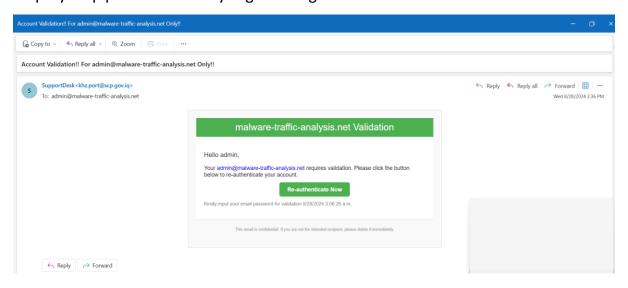
Task-2

Phishing Email Analysis

Here is the Phishing Email that I took for analysis.

I am planning to start the investigation and analysis in 3 steps.

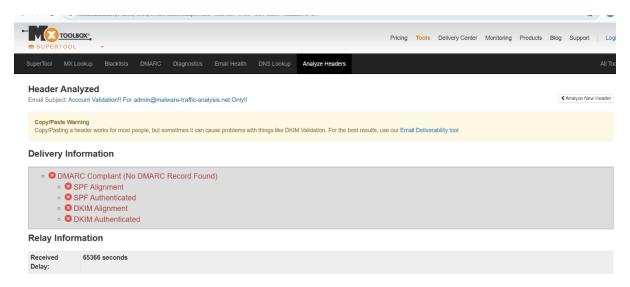
Step-by-step process for Analysing Phishing Email



Step-1: Header Analysis

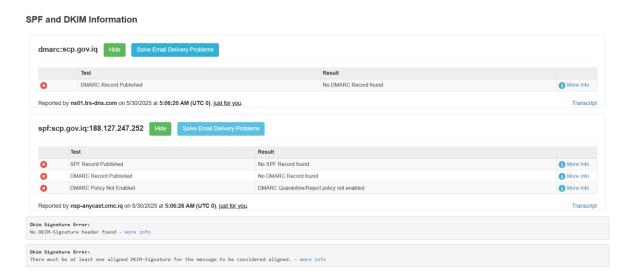
I extracted and reviewed the full email header using tools like MX toolbox and I checked the return path and the received fields to trace the source IP.

Screenshot:

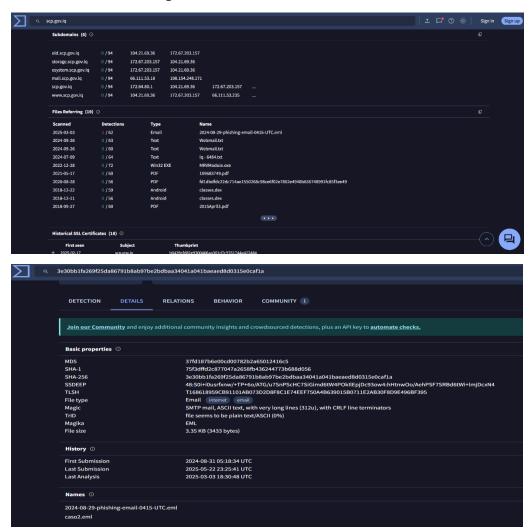


Here it showed that the Authentication checks are failed which are SPF Alignment, SPF Authenticated, DKIM Alignment, DKIM Authenticated are failed. In the MX

toolbox it showed that there is no record on that SPF and DMARC data. Below I have attached the screenshot of that details.



I checked the sender domain details in the Virus Total. It showed the details of that domain and its sub domain. Below are the screenshots of that details. It shows the details of files referring to and SSL certificate details.

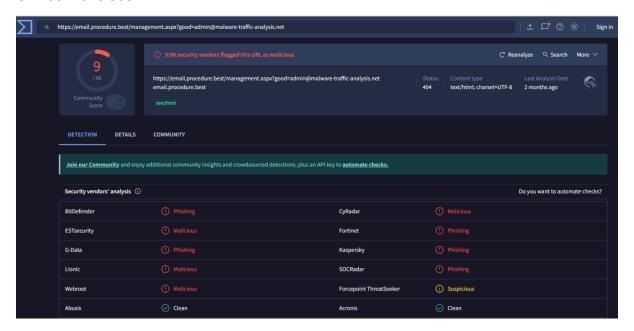


In that mail the Re-authenticate Now button hides a malicious URL. In the below screenshot it gives details about the Domain details such as its reputation it shows the malicious, phishing, suspicious or clean.

My first stage is completed it failed the Header analysis check.

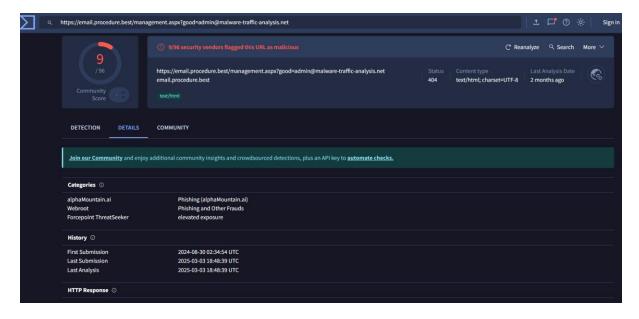
Step-2: Check any attachments or links are available in that email

I have checked that email and consists a link so I hovered over all hyperlinks to compare the displayed text with the actual URL. Then I copied that URL and pasted it on the Virus Total which is used to check any suspicious URLs are present. Then it started checking that URL. It showed the results that 9 security vendors flagged this URL as malicious.



In that email if there is an attachment, we have to download that attachment in a secure isolated environment like Virtual Machine or Sandbox. We will open the Virus Total and we will upload the attachment or file in it. It will give us the details of the attachment whether it is genuine or any malware is present or not. This helped me identify whether the links redirected to known phishing or malicious sites.

After clicking on that it shows about the full details of the email that was malicious email it contains the trojan in it will execute the different commands. Below mentioned the details of that URL.



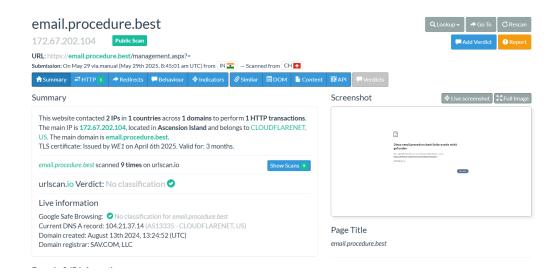
Step-3: Body of the Email

After that next step is look at the body of the email it mentioned about the Account Validation that you should authenticate now which is suspicious and it asks for a password.

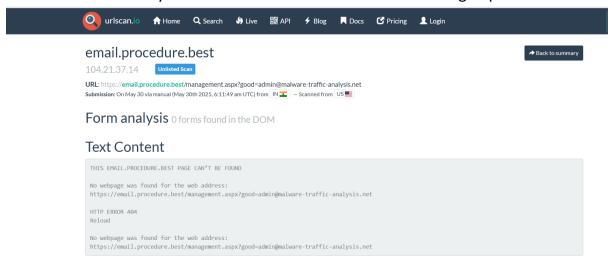
We should check for malicious payloads in that email attachments by using tools like Virus Total. Then check for links that are attached in that email by using tools like Urlscan.io or Virus Total it will give the results of that link.

If you click on that link by mistake the attacker will get the access, he will exploit the system and he will install the backdoor for access and then he will get the full access like command-and-control C2.

We can see that the link is not working at present. This Domain was created in the 2024 August.



We can see form analysis it showed that the URL was not working at present.



Based on this spoofed domain in the header and the malicious link this is confirmed to be a phishing attempt targeting the user credentials.

Tips:

Never open links/attachments on your real machine.

Always use sandbox or VM