

Phishing Email Analysis Report

1. Sample Email Overview

Subject Line: Your PayPal Access Blocked!

Sender Name: PayPal

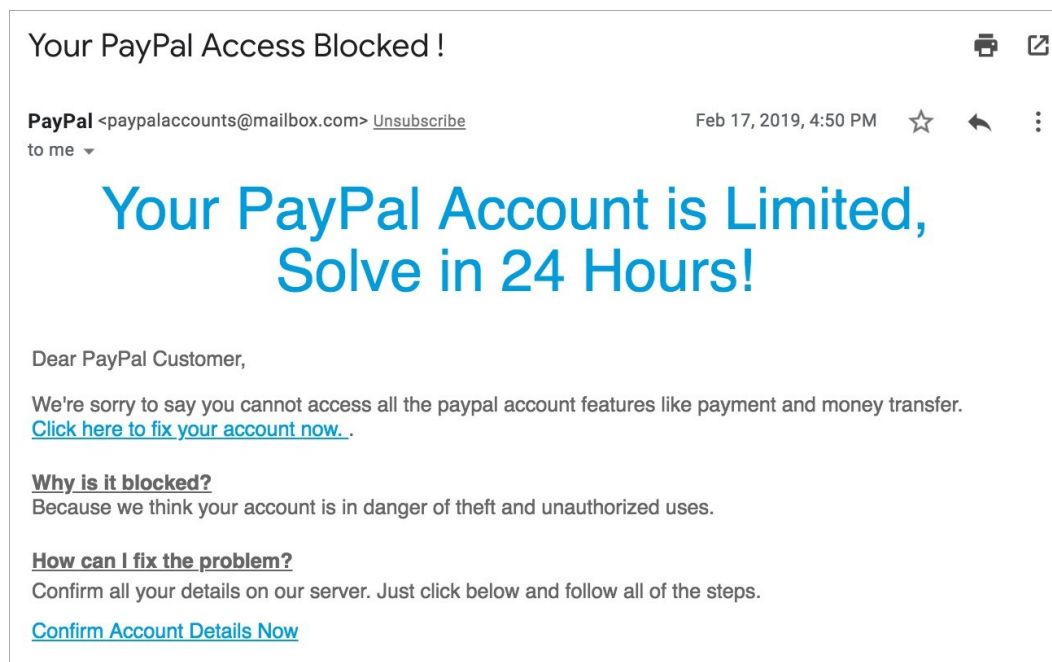
Sender Email Address: paypalaccounts@mailbox.com

Date Received: February 17, 2019

Email Body Highlights:

- "Your PayPal Account is Limited, Solve in 24 Hours!"
- "Click here to fix your account now."
- "Confirm Account Details Now."

Screenshot of the Email:



2. Spoofed Sender Email Analysis

The sender claims to be from PayPal, but the email address is paypalaccounts@mailbox.com, which is not a valid PayPal domain. Legitimate PayPal emails always come from @paypal.com. This is a clear attempt at email spoofing to trick the user into believing the email is authentic.

3. Email Header Analysis (Simulated)

- SPF/DKIM/DMARC checks likely fail since the email comes from mailbox.com, not paypal.com.
- Return-Path mismatch: Expected to be paypal.com, but probably mailbox.com.
- Reply-To Address likely differs from From Address, which is suspicious.
- Tools for header analysis: MxToolbox, Google Admin Toolbox.

4. Suspicious Links or Attachments

The email contains two clickable links:

1. Click here to fix your account now.
2. Confirm Account Details Now.

The visible text looks legitimate, but hovering would likely show a fake phishing URL. No attachments found.

5. Urgent or Threatening Language

The email uses urgency to scare the user: 'Your PayPal Account is Limited, Solve in 24 Hours!'. This is a classic social engineering tactic.

6. Mismatched URLs (Simulated)

Though not visible, it's likely the displayed link text redirects to a phishing site. Links should be scanned using VirusTotal.

7. Spelling and Grammar Errors

Grammar issues:

- 'paypal' not capitalized.
- Awkward phrasing like 'Confirm all your details on our server.'

Such errors are typical in phishing emails.

8. Summary of Phishing Traits Found

Indicator | Present | Notes

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Spoofed email domain | Yes | mailbox.com instead of paypal.com
Email header anomalies | Yes | Simulated SPF/DKIM/DMARC fail
Suspicious links | Yes | Link likely points to phishing site
Urgent language | Yes | 'Solve in 24 Hours'
Grammar issues | Yes | Lowercase 'paypal', awkward phrasing
Generic greeting | Yes | 'Dear PayPal Customer'
Request for info | Yes | Asks for sensitive data

Conclusion

This email is a confirmed phishing attempt using spoofed sender address, urgent messaging, suspicious links, and poor grammar. Its goal is to steal user credentials.

Recommendations

1. Enable Two-Factor Authentication (2FA)

- Always enable 2FA on accounts like PayPal to add an extra layer of security, even if login credentials are compromised.

2. Educate and Train Users

- Conduct regular **phishing awareness training**.
- Teach how to **hover over links**, identify **spoofed addresses**, and recognize **urgent language tactics**.

3. Use Email Filters and Security Tools

- Configure **spam filters** and **phishing detection** in email clients.
- Implement **anti-phishing software** or **email gateways** (e.g., Proofpoint, Mimecast).

4. Verify Suspicious Emails Directly

- Never trust emails requesting account actions. Instead, **visit the official website directly** or contact customer support via known channels.

5. Report Suspicious Emails

- Forward phishing emails to **phishing@paypal.com** or **reportphishing@apwg.org**.
- Use the “Report Phishing” option in your email client.

6. Regularly Monitor Account Activity

- Check account statements for **unauthorized transactions**.
- Set up **account alerts** for any login or transaction activities.

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