Phishing Email Analysis

December 25, 2024 1:23 AM

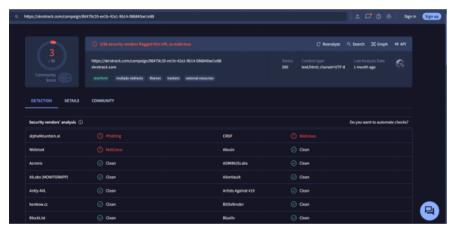
Using FREE web applications to analyze phishing emails.

- Open the email and check subject, sender information and email content.
- Questions to ask yourself:
 - Was I waiting for this email?
 - o Is this email from whom I was expecting it to be?
 - Is there any suspicious attachments or links that will redirect me?
 - If so: spot the link and copy it by right clicking on the link and selecting "Copy link".

Dating Cell



- Open https://www.virustotal.com/ and paste the link/url previously copied.
 - VirusTotal is an online service that analyzes files and URLs for viruses, malware, and other security threats by scanning them with multiple antivirus engines.
 It provides a detailed report on potential risks and safety of the submitted items.
 - You can also upload documents so it can be scanned for malware.
- Note: 3 engines spotted it as malicious or phishing.

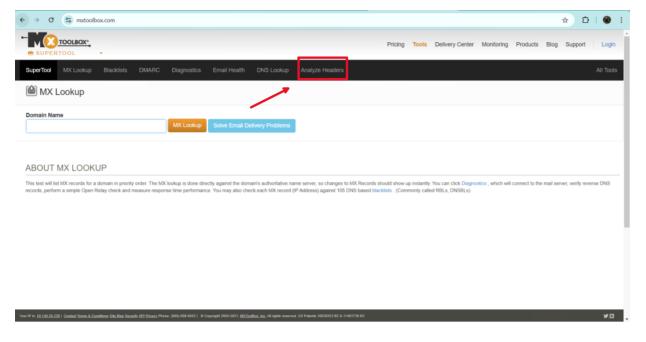


For a more thorough analysis of the link you can use tools like www.joesandbox.com, virtual machines or Sandbox applications (Windows Sandbox...), so you can access the link and further investigate.

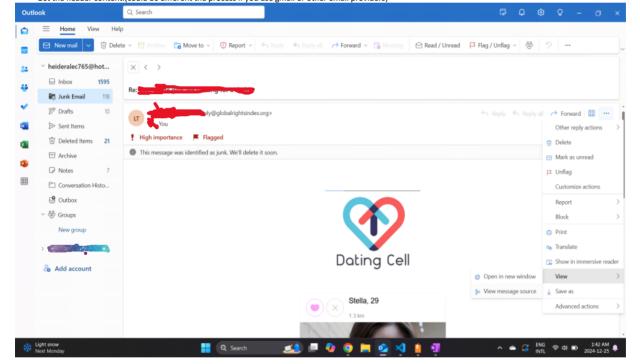
• Make sure it is done in a controlled and contained environment. Consulting a Specialist is recommended.

Get information and investigate:

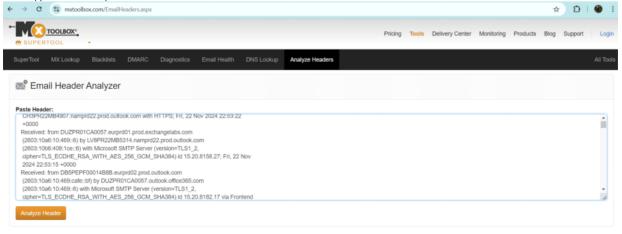
- MXToolBox
 - o Provides various tools which can be used for email investigation.
- Goals:
 - $\circ \quad \text{Verify the legitimacy of the email,} \\$
 - o Check if email is configured with the security mechanisms(SPF,DKIM and DMARC)
 - Get more information from the email header.



• Get the header content.(could be different the process if you use gmail or other email providers)



Copy the header and paste it to the website .

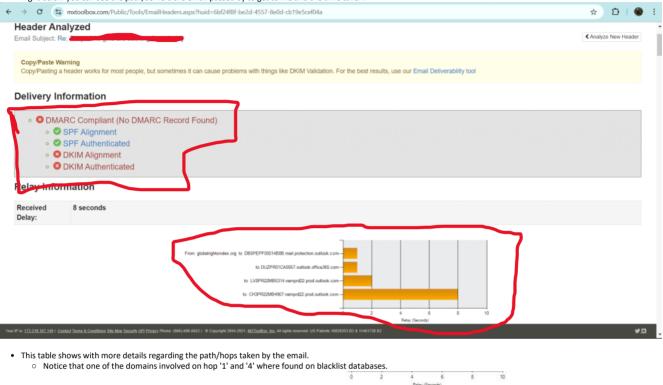


ABOUT EMAIL HEADERS

This tool will make email headers human readable by parsing them according to RFC 822. Email headers are present on every email you receive via the Internet and can provide valuable diagnostic information like hop delays, anti-spam results and more. If you need help getting copies of your email headers, just read this tutorial.



- To be **DMARC compliant**, an email must pass both of the following checks:
 - 1. SPF (Sender Policy Framework) Check:
 - o SPF is a system that checks if the email is coming from a server authorized to send emails on behalf of the domain in the "From" address.
 - 2. DKIM (DomainKeys Identified Mail) Check:
 - DKIM ensures that the email's content has not been altered in transit and that it was sent by a legitimate sender authorized to use the domain's private key.
- This email is not DMARC Compliant, which could indicate suspicious activity.
- Right below you can see the path/servers the email passed by to get to me and the time taken.





• Here are the contents found on the header, this is easier to view.(

Headers Found

Header Name	Header Value	
Authentication-Results	spf=pass (sender IP is 23.239.4.87) smtp.mailfrom=globalrightsindex.org; dkim=none (message not signed) header d=none;dmarc=bestguesspass action=none header from=globalrightsindex.org;compauth=pass reason=109	
Received-SPF	Pass (protection outlook com: domain of globalrightsindex org designates 23.239.4.87 as permitted sender) receiver=protection outlook com; client-ip=23.239.4.87; helo=globalrightsindex org; pr=M	
X-IncomingTopHeaderMarker	OriginalChecksum AC7979BA326FB801C78690CFD26FDC75BBE134A78AF50266769299016DA418B0,UpperCasedChecksum:F0A1CA2A824821B0C8D0C72D784AA2BBDB8AA67FCF3D77CEE726EAEB01BE164F,SizeAsReceived:461;Count:12	
From	Lets Today <noreply@globalrightsindex.org></noreply@globalrightsindex.org>	
Subject	Re de la companya de	
То	heideralec765@hotmail.com	
Content-Transfer-Encoding	7bit	
Content-Type	text/html, charset=UTF-8	
Date	Fri, 22 Nov 2024 23 52 53 +0100	
Message-Id	<nlsjtbjg-1zki-nj2y-x77c-4d67-b408-4rbdb970srfjmc@bn1pepf00005ffd com="" namprd05="" outlook="" prod=""></nlsjtbjg-1zki-nj2y-x77c-4d67-b408-4rbdb970srfjmc@bn1pepf00005ffd>	
x-Liar	email@11_323467>	
X-IncomingHeaderCount	12	
Return-Path	infobot@globalrightsindex.org	
X-MS-Exchange- Organization- ExpirationStartTime	22 Nov 2024 22:53:14 8762 (UTC)	
X-MS-Exchange- Organization- ExpirationStartTimeReason	OriginalSubmit	
X-MS-Exchange- Organization- ExpirationInterval	1:00:00:00 0000000	

• With the information found on the header I started my search.

Info acquired:

Info	Tools		
System is up	ping tool		
Sender is hosted or tunneling traffic through Linode/Akamai cloud services	Whois and tracert tools		
Domain was registered through https://www.ovhcloud.com/	Whois(Cisco Talos Intelligence)		
IP addresses linked to the domain (check picture below).	Nslookup tool		