

INSTITUTO SUPERIOR TÉCNICO

Departamento de Engenharia Informática

Forensics Cyber Security

MEIC / METI 2024-2025 - 1st Period

Digital Forensics Report Lab3

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1 Acquired artifacts

Trace 1

| Name | Туре | SHA-256 Value |
|--|---------|--|
| report.pdf | SHA-256 | 0e9aef94d7876a996be9f2fac6644e7d2258016f5409897e045501d7dfaa0625 |
| download%3fkey=AlzaS yC7jsptDS3am4tPx4r3nx is7IMjBc5Dovo.txt | SHA-256 | 8ffe2b541d1d353c3bd25a24bd22e623571c9bf8cfd1f523afc7a6bde5332229 |
| trace1-google-searches. | SHA-256 | cdcebf36a995342ed0889d26c445f55b2b95bc14d2aea9a1c30af4a39c4b46ef |
| oeiras_restaurants.png | SHA-256 | d1e7e9de8bf4ab756e24afedc83d9a6faca78e86e8783cc689cde062fa111cf0 |

Trace 2

| Name | Туре | SHA-256 Value |
|-----------------------|---------|--|
| full_chat_gpt.txt | SHA-256 | 8a7e39fcff47450c772bd90408d2f441ef196fa3d727c59ce99ec6d194ee7aae |
| cia_search.html | SHA-256 | 62290e84eff6e924059e7970d000132dbc247b993a9157789e70a1d51883a37f |
| past_discord_chat.txt | SHA-256 | 7e07e8dc604cf7136b4dab223938bb392a35e6550c07ac58555ecec1cfb2e978 |
| discord_messages.txt | SHA-256 | 9e952fd334b202d9e74b988234ec5566f00075762d030a51e565d8e9e6a9352 |
| BankStatement.pdf | SHA-256 | 6bcaa146616cff67eb5acf9ac6a2e84e503236e86a398d9784316a76e5a5d502 |

| MKU Documentation.pdf | SHA-256 | 75a554633a3d0a98faed4b5b1cc2e52d166fd44ee2804deb808a8f889f6ca3a5 |
|--------------------------|---------|--|
| RafaelEmail.eml | SHA-256 | 2e55a4810f3d82762d8097d9bd48487e5eaa41ace53a95eb34fa85d8748d20f4 |
| trace2-google-searches. | SHA-256 | e9c4d8b846e25803785160b29759c16a5664f6918ea899c819d9f6514a269c9b |
| mapsMOBICARE.html | SHA-256 | 02a1b3c255ef384376d47252d4252040a53bd882770b17a6ac73931bf326191 |
| MKUltraWiki.html | SHA-256 | 6503adb55d2077dec97d84e77bb621024f34a8c2c07c8d11b97646af1551688 0 |

Trace 3

| Name | Туре | SHA-256 Value |
|----------------------------|---------|--|
| chat_gpt_conversation.t xt | SHA-256 | cb4838781f78d0ed5117daa2e3e14c045260029623d23cd96b0275495167be9 |
| discord_chat.txt | SHA-256 | 98d556f122f3ac47ec513843642355591f4b19dc506f8dddc352d5f9a4a3a442 |
| Rafael_diario.txt | SHA-256 | 24bf229109dd8c1211069fd42f9b8d4f8a168e056acd704bc25cac2c395ba3f9 |
| IST_satellite_part.png | SHA-256 | 295df4111e9a421dbe6b24f3de40de7f249fbd74c6a259bbea53a8fdf044e040 |
| mkultra_logs.txt | SHA-256 | 0ab52616800ed2c13273ade923c13eb5ddde7e740ac11ecbcbdc6a676b5b968 d |
| trace3-google-searches. | SHA-256 | b3638e75bbc39c5611d5881457dc96896037251c4d5aa84e287a5bcbd615794 f |
| trace3-important-mails. | SHA-256 | 30069a7f2237f13928726f982efe1dfd1f99c07edd0e16cd60e21d5f730238e0 |
| driver-update.zip | SHA-256 | 8f86f97b310227eac68c619fdf2ae80e93f5298420c1201ea0524bc13931b1f9 |
| update-pckg.desktop | SHA-256 | 3819156932377705b95e7cf18b38a3fe5ca1061d9d4a939acc05457a5ae014e9 |
| shell-1524539510235.p | SHA-256 | 5675a6beb3187d5fa6cd645a0bda566bf7af718975829db96afc7ae560c80331 |

2 Report of all findings

Trace 1

In trace 1, we started to look for HTTP files and found some google searches (trace1-google-searches.zip), regarding mind control and restaurants in Oeiras and a Google Maps image of some markers of restaurants in Oeiras (oeiras_restaurants.png).

Regarding **report.pdf**, the DECO report of restaurant growth in Oeiras, after looking at the discord messages between Mr. Estrela and Mr. Caseiro, we knew that file had also been transferred via HTTP. By searching for report.pdf, a discord attachment of report.pdf was found, as referred to in the conversation. By digging deeper into the downloads made by Estrela, another reference to report.pdf was discovered, it was a link to a mega.nz (cloud storage service) which seemed to need a decryption key, but we were able to get the report.pdf file nevertheless, with this being the means which Miguel firstly downloaded the DECO article after searching on the Internet.

Trace 2

For this trace, we also started to look at the HTTP files present and found a myriad of interesting stuff, including google searches about mind control, MOBICARE and how to do some network scans (trace2-google-searches.zip), a chatGPT conversation in which Miguel Estrela asks questions about the File Transfer Protocol (full_chat_gpt.txt), a CIA (cia_search.html) and wikipedia (MKUltraWiki.html) page about MKUltra, a Google Maps html in the address of MOBICARE (mapsMOBICARE.html) and some discord chats between "miguistar_58253" and "diogo_caseiro_226", one old, regarding the information in trace 1 (past_discord_chat.txt) and some new messages (discord_messages.txt)

Because we saw that Miguel was very interested in FTP, we thought that it was a good idea to search the files transferred in this protocol and found another 3 very interesting files, 2 of which we had already seen. (BankStatement.pdf, MKU Documentation.pdf, RafaelEmail.eml).

Trace 3

Just like before, we started looking at the HTTP files present in the trace and, again, they turned out to be very interesting, including more google searches (trace3-google-searches.zip), this time about phishing emails (from Miguel Estrela's workstation) and about what to do with excess money (from Rafael Calhau's workstation). Besides this, we also found another chatGPT conversation (chat_gpt_conversation.txt) in which Miguel urges the virtual assistant to help him write a phishing email to make it seem like he's Ricardo Prado, the head of the IST IT department. We also found another discord set of messages (discord_chat.txt) in which Estrela says that he is delivering all the files he knows about to João Musk, our initial suspect.

Given that we saw some information about phishing emails, we decided to look deeper for something like that and we encountered a collection of emails (trace3-important-mails.zip), delivered to Rafael Calhau, that showed us how Miguel Estrela fooled him and what he was up to with Virgolino and Adelino (restaurant owner). One of those emails contained a zip attachment (driver-update.zip), which in turn had a supposed .desktop file (update-pckg.desktop) that was really running a malware script (shell-1524539510235.py) meant to extract files from Rafael's computer. Searching for TCP streams that were similar to what the script created, we found some encrypted data, belonging to 3 different files, which we were able to decrypt by reverse engineering

that same script. This data turned out to be 3 very interesting files: Calhau's diary (Rafael_diario.txt), a fragment of the satellite blueprint (IST_satellite_part.png) and the MKUltra logs (mkultra_logs.txt).

3 Analysis of relevant findings

3.1 Do you find any evidence of transfers involving the five hidden documents in the analyzed network traces? What can you determine about the source of these documents?

Trace 1

From searching the first trace, all relevant files had the IP address 194.210.61.136 which is Miguel Estrela's. Some chunks of discord conversations between users miguistar_58253 (Mr. Miguel Estrela) and diogo_caseiro_226 (Diogo Caseiro) were discovered. These were also found in Trace 2 and further analyzed in 3.4). There were google searches made by Estrela related to mind control devices, mind control technology and noninvasive brain computer interfaces which we cannot assume were made from suspicion of the overheard conversations mentioned in the discord chat or if those were just searches out of interest on the topic. We also tracked down some Google searches related to restaurants in Oeiras, with "O Pombalino" being the recurrent one, which happens to be the restaurant that Mr. Caseiro is working at. By analyzing the timestamps of the messages sent between Mr. Caseiro and Mr. Estrela, we know that Estrela was looking things up on Google as they were chatting. On those lookups we were able to find a download of a file from mega.nz (online cloud storage service) which was none other than one of the five hidden documents, the DECO report (report.pdf) that Musk also had in his possession!! Miguel immediately shared it via discord attachments with Diogo and they discussed the possible use of mind control for the growth of revenue in restaurants in Oeiras.

Trace 2

Based on the discord conversations, ChatGPT questions and google searches (which we will present in greater detail in **3.4**), we knew that Miguel Estrela, whose workstation's IP address 194.210.61.136, was getting very suspicious about Rafael Calhau and Virgolino Gonçalves' involvement in the IST satellite launch, thinking that it might have something to do with mind control. In a private discord chat, Estrela says that he will try to break into Virgolino's computer, which he later does successfully. In this illegal access, he finds 3 suspicious documents, which he sends to his workstation through FTP (which he had researched about before), from IP 194.210.61.134 (Virgolino's IP) to 194.210.61.136 (Miguel's IP). Given that he had been investigating the FTP protocol in his chatGPT inquiries, we thought that it was a good idea to search for files sent through FTP on wireshark (File > Export Objects > FTP-DATA...).

We found 3 very interesting files, 2 which we had seen before (BankStatement.pdf, MKU Documentation.pdf), and one that was a new finding (RafaelEmail.eml) - an email from Rafael

Calhau to Virgolino, containing requests to test the MKUltra commands, so that they know they are working properly.

```
From: rafaelcalhau123@hotmail.com
To: virgolinogoncalves@hotmail.com
Subject: Execute the commands asap
Hi Virgolino,
I need you to execute some commands on the MK so we know if it's working properly. Try to direct them to the restaurants but don't go too crazy at first, we are still not sure what the higher modes are capable of.

Keep me posted.

Best regards,
Rafael
```

Trace 3

Coming into this trace, we knew that we still had to find at least the MKUltra logs and the IST Satellite blueprint, both files from the 1st stage of the investigation which we knew we had to find in these traces for everything to make sense.

Just like before, first we searched for any files downloaded through HTTP that might be of interest. Again, we found some incriminating ChatGPT conversations and Discord chats in Miguel Estrela's computer. This time, he was searching for the best way to write a phishing email, disguising himself as head of IT professor Ricardo Prado, and asking teacher Rafael Calhau to update his drivers. We thought that Miguel Estrela might follow through with his intentions of writing such an email and so we dug deeper into this trace, this time searching for emails. We found an email sent from Estrela's workstation IP address, from an email address called "ricardo prado1986@hotmail.com", clearly a fake address, to Rafael Calhau, which we show below:

```
Dear Rafael,

I hope this message finds you well. As part of a routine security upgrade across IST's systems, we've identified the need for all users to update their computer drivers to ensure they are safe from the most recent detected threats. This is part of an ongoing effort by DSI to enhance system security at the Taguspark campus.

The update package is attached to this email.

This update is urgent as a new virus has come to our attention, and so we ask that you complete it within the next 24 hours to avoid any security breaches.

If you have any questions, please feel free to contact the DSI support team.

Thank you for your cooperation.

Best regards,
Ricardo Prado
Head of IT Department (DSI)
IST Taguspark Campus
```

Because of this, we searched all the HTTP downloaded files (File -> Export Objects -> HTTP) for email attachments and we eventually found a zip that was attached to an outlook email. Given that it was the only one, we thought that, most likely, it was the malware driver-update.zip. We

downloaded it (carefully) and found that it contained a .desktop file (**update-pckg.desktop**) that, when executed, ran a python script (**shell-1524539510235.py**). This script, given an IP address and port, specifying the target server, enters a loop and sends constant GET requests. If the server returns download commands, the script encrypts the file it refers to (if it exists) and sends it back to the attacker's server.

Given the contents of this script, we thought that maybe Rafael Calhau was gullible enough to execute it and send sensitive information back to Miguel Estrela's computer. Because of this, we searched for packets on Wireshark that contained the string "file:", exactly like the format present on the malware script. We found 3 TCP packet streams that contained information in the aforementioned format ("file: raw_encrypted_data"). We copied these raw data strings to 3 different text files (first_file.txt, second_file.txt, third_file.txt). Given that we already had the script that encrypted this data, all we had to do was reverse engineer it with another python script (decrypt_script.py) and decrypt the information of these 3 different files.

Just like we hoped, we were able to extract 3 files from this information: the first one being Rafael Calhau's diary, which contained some very serious information, about the mind-control capabilities of IST's satellite and his conversations with Virgolino (which we will delve deeper into on 3.4); the second file is a fragment of the Ariane6 satellite blueprint, which was one of the original files found in this investigation; and the third is also a known file to us, the MKUltra logs regarding mind control commands.

All this proves that these 3 files were in Rafael Calhau's workstation and that he was involved in this great conspiracy. In the end, we were indeed able to find evidence of transfers involving the five hidden documents in the analyzed network traces.

3.2 What can you deduce about the identity of the person(s) responsible for transferring the documents?

Given all the evidence that we were able to gather in this part of the investigation, we believe that it's more than clear that student Miguel Estrela is the person responsible for transferring the documents, as they were all downloaded or transferred to the workstation with IP address number 194.210.61.136. Moreso, because of the extensive conversations he had on Discord with user "diogo_caseiro_226", supposedly a friend of his, we can be absolutely sure that he is the one behind the theft of these documents. In his latest discord chat, he even admitted to giving all of his findings to fellow IST student João Musk:

```
2024-09-08T11:05:34.715000+00:00 | miguistar_58253 | Diogo, I've dug deeper, and what I found is way more dangerous than I initially thought. We need to get this out there, but I don't know how. I can't just keep sitting on this information.
2024-09-08T11:00:46.658000+00:00 | miguistar_58253 | I've got proof of some MKUltra logs, Rafael Calhau's diary, and even blueprints for that satellite we talked about. This is too big for me to handle alone. I've got proof that Rafael and Virgolino are up to something serious.
2024-09-08T11:01:53.559000+00:00 | miguistar_58253 | Yeah, I know... but what else can I do? I can't trust anyone right now.
2024-09-08T11:02:45.261000+00:00 | miguistar_58253 | João? You really think he's the right person to handle this?
2024-09-08T11:03:51.467000+00:00 | miguistar_58253 | You're right. I need to be smart about this. I'll send everything to João. He'll know what to do.
2024-09-08T11:05:06.008000+00:00 | miguistar_58253 | Yeah, it's the safest option. João can make sure the right people see it without tipping off Rafael and Virgolino.
2024-09-08T11:05:28.584000+00:00 | miguistar_58253 | I will. And thanks for pointing me in the right direction. I didn't know what to do with all this until now.
```

To give a brief summary in regard to how he got ahold of all the documents found in João Musk's Sigma in the beginning of this investigation, Mr. Miguel Estrela looked up the Deco Report online when he got suspicious about the activity of his teachers, then proceeded to hack into Virgolino Gonçalves' computer to retrieve (through FTP) the files BankStatement.pdf, MKU Documentation.pdf and RafaelEmail.eml. In his final move, Estrela devised a phishing executable file that ran a script to retrieve files from the attacked computer, who sent it to teacher Rafael Calhau, who fell for it. This way, he was able to collect Rafael's diary, the blueprint of the Ariane6 satellite and the MKUltra logs, probably executed by him. All the metadata of these operations and network packets suggest that Miguel Estrela was the culprit - the most damning being the phishing email came from his computer's IP and the files transferred through FTP were transferred to that same computer. We can assure Mr. Ricardo Prado with absolute certainty that he was the one that caused the leakage of these sensitive files. It is also worth noting that he had some legitimacy in being the whistleblower to this grave conspiracy.

3.3 Can you establish a timeline of key events that explains how the data exfiltration occurred and how the documents ultimately ended up in João Musk's possession?

Yes, here is the timeline regarding trace 1:

| Timestamp | Description | Source | Notes: |
|-----------------------------------|--|--|--|
| | | | Miguel Estrela's IP Address is 194.210.61.136; |
| | start of past discord chat between users miguistar_58253 (Miguel | trace2.pcapng - past_discord_chat.txt | |
| 05-09-2024 09:46:59.421000+00:00 | Estrela) and his friend Diogo Caseiro (diogo_caseiro_226) | | |
| 05-09-2024 09:53:39.579976243 UTC | google searches 194.210.61.136 restaurants in oeiras | trace1.pcapng - google searches | Prof. Rafael Calhau's IP Address is 194.210.61.135 |
| 05-09-2024 09:54:28.324743280 UTC | Tripadvisor map of restaurants in oeiras | trace1.pcapng - google maps oeiras_restaurants.jpeg | |
| 05-09-2024 09:54:39.932301719 UTC | google searches 194.210.61.136 pombalino oeiras | trace1.pcapng - google searches | |
| 05-09-2024 09:55:32.325636706 UTC | google searches 194.210.61.136 pombalino oeiras location | trace1.pcapng - google searches | Virgolino Gonçalves' IP Address is |
| | google searches 194.210.61.136 nextmind noninvasive brain computer | trace1.pcapng - google searches | 194.210.61.134; |
| 05-09-2024 09:57:30.751622553 UTC | interface | | |
| | google searches 194.210.61.136 newsweek.com remote mind control | trace1.pcapng - google searches | |
| 05-09-2024 09:57:54.641132897 UTC | technology world first | | |
| 05-09-2024 09:58:11.471054578 UTC | google searches 194.210.61.136 mind control devices | trace1.pcapng - google searches | Diogo Caseiro (diogo_caseiro_226) works at the |
| | download of report.pdf from mega.nz by miguel_estrela after | trace1.pcapng - | restaurant "O Pombalino" |
| | searching - IP 194.210.61.136 | https://mega.nz/e2f681bc-814a-4d4b-88a6-e7b547520cb4 | |
| 05-09-2024 10:00:12.147846932 UTC | | report.pdf download | |
| | report.pdf sent from 194.210.61.136 (miguel estrela) to | trace1.pcapng - discord-attachments-uploads report.pdf | |
| 05-09-2024 10:01:11.275830614 UTC | diogo_caseiro_226 through discord attachments | | |

Next, here is the timeline regarding trace 2:

| 05-09-2024 10:03:22.432000+00:00 | end of past discord chat between users miguistar_58253 (Miguel Estrela) and his friend Diogo Caseiro (diogo_caseiro_226) | trace2.pcapng - past_discord_chat.txt |
|--|--|---------------------------------------|
| 06-09-2024 20:44:37 UTC | google searches 194.210.61.136 how to do arp scan | trace2.pcapng - google searches |
| 06-09-2024 20:45:41 UTC | google searches 194.210.61.136 how to do port scan | trace2.pcapng - google searches |
| 06-09-2024 20:47:03.114000 to 06-09-2024 20:49:53.229000 | ChatGPT conversation with destination IP - 194.210.61.136 | trace2.pcapng - full_chat_gpt.txt |
| 06-09-2024 20:51:20 UTC | file sent from 194.210.61.134 to 194.210.61.136 by Mr. Estrela | trace2.pcapng - BankStatement.pdf |
| 06-09-2024 20:51:25 UTC | file sent from 194.210.61.134 to 194.210.61.136 by Mr. Estrela | trace2.pcapng - MKU Documentation.pdf |
| 06-09-2024 20:51:36 UTC | email from rafaelcalhau123@hotmail.com to virgolinogoncalves@hotmail.com with subject: "Execute the commands asap", file sent from 194.210.61.134 to 194.210.61.136 by Mr. Estrela | trace2.pcapng - RafaelEmail.eml |
| 06-09-2024 20:52:55 UTC | google searches 194.210.61.136 what is mku | trace2.pcapng - google searches |
| 06-09-2024 20:53:13 UTC | google searches 194.210.61.136 what is mku mind control | trace2.pcapng - google searches |
| 06-09-2024 20:53:19 UTC | mkultra wikipedia page search - 194.210.61.136 | trace2.pcapng - MKUlraWiki.html |
| 06-09-2024 20:53:42.138351422 UTC | cia search - 194.210.61.136 | trace2.pcapng - cia_search.html |
| 06-09-2024 20:54:02 UTC | google searches - 194.210.61.136 mobicare | trace2.pcapng - google searches |
| 06-09-2024 20:54:24 UTC | google maps mobicare address - 194.210.61.136 | trace2.pcapng - mapsMOBICARE.html |
| 06-09-2024 from 20:57:04.300000+00:00 to 21:00:27.292000+00:00 | new discord messages from miguistar_58253 all sent from IP address 194.210.61.136 about accessing Virgolino's computer | trace2.pcapng - discord_messages.txt |

And finally, here is the timeline regarding trace 3:

| 08-09-2024 10:44:06 UTC | google searches 194.210.61.136 how to establish a connection using ssh port | trace3.pcapng - google searches |
|---|---|---|
| 08-09-2024 10:44:13 UTC | google searches 194.210.61.136 how to use ssh to connect to a remote server linux or windows | trace3.pcapng - google searches |
| 08-09-2024 10:45:37 UTC | google searches 194.210.61.136 phishing email example | trace3.pcapng - google searches |
| 08-09-2024 from 10:47:14 to 10:47:39 | ChatGPT conversation - 194.210.61.136 | trace3.pcapng - chat_gpt_conversation.txt |
| 08-09-2024 10:49:17 UTC | google searches 194.210.61.135 what to do with excess money | trace3.pcapng - google searches |
| 08-09-2024 10:50:01 UTC | creation of phishing email by 194.210.61.136 | trace3.pcapng - service.svc mail json file |
| 08-09-2024 10:52:36 UTC | reception and view of phishing email by 194.210.61.135 | trace3.pcapng - service.svc mail json file |
| 08-09-2024 on 10:52:50 UTC | malware driver-up date downloaded by 194.210.61.135 | trace3.pcapng - driver-update.zip |
| 08-09-2024 10:53:58 UTC | | trace3.pcapng - service.svc mail json file |
| | response to phishing email by 194.210.61.135 | |
| 08-09-2024 10:55:18 UTC | 1st file (diary) - file sent from 194.210.61.135 to 194.210.61.136 by Mr. Estrela | trace3.pcapng - first_file.txt -> Rafael_diario.txt |
| 08-09-2024 10:55:42 UTC | 2nd file (piece of the ist satellite image) file sent from 194.210.61.135 to 194.210.61.136 by Mr. Estrela | trace3.pcapng - second_file.txt -> IST_satellite_part.png |
| 08-09-2024 10:56:29 UTC | 3rd file (mkultra logs) file sent from 194.210.61.135 to 194.210.61.136 by Mr. Estrela | trace3.pcapng - third_file.txt -> mkultra_logs.txt |
| 08-09-2024 from 10:59:34 to 11:05:28 | last discord chat from miguistar_58253 to Diogo, talking about sending all the information to Musk because he is the "right person to handle this" - 194 210.61.136 | trace3.pcapng - discord_chat.txt |

3.4 Based on all the evidence gathered in this investigation, what can you infer regarding the conspiracy hypothesis that initiated this inquiry? Did you find any additional evidence supporting it? If so, who might be the actors involved, and what steps would you recommend for the next phase of the investigation?

Since the beginning of our investigation, we have changed our focus quite a few times. Firstly, we thought João Musk was the central character of this conspiracy and that he was trying to use fenix credentials in some sort of Técnico mind control masterplan. In time, we realized that those 2 things were mostly unrelated and that this was way bigger than João Musk. With the network analysis we did in the third part of our examination, we realized that this conspiracy involved people in way higher places than students - IST teachers and researchers - and that students were the ones trying to alert the public to the danger of this mind control program.

This way, and now shifting focus from Miguel Estrela to the real culprits of this conspiracy, the teachers and researchers on the IST Satellite project - Virgolino Gonçalves and Rafael Calhau,

we'll guide you through every piece of incriminating evidence that we found against them, this way concluding our investigation.

Regarding trace 1, there's not much information that could be useful to this conspiracy, it's more about Miguel's search, motivated by the conversations he overheard. We found chunks of discord conversations between users miguistar_58253 (Mr. Miguel Estrela) and diogo_caseiro_226 (Diogo Caseiro), Tripadvisor and TheFork searches related to restaurants in Oeiras, searches about mind control and we found the DECO report as explained in **3.1**).

Moving on to our findings in trace 2, our first discovery that suggested that something was amiss were the past discord conversations of Miguel Estrela with Discord user and fellow friend "diogo_caseiro_226" (also found in trace 1). At this point in our investigation, we believe we can assume that Mr. Estrela was being candid in his concern about this satellite project and in the intentions of its researchers. In the following discord conversation, he expresses his concern about something he overheard from Virgolino and Rafael about mind control and restaurants in Oeiras. Here is a piece of it:

```
[2024-09-05T09:50:59.866000+00:00Z] diogo_caseiro_226: How's the satellite project going? You guys made big moves with the launch, mad props!
 [2024-09-05T09:51:13.165000+00:00Z] miguistar_58253: Well, about that, something's been very sus lately...
 [2024-09-05T09:51:18.576000+00:00Z] diogo_caseiro_226: Erm... what the sigma? What do you mean?
2024-09-05T09:51:36.639000+00:00Z] miguistar_58253: Well, one time I stayed at work a little bit late, doing some last minute stuff, and I heard
Virgolino (you might know about him, he's that kinda weird dude) and Rafael Calhau talking about some mind control stuff and restaurants in Oeiras.

[2024-09-05T09:51:46.829000+00:00Z] miguistar_58253: I thought it would be nothing, but then I let out a sneeze.

[2024-09-05T09:51:59.927000+00:00Z] miguistar_58253: I looked at them and they seemed terrified, as if I had overheard the most important thing ever, which made me very suspicious... It's probably nothing though, who would do such a thing?
[2024-09-05T09:52:16.953000+00:00Z] diogo_caseiro_26: Well, funny you mention that! Pombalino has been getting a lot more people than usual
[2024-09-05T09:52:27.161000+00:00Z] diogo_caseiro_226: Our boss even hired a lot of new people. (there's this really beautiful girl now too, oh
[2024-09-05T09:52:36.199000+00:00Z] miguistar_58253: Stay on topic man! [2024-09-05T09:52:43.682000+00:00Z] diogo_caseiro_226: Yea, yea! Sorry.
 [2024-09-05T09:52:55.344000+00:00Z] diogo_caseiro_226: Anyways, you think people are being mind controlled to go eat at Pombalino?
[2024-09-05T09:53:13.931000+00:00Z] diogo_caseiro_226: What's next? Getting a girlfriend via mind control?
 [2024-09-05T09:53:15.500000+00:00Z] diogo_caseiro_226: Get out of here.
 .
[2024-09-05T09:53:24.262000+00:00Z] miguistar_58253: I just can't shake that feeling that something's wrong with the satellite.
 [2024-09-05T09:58:32.306000+00:00Z] miguistar_58253: Look man, you know I never liked Virgolino.
 [2024-09-05T09:58:41.162000+00:00Z] miguistar_58253: He was always up to something shady..
[2024-09-05T09:58:51.542000+00:00Z] miguistar_58253: Remember when I caught him in a weird empty lot in Avenida de Ceuta? And then that whole
weird situation with the Millenium Tower happened?
[2024-09-05T09:58:59.948000+00:00Z] miguistar_58253: And now he's involved in this…
[2024-09-05T09:59:17.894000+00:00Z] diogo_caseiro_226: Yeah, that was really weird, especially his weird meetings with the eyepatch guy... he
scared the shit out of me, not gonna lie.
[2024-09-05T10:01:04.968000+00:00Z] miguistar_58253: Anyways, I did some research online about it and I found this DECO report, take a look at it. [2024-09-05T10:02:01.048000+00:00Z] diogo_caseiro_226: So it's real... people really have been going to restaurants in Oeiras more often, it's not
 just here at Pombalino too.
[2024-09-05T10:02:23.543000+00:00Z] miguistar_58253: Yeah, it doesn't seem related to anything, at least that I know of. [2024-09-05T10:02:32.145000+00:00Z] miguistar_58253: Do you have any ideas of what it might be?
[2024-09-05T10:02:37.972000+00:00Z] diogo_caseiro_226: I don't think anything has changed, if anything, people should be coming here less.
[2024-09-05T10:02:44.713000+00:00Z] diogo_caseiro_226: Remember the legionella cases?
 [2024-09-05T10:02:56.284000+00:00Z] miguistar_58253: Good point... This is all becoming very suspicious.
[2024-09-05T10:03:09.458000+00:00Z] miguistar_58253: Well, tonight I'm going to try to take a look at Virgolino's computer. He usually leaves it
 on when he leaves at night, for some reason. See you.
 2024-09-05T10:03:16.981000+00:00Z] diogo_caseiro_226: Good luck man!
[2024-09-05T10:03:22.432000+00:00Z] diogo_caseiro_226: This whole thing is very weird.
```

Besides this, as we already mentioned, he was also able to retrieve Virgolino's bank statement, which shows that he came into a great sum of money, not long ago, from an entity called "ERCE.LTA". Very suspicious activity indeed. He also found the MKUltra documentation on Virgolino's workstation, meaning that he was interested in knowing more about this shady program. Miguel went on to search about MKUltra in Wikipedia and the CIA website.

Moreso, he discovered an email sent from Rafael Calhau to Virgolino Gonçalves (that we showed earlier), that contains information about Rafael's intention to try out the MKUltra commands, suggesting that they first direct them to Oeiras restaurants.

After discovering all of this, Miguel went on to vent about it to his discord friend, realizing that he was involved in a very dangerous and unethical experimentation:

```
[2024-09-06T20:57:04.300000+00:00Z] miguistar_58253: Hey Diogo! You won't believe what I just found.
[2024-09-06T20:57:54.571000+00:00Z] miguistar_58253: I managed to access Virgolino's computer and found some shady things. There is a bank statement with a weird transaction for a "MKU-2784"; I searched for it and seems to be linked to mind control!
[2024-09-06T20:58:16.753000+00:00Z] miguistar_58253: Yeah, but there's more, I also found the documentation of an API related to it and an email from Rafael telling him to execute some commands on it.
[2024-09-06T20:58:47.890000+00:00Z] miguistar_58253: I'an thinking of exposing this, people need to know what's going on.
[2024-09-06T20:59:12.389000+00:00Z] miguistar_58253: I get that it's risky, but if it's shady, it has to come out
[2024-09-06T20:59:39.808000+00:00Z] miguistar_58253: I know, I'll be cautious
[2024-09-06T20:59:50.860000+00:00Z] miguistar_58253: I'll try to see if I can get something from Rafael as well
[2024-09-06T21:00:27.292000+00:00Z] miguistar_58253: Will do!
```

In continuation, we reach the most incriminating trace of all, trace 3. Before moving on to the files extracted by Miguel, we want to refer that a suspicious google search was made from Calhau's workstation IP address - "what to do with excess money", suggesting that he had some sort of deal with Oeiras restaurants and had become rich because of it, or has been profiting off the MKUltra program in some other way - something that was being hinted at in one of his emails.

From the files retrieved via phishing from Rafael Calhau's workstation, we have a great deal to chew on. Regarding his diary, Rafael makes a series of compromising statements:

```
11:00 AM

Had another meeting with Virgolino about MKULTRA's integration into the ISTSat. Virgolino keeps snacking on those sardine crackers and leaving crumbs in the satellite clean room. I'm seriously concerned that we might end up sending an ant colony into space along with the mind-control device. He assured me the ants "won't affect the signal." It's hard to know when he's joking.

3:00 PM

The mayor of Oeiras called. He always calls at the worst possible times, like when I'm just about to escape into a moment of peace between classes. He asked if the device can target individuals specifically. I told him it's still in the testing phase, but the idea of "influencing local elections" was apparently on his mind. Must be hard, being a politician in Oeiras. I suggested he focus on more local issues like, I don't
```

```
9:00 AM
I woke up to the sound of my phone ringing. The mayor again. He had an idea to install a backup MKULTRA device at the Oeiras City Hall "just in case." I told him it's a satellite project, not a home security system. He wasn't pleased, but I distracted him by suggesting we name one of the satellite components after him.

12:00 PM
Virgolino is now claiming that the satellite could "potentially" control the thought patterns of small mammals. I told him that was a hard ethical boundary for me. He just shrugged and said, "Just testing the limits." He then asked me what I thought the mayor of Oeiras would do with an army of telepathically controlled guinea pigs. I didn't respond.
```

10:30 AM
ISTSat is finally entering the final testing phases. Virgolino insisted we run a simulation using live pigeons. He said pigeons are "the perfect test subjects for mind control." I'm not sure what's more worrying—the fact that he said this, or that the mayor of Oeiras is now onboard with pigeon experimentation. I'm 90% sure they've been texting each other behind my back.

From these diary entries, we can clearly see that, together with Virgolino and the mayor of Oeiras, Rafael Calhau is engineering a plan to integrate mind control operations into IST's satellite. All of them appear to be very interested in the capabilities of this MKUltra program.

Besides that, Miguel also gained access to the MKUltra commands log, which shows what those two evil teachers have been up to all the way since July. It is fairly obvious that they had been testing this program on the population of Oeiras, implanting ideas into their brain such as:

```
"endpoint": "/api/MKUltra/idea",
    "parameters": {
        "session_id": "session_k651w1r",
        "target_type": "region",
        "latitude": 38.6973,
        "longitude": -9.30836,
        "radius": 3,
        "idea": "I feel like going tonight to the restaurant 'O Pombalino' to have dinner"
        },
        "response": {
            "status": "started",
            "message": "Idea implanted in the region centered at (38.6973, -9.30836)."
        }
},
```

Concluding, and looking back at the monstrous amount of evidence we have against the teachers Virgolino Gonçalves and Rafael Calhau, we urge that swift action be taken against them, so that they are no longer in control of the IST Satellite research. There also needs to be a deeper and more prolonged investigation about what they managed to send out into space, to ensure that it will never be used for mind control again.