Contemporaneous Notes

Cyber Crime and Digital Evidence



Submitted by

Name: Sidhant Kumar Chaurasiya

Student ID:10487

Cyber Security and digital forensics

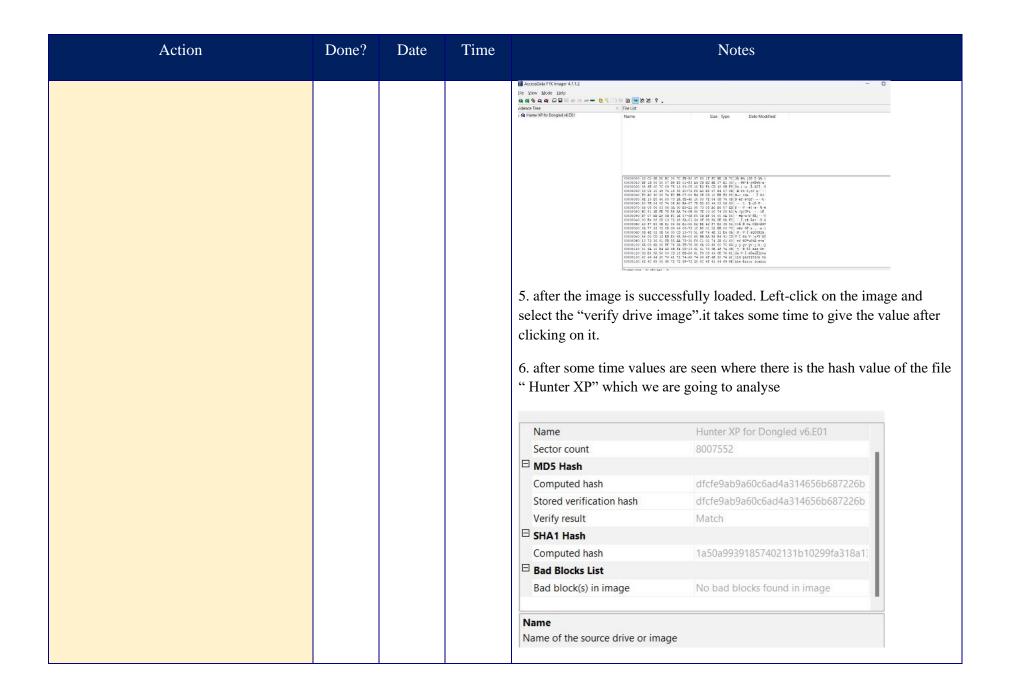
Kathmandu, Nepal

Contemporaneous Notes

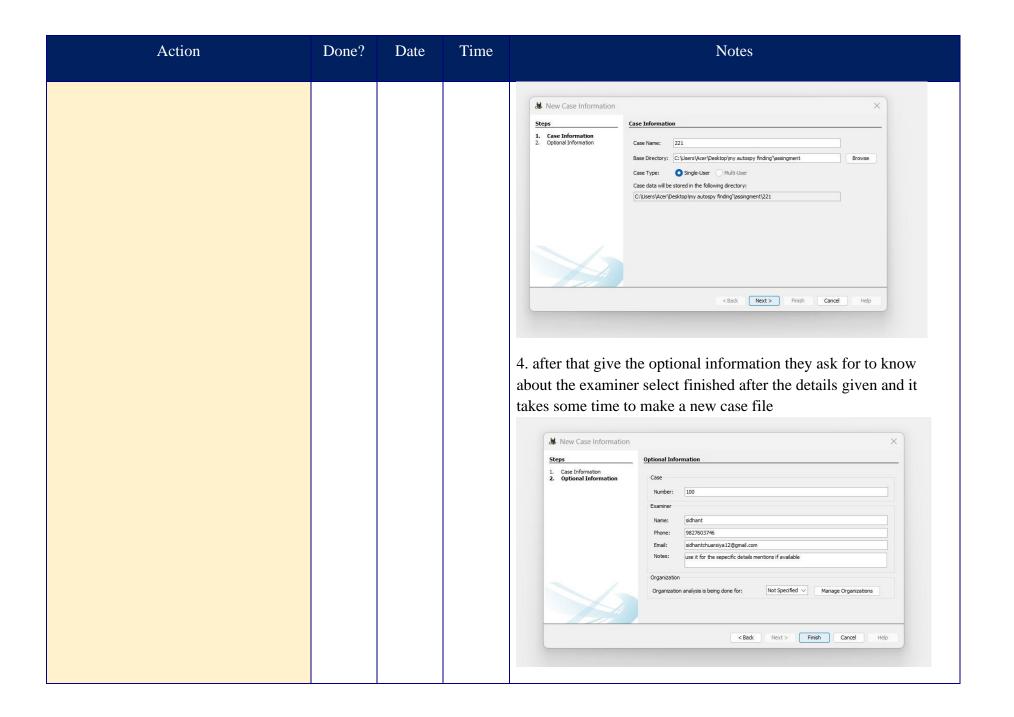
Note: If you decide to omit a process, then you should provide your reasons for doing so. You may add additional rows, as appropriate.

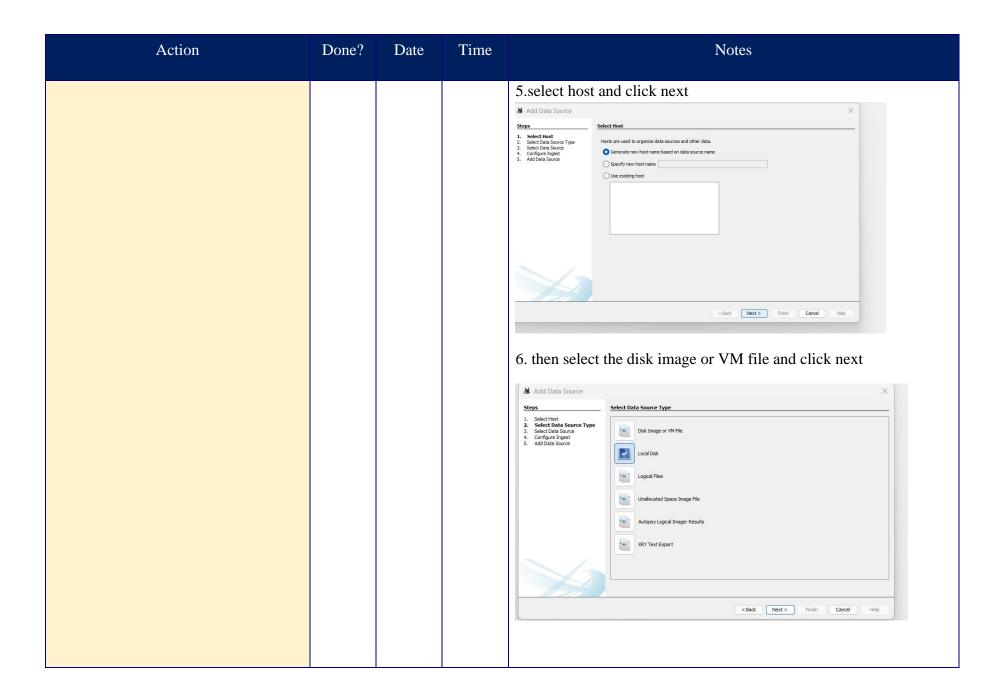
Examiner	Sidhant Kumar Chaurasiya	Exam commenced	November 26 th 2024
Other relevant information	Student number:- 24000865	Software used, versions, and licensing	FTK Imager 4.7.12 Registry viewer 1.8.0.5 Autopsy 4.19.2 Event Log Explorer 4.8 Reg ripper 3.0 Is the software used in the investigation

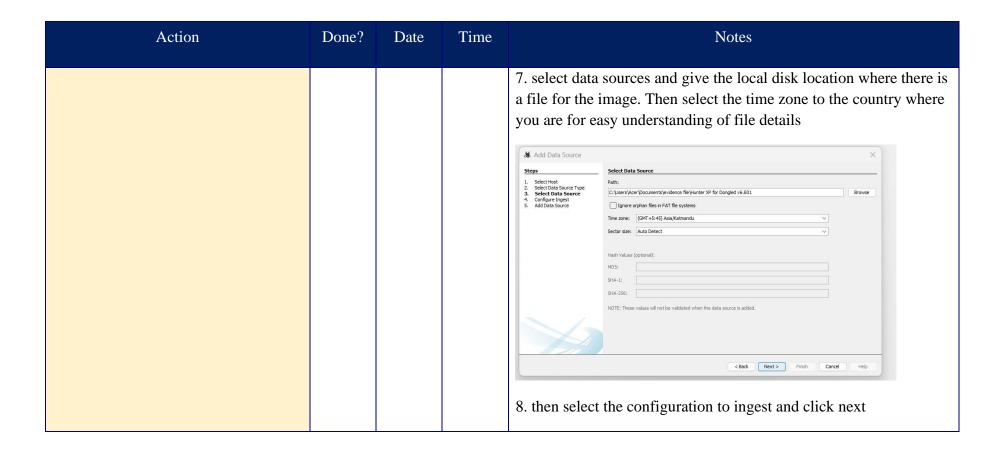
Action	Done?	Date	Time	Notes
Load case and verify image	yes	Nov 26th 2024	12 A.M	For loading the image I use the FTK imager. 1. go to add evidence item. click on it to open. 2. select the sources evidence types as "image file" .select next

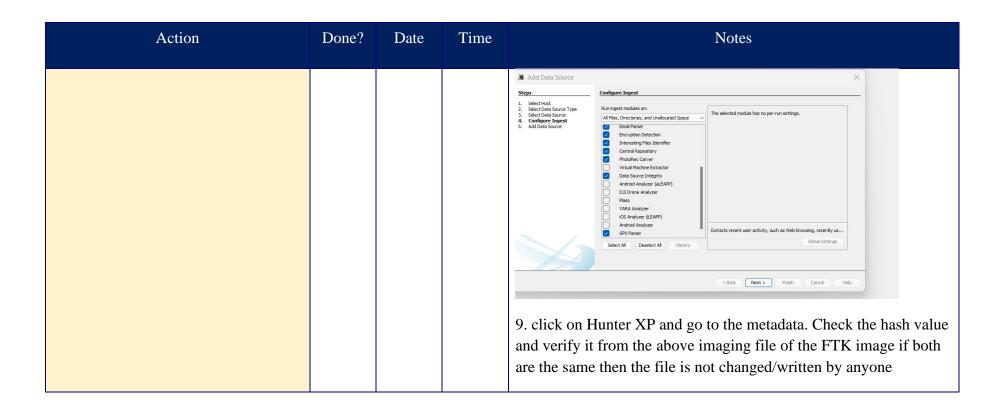


Action	Done?	Date	Time	Notes
Load Case into a second forensic tool for dual verification of at least 2 key artifacts, evidence items	yes	Nov 26th 2024	12:20 P.M	The second tool I use to check the dual verification of at least 2 key artifacts in the autopsy 1. Double-click the autopsy tool to open it. 2. after opening the autopsy it looks like this. Welcome Open Recent Case Open Case Open Case Open Case and give the case name and the path of the base directory. And check the case type (if you are doing it alone select single-user or if you are doing it in the group then choose multi-user)





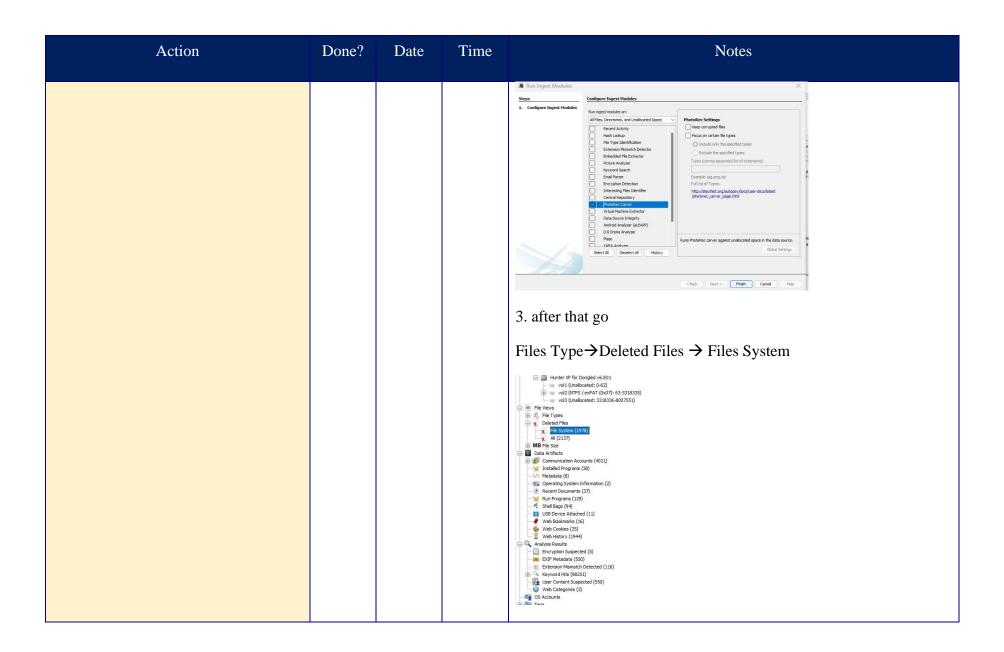




Action	Done?	Date	Time	Notes
				Listing Hunter XP for Dongled v6.E01_1 Host Table Thumbnal Summary Save Table as CSV Name Type Size (Bytes) Sector Size (Bytes) Timex ### Annotations Hunter XP for Dongled v6.E01 Timege ### Annotations Hunter XP for Dongled v6.E01 Timege #### Annotations Hex Text Application ####################################
Time Zone Adjusted? Report Time Zone used for Analysis.	yes	Nov 26 th 2024	1 P.M	I adjusted the Time zone of the Hunter XP image file as per the UK local time which is (GMT +0:00) GMT Because the case is executed from the UK but we are doing forensics from Nepal. So for a better understanding of the case, we analysed the case in the UK time zone

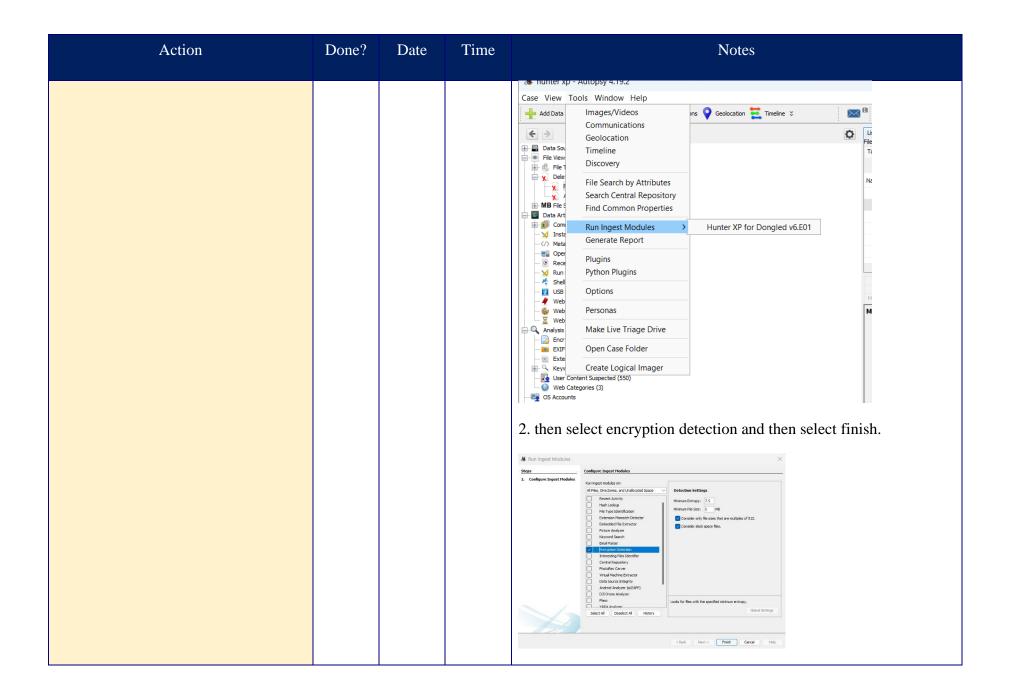
Action	Done?	Date	Time	Notes
				Select Host 1. Select Host 2. Select Data Source 3. Select Data Source 4. Configure Ingest 5. Add Data Source Egnore orphan files in FAT file systems
Recover lost folders (NTFS, FAT16&32).	yes	Nov 26 th 2024	1:30 P.M	1. The NTFS file can be found when we go to the tools and then go to the Run ingest Modules and select Hunter xp for dongled v6 E01

Action	Done?	Date	Time	Notes
				Case View Tools Window Help Images/Videos Communications Geolocation Timeline Discovery File Search by Attributes Search Central Repository Find Common Properties Data Art Inst Generate Report Plugins Run Python Plugins Python Plugins Python Plugins Personas Web Analysis Web Web Personas Web Web Create Logical Imager Web Catepories (3) 2. after that go to the photoRec Carver select it and click on the finished

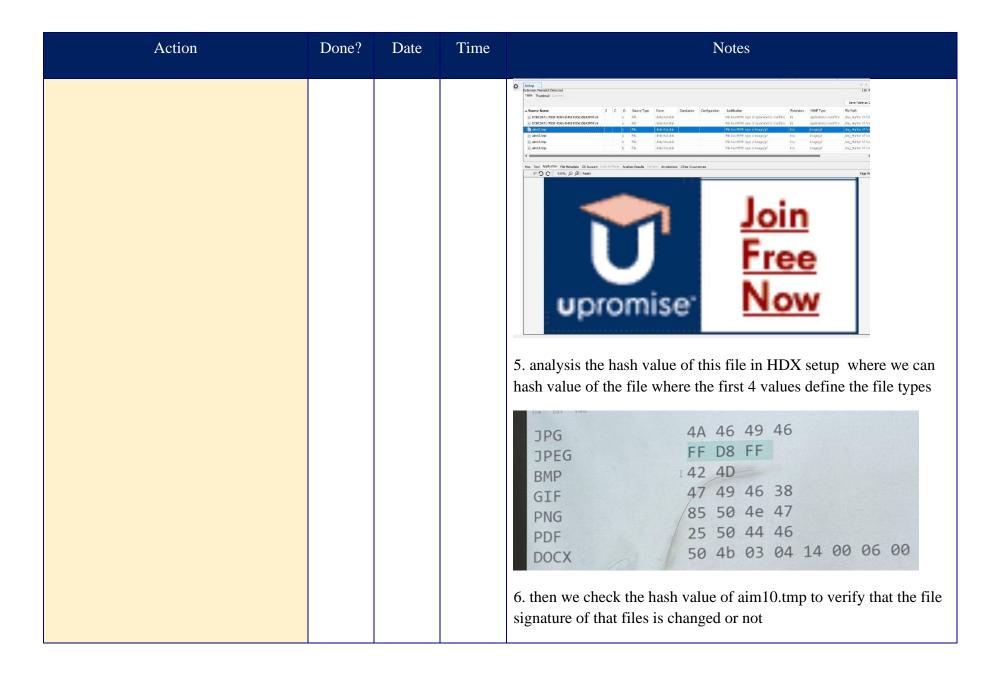


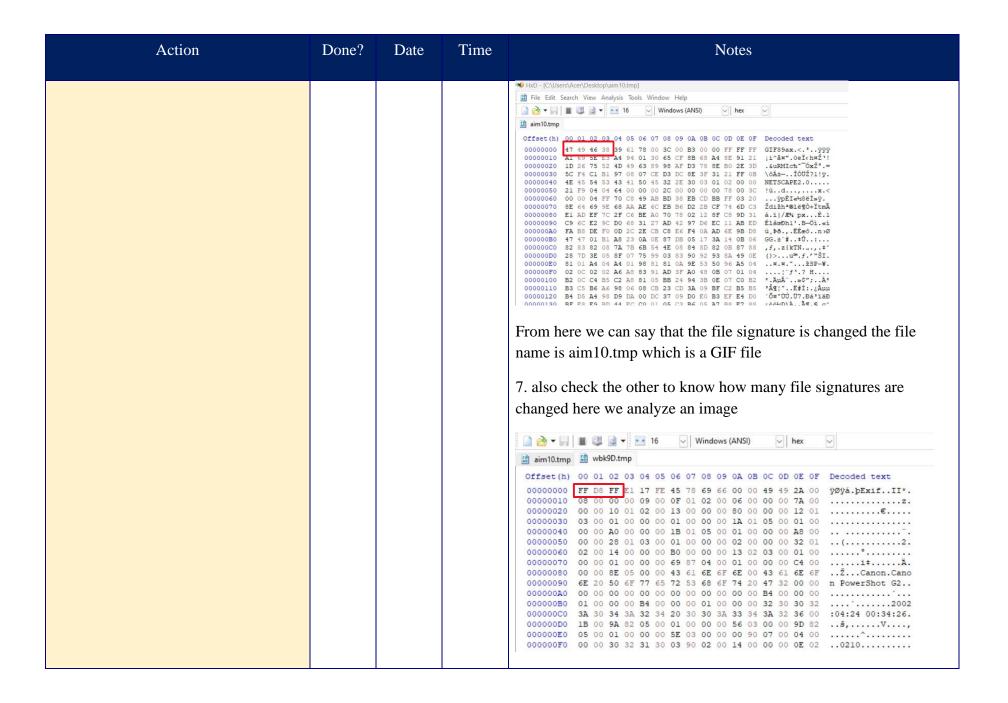
Action	Done?	Date	Time	Notes
Mount archives; zip, thumbs.db, etc.	yes	Nov 26 th 2024	2 P.M	1. To find the Mount archived Zip file we must go to the file view go to file types, and then select by extension where we can see the archived files Link:-/img Hunter XP for Dongled v6.E01/v01 vol2/RECYCLER/S-1-5-21-1229272821-1580818891- 854245398-1004/D1389.zip The second of the second o

Action	Done?	Date	Time	Notes
				Nome
File signature analysis (any interesting file mismatch?); Compute hash values (enable entropy computation)	yes	Nov 26 th 2024	3 P.M	1. files signature analysis (any interesting mismatch) can be found when we go to the tools and then go to the Run ingest Modules and select Hunter xp for dongled v6 E01



Action	Done?	Date	Time	Notes
				3. Go to the Analysis Result→ Extension Mismatch Detected Data Sources File Views File Vyes Detected Files Deta Artifacts File System (1978) MB File Size Data Artifacts Files System (1978) MISTEL Size Deta Artifacts Department (1978) MISTEL Size Deta Artifacts Department (1978) Man Programs (38) Metadata (8) Department (1978) Man Programs (1979) Man Pr

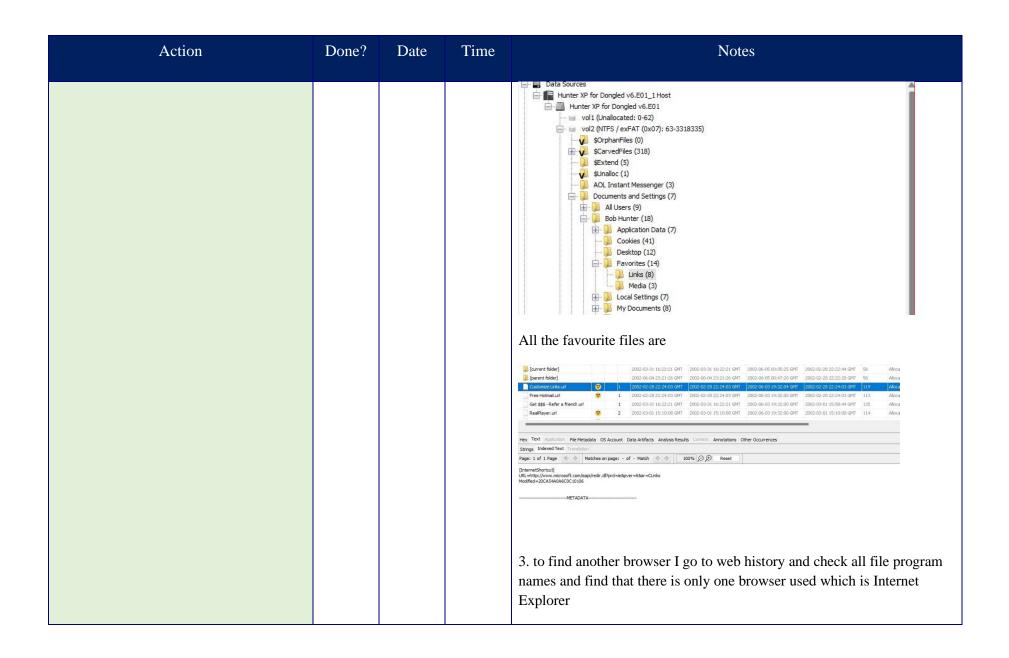




Action	Done?	Date	Time	Notes
				Here I see that these files we can see are actually JPEG and the files/evidence is tempering
Internet History, favorites, etc. Other browsers?	yes	NOV 27 TH 2024	10A.M	1.here to find internet history I go to the /img_Hunter XP for Dongled v6.E01/vol_vol2/Documents and Settings/Bob Hunter/Local Settings/History/History.IE5/MSHist012002060320020 604/index.dat. here I can see every file of the Internet history



Action	Done?	Date	Time	Notes
Action	Done?	Date	Time	2. here I can see all the internet history of Bob Hunter
				3. for favourites I must go /img_Hunter XP for Dongled v6.E01/vol_vol2/Documents and Settings/Bob Hunter/Favorites



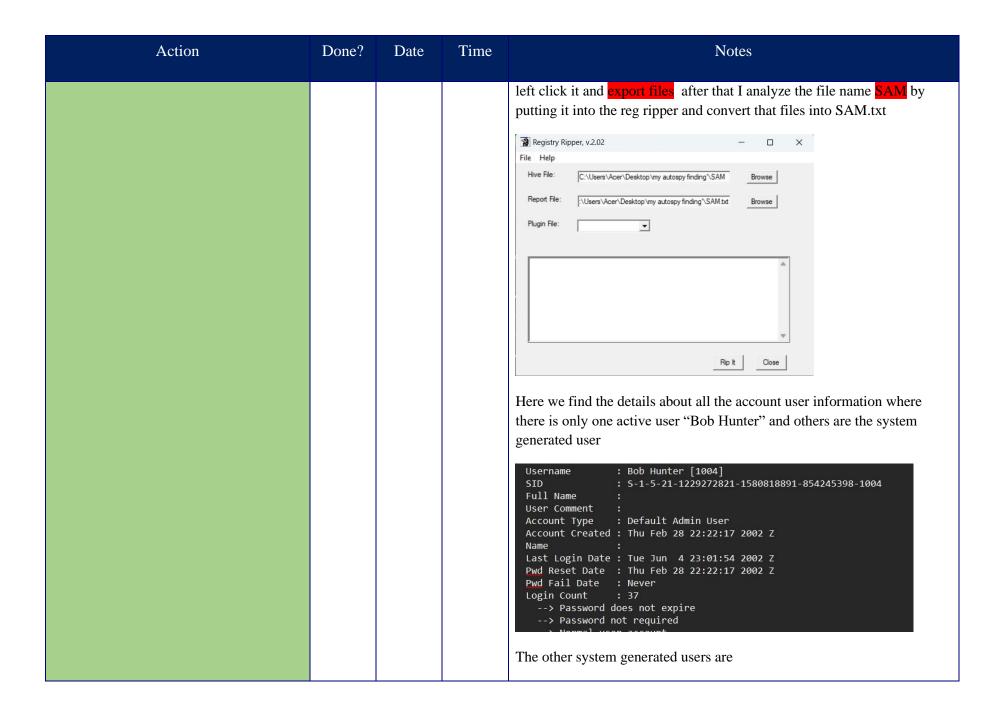
Action	Done?	Date	Time	Notes
				Source Name S C O URL Program Name Domain Internet Explorer White Light Accessed Interplace and the complete place place place Interplace and the complete place place place Interplace Inter
Emails, local and web-based.	yes	NOV 27 TH 2024	11:20 A.M	1. to find the email I go to the files /img_Hunter XP for Dongled v6.E01/vol_vol2/Documents and Settings/Bob Hunter/Local Settings/Temporary Internet Files/Content.IE5/6ZSJ6T6D/getmsg[2]/getmsg[2]/0

Action	Done?	Date	Time	Notes
Action	Done?	Date	Time	Here I can see that there is an email ID of triend@hemine.com and chaser I 9 @hotmail.com also the email of chaser friend hillyray I 50 b@netscape.com here from the given screenshot I can also find out that Billyray was also involved in the case and share the email of father. MSN Home My MSN Hotmail Search Shopping Money People & Chat Home labox Compose Address Book Options Help chaser 1191@hotmail.com Save Address(es) Block Previous Next Close From: "Hotmail "Grind@hemine.com" To: "Ghaser 1191@hotmail.com" Save Address Book Options Help Chaser 1191@hotmail.com Previous Next Close From: "Hotmail "Grind@hemine.com" To: "Ghaser 1191@hotmail.com" Printer Friendly Version His one? Home labox Compose Address Book Options Help Chaser 1191@hotmail.com Save Address(es) Block Provious Next Close From: "Mid Delivery Subsystem (AMLEE DAEMON@yving settorge composition of the
				(ceason: 550 5.1.1 chillyray150b@netscape.comb User unknown)

Action	Done?	Date	Time	Notes
				Name House My Man Hottaall Search Shopping Money People & Chat

Action	Done?	Date	Time	Notes
				Fig. Fig. Path Comment Modified Time Charged Time Charged Time Coasted Time Coasted Time Size MOS No.
				Sergic Indication: Relevated a Off Account Units Artificial Amendations Other Cournemes Sergic Indicator First Translation: Page: 10 1 Rape () 10 R
				4. by analyzing deeply I can find the conversation on the case and bargaining of the ransomware for the crime. The location of the file /img_Hunter XP for Dongled v6.E01/vol_vol2/Documents and Settings/Bob Hunter/Local Settings/Temporary Internet Files/Content.IE5/6ZSJ6T6D/or_else[1].htm

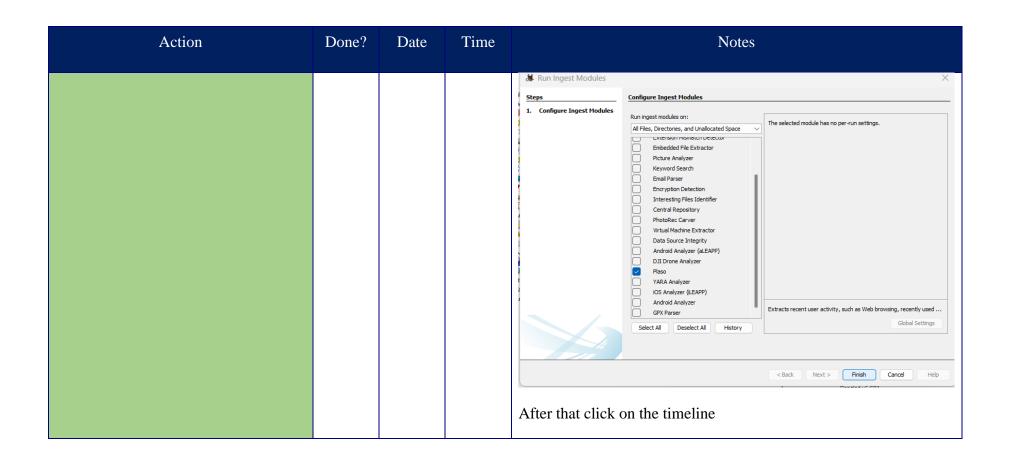
Action	Done?	Date	Time	Notes
				The Park Park Control of Control
Retrieve operating system information, accounts information, software, time zone information etc.).	yes	NOV 27 TH 2024	12 A.M	1. I can found the information on the operation system of Hunter XP on the file data artifacts after that I go to the operating system information where I can see the whole details of OS and the source's path for the file is imp. Hunter XP for Dongled. v6.E01/vol_vol2/WINDOWS/system32/config/software Windows_Jii 3800 390/ydefineOCONJII Market 20 for Dongled v6.E01 16 Realt I of 83 Result 6 - 9 1000



Action	Done?	Date	Time	Notes
				Username : Administrator [500] SIO : S-1-5-21-1229772821-1580818891-854245398-500 Full Name : uit-in account for administering the computer/domain Account User : Default Admin User Account trype : Default Admin User Account Greated : Thu Feb 28 15:22:36 2002 Z Name : S-1-5-21-122972821-1580818891-854245398-501 Full Name : User Comment : Never Dod Fail Date : Never Dod Fail Name : Suproal does not expire> Normal user account Username : Guest [501] SIO : S-1-5-21-1229277821-1580818891-854245398-501 Full Name : Default Guest Acct Account Type : Default Guest Acct Account Type : Default Guest Acct Name : Suproal Suproa

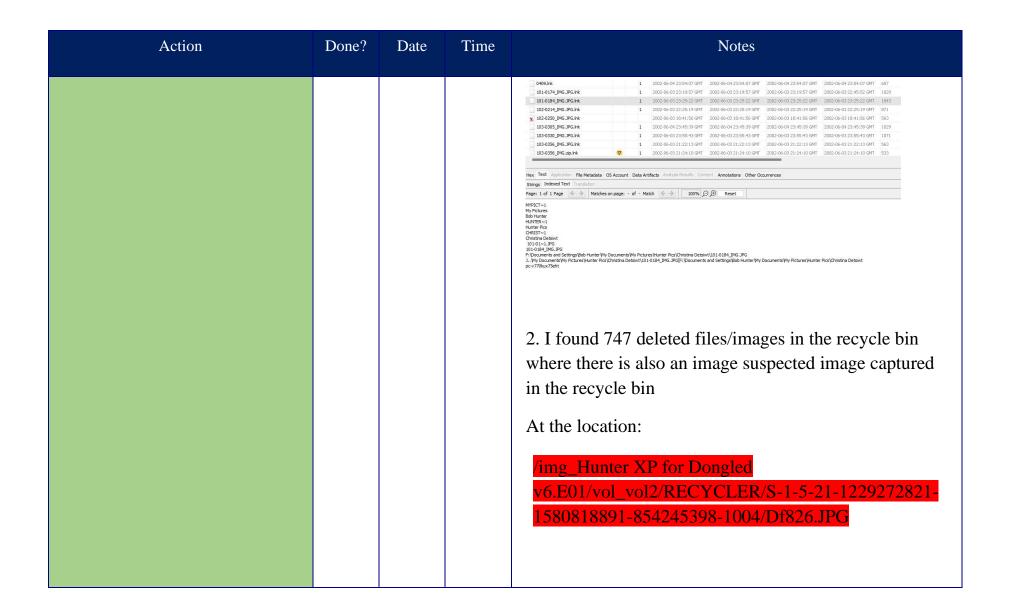
Action	Done?	Date	Time	Notes
				timezone v.20200518 (System) Get TimeZoneInformation key contents TimeZoneInformation key ControlSet001\Control\TimeZoneInformation LastWrite Time 2002-04-18 14:33:31Z DaylightName -> Central Daylight Time StandardName -> Central Standard Time Bias -> 360 (6 hours) ActiveTimeBias -> 300 (5 hours) usb v.20200515 From the daylight name which is Central Daylight Time, I can find out that the time zone is North America so the crime must be happening in North America
Timeline analysis- Note date of last activity on the computer.system profiling	yes	NOV 27 TH 2024	12:35 P.M	1. I can find the time analysis at the same file location at the SAM.txt whose converting process has been done on the above, here data of the last activity on the computer are found inside the SAM Last Login Date: Tue Jun 4 23:01:54 2002 Z Username : Bob Hunter [1004] SID : S-1-5-21-1229272821-1580818891-854245398-1004 Full Name : User Comment : Account Type : Default Admin User Account Created: Thu Feb 28 22:22:17 2002 Z Name : Last Login Date: Tue Jun 4 23:01:54 2002 Z Pwd Reset Date: Thu Feb 28 22:22:17 2002 Z Pwd Fail Date : Never Login Count : 37> Password does not expire> Password not required

Action	Done?	Date	Time	Notes
				I also found the last login date of the guest Last Login Date: Mon Jun 3 16:49:37 2002 Z Username : Guest [501] SID : S-1-5-21-1229272821-1580818891-854245398-501 Full Name : User Comment : Built-in account for guest access to the computer/domain Account Type : Default Guest Acct Account Type : Default Guest Acct Account Created : Thu Feb 28 15:22:36 2002 Z Name : Last Login Date : Mon Jun 3 16:49:37 2002 Z Pwd Reset Date : Never Pwd Fail Date : Never Login Count : 0 > Password does not expire> Password not required> Normal user account
				For timeline analysis I can also go through the tool→Run ingest Modules→Hunter Xp → Plaso

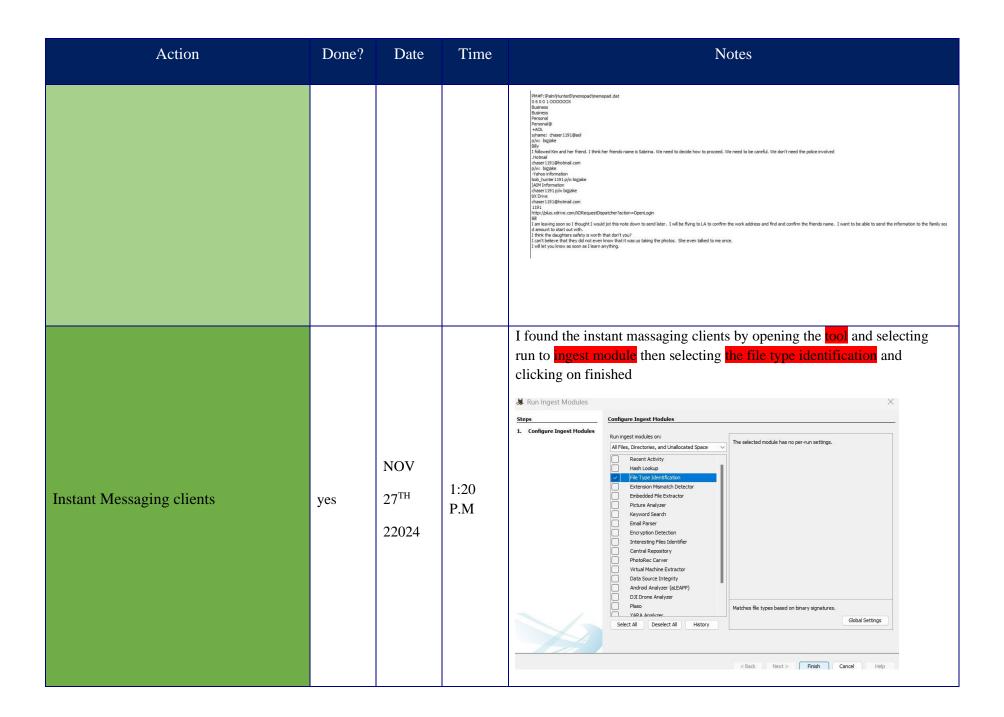


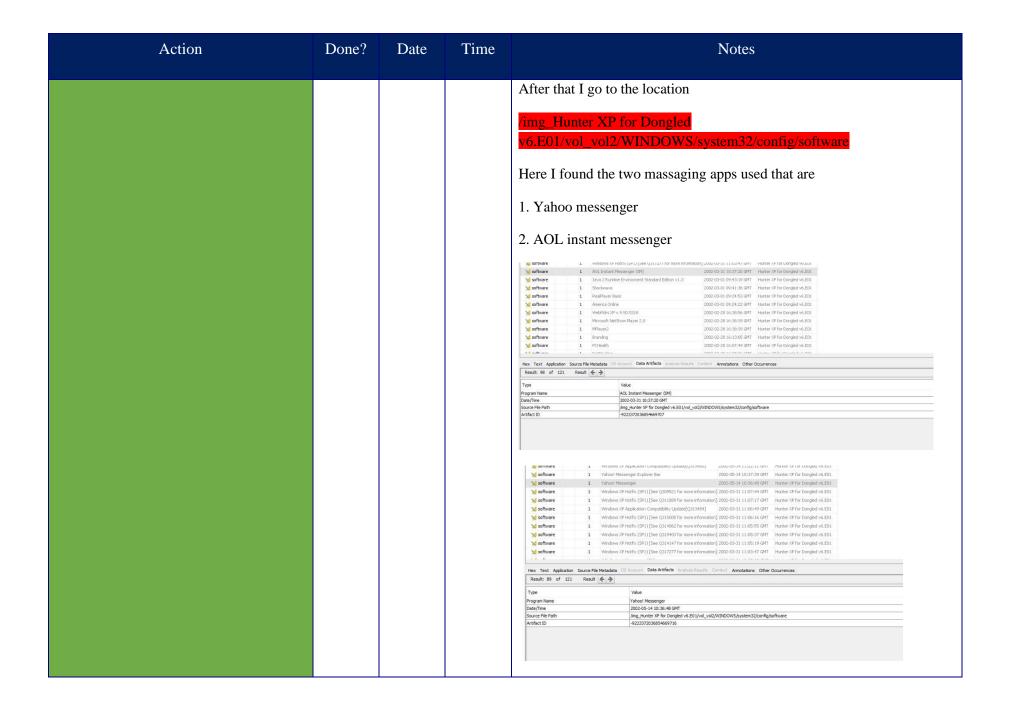
Action	Done?	Date	Time	Notes
				Here I get the details of File System, Web Activity and other at the yearly use
Registry analysis and Registry protected area	yes	NOV 27 TH 2024	12:50 P.M	I find the registry analysis and registry-protected area at the location /img_Hunter XP for Dongled v6.E01/vol_vol2/WINDOWS/system32/config/ Here I analyze the file that cannot be opened and copied by the system but can be exported by FTK Imager here I analyze file SAM, System, and others in the reg ripper

Action	Done?	Date	Time	Notes
				Registry Ripper, v.2.02 File Help Hive File: 2:\Users\Acer\Desktop\my autospy finding\system Report File: C:\Users\Acer\Desktop\my autospy finding\system Browse Plugin File: typedurlsDone. muicacheDone. user_nuDone. user_nuDone. vncviewerDone. winzipDone. vista_bitbucketDone. vista_bitbucketDone. 26 plugins completed with errors.
Link files and Recycle Bin	yes	NOV 27 TH 2024	1 P.M	 I found the link files at the location /img_Hunter XP for Dongled v6.E01/vol_vol2/Documents and Settings/Bob Hunter/Recent/ where I can see all 40 files link



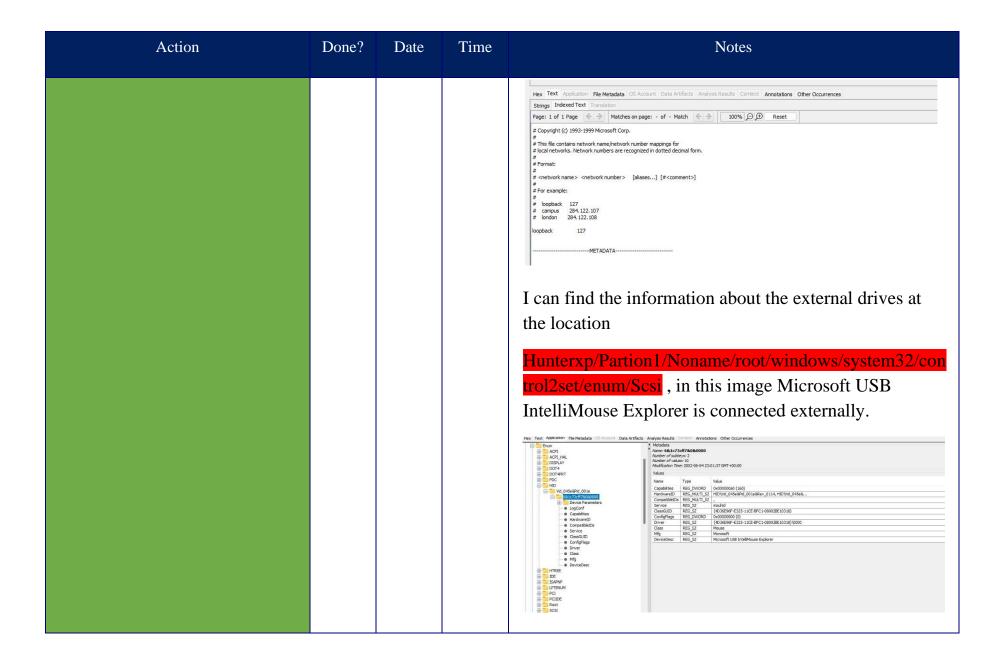
Action	Done?	Date	Time	Notes
				As dived deep into the recycle bin I found the conversation between Chaser and Billy at the location: /img_Hunter XP for Dongled v6.E01/vol_vol2/RECYCLER/S-1-5-21-1229272821- 1580818891-854245398- 1004/Df1040/HunterB/memopad/memopad.bak where they discuss about the family information and discuss about money

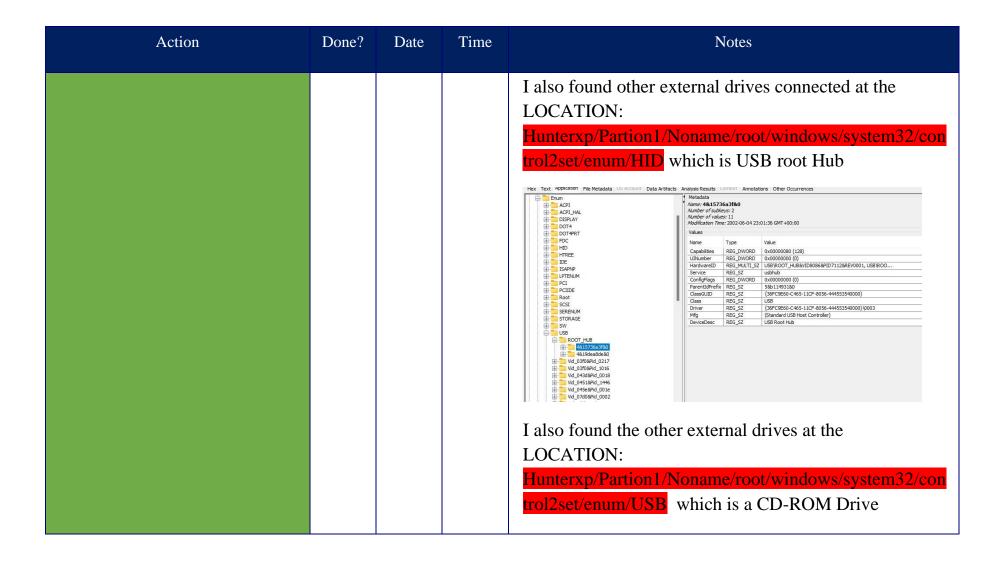


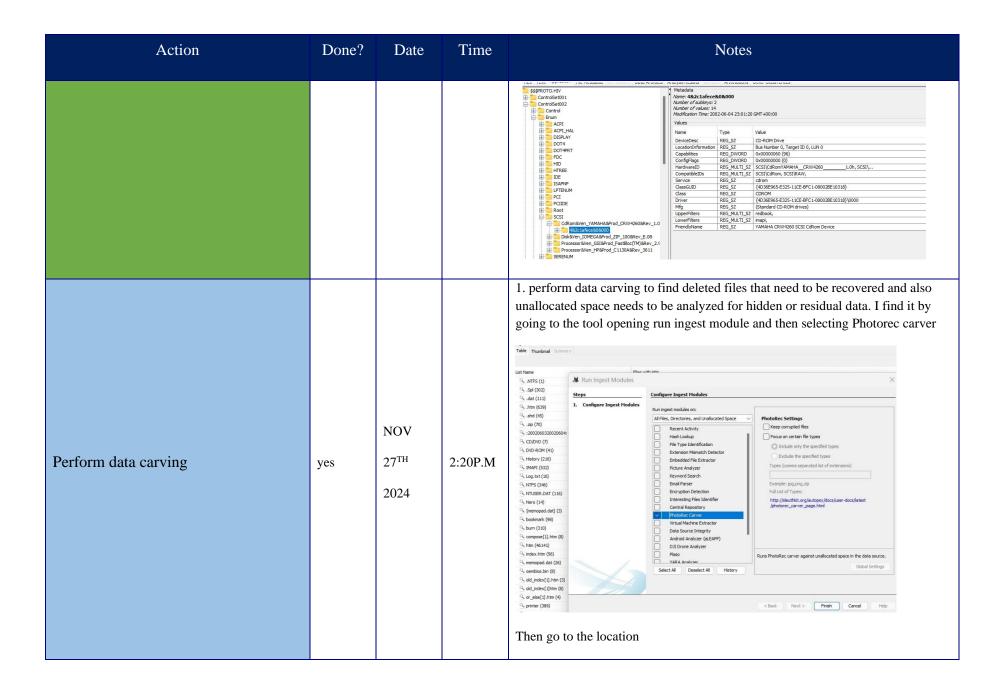


Action	Done?	Date	Time	Notes
Clean-up/Wiping utilities. Check log files. Anything used?	yes	NOV 27 TH 2024	1:40P.M	I can find the clean-up/wiping utilities at the location /img_Hunter XP for Dongled v6.E01/vol_vol2//\$CarvedFiles/f00003340_BestCrypt_v 7_for_Windows_95_98_ME_NT_2000_XP.html Here I found BCWipe software and BestCrypt software and these both software is used for cleaning and wiping the disk Image

Action	Done?	Date	Time	Notes
				Hex. Text. Application File Metadata OS Account Data Artificits Analysis Results Context Annotations Other Occurrences
External drives; Network connections	yes	NOV 27 TH 2024	2 P.M	1.i can find out the network connection details/information at the location: /img_Hunter XP for Dongled v6.E01/vol_vol2/WINDOWS/system32/drivers/etc/net works



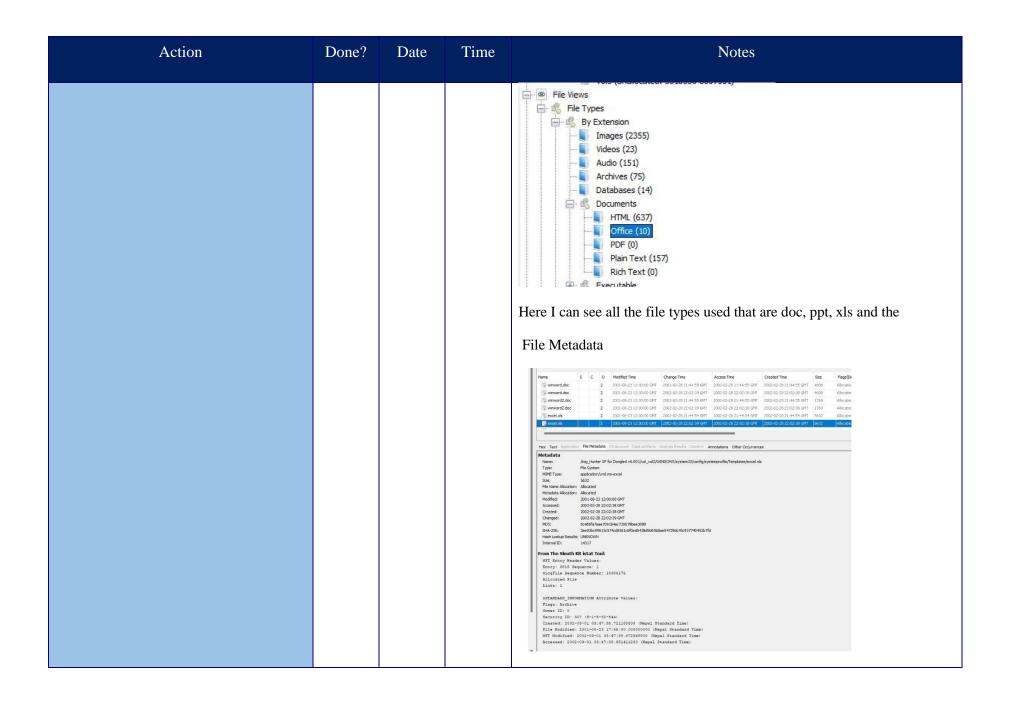




Action	Done?	Date	Time	Notes
				Data Sources ☐ Hunter XP for Dongled v6.E01_1 Host ☐ Hunter XP for Dongled v6.E01 ☐ Vol2 (NTFS / exFAT (0x07): 63-3318335) ☐ Vol3 (ScarvedFiles (318) ☐ f0000132.html.gz (1) ☐ f0000320.html.gz (1) ☐ f0000128.html.gz (1) ☐ f0001128.html.gz (1) ☐ f0000320.html.gz (1) ☐ f0000340.html.gz (1) ☐ f0000340.html.gz (1) ☐ f0000340.html.gz (1) ☐ f0000406.html.gz (1) ☐ f0000406.html.gz (1) ☐ f0000406.html.gz (1) ☐ f0000430.html.gz (1) ☐ f0000430.html.gz (1) ☐ f0000390.html.gz (1) ☐ f0000390.html.gz (1) ☐ f0000390.html.gz (1) ☐ f0000590.html.gz (1) ☐ f0000590.html.gz (1) ☐ f0000590.html.gz (1) ☐ f0005400.gz (1) ☐ f0005400.gz (1) ☐ f0005590.html.gz (1) ☐ f0005400.gz (1) ☐ f0005400.gz (1) ☐ f0005400.gz (1) ☐ f0005590.html.gz (1) ☐ f0005400.gz (1) ☐ f0005400.gz (1) ☐ f0005400.gz (1) ☐ f0005400.gz (1) ☐ f0005590.html.gz (1) ☐ f0005590.html.gz (1) ☐ f0005400.gz (1) ☐ f0005590.html.gz (1) ☐ f0

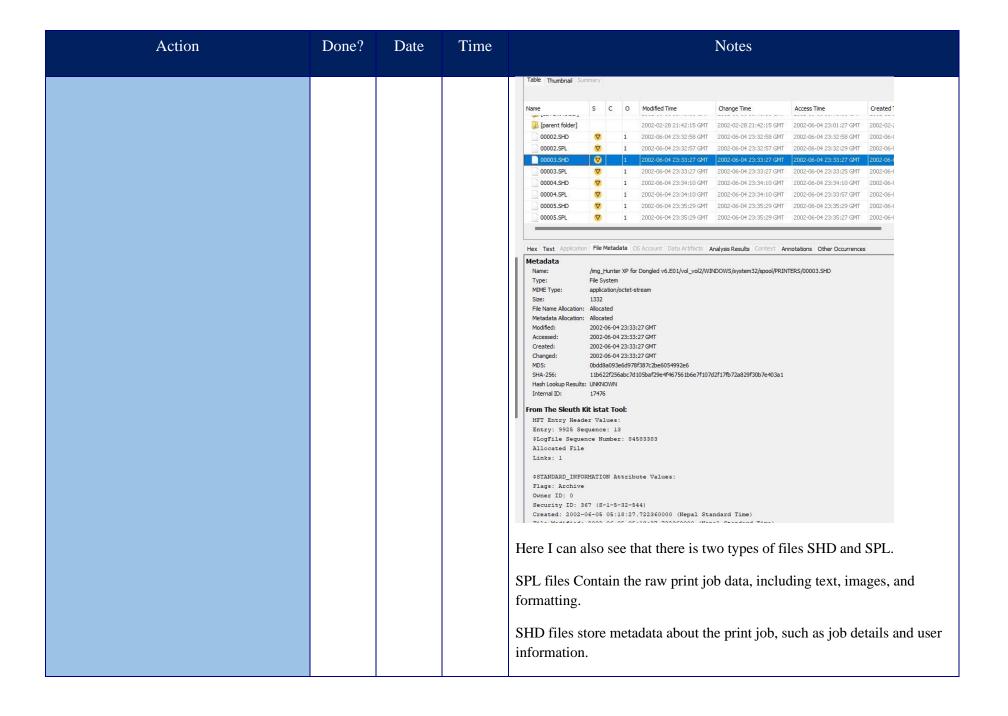
Action	Done?	Date	Time	Notes
Run relevant keyword searches; Did you index the evidence file?	yes	NOV 27 TH 2024	2:40 P.M	I searched for relevant keywords to find the exact evidence file for Hunter that is mention in the screenshot List Name
Recover Log-on passwords — use SAMInside/Ophcrack/Encase	yes	NOV 27 TH 2024	3:10 P.M	To recover the log-on password I used the tool ophcrack in Linux. For this, I exported the config file from Windows to Linux where I used samdump2 to analyze it.

Action	Done?	Date	Time	Notes
				After doing this I put the output file which I get by using the command sentence of the command senten
Examine different file types: Export doc/office and exe files; look at Metadata if required	yes	NOV 27 TH 2024	3:30 P.M	I found doc/office files by going to files views and opening it and then selecting files types after that select by extension here you will see a document folder open it and click on office here we see all the doc/office files

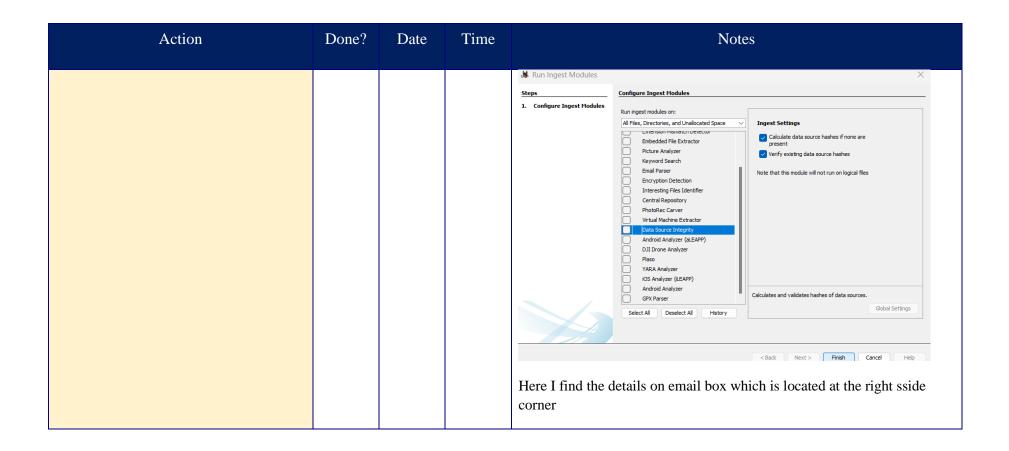


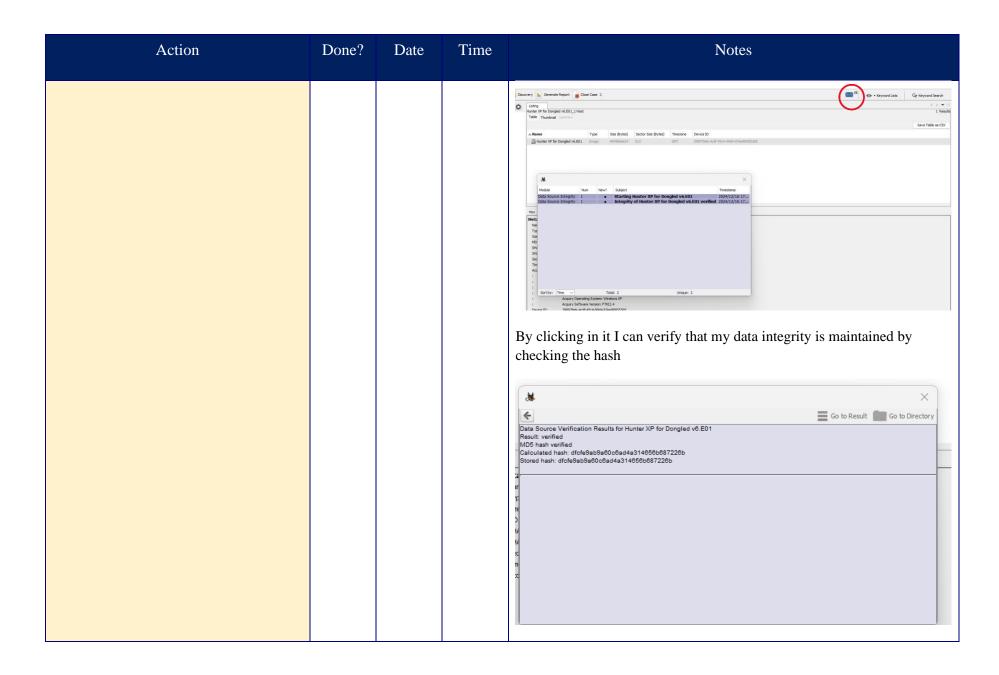
Action	Done?	Date	Time	Notes
Encryption, Steganalysis (any indications? Entropy or Autopsy can be used)	yes	NOV 27 TH 2024	4:10 P.M	I I can find the encryption by going to the tool and then selecting run ingest modules and then selecting Encryption detection and then select Finished A four Ingest Modules Steps Locality Robert Modules Steps Robert Modules

Action	Done?	Date	Time	Notes
				Secret Name Source Tipes Source Tipes Source Tipes Conductor Source Tipes Source
Print artefacts	yes	NOV 27 TH 2024	4:35 P.M	1. I find the print artifacts at the location /img_Hunter XP for Dongled v6.E01/vol_vol2/WINDOWS/system32/spool/PRINTERS/ Here I can see that there is two types of printer used. The name of the printer is Lexmark Z52 Color Jetprinter and the HP LaserJet 2200 Series PCI



Action	Done?	Date	Time	Notes
CD/DVD burning apps; check log files	yes	NOV 27 TH 2024	4:45 P.M	I found the information and the app of CD/DVD burning at the location /img_Hunter XP for Dongled v6.E01/vol_vol2/RECYCLER/S-1-5-21- 1229272821-1580818891-854245398-1004/Df1017.JPG Here I found the IMAPI It is a Microsoft API that provides developers with the ability to create applications capable of writing data to optical discs such as CDs, DVDs, and Blu-rays. It is not specifically designed for forensics but can be used to create accurate disc images or burn data for preservation or analysis.
Validate evidence integrity at the end of the examination	yes	NOV 27 TH 2024	5:20 P.M	1.for the validation of evidence integrity. Tools→ Run ingest modules → Hunter Xp→Data Sources integrity





Additional Notes/Artefacts Examined:

Colour-coding Legend	Tasks
	Fundamental
	Basic
	Elementary
	Secondary
	Advanced
	Exceptional