Email samples and screenshots in this analysis are from Phishing Pot by Peixoto, licensed under CC BY-NC 4.0. The original sample analysed in this report can be found below:

Phishing Pot: https://github.com/rf-peixoto/phishing pot

Peixoto: https://github.com/rf-peixoto

License: https://github.com/rf-peixoto/phishing_pot/blob/main/LICENSE

Source file: https://github.com/rf-peixoto/phishing_pot/blob/main/email/sample-1199.eml

Executive Summary

This report analyzes a phishing email impersonating ProtonMail, sent from a free Gmail account. The attacker attempts to trick the recipient into clicking a fraudulent link under the pretext of restoring a "Prime" mailbox service, which does not exist. Indicators of compromise include urgency tactics, failure of DKIM authentication, and the use of a malicious Webflow-hosted URL. Although the phishing page has since been removed, the email demonstrates typical characteristics of credential-harvesting attempts. Defensive actions were taken to block the sender and associated domains to prevent further exposure.

Headers

Date: Mon, 24 Jul 2023 09:14:54 -0700

Subject: THE PRIME

To: username@hotmail.com

From: amandastaples353@gmail.com

Reply-To: None

Return-Path: amandastaples353@gmail.com

Sender IP: mail-lj1-f177.google.com Resolve Host: 209.85.208.177

Message-ID:

<CA+b2QqQh3=9wJxbyTmCq9Sapx9mAuRCCyz31 nvBNrqNL13 pw@mail.gmail.com>

URLs

hxxps[://]protonmail-6e3725[.]webflow[.]io/

hxxp[://]skymesh[.]com[.]au/

Description

It is an email with just text, no graphics. It claims the Prime version of their mailbox will be replaced by the next day, and to click a link. It is not clear from the email body who the email claims to represent, but the signature mentions ProtonMail.

There are several indications of urgency: The receiver has 1 day to restore their mailbox and avoid the permanent closure of their account.

Artifact Analysis

Sender Analysis:

The mail claims to be from Protonmail, but Protonmail does not have a Prime mailbox feature. Additionally, the email came from a Gmail address with a format {firstname}{lastname}{numbers} which is often used by attackers.

DKIM authentication failed.

URL Analysis:

hxxps[://]protonmail-6e3725[.]webflow[.]io/ is no longer available and does not give any hits on VirusTotal. This is the link that the email asks to click on with the text being 'Log-in Restore' so this was likely a credential harvesting page. Webflow is a legitimate service and must have taken down this page after receiving complaints.

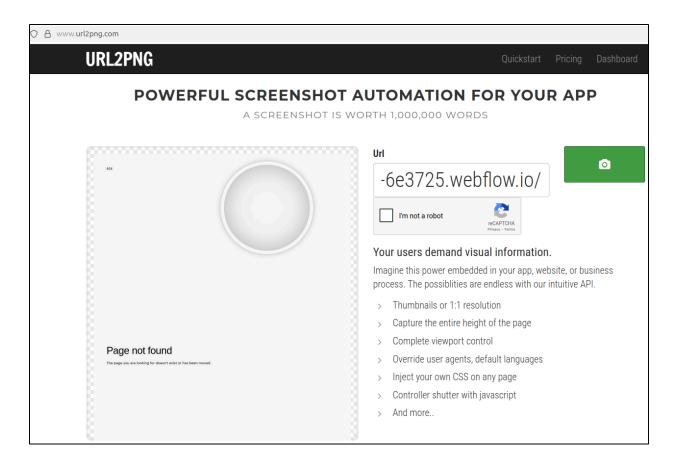
There is another URL: hxxp[://]skymesh[.]com[.]au/. However this seems to not be related to anything, and it is unclear as to why it is there. Skymesh is a legitimate internet provider in Australia, and the link redirects to their homepage https://www.skymesh.net.au/

Verdict

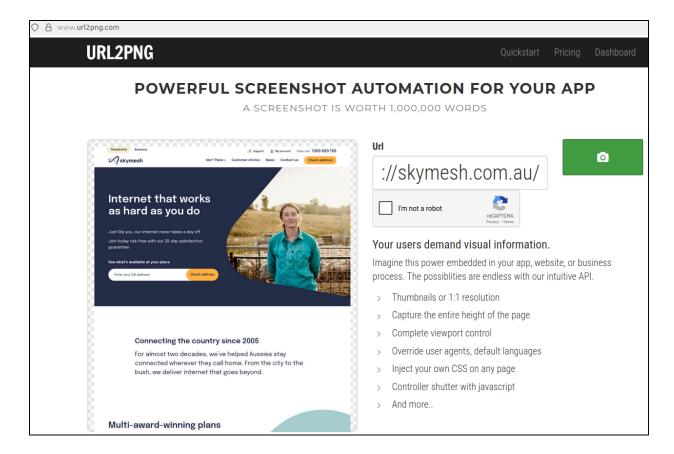
Due to the sender being unaffiliated with Protonmail, and the Prime mailbox for Protonmail service not existing, this email is a clear impersonation and spoofing attempt.

The email seems to be a very low effort phish, as there are no logos, and no company is mentioned except for the signature. Legitimate services would usually call an account a {company} account, such as an Indeed account or an Amazon account.

The phishing link has been taken down, as can be seen in the below screenshot: hxxps[://]protonmail-6e3725[.]webflow[.]io/



And the random Skymesh link seems to be unrelated, and may have been added by accident, or was added to function as a red herring. http://skymesh[.]com[.]au/



As a result of the analysis, this email has been determined to be malicious.

Defense Actions

After performing a message trace, no other users within the organization received an email from this sender or with a similar subject line.

To prevent the malicious sender from sending any other email to the organization, I have blocked the "amandastaples353[@]gmail[.]com" email on the email gateway. The gmail[.]com domain is legitimate, but this particular user is malicious.

To ensure users are unable to access this malicious URL or domain, I have blocked "hxxps[://]protonmail-6e3725[.]webflow[.]io/" on the EDR and on the Web Proxy. While the website seems to have been removed, it is unlikely that a legitimate service will use that domain in the future.