

Forensic Analysis of the Android Image

This report details a comprehensive forensic investigation into an alleged internet fraud scheme involving a fake investment website designed to lure individuals into investing in fraudulent cryptocurrency, promising exceptionally high returns on investment.

The report outlines the methodologies and tools utilized, presents key findings, and provides recommendations for future preventative measures and legal actions.

Tools used: Autopsy, 7zip, Android forensic image

Methodology: This encompassing evidence collection, examination, analysis, and reporting. An android image was extracted with 7zip extraction software, which was feed into Autopsy for analysis. The forensic investigation adhered to a rigorous, multi-phase methodology to ensure the integrity, authenticity, and admissibility of all collected digital evidence. This structured approach, adapted from established digital forensic principles, involved the following key stages:

1. collection/Acquisition:

- **Victim Device Acquisition:** Where available and permissible, forensic images of relevant storage media (e.g., the mobile phone, tablets) used by victims to interact with the fake website or communicate with

the perpetrators were acquired. Strict chain of custody protocols were maintained throughout this process, and hardware write-blockers were utilized to ensure that no data on the original media was inadvertently altered during the imaging process

- **Call logs:** various calls and phone numbers of the conspirators were recovered; this gives more insights into their deceitful act.

- **Message logs:** these were also retrieved to ascertain and monitor the trend of communication and strategies in carrying out their elicit fraud.

- **Open Source Intelligence (OSINT) Gathering:** Publicly available information was systematically collected from various online sources, including social media platforms, online forums, cryptocurrency communities, and news articles related to the scam. This intelligence helped in understanding the scam's promotion, identifying potential victims, and uncovering additional digital footprints of the perpetrators.

- **Artifacts:** web histories, web cookies, web search were also collected this helps to know the tress of web visited by this perpetrator, and the type of search conducted.

2. Examination: Following the secure collection of data, the examination phase involved a meticulous and systematic processing of the acquired digital evidence to identify and extract information pertinent to the investigation. This phase was characterized by:

- **Data Carving and Recovery:** Advanced data carving techniques were employed to recover deleted files or fragments of files from unallocated space on acquired disk images. This was crucial for uncovering hidden or intentionally removed evidence.
- **Targeted Keyword Searches:** Extensive keyword searches were conducted across all acquired data. Keywords included the name of the fake website, specific cryptocurrency names mentioned in the scam, known aliases of perpetrators, victim names, and terms commonly associated with investment schemes (e.g., 'ROI', 'guaranteed returns', 'withdrawal').
- **File System and Metadata Analysis:** A detailed analysis of file system metadata, including creation, modification, and access timestamps, was performed to reconstruct the chronological sequence of events. This helped in understanding when specific files were created, accessed, or altered, providing insights into the perpetrators' activities.

3. Analysis:

Message Log analysis:

2024-03-17 03:09:45 WAT

Deduced the name of the alleged suspect to be Bro Sam from the message supposedly to be from his pastor.

2024-03-17 03:19:10 WAT

A scam idea was mention to be carried out

2024-03-17 03:20:44 WAT

A fake investment crypto currency website was to be created to lure in innocent people

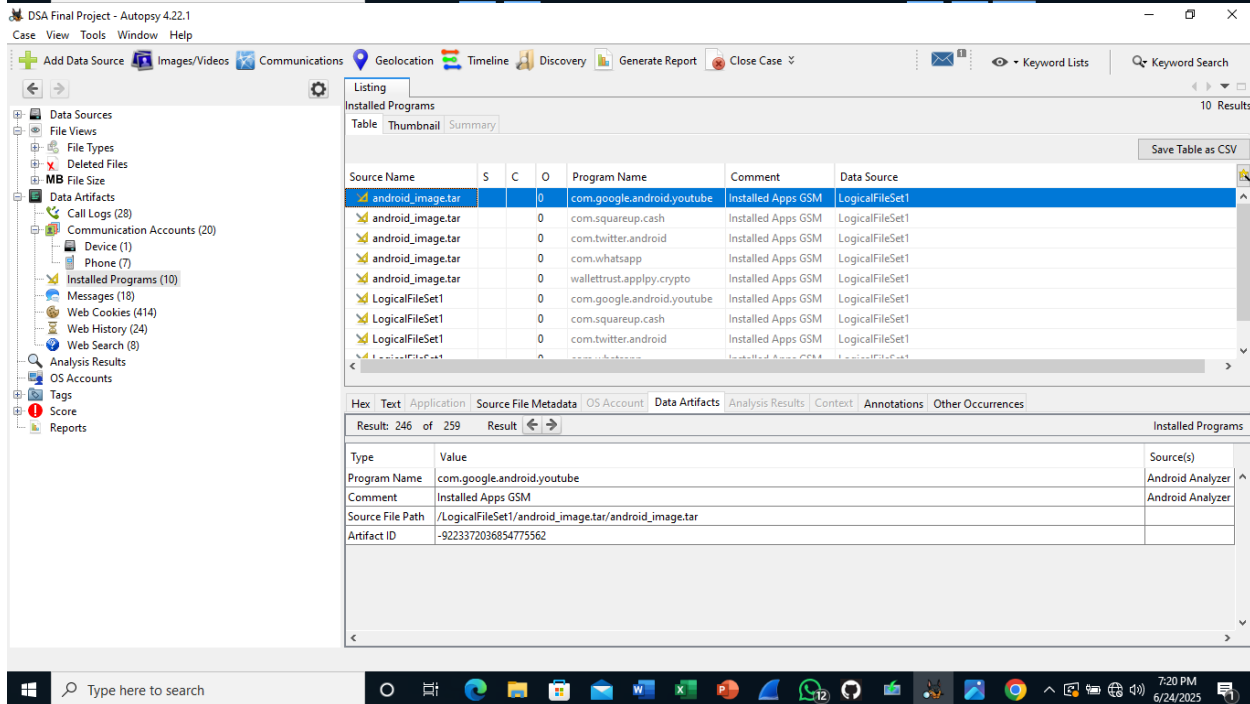
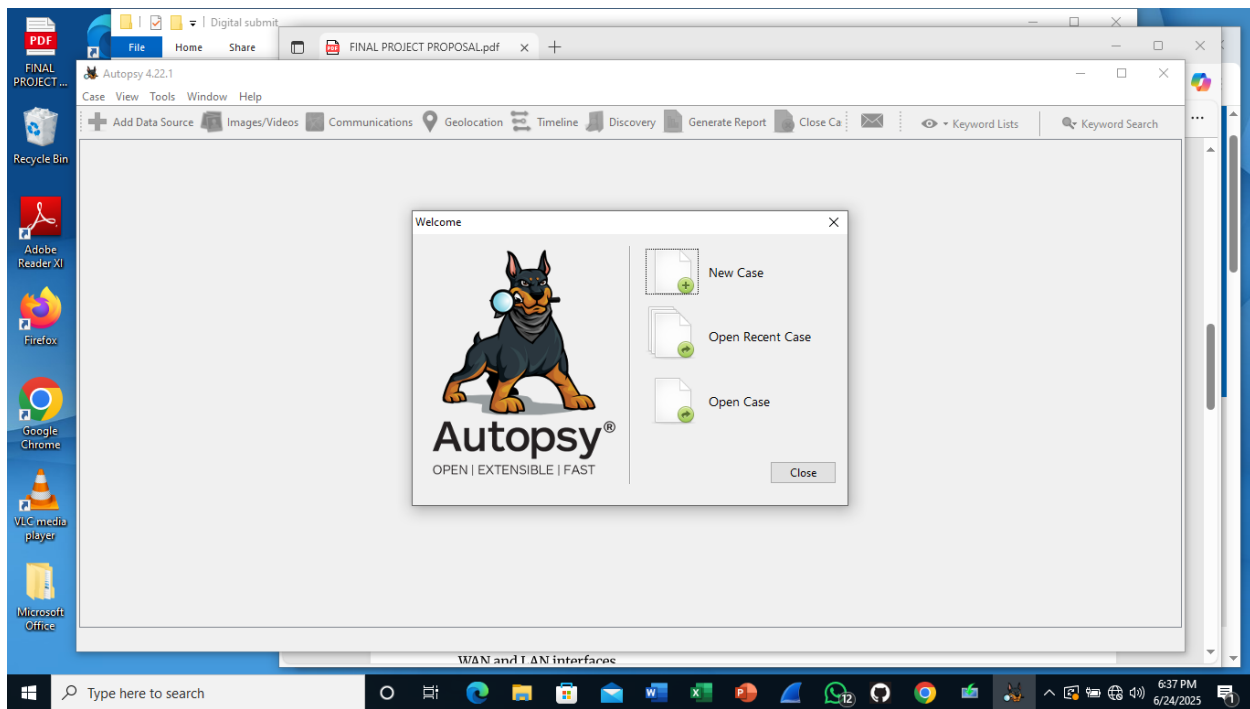
2024-03-17 03:23:45 WAT

A bitcoin wallet address to be used 16AtGJBaxL2kmzx4mW5ocpT2ysTWxmacWn. Which actually belong to Woodberry

2024-03-17 04:29:40 WAT

The fake investment website was actually created.

- **Screen shorts**



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Case View Tools Window Help

Add Data Source Images/Videos Communications Geolocation Timeline Discovery Generate Report Close Case

Keyword Lists Keyword Search

Listing 17 Results

Table Thumbnail Summary

Save Table as CSV

Source Name	S	C	O	Account Type	ID	Data Source
android_image.tar		0		PHONE	+15555215554	LogicalFileSet1
android_image.tar		0		PHONE	+971565505984	LogicalFileSet1
android_image.tar		0		PHONE	08032111669	LogicalFileSet1
android_image.tar		0		PHONE	08032111225	LogicalFileSet1
android_image.tar		0		PHONE	08012345678	LogicalFileSet1
android_image.tar		0		PHONE	+971543777711	LogicalFileSet1
android_image.tar		0		PHONE	08032111133	LogicalFileSet1
LogicalFileSet1		0		PHONE	+15555215554	LogicalFileSet1
LogicalFileSet1		0		PHONE	+971565505984	LogicalFileSet1

Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences

Result: of Result

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Case View Tools Window Help

Add Data Source Images/Videos Communications Geolocation Timeline Discovery Generate Report Close Case

Keyword Lists Keyword Search

Listing 3 Results

Table Thumbnail Summary

Save Table as CSV

Source Name	S	C	O	Account Type	ID	Data Source
android_image.tar				DEVICE	72322f12-ce81-4ac3-ade5-87c54d60e113	LogicalFileSet1
LogicalFileSet1				DEVICE	72322f12-ce81-4ac3-ade5-87c54d60e113	LogicalFileSet1
mmssms.db				DEVICE	72322f12-ce81-4ac3-ade5-87c54d60e113	LogicalFileSet1

Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences

Result: of Result



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Case View Tools Window Help

Add Data Source Images/Videos Communications Geolocation Timeline Discovery Generate Report Close Case

Keyword Lists Keyword Search

Listing Deleted Files 2 Results

Table	Thumbnail	Summary
Type		
File System (0)		
All (0)		

Save Table as CSV

Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences

Android Analyzer (aLEAPP) for LogicalFileSet1

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Case View Tools Window Help

Add Data Source Images/Videos Communications Geolocation Timeline Discovery Generate Report Close Case

Keyword Lists Keyword Search

Listing Web Search 8 Results

Table	Thumbnail	Summary						
Source Name	S	C	O	Date Accessed	Text	Domain	Comment	Data Source
android_image.tar				2024-03-17 03:39:59 WAT	new and latest investment scam format	google.com	Chrome Search Terms	LogicalFileSet1
android_image.tar				2024-03-17 03:42:06 WAT	How to avoid being caught by the EFCC	google.com	Chrome Search Terms	LogicalFileSet1
android_image.tar				2024-03-17 04:38:00 WAT	"create new bi", "create new bitcoin...		Google Quick Search	LogicalFileSet1
LogicalFileSet1				2024-03-17 03:39:59 WAT	new and latest investment scam format	google.com	Chrome Search Terms	LogicalFileSet1
LogicalFileSet1				2024-03-17 03:42:06 WAT	How to avoid being caught by the EFCC	google.com	Chrome Search Terms	LogicalFileSet1
LogicalFileSet1				2025-06-24 18:07:39 WAT	"create new bi", "create new bitcoin...		Google Quick Search	LogicalFileSet1

Save Table as CSV

Hex Text Application Source File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences

Result: 232 of 259 Result

Web Search

Term: new and latest investment scam format

Time: 2024-03-17 03:39:59 WAT

Domain: google.com

Other

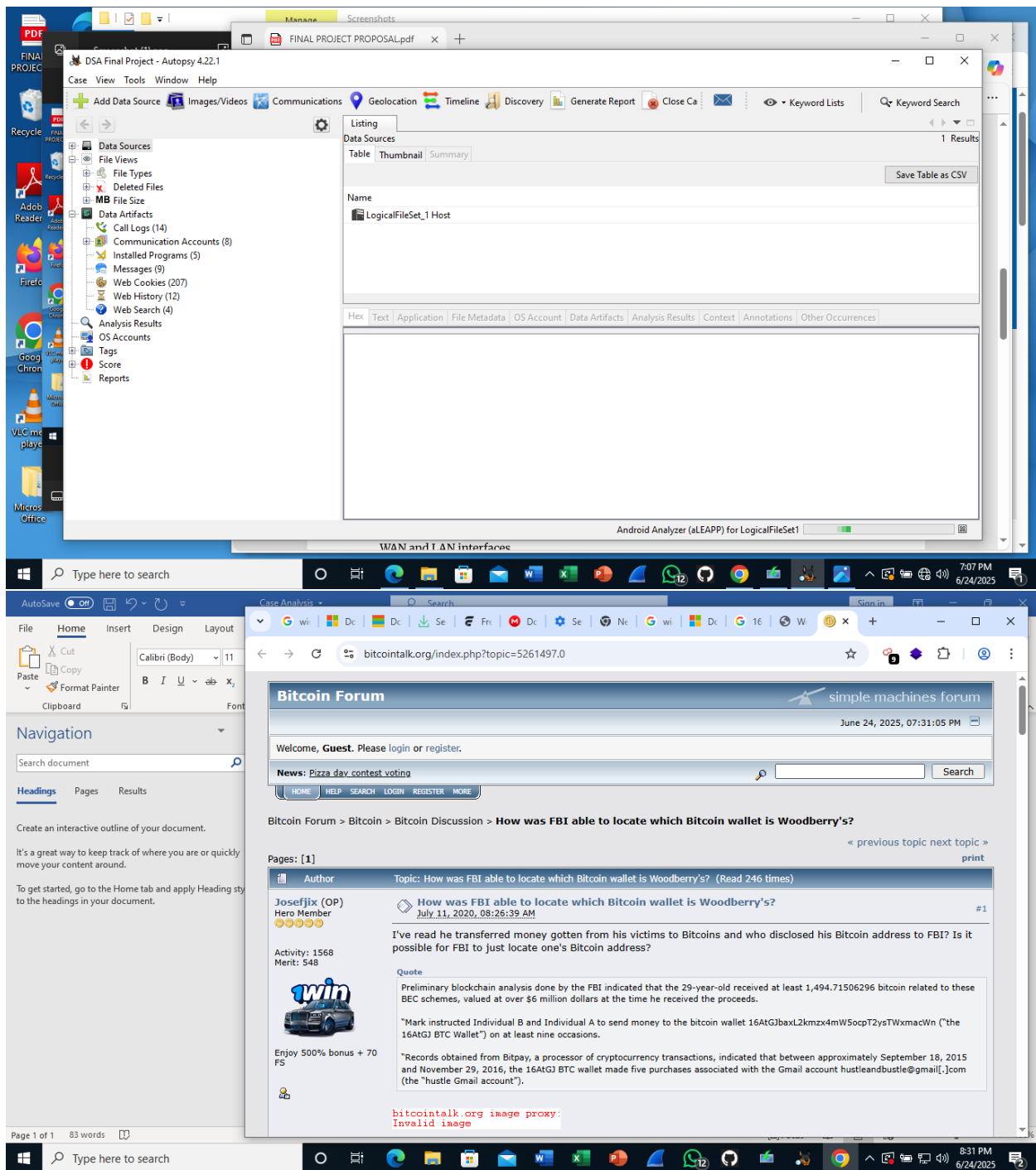
Comment: Chrome Search Terms

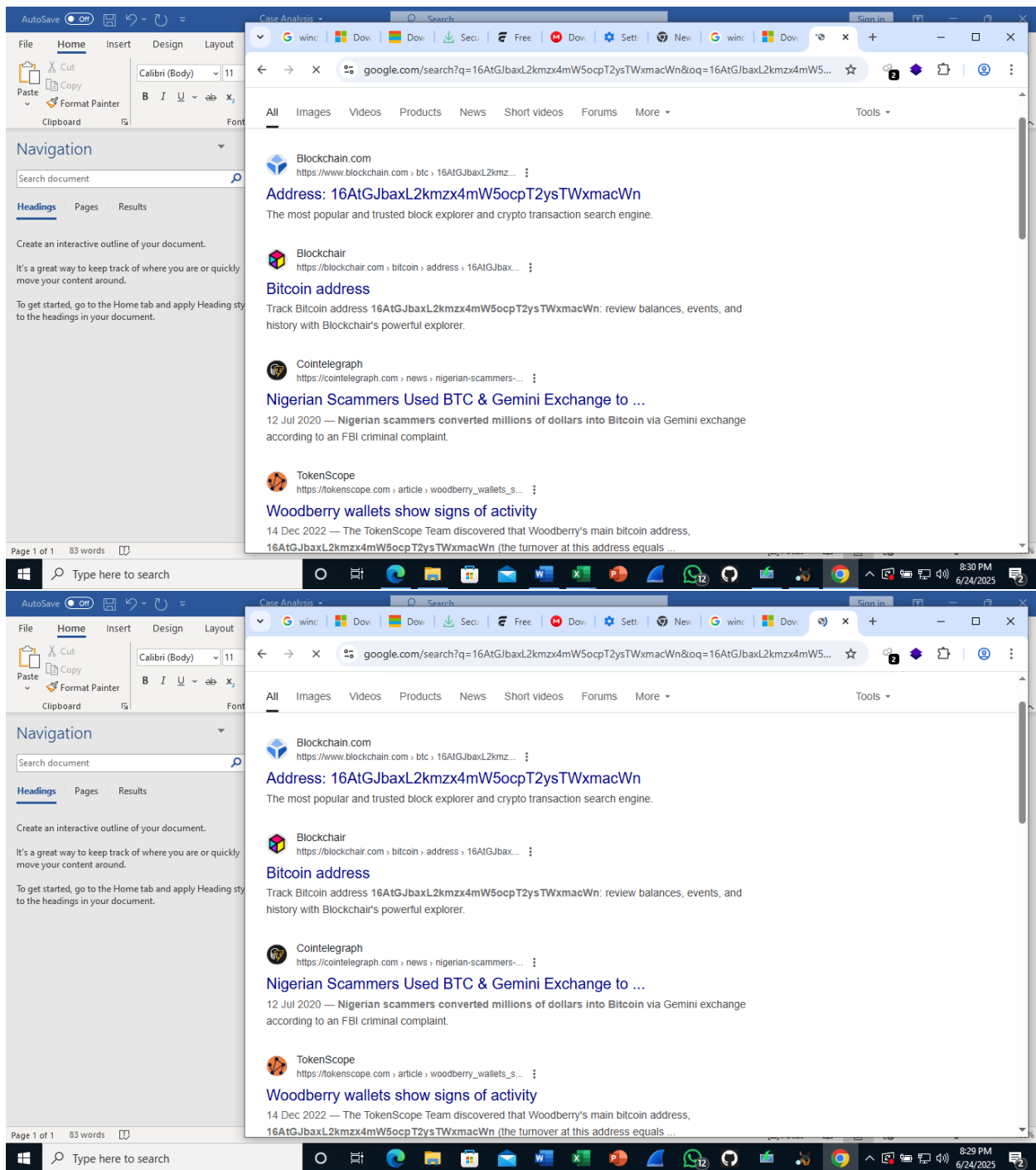
Source

Host: LogicalFileSet_1 Host

Data Source: LogicalFileSet1

File: LogicalFileSet1/android_image.tar/android_image.tar





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Case View Tools Window Help

Add Data Source Images/Videos Communications Geolocation Timeline Discovery Generate Report Close Case

Listing
Web Search 8 Results

Source Name	S	C	O	Date Accessed	Text	Domain	Comment	Data Source
android_image.tar				2024-03-17 03:39:59 WAT	new and latest investment scam format	google.com	Chrome Search Terms	LogicalFileSet1
android_image.tar				2024-03-17 03:42:06 WAT	How to avoid being caught by the EFCC	google.com	Chrome Search Terms	LogicalFileSet1
android_image.tar				2024-03-17 04:38:00 WAT			Google Quick Search	LogicalFileSet1
android_image.tar				2024-03-17 04:39:00 WAT	"create new bi", "create new bitcoin...		Google Quick Search	LogicalFileSet1
LogicalFileSet1				2024-03-17 03:39:59 WAT	new and latest investment scam format	google.com	Chrome Search Terms	LogicalFileSet1
LogicalFileSet1				2024-03-17 03:42:06 WAT	How to avoid being caught by the EFCC	google.com	Chrome Search Terms	LogicalFileSet1
LogicalFileSet1				2025-06-24 18:07:39 WAT			Google Quick Search	LogicalFileSet1
LogicalFileSet1				2025-06-24 18:07:39 WAT	"create new bi", "create new bitcoin...		Google Quick Search	LogicalFileSet1

Hex Text Application File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences

Result: of Result

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Case View Tools Window Help

Add Data Source Images/Videos Communications Geolocation Timeline Discovery Generate Report Close Case

Listing
Web History 24 Results

Source Name	S	C	O	Date Created	Date Accessed	URL	Title
android_image.tar				2024-03-17 03:49:04 WAT	2024-03-17 03:49:04 WAT	https://www.google.com/search?client=ms-unknown...	how to know if efcc is tr
android_image.tar				2024-03-17 03:47:51 WAT	2024-03-17 03:47:51 WAT	https://www.nairaland.com/6982372/scared-being-arr...	Scared Of Being Arrested
android_image.tar				2024-03-17 03:39:59 WAT	2024-03-17 03:39:59 WAT	https://www.google.com/search?q=new+and+latest+investme...	new and latest investme
android_image.tar				2024-03-17 03:40:47 WAT	2024-03-17 03:40:47 WAT	https://www.google.com/search?client=ms-unknown...	Fake investment website
android_image.tar				2024-03-17 03:40:55 WAT	2024-03-17 03:40:55 WAT	https://www.google.com/url?q=https://businessday.n...	Here are 7 fake cryptocu
android_image.tar				2024-03-17 03:40:55 WAT	2024-03-17 03:40:55 WAT	https://businessday.ng/technology/article/here-are-7...	Here are 7 fake cryptocu
android_image.tar				2024-03-17 03:42:06 WAT	2024-03-17 03:42:06 WAT	https://www.google.com/search?q=How+to+avoid+...	How to avoid being cau
android_image.tar				2024-03-17 03:42:59 WAT	2024-03-17 03:42:59 WAT	https://www.google.com/url?q=https://www.nairalan...	Scared Of Being Arrested

Hex Text Application Source File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences

Result: 230 of 259 Result

Web History

Visit Details

Title: how to know if efcc is tracking you - Google Search

Date Accessed: 2024-03-17 03:49:04 WAT

Date Created: 2024-03-17 03:49:04 WAT

URL: https://www.google.com/search?client=ms-unknown&csca_esv=f2e7f9d141197aa8&q=how+to+know+if+efcc+is+tracking+you&oq=How+to+know+if+EFCC&aq...

Other

Comment: Chrome Offline Pages

Source

LogicalFileSet 1 Host

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Case View Tools Window Help

Add Data Source Images/Videos Communications Geolocation Timeline Discovery Generate Report Close Case

Keyword Lists Keyword Search

Listing

Web Cookies

Table Thumbnail Summary

Save Table as CSV

Source Name	S	C	O	Date Accessed	URL	Name	Value
android_image.tar				2024-03-17 03:49:03 WAT	.google.com	AEC	Ae3NU90QA0od-BIMfLmBtwtQIEBUKA9HHD
android_image.tar				2024-03-17 03:42:08 WAT	.google.com	SNID	AOYECsqoEC6RpQoRq3rbxzaWS-yUffqSkoVl
android_image.tar				2024-03-17 03:40:57 WAT	.onesignal.com	_cf_bm	ZxwqKp90IEBh181z_J2TqrIRbUQJKNLvkRhfg
android_image.tar				2024-03-17 03:42:07 WAT	.businessday.ng	_cb	FJBbcCbraRXDGZa2
android_image.tar				2024-03-17 03:42:07 WAT	.businessday.ng	_chartbeat2	.1710646857645.1710646857645.1.nv5mwvLjal3
android_image.tar				2024-03-17 03:42:07 WAT	.businessday.ng	_cb_svref	https%3A%2F%2Fwww.google.com%2F
android_image.tar				2024-03-17 03:42:07 WAT	.businessday.ng	_ga	GA1.1.1872749314.1710646858
android_image.tar				2024-03-17 03:42:07 WAT	.businessday.ng	_gads	ID=53d6add53377f120-T=1710646859-RT=1710

Hex Text Application Source File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences

Result: 23 of 259 Result

Web Cookies

Cookie Details

URL: .google.com

Name: AEC

Value: Ae3NU90QA0od-BIMfLmBtwtQIEBUKA9HHD017YcJLMDUHV/fBUlmsi9w

Dates

Created: 2024-03-17 03:39:58 WAT

End: 2024-09-13 03:39:58 WAT

Other

Date Accessed: 2024-03-17 03:49:03 WAT

Comments: Chrome Cookie

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Case View Tools Window Help

Add Data Source Images/Videos Communications Geolocation Timeline Discovery Generate Report Close Case

Keyword Lists Keyword Search

Listing

Messages

Table Thumbnail Summary

Save Table as CSV

Source Name	S	C	O	Message Type	Date/Time	Read	Phone Number	Text
android_image.tar			0	SMS messages	2024-03-17 03:09:45 WAT	1	72322f12-ce81-4ac3-ade5-87c54d60e113	Calvary greetings brother Sam, I tru
android_image.tar			0	SMS messages	2024-03-17 03:19:10 WAT	1	72322f12-ce81-4ac3-ade5-87c54d60e113	Hey, I've got a new scam idea. we r
android_image.tar			0	SMS messages	2024-03-17 03:20:44 WAT	1	72322f12-ce81-4ac3-ade5-87c54d60e113	Let's create a fake investment webs
android_image.tar			0	SMS messages	2024-03-17 03:23:45 WAT	1	72322f12-ce81-4ac3-ade5-87c54d60e113	Yes, use the same Bitcoin wallet ad
android_image.tar			0	SMS messages	2024-03-17 03:29:45 WAT	1	72322f12-ce81-4ac3-ade5-87c54d60e113	Sure, enough of this text messages.
android_image.tar			0	SMS messages	2024-03-17 04:29:40 WAT	1	72322f12-ce81-4ac3-ade5-87c54d60e113	Nice work, Sammy. I'll take a look a
android_image.tar			0	SMS messages	2024-03-17 04:35:36 WAT	1	72322f12-ce81-4ac3-ade5-87c54d60e113	Sounds convincing. Payment gatew
android_image.tar			0	SMS messages	2024-03-17 04:46:40 WAT	1	72322f12-ce81-4ac3-ade5-87c54d60e113	Got it, I'll update the payment instr

Hex Text Application Source File Metadata OS Account Data Artifacts Analysis Results Context Annotations Other Occurrences

Result: 251 of 259 Result

Messages

From: 2024-03-17 03:09:45 WAT

To:

CC:

Subject:

Headers Text HTML RTF Attachments (0) Accounts

Original Text

Calvary greetings brother Sam, I trust you are doing fine. It been about 6 months since you were last seen fellowshiping with us, I hope all is well, in this period of economic meltdown th ere is no better time to draw closer to God. May the good Lord keep us all from temptations. I hope to see you fellowship with the brethren come sunday. The Lord be with you always m y brother

4. Findings of the Investigation

The forensic investigation yielded significant findings that shed light on the operation of the internet fraud scheme, the tactics employed by the perpetrators, and the extent of their illicit activities. The findings are categorized to provide a clear understanding of the various facets of the fraud.

Website Infrastructure and Deception: The fraudulent investment website was meticulously designed to appear legitimate, mimicking the aesthetics and functionalities of genuine cryptocurrency investment platforms. Analysis of the website's infrastructure revealed

Luring Tactics and Social Engineering: The perpetrators employed sophisticated social engineering tactics to attract and deceive victims

Cryptocurrency Transaction Analysis

The core of the fraud involved the illicit acquisition of legitimate cryptocurrency from victims. Analysis of blockchain data and associated transactions revealed

Conclusion

Sequel to the evidence above, it's safe to say the suspect is suspected to be involved in the internet related fraud activities having links with international internet fraudsters. Although there is no evidence of committing the actual act of defrauding anyone yet but I guess he is in the process of achieving that.

Recommendations

Based on the findings of this investigation, the following recommendations are put forth to aid in ongoing efforts to combat such frauds, enhance cybersecurity, and protect potential victims:

Enhanced Public Awareness Campaigns: Launch widespread public awareness campaigns to educate individuals about the red flags of investment scams, particularly those involving cryptocurrencies. Emphasize the importance of due diligence, skepticism towards unrealistic returns, and verification of platform legitimacy.

Strengthened Collaboration with Hosting Providers and Domain Registrars: Foster closer collaboration between law enforcement agencies and internet service providers, hosting companies, and domain registrars to facilitate the rapid identification, takedown, and preservation of evidence from fraudulent websites. Implement mechanisms for quicker response to abuse reports.

Improved Cryptocurrency Tracing Capabilities: Continue to invest in and develop advanced blockchain analytics tools and techniques to enhance the ability to trace illicit cryptocurrency flows, de-anonymize perpetrators, and identify associated entities. Encourage greater information sharing among blockchain intelligence firms and law enforcement.

International Cooperation: Given the transnational nature of internet fraud and cryptocurrency scams, strengthen international cooperation among law enforcement agencies, regulatory bodies, and financial intelligence units to

facilitate cross-border investigations, asset freezing, and extradition of perpetrators.

Regulatory Framework Development: Advocate for the development and enforcement of robust regulatory frameworks for cryptocurrency platforms and digital asset services, including mandatory KYC (Know Your Customer) and AML (Anti-Money Laundering) compliance, to prevent their exploitation by fraudsters.