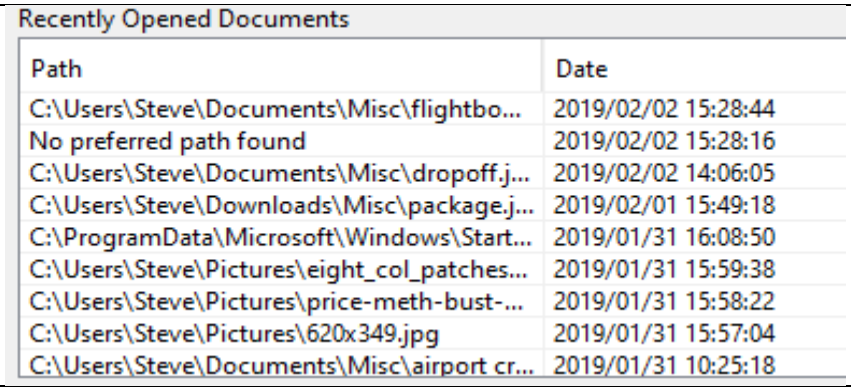


"No, really, Mom—who do you like best?"

S053	RSA key name	  	26/10/24 9:28 pm
		Based on password ‘Elchapo2’ conveyed by the other team we could decipher the image of BNE.png and we got the image of package.jpg using image steganography.	

S054	Image Stenography Result – package.jpg		02/11/24 12:24pm
S055	Login, Jumplist and Thumbnail		02/11/24 1:53 pm
S056	Password from Bulk extractor (pii.txt)		02/11/24 2:58 pm
S057	Truecrypt	TrueCrypt User Guide.pdf	26/10/24 8:26 pm

<table>
<tr><td>S058</td><td>Allocated Drive Images</td><td>
<table>
<tr><td colspan="3">Drive Images</td></tr>
<tr><td>Actor</td><td>File Name</td><td>MD5 Hash</td></tr>
<tr><td>Steve Kowhai</td><td>Narcos-1.001-021</td><td>c63a3d19e9c9495b573f45be544e50f9</td></tr>
<tr><td>Jane Estaban</td><td>Narcos-3.001-021</td><td>b66ca567bec6b0a195b99c57dfa0919f</td></tr>
<tr><td>John Fredricksen</td><td>Narcos-2.001-021</td><td>6265dbaa16a354daddba311334484660</td></tr>
<tr><td colspan="3">Memory images</td></tr>
<tr><td>Actor</td><td>File Name</td><td>MD5 Hash</td></tr>
<tr><td>Steve Kowhai</td><td>Narcos-Mem-1.001-003</td><td>9ca08c17b4a359d61f6f8f7bb6328c1c</td></tr>
<tr><td>Jane Estaban</td><td>Narcos-Mem-3.001-003</td><td>8e8a3a91eb89fe6c3cd10231f13141fe</td></tr>
<tr><td>John Fredricksen</td><td>Narcos-Mem-2.001-003</td><td>0f7e7be4d2844457e2111eaffa1e77ec</td></tr>
</table>
</td><td>14/10/24 12:24pm</td></tr>
<tr><td></td><td></td><td>Hash numbers above matched the below number, verifies they are unaltered copies</td><td></td></tr>
<tr><td>S059</td><td>Drive Image extracted by FKT Imager</td><td>
Image Information:
Acquisition started: Sun Feb 17 20:20:30 2019
Acquisition finished: Sun Feb 17 20:21:46 2019
Segment list:
F:\Final Images RAW\Narcos-1\Memory Dump\Narcos-Mem-1.001
F:\Final Images RAW\Narcos-1\Memory Dump\Narcos-Mem-1.002
F:\Final Images RAW\Narcos-1\Memory Dump\Narcos-Mem-1.003
Image Verification Results:
Verification started: Sun Feb 17 20:21:46 2019
Verification finished: Sun Feb 17 20:23:02 2019
MD5 checksum: 9ca08c17b4a359d61f6f8f7bb6328c1c : verified
SHA1 checksum: 191a10f54e04ad05d9d6a430e01ef6203406accb : verified
Information for F:\Final Images RAW\Narcos-1\Image\Narcos-1:
</td><td>14/10/24 12.25pm</td></tr>
<tr><td>S060</td><td>Live R</td><td>
Physical Evidentiary Item (Source) Information:
[Device Info]
Source Type: Physical
[Drive Geometry]
Cylinders: 3,916
Heads: 255
Sectors per Track: 63
Bytes per Sector: 512
Sector Count: 62,914,560
[Physical Drive Information]
Drive Interface Type: Isilogic
[Image]
Image Type: VMWare Virtual Disk
Source data size: 30720 MB
Sector count: 62914560
[Computed Hashes]
MD5 checksum: c63a3d19e9c9495b573f45be544e50f9
SHA1 checksum: 4d8e5041f47e0b0fc0eacc85d300661946537418
</td><td>14/10/24 12.29pm</td></tr>
</table>

S061	File Type Analysed of OS extract from Autopsy		18/11/24 10:45AM
		This confirm OS Drive (Window PRO) size 32 GB	
S062	Recent Domain		18/11/24 12.25pm
S063	Recent Device File		18/11/24 12.29pm
SO64	Recent Open Documents		20/11/24 12.30pm

<table>
<tr><td>S065</td><td>Recent Downloads</td><td>Recently Opened Documents
<table><tr><th>Path</th><th>Date</th></tr><tr><td>C:\Users\Steve\Documents\Misc\flightbo...</td><td>2019/02/02 15:28:44</td></tr><tr><td>No preferred path found</td><td>2019/02/02 15:28:16</td></tr><tr><td>C:\Users\Steve\Documents\Misc\dropoff.j...</td><td>2019/02/02 14:06:05</td></tr><tr><td>C:\Users\Steve\Downloads\Misc\package.j...</td><td>2019/02/01 15:49:18</td></tr><tr><td>C:\ProgramData\Microsoft\Windows\Start...</td><td>2019/01/31 16:08:50</td></tr><tr><td>C:\Users\Steve\Pictures\eight_col_patches...</td><td>2019/01/31 15:59:38</td></tr><tr><td>C:\Users\Steve\Pictures\price-meth-bust-...</td><td>2019/01/31 15:58:22</td></tr><tr><td>C:\Users\Steve\Pictures\620x349.jpg</td><td>2019/01/31 15:57:04</td></tr><tr><td>C:\Users\Steve\Documents\Misc\airport cr...</td><td>2019/01/31 10:25:18</td></tr></table></td><td>18/10/24 12:40pm</td></tr>
<tr><td>S066</td><td>Partitions Related to S001</td><td>Listing
'img_Narcos-1.001 6 Resu
Table Thumbnail Summary
Save Table as CSV
<table><tr><th>Name</th><th>ID</th><th>Starting Sector</th><th>Length in Sectors</th><th>Description</th><th>Flags</th></tr><tr><td>vol1 (Unallocated: 0-2047)</td><td>1</td><td>0</td><td>2048</td><td>Unallocated</td><td>Unallocated</td></tr><tr><td>vol4 (Basic data partition: 2048-1023999)</td><td>4</td><td>2048</td><td>1021952</td><td>Basic data partition</td><td>Allocated</td></tr><tr><td>vol5 (EFI system partition: 1024000-1226751)</td><td>5</td><td>1024000</td><td>202752</td><td>EFI system partition</td><td>Allocated</td></tr><tr><td>vol6 (Microsoft reserved partition: 1226752-1259519</td><td>6</td><td>1226752</td><td>32768</td><td>Microsoft reserved partition</td><td>Allocated</td></tr><tr><td>vol7 (Basic data partition: 1259520-62912511)</td><td>7</td><td>1259520</td><td>61652992</td><td>Basic data partition</td><td>Allocated</td></tr><tr><td>vol8 (Unallocated: 62912512-62914559)</td><td>8</td><td>62912512</td><td>2048</td><td>Unallocated</td><td>Unallocated</td></tr></table></td><td>19/10/24 10:00 am</td></tr>
<tr><td>S067</td><td>Autopsy extraction of Steves Computer</td><td>Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences
Result: 1 of 1 Result Operating System Information
<table><tr><th>Type</th><th>Value</th><th>Source(s)</th></tr><tr><td>Name</td><td>SK-DESKTOP</td><td>Recent Activity</td></tr><tr><td>Program Na</td><td>Windows 10 Pro</td><td>Recent Activity</td></tr><tr><td>Processor Ar</td><td>AMD64</td><td>Recent Activity</td></tr><tr><td>Temporary Fi</td><td>%SystemRoot%\TEMP</td><td>Recent Activity</td></tr><tr><td>Path</td><td>C:\Windows</td><td>Recent Activity</td></tr><tr><td>Product ID</td><td>00330-80000-00000-AA502</td><td>Recent Activity</td></tr><tr><td>Owner</td><td>Steve</td><td>Recent Activity</td></tr><tr><td>Source File P</td><td>/img_Narcos-1.001</td><td></td></tr><tr><td>Artifact ID</td><td>-9223372036854775620</td><td></td></tr></table></td><td>21/11/2024 12:pm</td></tr>
<tr><td>S068</td><td>Discord conversation timestamp</td><td><table><tr><th>Name</th><th>Modified Time</th><th>Change Time</th><th>Access Time</th><th>Creat</th></tr><tr><td>BNE.png</td><td>2019-02-01 13:13:20 NZDT</td><td>2019-02-01 13:15:20 NZDT</td><td>2019-02-02 15:31:06 NZDT</td><td>2019-13:13</td></tr><tr><td>DiscordSetup.exe</td><td>2019-01-29 09:56:07 NZDT</td><td>2019-01-29 09:56:33 NZDT</td><td>2019-02-02 15:31:06 NZDT</td><td>2019-09:56</td></tr></table>Discord Chatroom Conversation between John and Steve</td><td>31/10/2024 8:00 pm</td></tr>
</table>