

SOC282 - Phishing Alert - Deceptive Mail Detected

Hey, Today I will write about investigation of “SOC282 - Phishing Alert - Deceptive Mail Detected”

Before we begin lets understand some keywords.

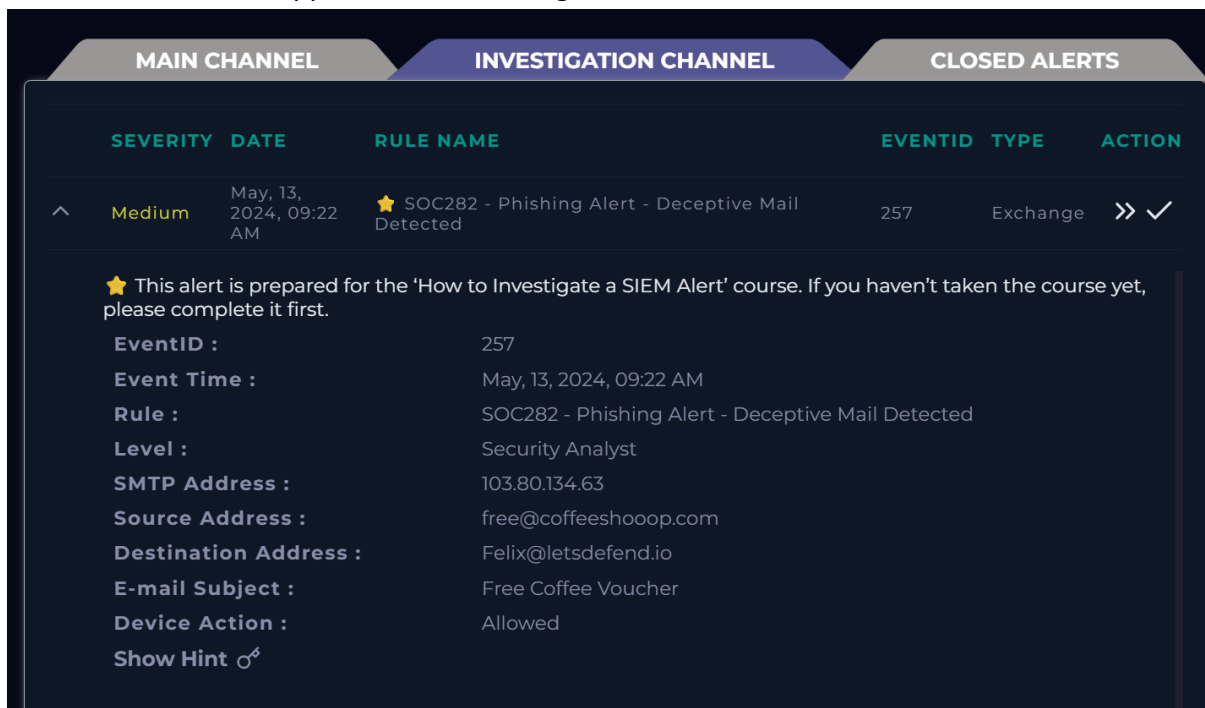
Phishing: It is a type of cyberattack where someone tricks you into giving away sensitive information like passwords, OTPs, bank details, or personal data by pretending to be a trusted person or organization.

Playbook: They are crucial for a Security Operations Center for several reasons. A couple of those reasons are Consistency and Standardization. Playbooks ensure that incident responses are handled consistently across the team. By standardizing procedures, SOC analysts can respond to threats in a uniform manner, reducing the chances of errors or missed steps.

VirusTotal: It is a free tool used by analyst for scanning URLs, IP addresses, and domains for malicious content

Now let’s start investigating

This is the alert that appears in our investigation channel.



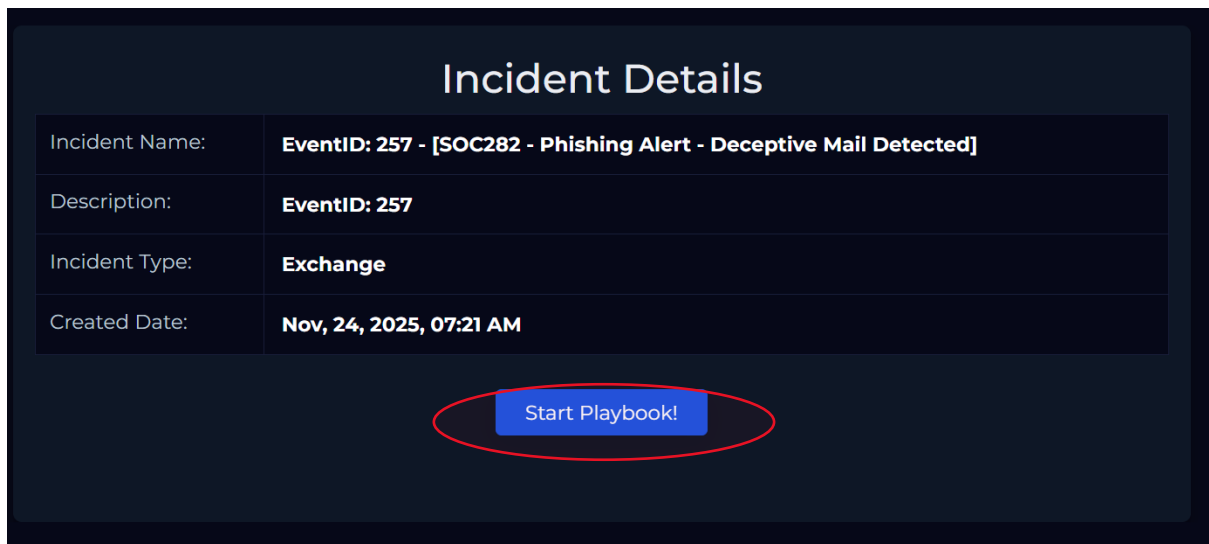
The screenshot displays a SIEM alert interface with three tabs: MAIN CHANNEL, INVESTIGATION CHANNEL (selected), and CLOSED ALERTS. The alert is titled "SOC282 - Phishing Alert - Deceptive Mail Detected" and is categorized as "Medium" severity. The alert details include:

SEVERITY	DATE	RULE NAME	EVENTID	TYPE	ACTION
Medium	May, 13, 2024, 09:22 AM	★ SOC282 - Phishing Alert - Deceptive Mail Detected	257	Exchange	>> ✓

Below the table, a message states: "★ This alert is prepared for the 'How to Investigate a SIEM Alert' course. If you haven't taken the course yet, please complete it first." The alert details are as follows:

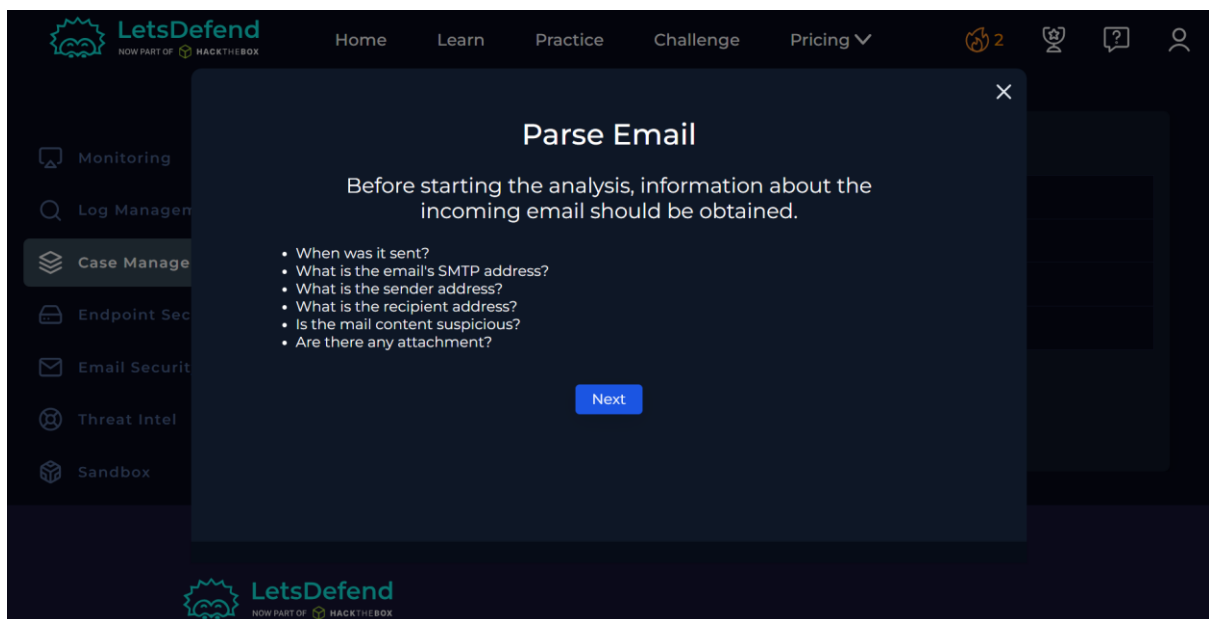
EventID :	257
Event Time :	May, 13, 2024, 09:22 AM
Rule :	SOC282 - Phishing Alert - Deceptive Mail Detected
Level :	Security Analyst
SMTP Address :	103.80.134.63
Source Address :	free@coffeeshoop.com
Destination Address :	Felix@letsdefend.io
E-mail Subject :	Free Coffee Voucher
Device Action :	Allowed
Show Hint	🔔

Let’s start with the playbook

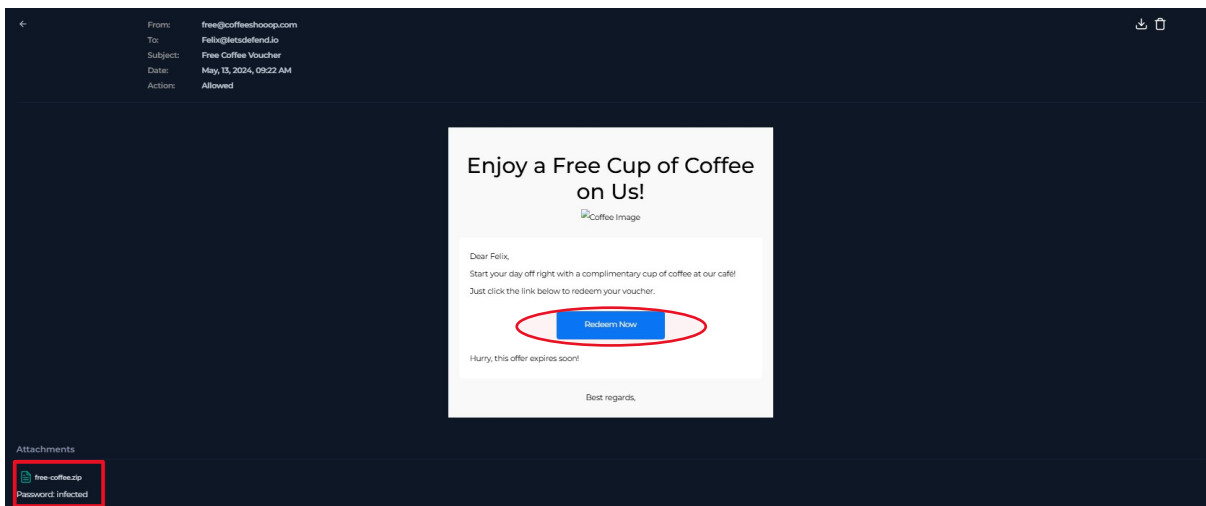


Click on >> Start Playbook button

The first step of the playbook is asking us to obtain the information about the alert

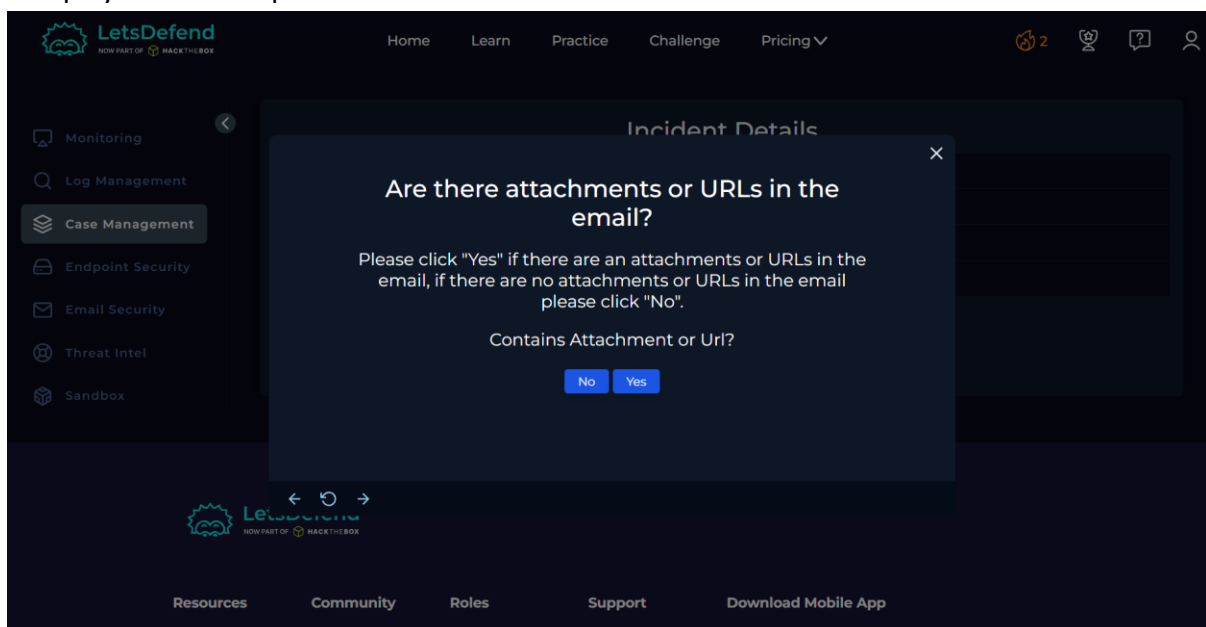


- When was it sent?
May, 13, 2024, 09:22 AM
- What is the email's SMTP address?
103.80.134.63
- What is the sender address?
free@coffeeshoop.com
- What is the recipient address?
Felix@letsdefend.io
- Is the mail content suspicious?
Yes, the mail contains suspicious content. The attacker is trying to trick the user by sending free vouchers!

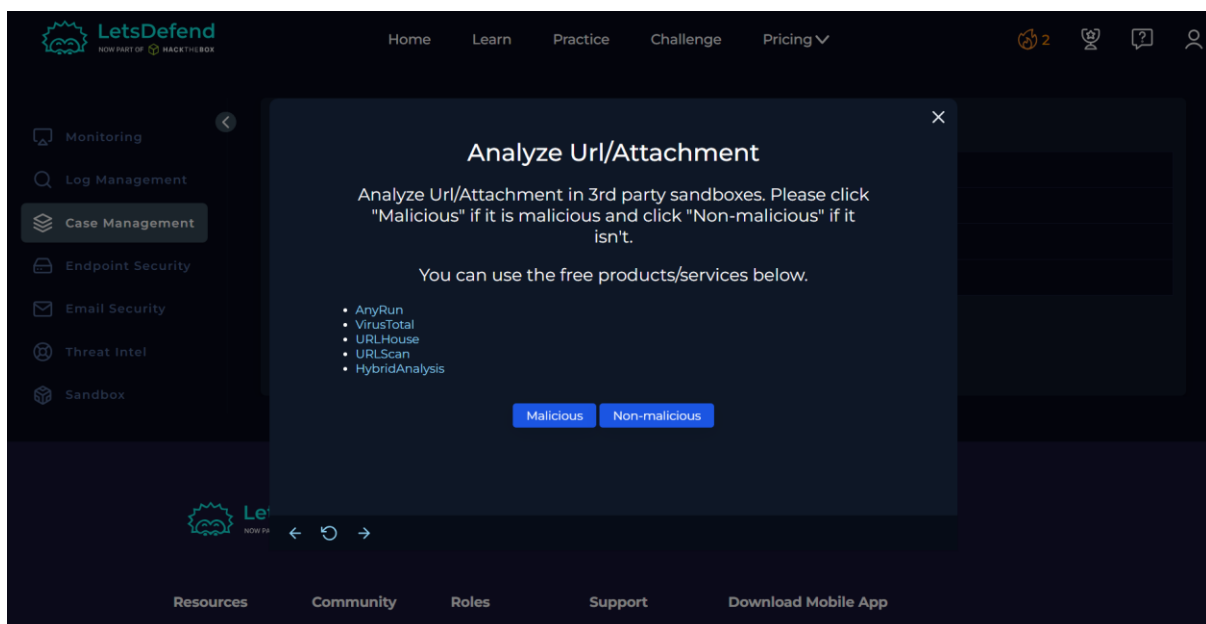


- Are there any attachment?
Yes, there is an attachment with file name **free-coffee.zip**

The playbook's next phase is to look for attachments



Click on >> Yes, because we found both attachment and URL in the email



Let us analyze the attached URL on VirusTotal

The screenshot shows the VirusTotal web interface. At the top, a search bar contains the URL: `https://download.cyberlearn.academy/download/download?url=https://files-ls.s3.us-east-2.amazonaws.com/59cbd215-76ea-434d-93ca-4df`. Below the search bar, a summary card indicates that 9/98 security vendors flagged this URL as malicious. The URL is listed as `https://download.cyberlearn.academy/download/download?url=https://files-ls.s3.us-east-2.amazonaws.com/59cbd215-76ea-434d-93ca-4df` with a status of 200 and content type of `text/html; charset=utf-8`. The last update was 1 day ago. Below this, there are tabs for DETECTION, DETAILS, and COMMUNITY. A banner encourages joining the community. The 'Security vendors' analysis' section shows a table of results:

Vendor	Result
alphaMountain.ai	Malicious
BitDefender	Malware
CyRadar	Malicious
Forcepoint ThreatSeeker	Malicious
Fortinet	Malware
G-DATA	Malware
Lionic	Malware
Sophos	Malware

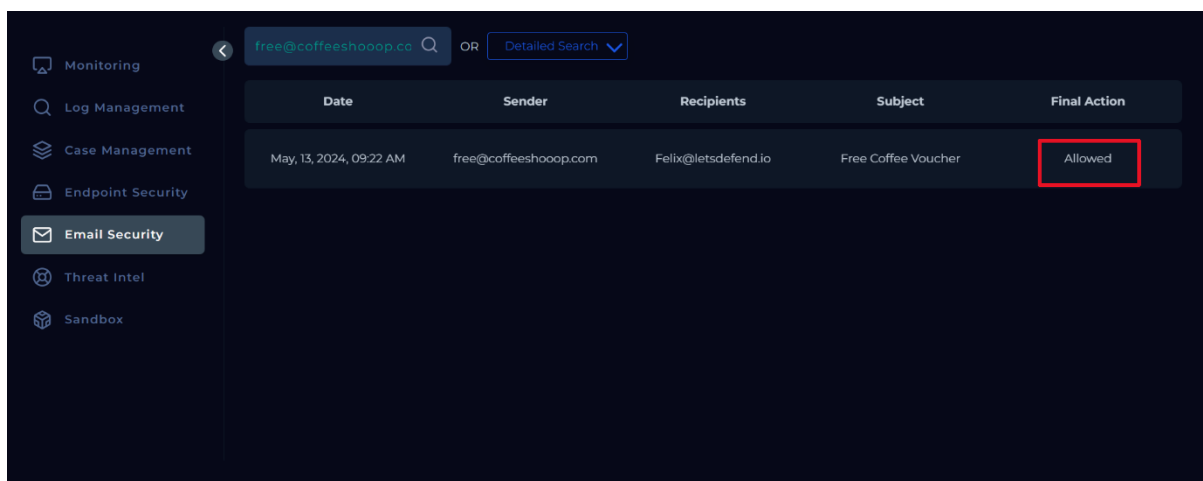
The URL is flagged as malicious!

The screenshot shows the Hybrid Analysis web interface. The 'Analysis Overview' section displays submission details for a file named `59cbd215-76ea-434d-93ca-4d6aec3bac98-free-coffee.zip`. The file is 30KiB, type is `application/zip`, and SHA256 is `6f33ae4b134c49faa14517a275c039ca1818b24fc2304649869e399ab2fb389`. It was submitted on 2024-07-04 13:19:58 (UTC) and last scanned on 2025-01-21 05:07:31 (UTC). The 'Anti-Virus Results' section shows a 'MetaDefender' multi-scan analysis result, which is 'Malicious (2/23)'. A 'Request Report Deletion' button is visible. The 'Analysis Overview' sidebar on the right lists 'Anti-Virus Scanner Results', 'Relations', 'Additional Context', and 'Community (6)'. A 'Back to top' link is also present.

Click on >> Malicious

The screenshot shows the LetsDefend web interface. The 'Incident Details' section is active, displaying a modal window titled 'Check If Mail Delivered to User?'. The modal contains the text: 'Answer the following question by determining whether the e-mail is delivered by looking at the "device action" part of the alert details.' Below this text are two buttons: 'Delivered' and 'Not Delivered'. The background interface shows a sidebar with navigation options: Monitoring, Log Management, Case Management, Endpoint Security, Email Security, Threat Intel, and Sandbox. The top navigation bar includes Home, Learn, Practice, Challenge, and Pricing. The bottom navigation bar includes Resources, Community, Roles, Support, and Download Mobile App.

Let us go to Email Security page and find this out

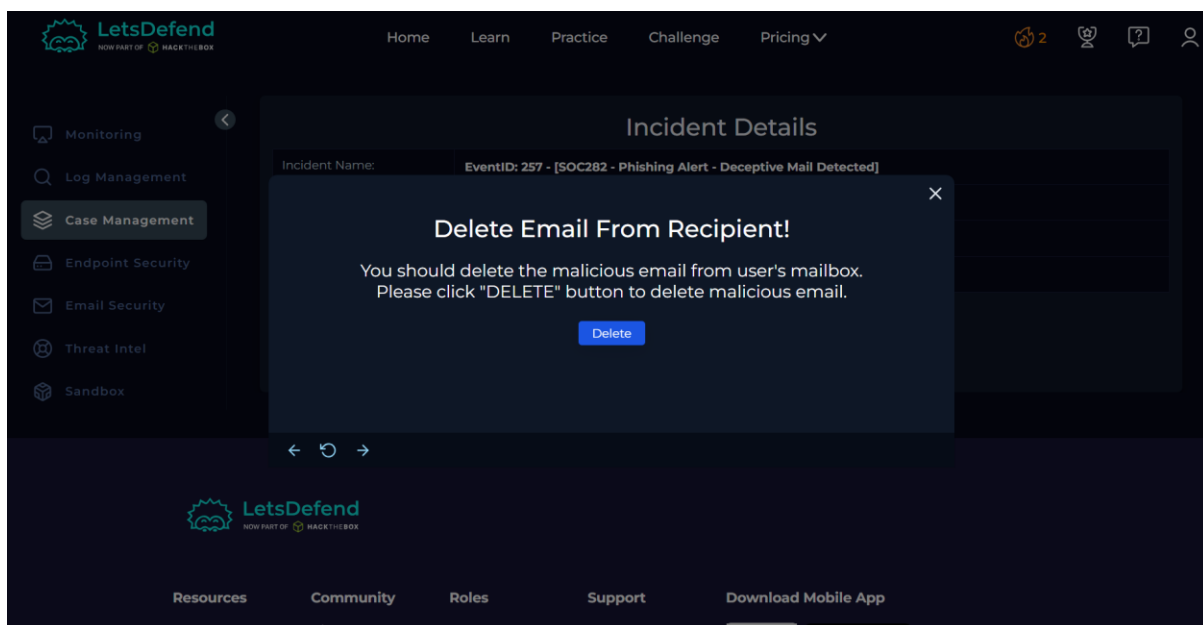


The screenshot shows the 'Email Security' section of the LetsDefend dashboard. A search bar at the top contains the email address 'free@coffeeshoop.co'. Below the search bar is a table with the following columns: Date, Sender, Recipients, Subject, and Final Action. A single row is displayed with the following data: Date: May, 13, 2024, 09:22 AM; Sender: free@coffeeshoop.com; Recipients: Felix@letsdefend.io; Subject: Free Coffee Voucher; Final Action: Allowed. The 'Allowed' text is highlighted with a red rectangle.

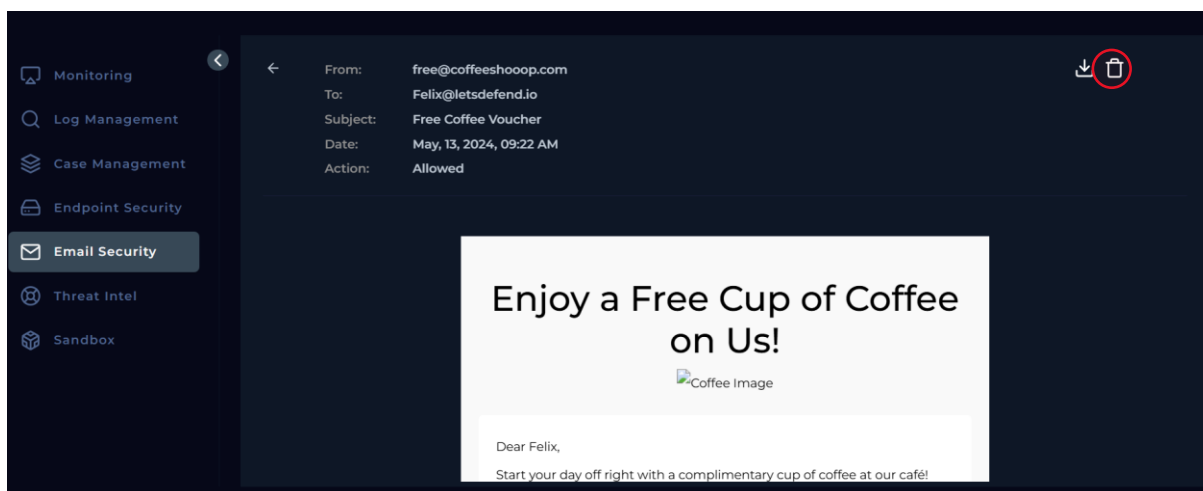
Date	Sender	Recipients	Subject	Final Action
May, 13, 2024, 09:22 AM	free@coffeeshoop.com	Felix@letsdefend.io	Free Coffee Voucher	Allowed

As we can see the final action is displayed as **Allowed** that means the message was delivered to the user.

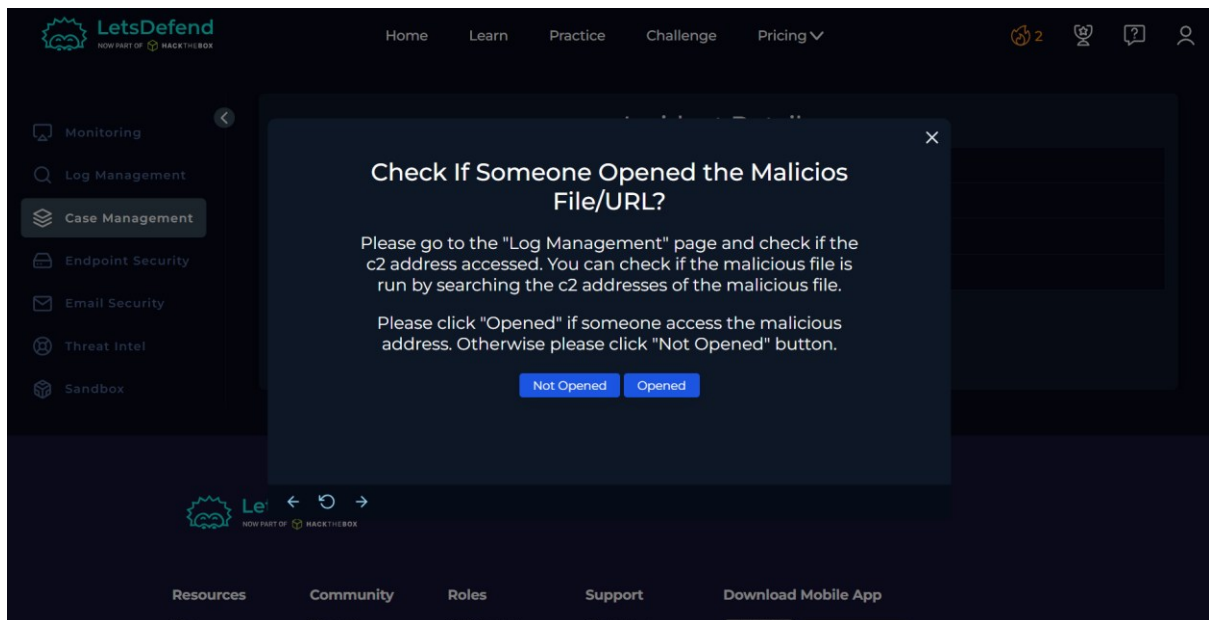
Click on >> Delivered



For this go to Email Security Page and delete the mail



Click on >> Delete

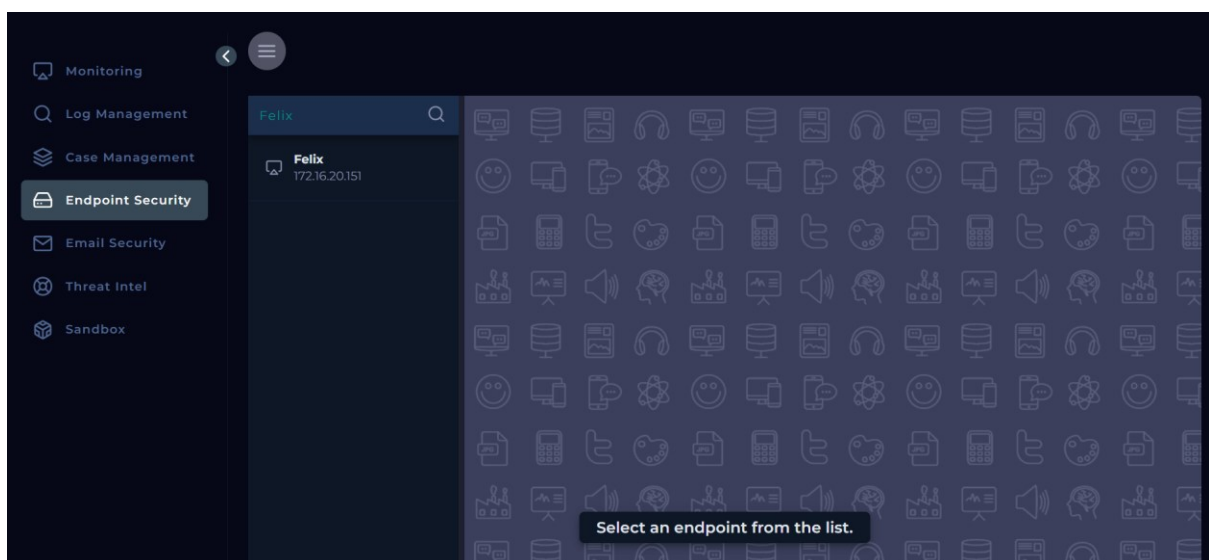


To find this we need to go to Endpoint Security Page, as we know the users email address we can find out his name

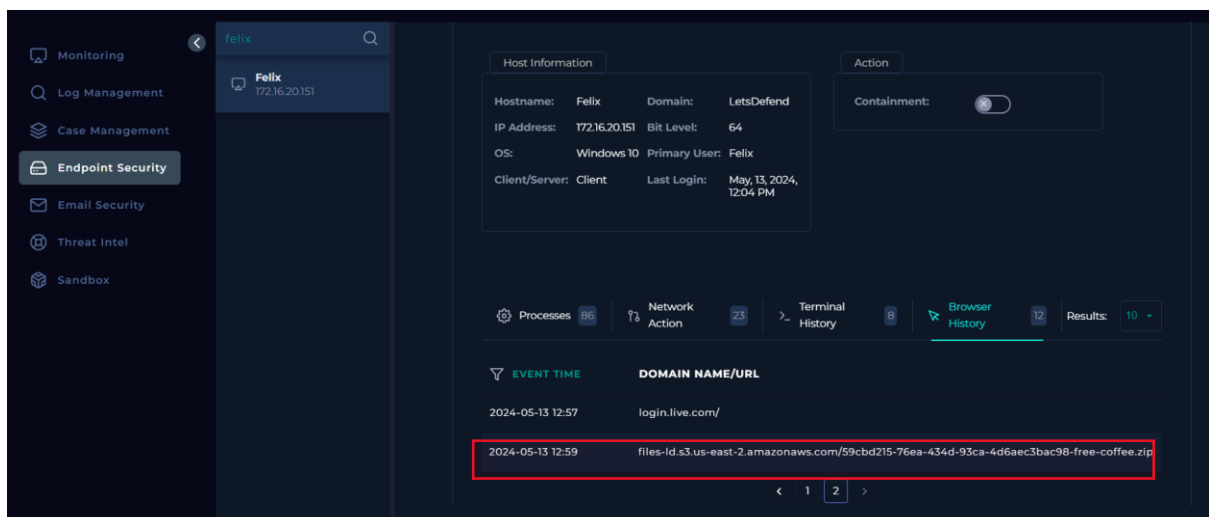


So the name of the user is **Felix**.

Search the same of the EDR page

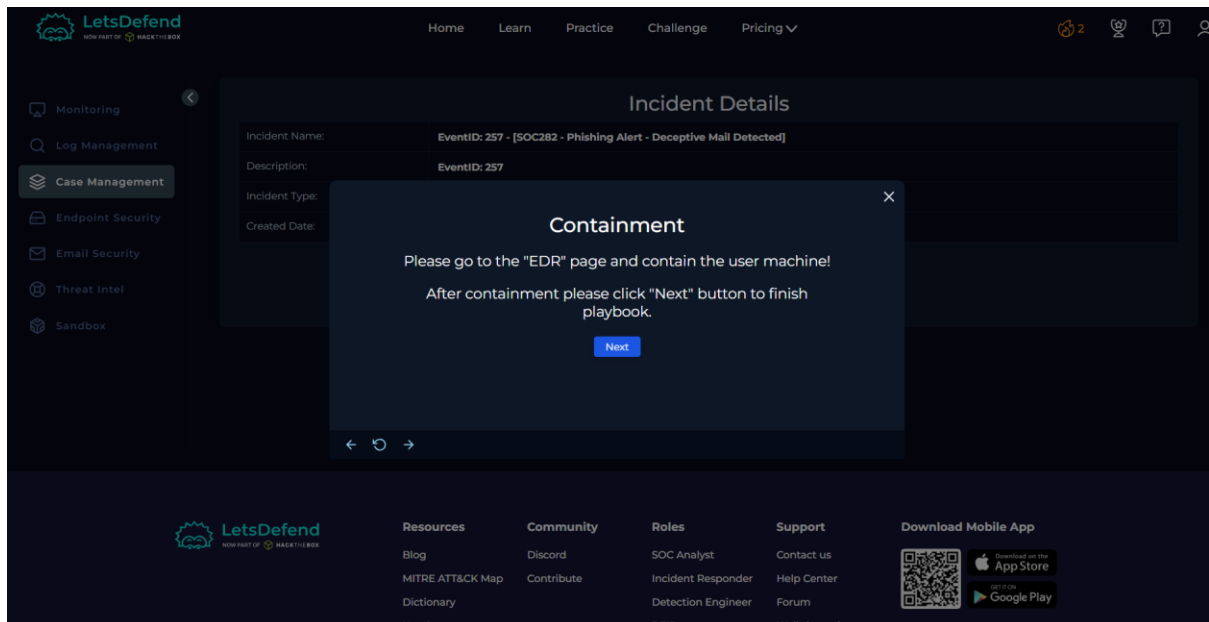


Click on >> Felix

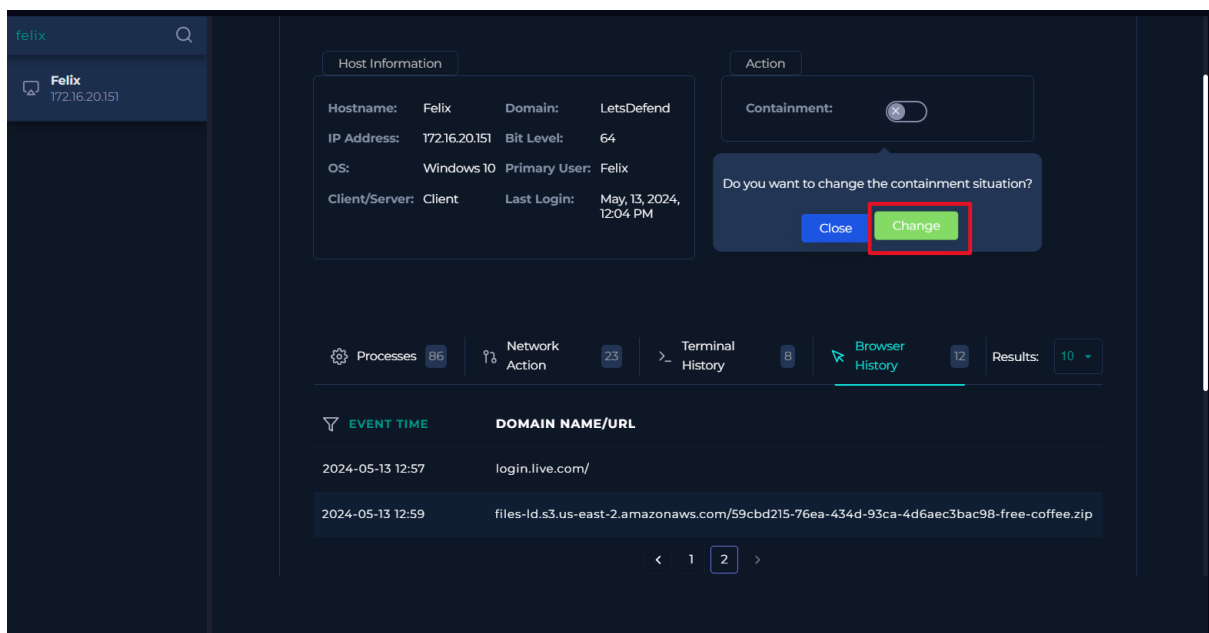


As we can see that the user has opened the malicious URL

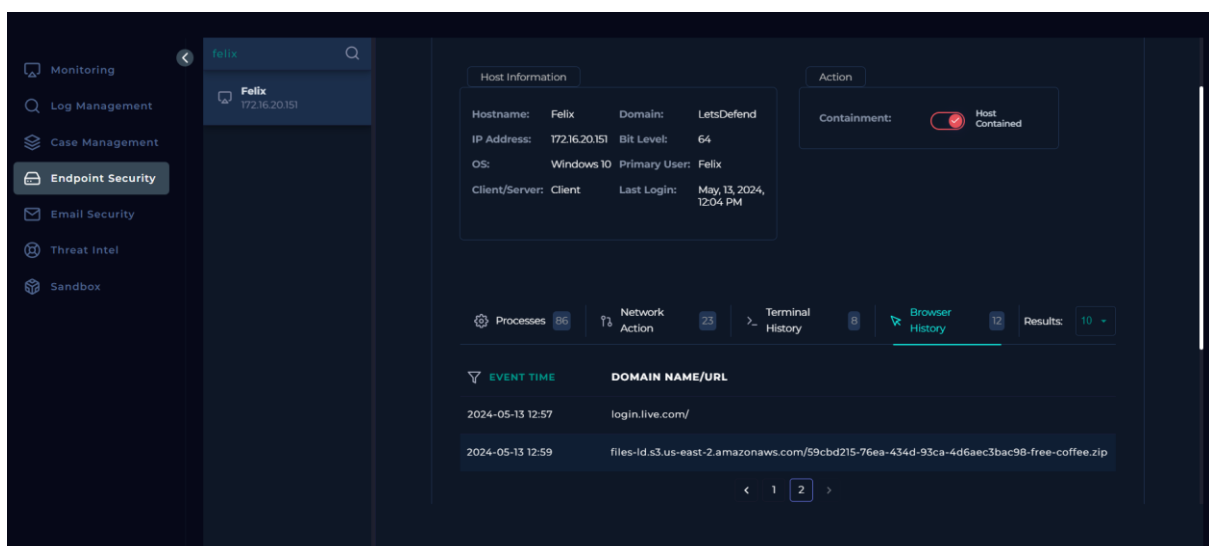
Click on >> Opened



We need to make sure that this infected machine does not infect other systems connected to the same network. So, Isolate the infected machine

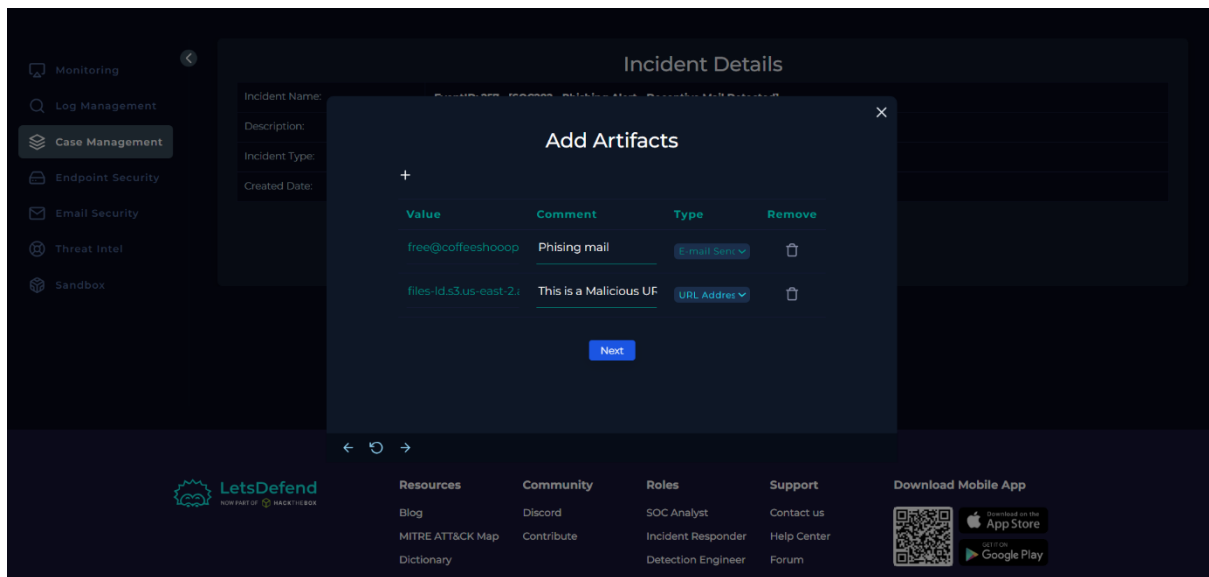


Click on >> Change



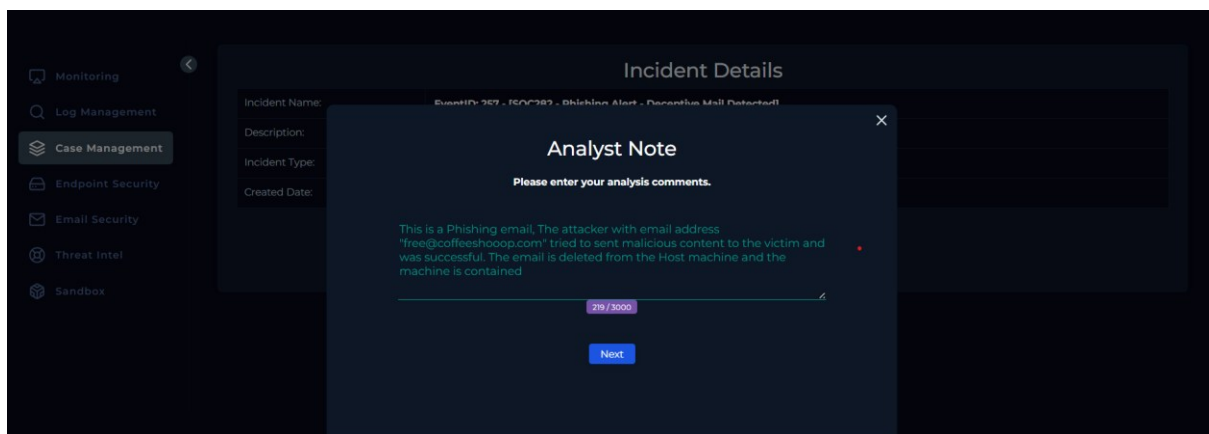
The Host is now contained

Click on >> Next

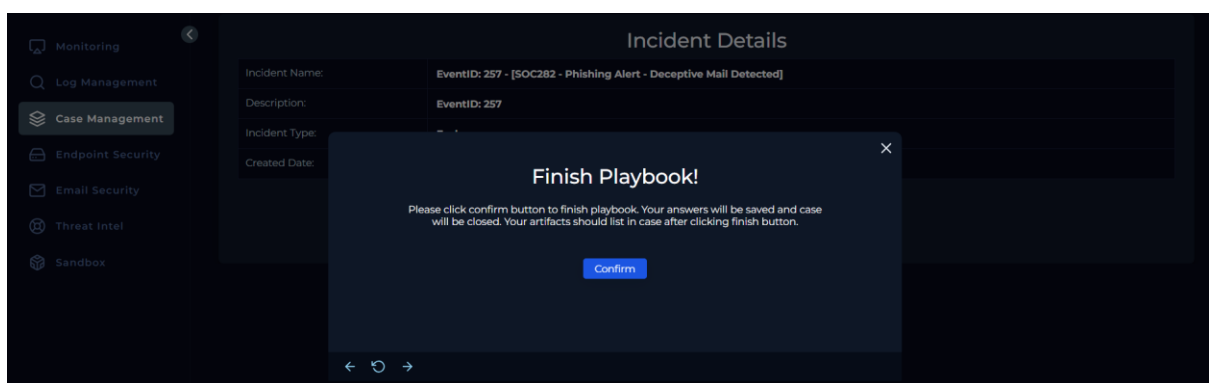


Add Artifacts

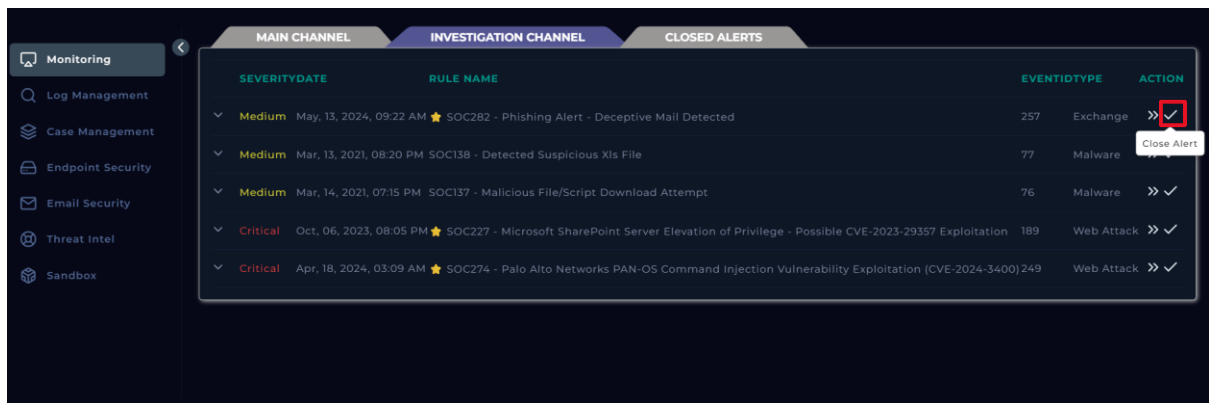
Click on >> Next



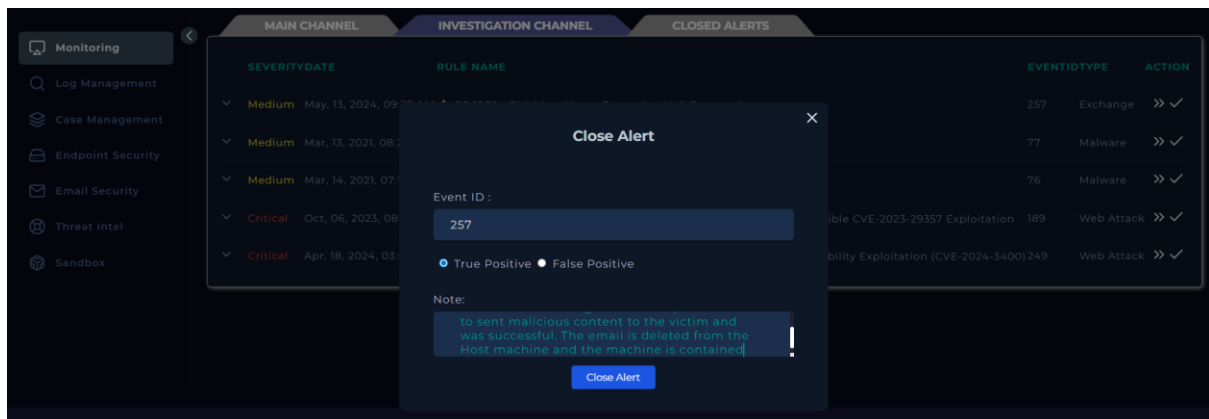
Click On >> Next



Click on >> Confirm



Click on >> Close Alert



Click on >> Closed Alert

Lessons Learned

- Email security filters aren't foolproof: This email bypassed initial security measures, highlighting the need for multiple layers of defense.
- User awareness is critical: Even with technical controls, users remain the last line of defense. Security awareness training could have prevented Felix from opening the malicious URL.
- Quick response matters: Rapid identification and containment prevented the potential compromise from spreading across the network.
- Documentation is essential: Proper artifact collection enables future analysis and helps identify patterns in attacker behavior.

Conclusion

This investigation demonstrates a typical phishing attack lifecycle: from initial delivery to user interaction and finally containment. The quick response prevented a potentially serious security incident from escalating. As SOC analysts, our role is not just to respond to threats but to continuously learn from each incident to strengthen our organization's security posture.