

NJCCIC



PREVENT | DETECT | RESPOND



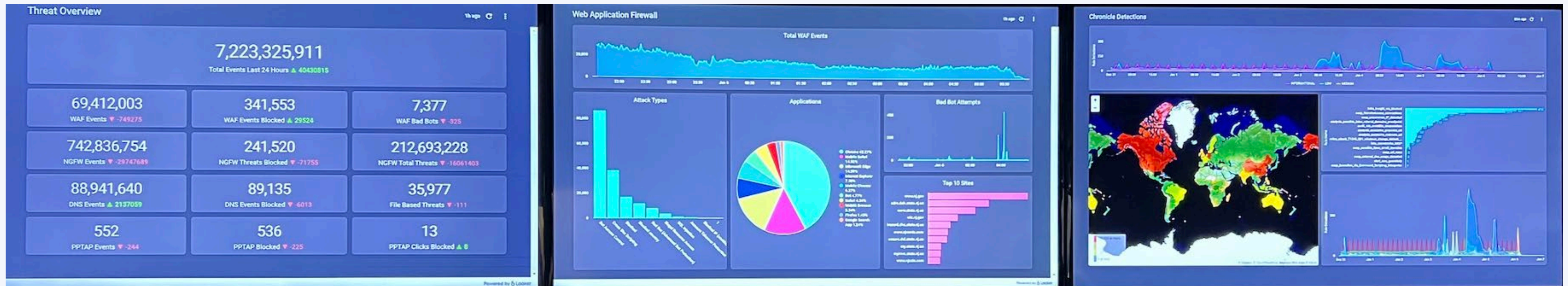
This presentation is TLP: CLEAR

The NJ CCIC

Governance, Risk, and Compliance

Cyber Threat Outreach and Partnerships

Security Engineering and Cyber Operations

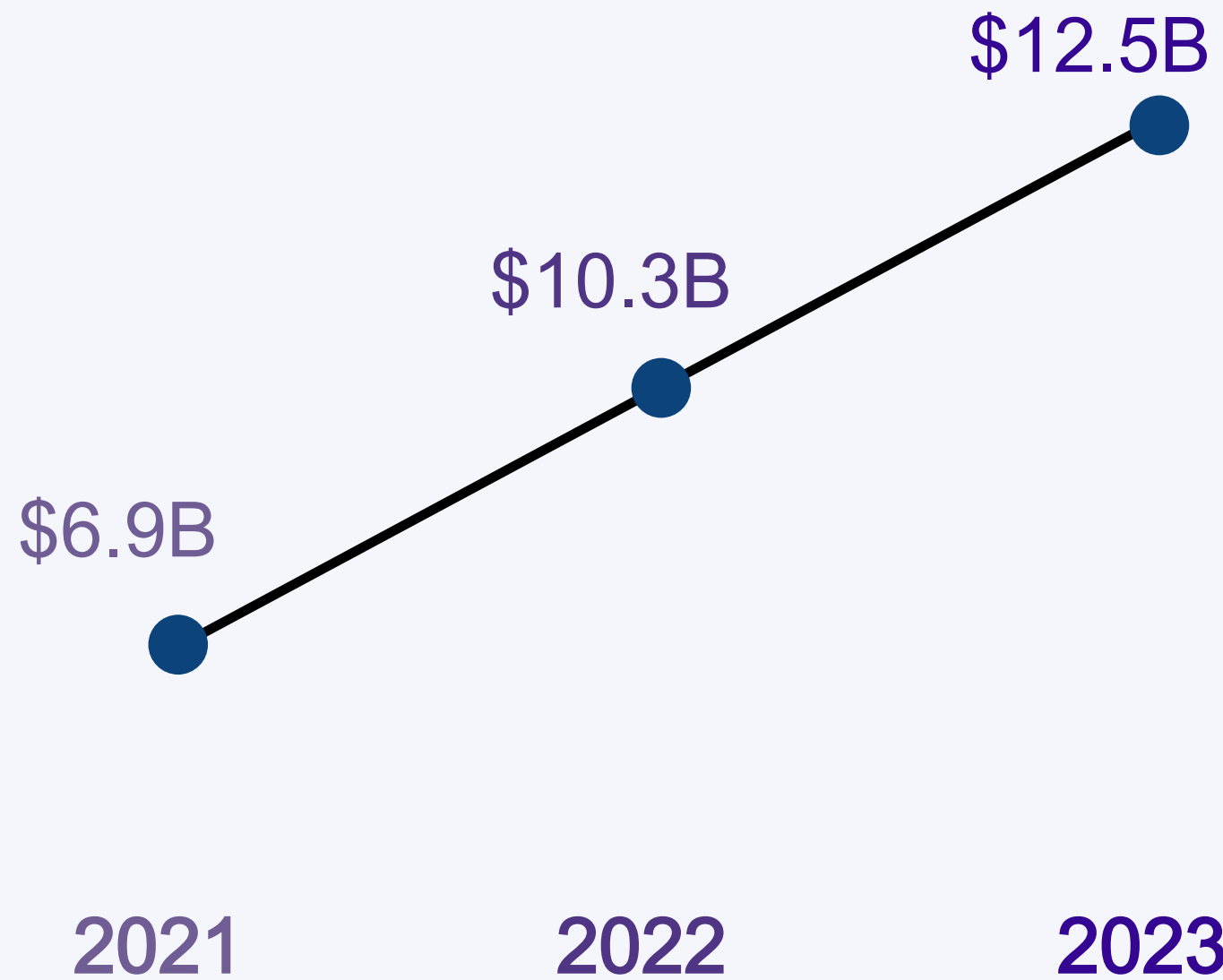


Cyber Threats and Best Practices

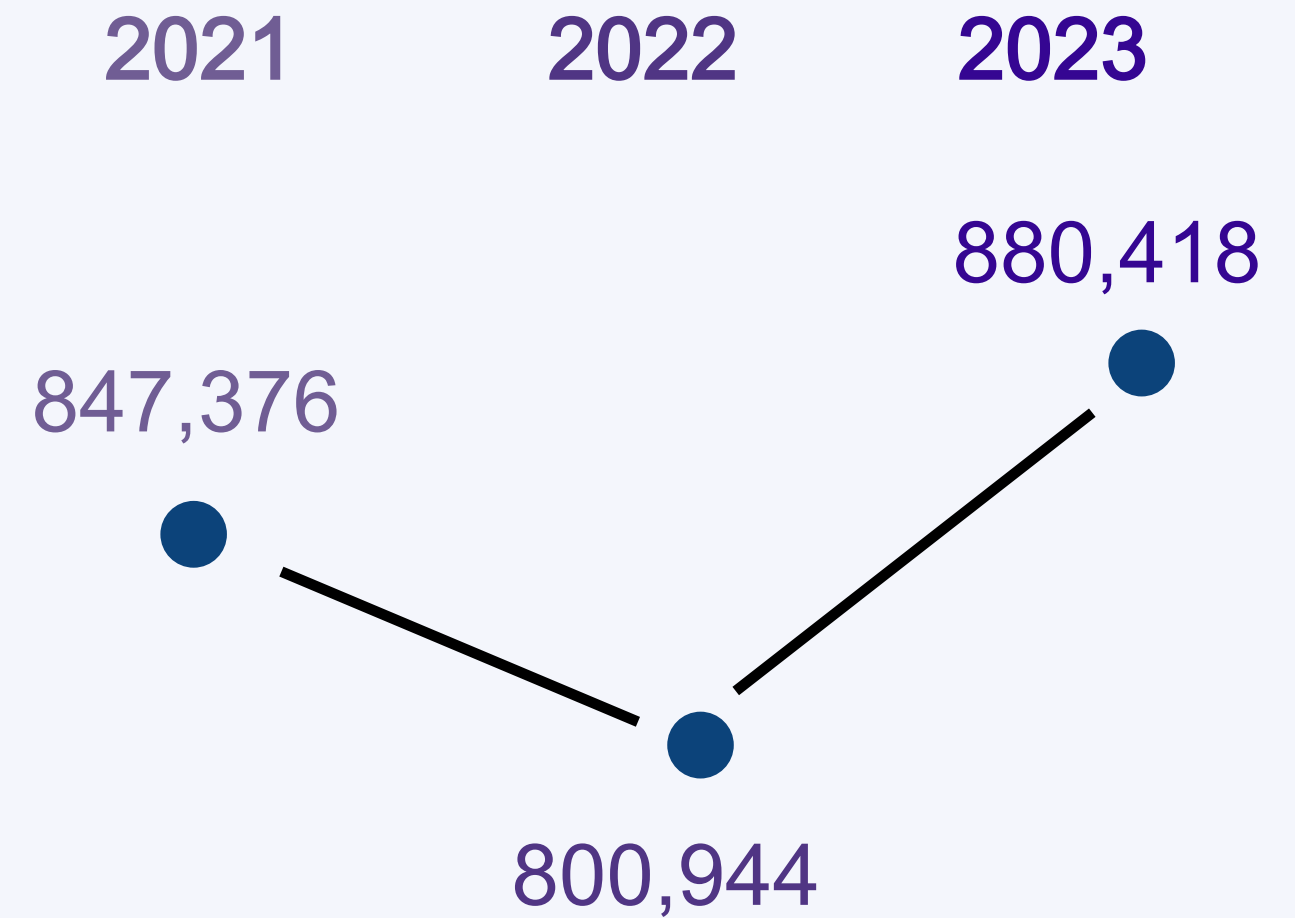
Impacts to the Healthcare and Public Health Sector

IC3 Annual Report

TOTAL CYBERCRIME LOSSES



TOTAL COMPLAINTS



IC3 Annual Report

Greatest Losses By Cybercrime Type

Investment - \$4.57 B

Business Email Compromise - \$2.9 B

Tech Support Scam - \$924 M

Confidence/Romance Scam- \$652 M

Government Impersonation - \$394 M

Real Estate Transaction - \$145 M

Extortion - \$74.8 M

Tech Support Scam

IMPERSONATING THOSE YOU TRUST



**Alert Number: I-012924-PSA
January 29, 2024**

Scammers Use Couriers to Retrieve Cash and Precious Metals from Victims of Tech Support and Government Impersonation Scams

The FBI is warning the public about scammers instructing victims, many of whom are senior citizens, to liquidate their assets into cash and/or buy gold, silver, or other precious metals to protect their funds. Criminals then arrange for couriers to meet the victims in person to pick up the cash or precious metals. From May to December 2023, the FBI Internet Crime Complaint Center (IC3) saw an uptick in this activity with aggregated losses of over \$55 million.

Recent incident:

An employee was the target of a social engineering attack. This employee was deceived into believing that her computer was infected with a computer virus and that in order to prevent further damage, she should contact “Microsoft’s” customer support. The scammer was not affiliated in any way with Microsoft. The employee unfortunately did contact this false number and shared her screen with the scammer. This phone call lasted approximately 30 minutes, during which time the scammer was able to access all of the files on the employee’s computer. These files contained highly confidential information, including Social Security numbers, dates of birth, addresses, and financial information. The employee became suspicious when the scammer asked her to go to a local department store and purchase \$20,000 in gift cards. It was then that the employee terminated her call and disconnected her computer.

Impacts:

- Access to sensitive organization information.
- Obtain credentials for the employee’s online accounts.
- Ability to install malware onto the device – persistent access and opportunity to move laterally/compromise accounts on the network.
- Need to change passwords, ensure MFA is enabled, and revoke session tokens.

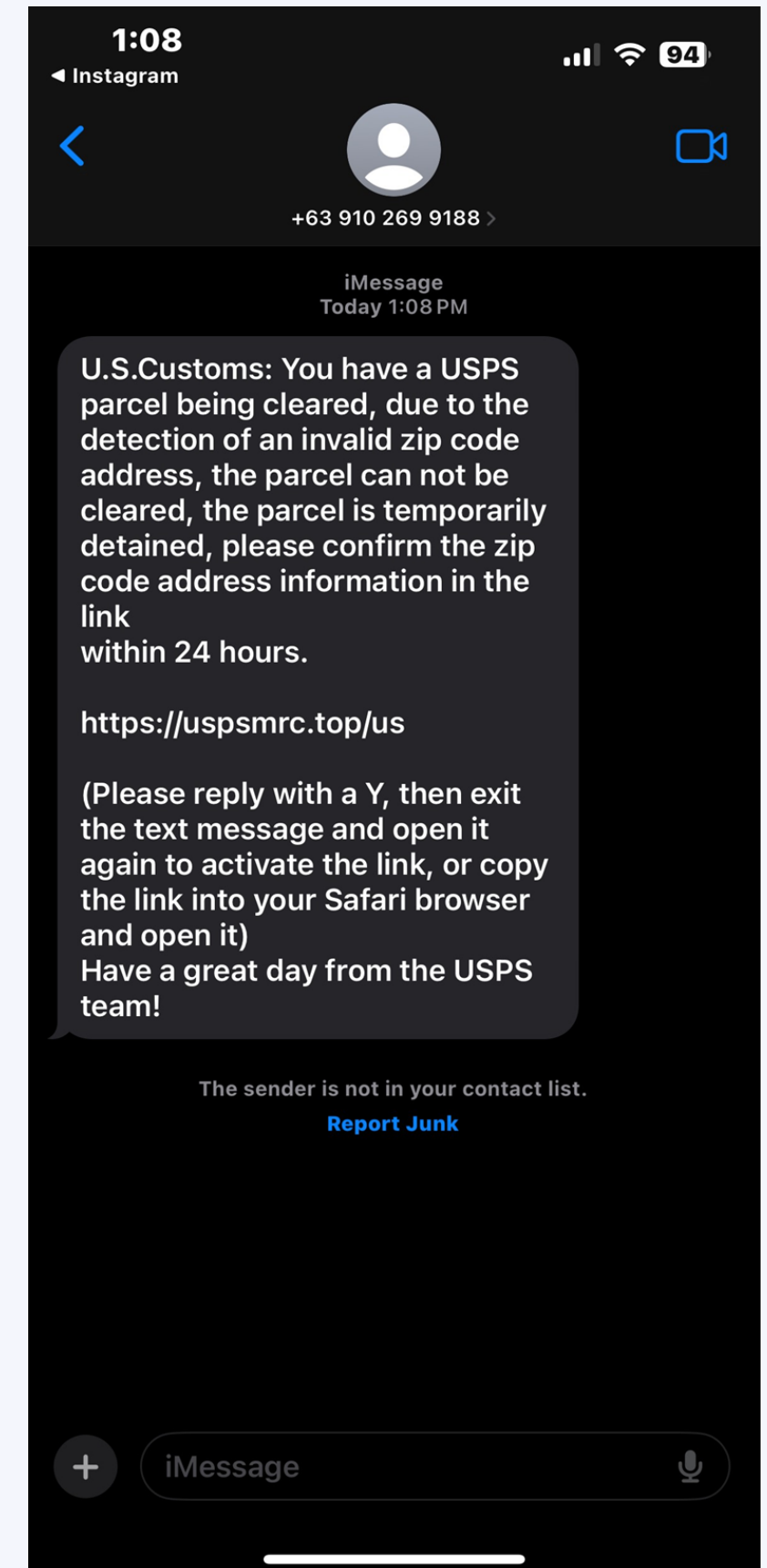
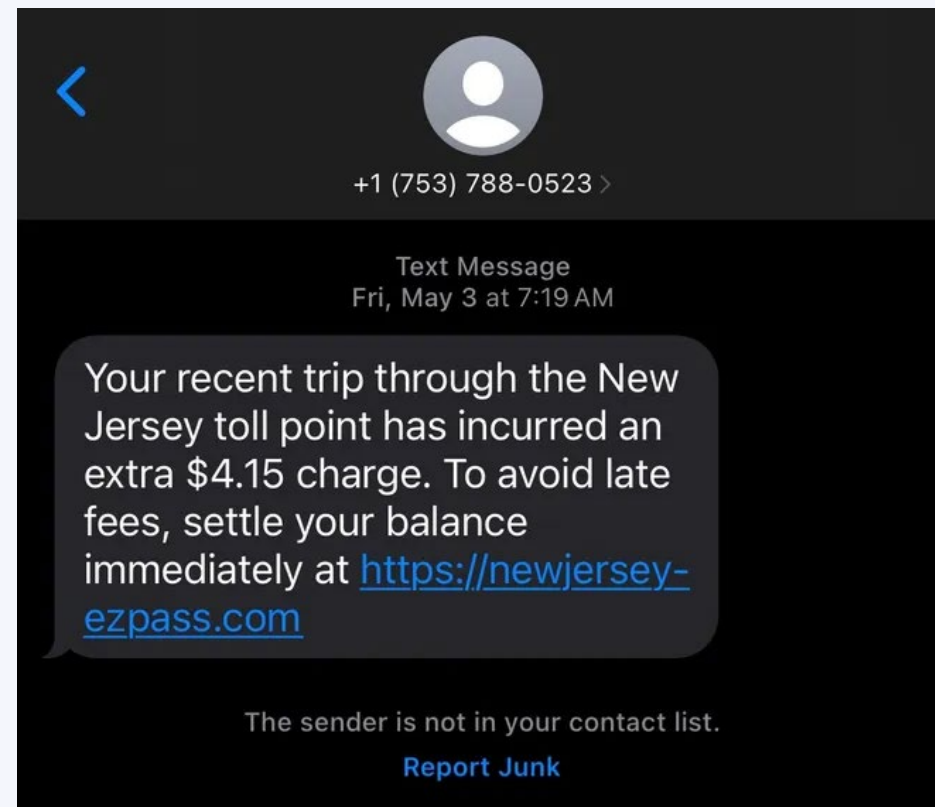
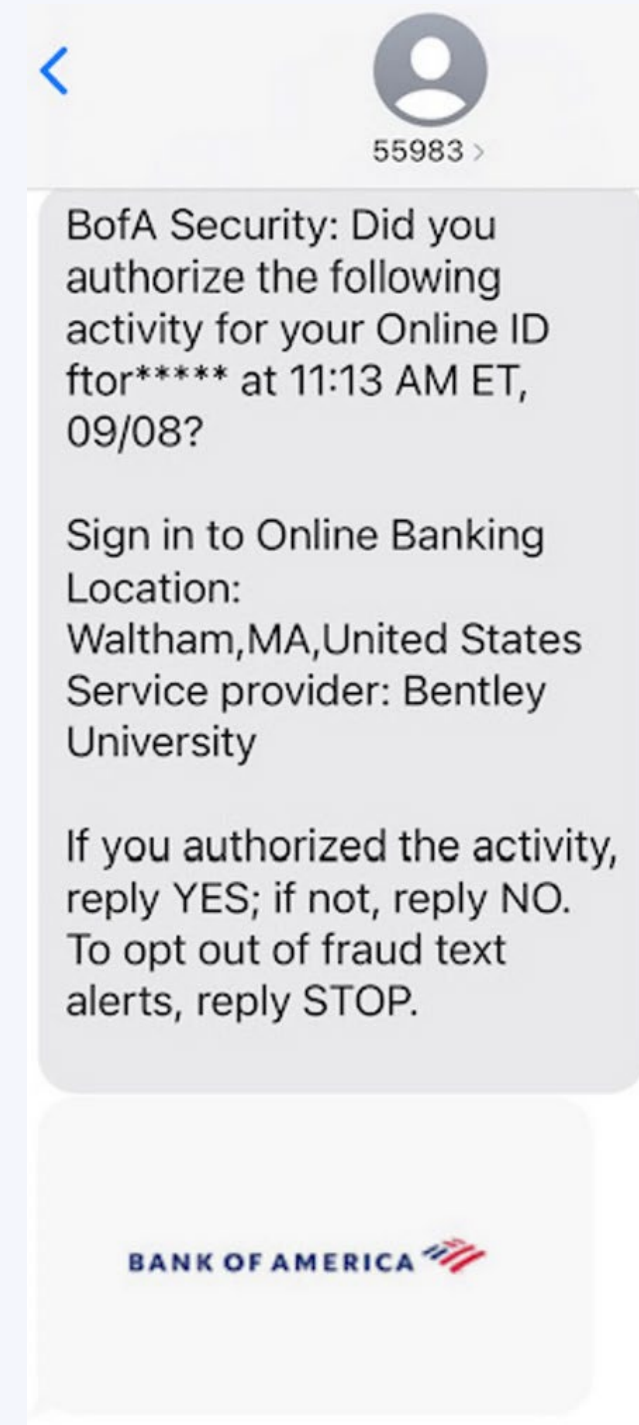
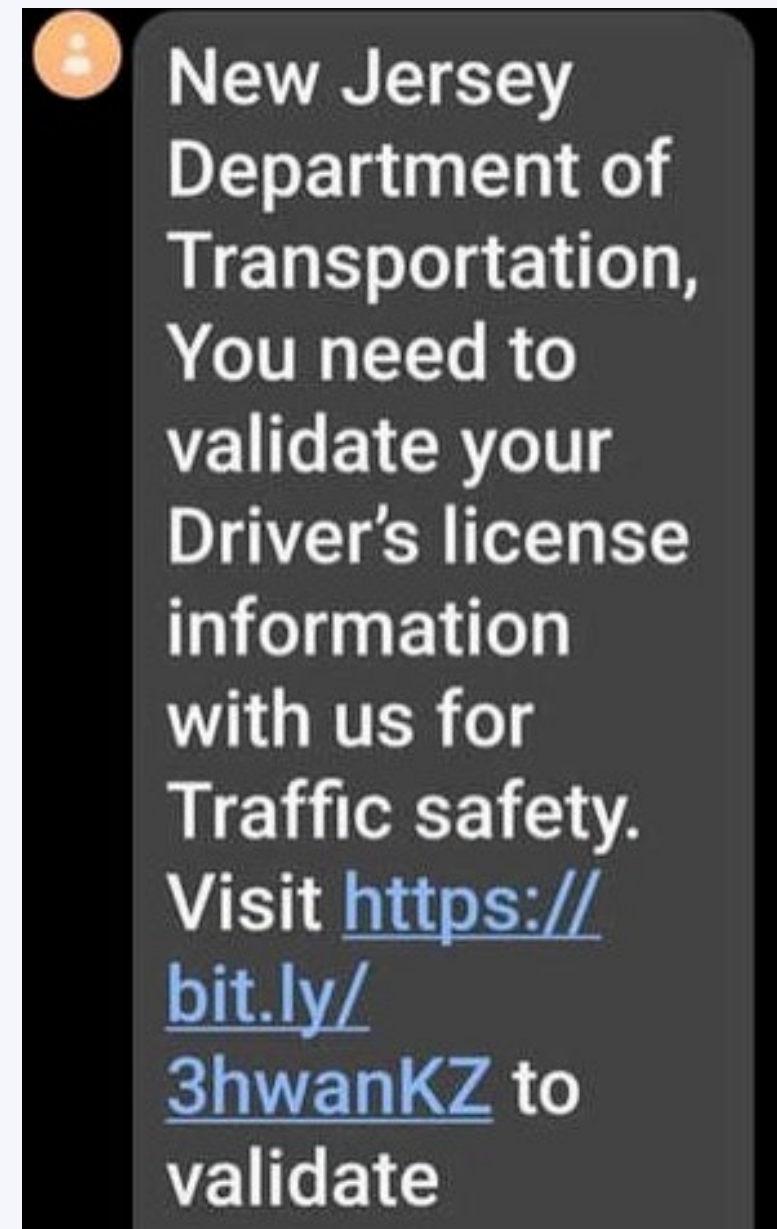
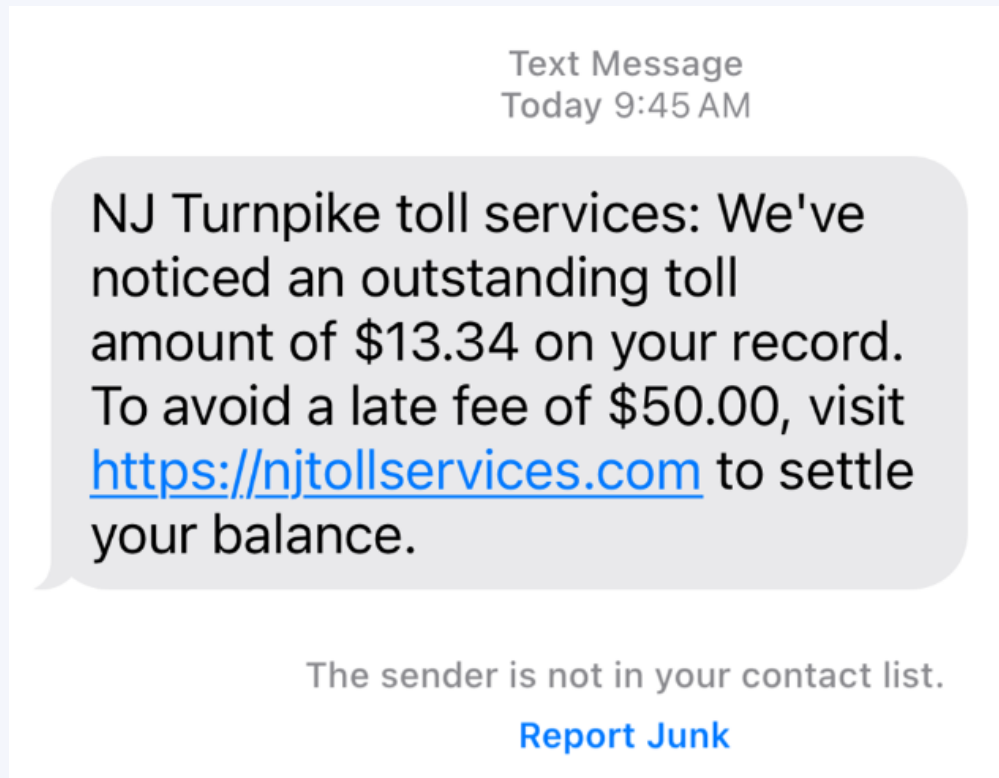
SMS Text Scam

Exploiting Legitimate Comms

- Missed delivery notifications
- “Is this you?” messages
- Text scams claiming that your bank is closing your account
- Texts claiming that you’ve won a prize
- Texts claiming that your debit or credit card has been locked
- Text messages supposedly from the IRS
- Text messages from your own number
- Texts claiming that your payment for subscription services didn’t go through
- Texts about purchases you didn’t make
- Two-factor authentication (2FA) scam messages

SMS Text Scam

Exploiting Legitimate Comms



Direct Deposit Scams

NEW YORK [REDACTED] HOSPITAL
DIRECT DEPOSIT AUTHORIZATION FORM

NOTE: You cannot split your paycheck between direct deposit and a live check.

I authorize my employer to deposit directly in the account(s) named below in the amount(s) I have specified. This authority will remain in force until given written notice that I have been terminated. I understand that I must give advance notice to allow reasonable time for my instructions to be executed. If ever an incorrect amount should be entered into my account(s), I authorize my bank(s) to make appropriate adjustment(s).

NAME (Print): _____ EMPLOYEE ID #: _____
(required 6 digit number)

WORK NO.: _____ HOME PHONE: _____
(Provide entire phone number not just extension)

SIGNATURE: _____ E-MAIL ADDRESS: _____

ACCOUNTS:

CHECKING: (Partial Amounts MUST be in dollars, NO percentages)

(1) BANK: _____ ROUTING #: _____
A/C NO.: _____ FULL _____ PARTIAL AMOUNT _____

(2) BANK: _____ ROUTING #: _____
A/C NO.: _____ FULL _____ PARTIAL AMOUNT _____

SAVINGS: (Partial Amounts MUST be in dollars, NO percentages)

(1) BANK: _____ ROUTING #: _____
A/C NO.: _____ FULL _____ PARTIAL AMOUNT _____

(2) BANK: _____ ROUTING #: _____
A/C NO.: _____ FULL _____ PARTIAL AMOUNT _____

MONEY MARKET: (Partial Amounts MUST be in dollars, NO percentages)

(1) BANK: _____ ROUTING #: _____
A/C NO.: _____ FULL _____ PARTIAL AMOUNT _____

Without the proper **Account Information** as noted below, this form will not be processed.

Checking: The Routing # is the first 9 numbers at the bottom of the check, a check with the word (VOID) written across the check.

Savings & Money Market: You must attach Routing # and Account # information on your bank statement.

Scan-Email form to [REDACTED] and upon request a confirmation email will be sent.

DIRECT DEPOSIT FORM
AUTHORIZATION AGREEMENT FOR AUTOMATIC DEPOSITS OR TO DISCONTINUE
An employee must present ID badge or state issued ID when submitting this form.

EMPLOYEE INFORMATION

NAME (Last, First) _____

START DIRECT DEPOSIT (Primary account is the account where you have 100% or the Balance of your pay)

Bank Name: _____ Provide **one** of the following: (with Routing and Account #)
A voided check
Stamped direct deposit form completed by bank or
Official letter from the bank

ADDITIONAL CHECKS (When receiving additional check(s), I would like the money to be deposited into the _____) Primary Account Or _____

STOP DIRECT DEPOSIT (I authorize Montefiore Nyack Hospital to terminate my direct deposit. I acknowledge this.)

Bank Name: _____ Routing#: _____
Account#: _____

CHANGE DIRECT DEPOSIT

Bank Name: _____ Change Request: _____

COMMENTS SECTION:

REQUIRED APPROVAL

I authorize Montefiore Nyack Hospital, hereinafter referred to as COMPANY, to initiate credit entries and to initiate, if necessary, debit entries and adjustments for any credit entries in error to my account indicated above and the depository named above, hereinafter called DEPOSITORY, to credit and/or debit the same to such account. This authority is to remain in full force and effect until COMPANY has received written notification from me of its termination in such time and in such manner as to afford COMPANY and DEPOSITORY a reasonable opportunity to act on it.

SIGNATURE: _____ DATE: _____

PHONE #: _____

HR OFFICE USE:

Employee ID reviewed (ID Badge/Photo ID) HR Staff Initials: _____ Date: _____

Direct Deposit Authorization Form

I hereby authorize St. James Hospital/ER Select to directly deposit my pay in the bank account(s) listed below in the percentages specified. (If two accounts are designated, deposits are to be made in whole percentages of pay to total 100%.) I have attached a voided personalized check (checking accounts) or deposit slip (savings accounts) for each account specified below. This authorization is to remain in force until the Company has received written authorization from me of its termination or change. Also, I hereby grant St. James Hospital the right to correct any such electronic funds transfer resulting from an erroneous overpayment by debiting my account to the extent of such overpayment.

Name (PRINT): _____

Signature: _____ Date: _____

Account #1 (Check only one)

Checking (attached voided check)

Savings (attach deposit slip and obtain ABA routing number from your bank)

Financial Institution: _____

Street Address: _____

City, State and Zip Code: _____

Telephone: (____) _____

Personal Account Number: _____

ABA (Routing) Number: _____

Amount of pay to be deposited into this account:
\$ _____ or _____ %

Account #2 (Check only one)

Checking (attached voided check)

Savings (attach deposit slip and obtain ABA routing number from your bank)

Financial Institution: _____

Street Address: _____

City, State and Zip Code: _____

Telephone: (____) _____

Personal Account Number: _____

ABA (Routing) Number: _____

Amount of pay to be deposited into this account:
\$ _____ or _____ %

From: Denise [REDACTED]@gmail.com>
Sent: Tuesday, February 6, 2024 11:53 AM
To: Maria [REDACTED].com>
Subject: CHANGE OF DD ACCOUNT INFORMATION

[You don't often get email from [REDACTED]@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

Hello Maria

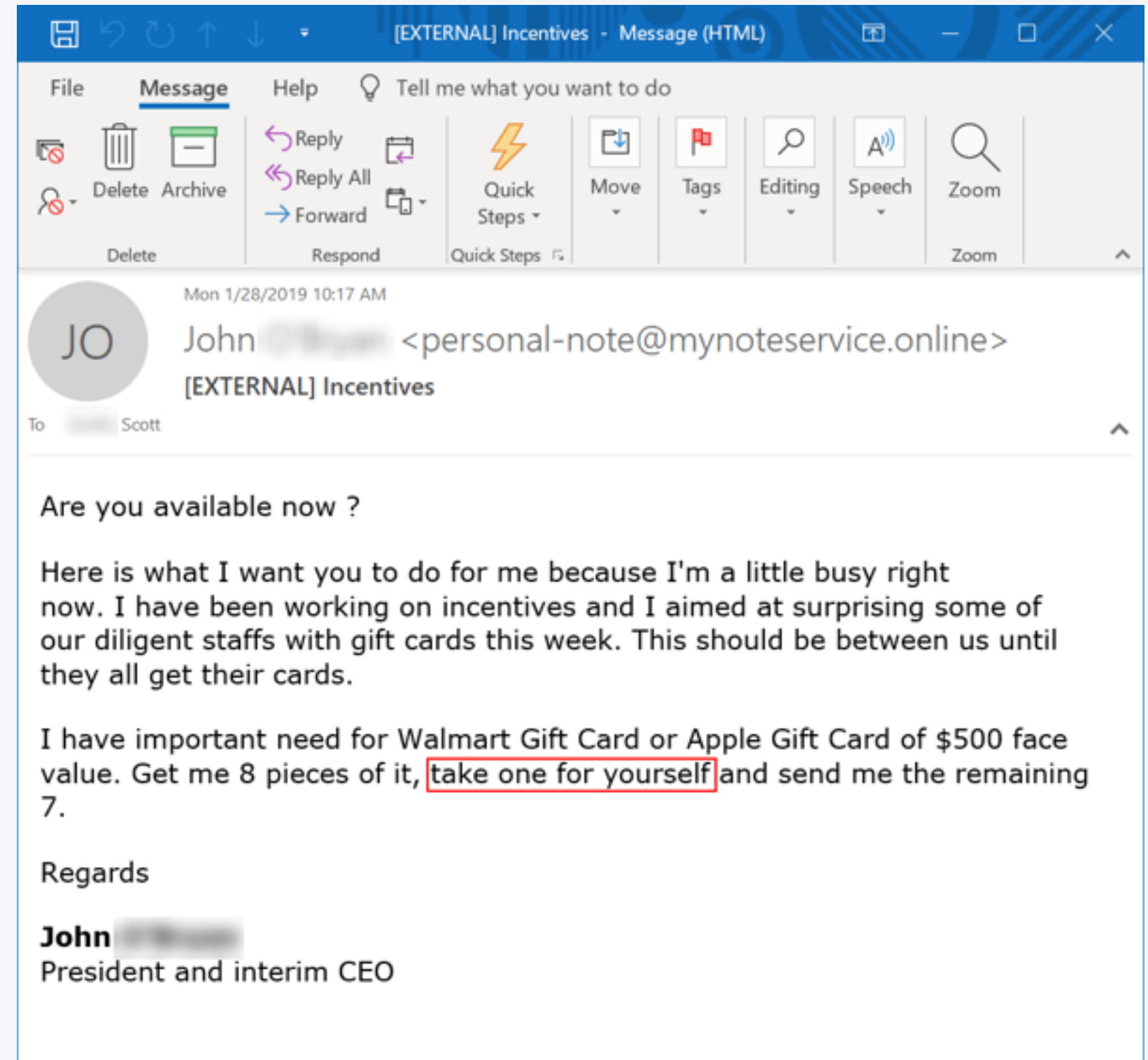
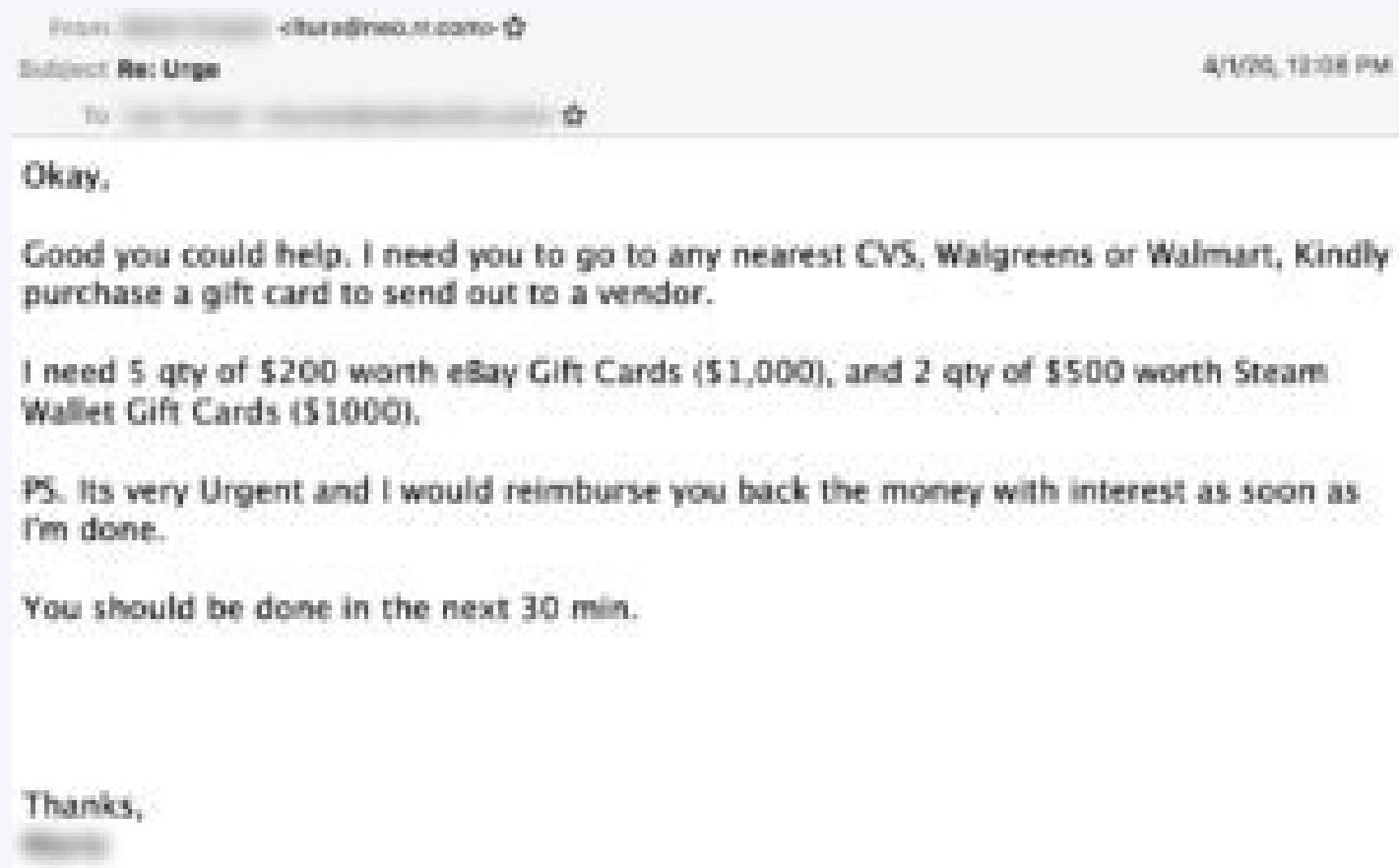
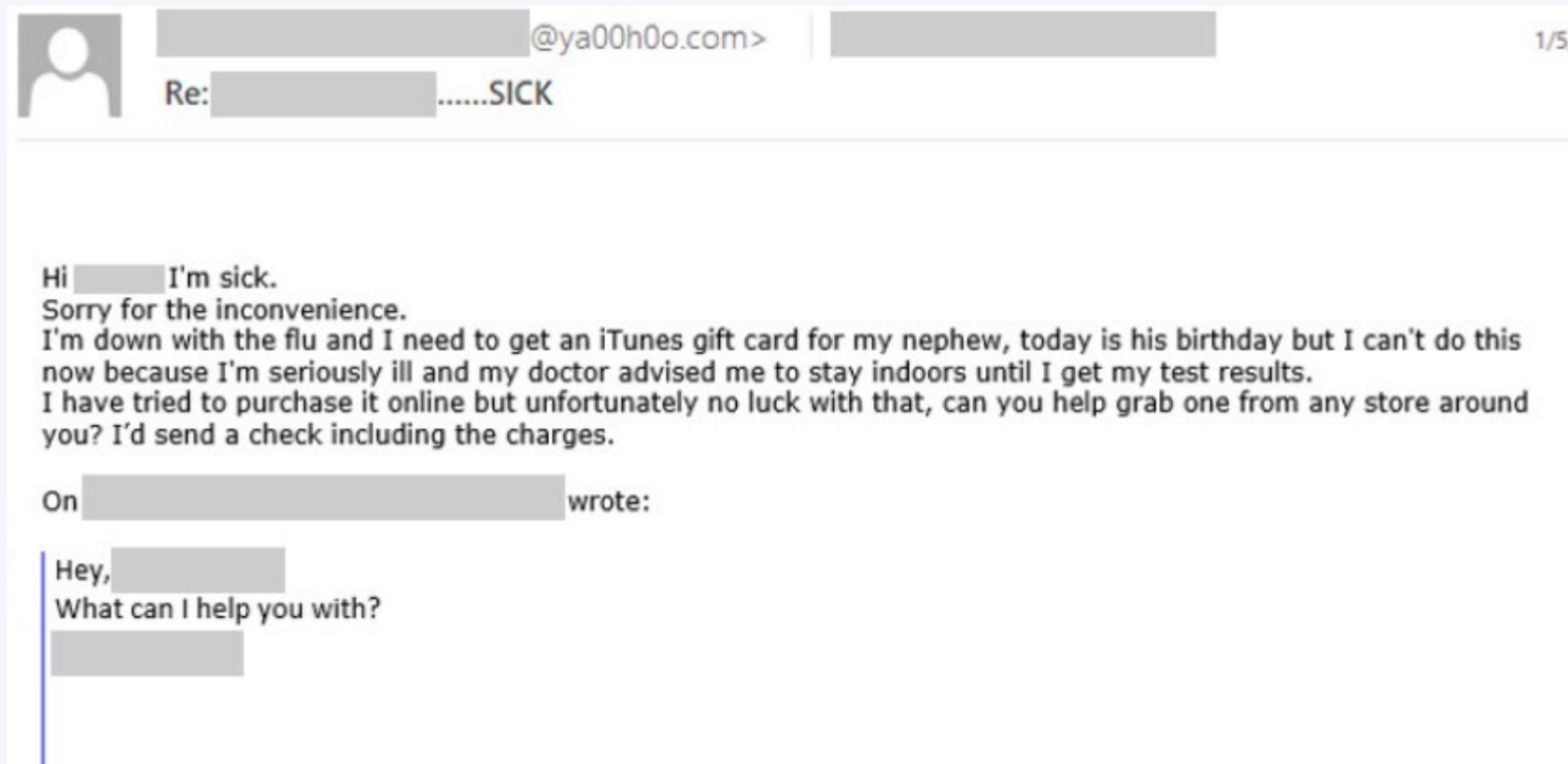
I would like to change the details of my direct deposit information in our records. Unfortunately current bank is closed temporarily due to unauthorized activity. Please make the change for me before the next payroll is processed. If not, can you forward my request to the appropriate person.

Thank you

Denise [REDACTED]

External Message Warning! Carefully inspect this message for indicators of phishing. DO NOT click links, open attachments, or take other actions in any untrusted or suspicious message.

Gift Card Scams



Business Email Compromise

Healthcare and Public Health Sector

Social engineering attacks increased by **279%** in 2023

Business email compromise increased **167%** in 2023

Average cost of BEC is **\$135,000**

Business Email Compromise

Why is BEC So Prevalent?

- Threat actor simply asks for something (money usually).
- No malicious links or attachments are included.
- Impersonation is easy – display name spoofing, stolen branding, etc.
- In public sector, so much information is publicly available.
- Procedural changes could thwart attempts.

Business Email Compromise

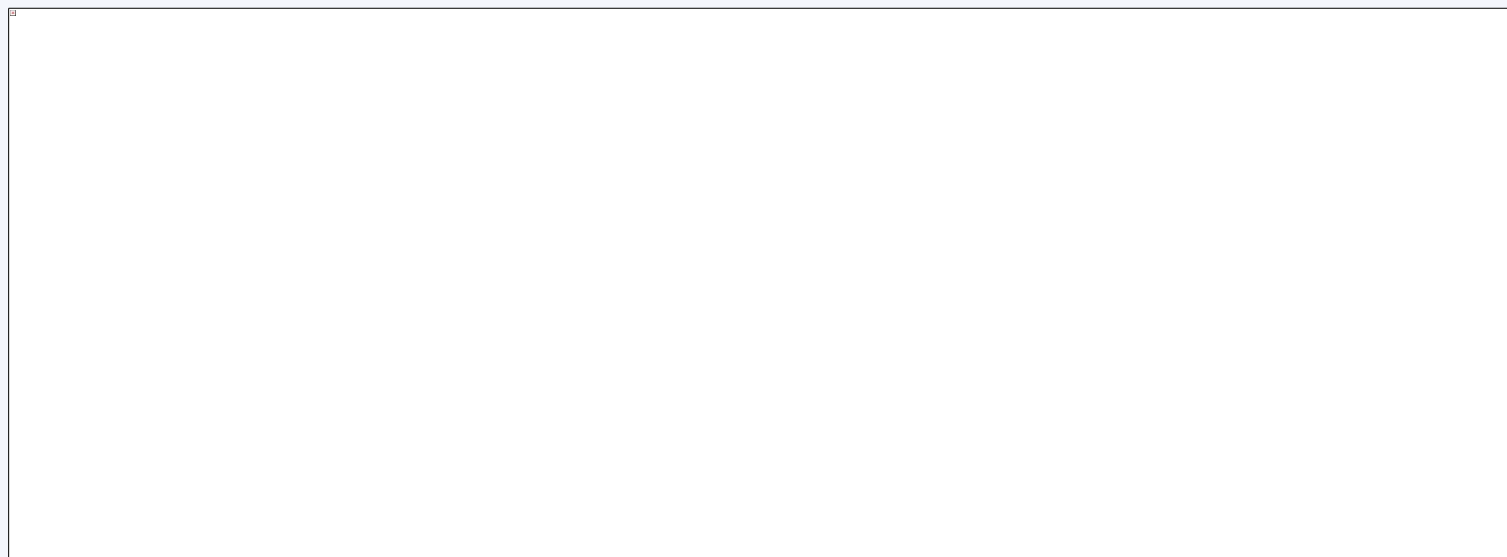
Recent Incident:

- School received email from vendor regarding a payment due.
- Instructed to ACH the payment as they could not process checks at that time.
- A >\$100,000 payment was initiated to a fraudulent account.
- Luckily, the school realized the malicious attempt and went through their bank to reverse the transfer.
- The vendor email account had been compromised.



Credential Compromise

Tricking Users



<http://my-state-nj-us.plusandminues.com>

OFFICIAL SITE OF THE STATE OF NEW JERSEY

Governor Phil Murphy • Lt. Governor Sheila Oliver
NJ.gov | Services | Agencies | FAQs

myNewJersey
powered by P301

Log In to myNewJersey

Login ID:

Password:

[Log in](#)

[Forgot your login ID?](#)
[Forgot your password?](#)
[Need help?](#)

If you need to register for Unemployment Benefits please go to myunemployment.nj.gov. Unemployment services are only accessed through that site.

Otherwise, register for myNewJersey services here:
[Sign Up](#)

Statewide

- Governor Phil Murphy
- Lt. Governor Sheila Oliver
- NJ Home
- Services A to Z
- Departments/Agencies
- FAQs
- Contact Us
- Privacy Notice
- Legal Statement & Disclaimers
- Accessibility Statement

NJ

Compromised Accounts


[EXTERNAL] Debbie [REDACTED] Signed Contract (ESY) from [REDACTED] with you

DW Debbie [REDACTED] com>

Tue 7/16/2024 10:51 AM


Reply Reply All Forward


If there are problems with how this message is displayed, click here to view it in a web browser. Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.



Debbie [REDACTED] shared a file with you

Here's the document that Debbie Welch shared with you.

 Signed Contract (ESY) from [REDACTED]

 This link only works for the direct recipients of this message.

Open

[Privacy Statement](#)

This email is generated through Warren Glen Academy's use of Microsoft 365 and may contain content that is controlled by Warren Glen Academy.

Sharing Link Validation

sssk12-my.sharepoint.com/:o/g/personal/[REDACTED]com/Eu6PUWcmbbhEm2JjhXBa_9IB9J1i48OFxQL46XjrxHdH0Q?e=5%3aVlcK7i&at=9

OneDrive

Microsoft

Verify Your Identity

You've received a secure link to:

Signed Contract (ESY) from [REDACTED]

To open this secure link, we'll need you to enter the email that this item was shared to.

Enter email

Next

By clicking Next you allow Warren Glen Academy to use your email address in accordance with their privacy statement. Warren Glen Academy has not provided

Activate Windows
Go to Settings to activate Windows.

Type here to search

12:29 PM
7/17/2024

[EXTERNAL] Fondex AB - Deals Tracker Update - Ref:HS82GJUN21



Patricia [redacted].k12.nj.us>
To [redacted]

Reply Reply All Forward [Share icon] [More icon]

Wed 6/26/2024 10:32 AM

Good Morning,

We have updated our online document tracker.

Please review new files added to the online document tracker;

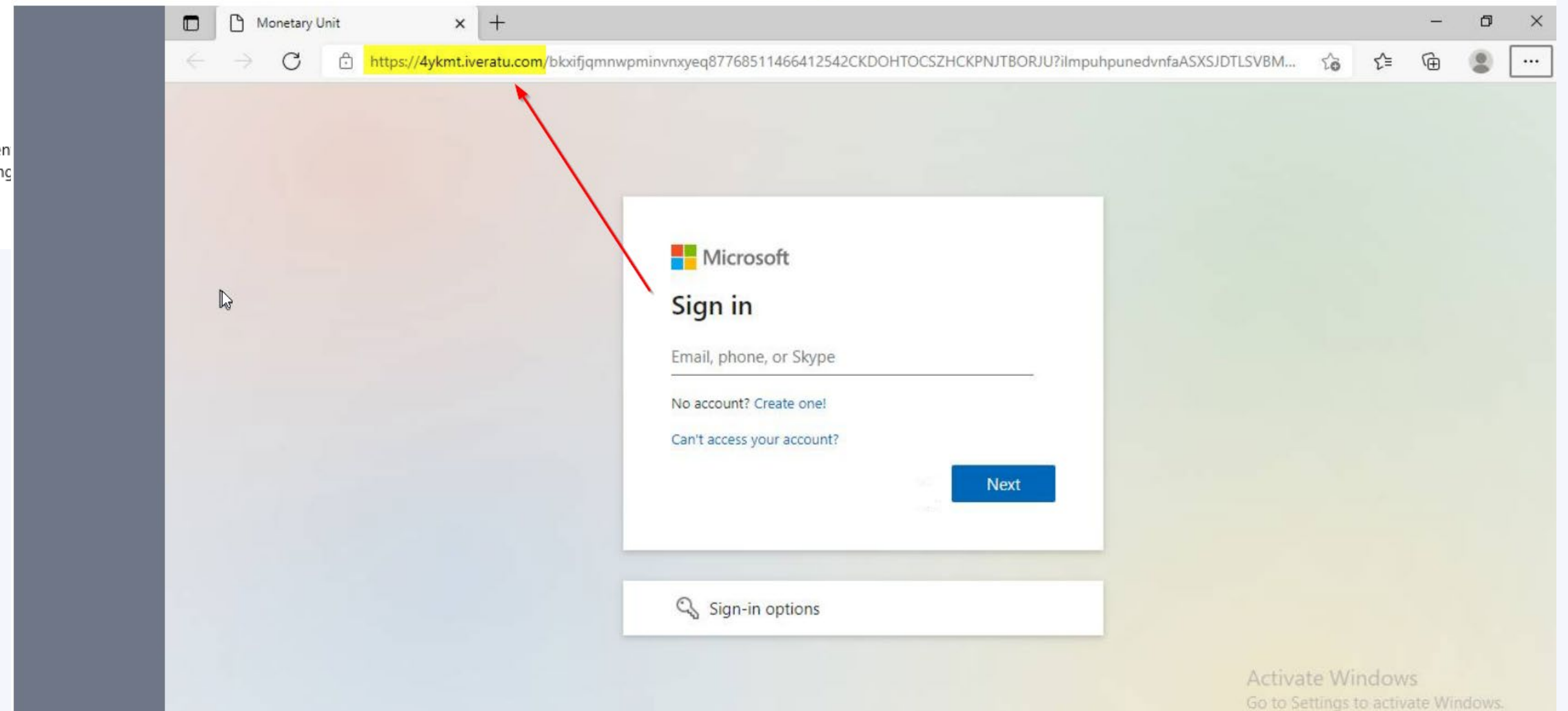
Online document and deal tracker url: fondexgruppen-online-deal-tracker-url-update-fondexgruppen.esdebutik.com

Anti-spam policy; recipient verification is required: To access the tracker, please copy and paste the above URL in your preferred internet browser.

Patricia [redacted]
Superintendent

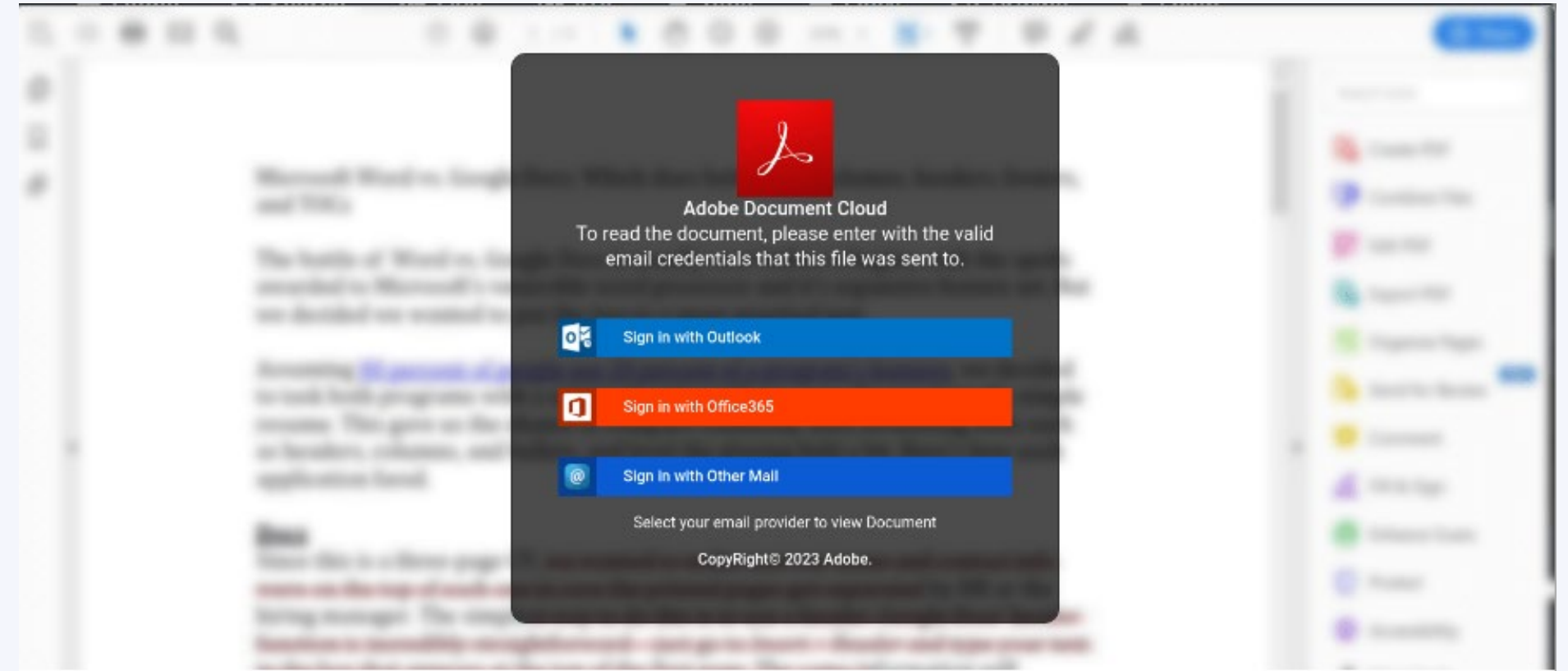
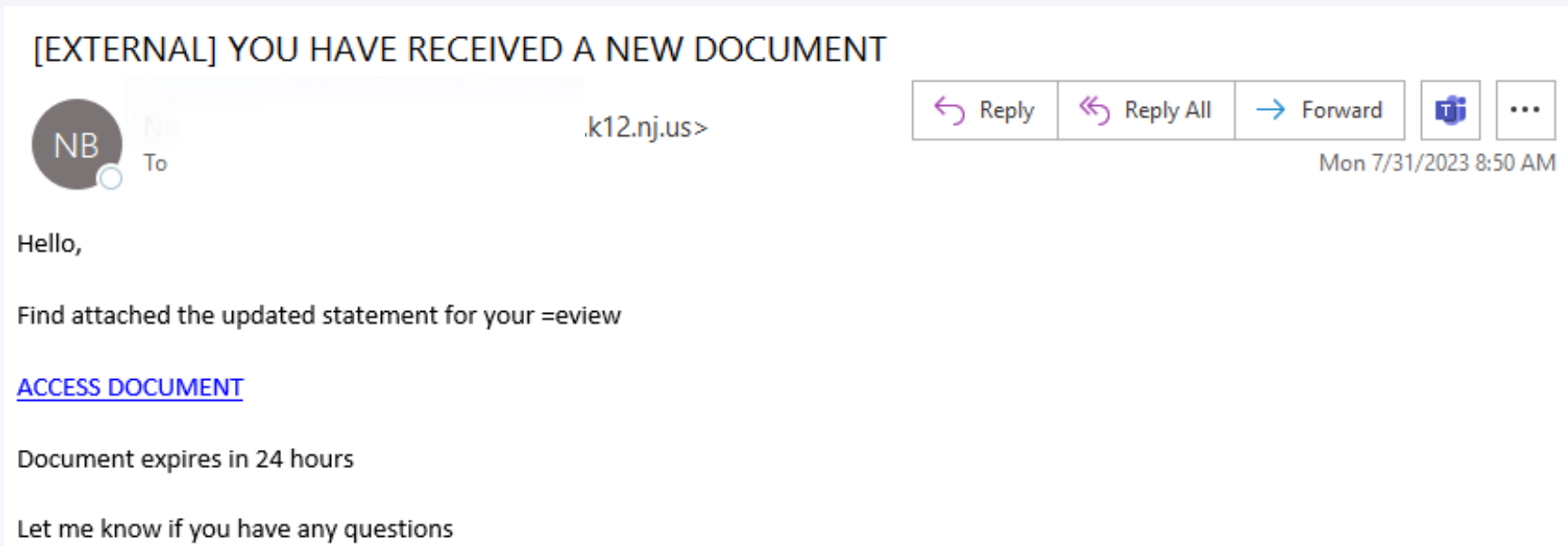
<http://fondexgruppen-online-deal-tracker-url-update-fondexgruppen.esdebutik.com>

Confidentiality Notice: This email message and any files transmitted with it may contain confidential information. If you have received this email message in error, please notify the sender immediately by phone or email and destroy the original message without making copies.



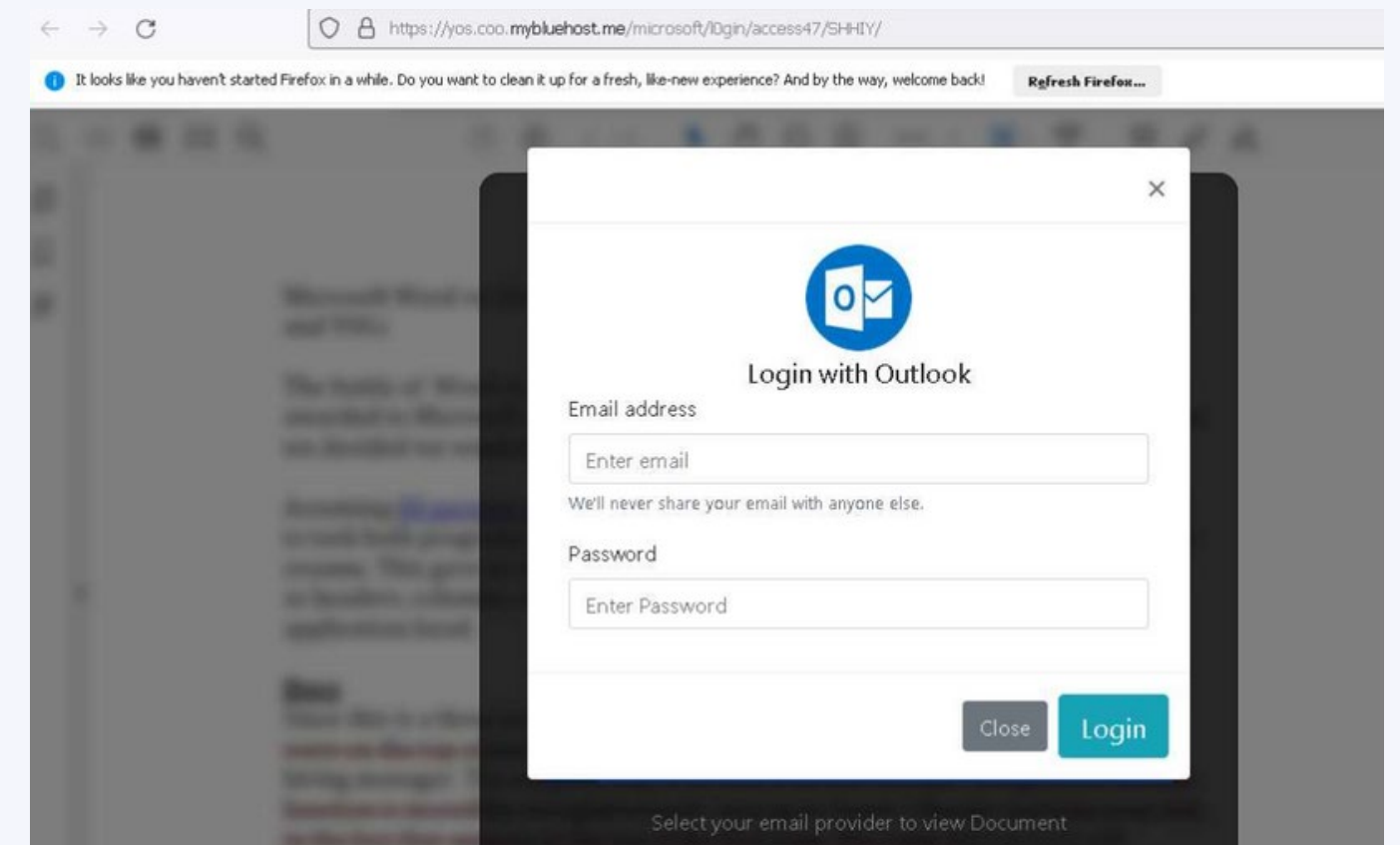
Activate Windows
Go to Settings to activate Windows.

Using Compromised Accounts

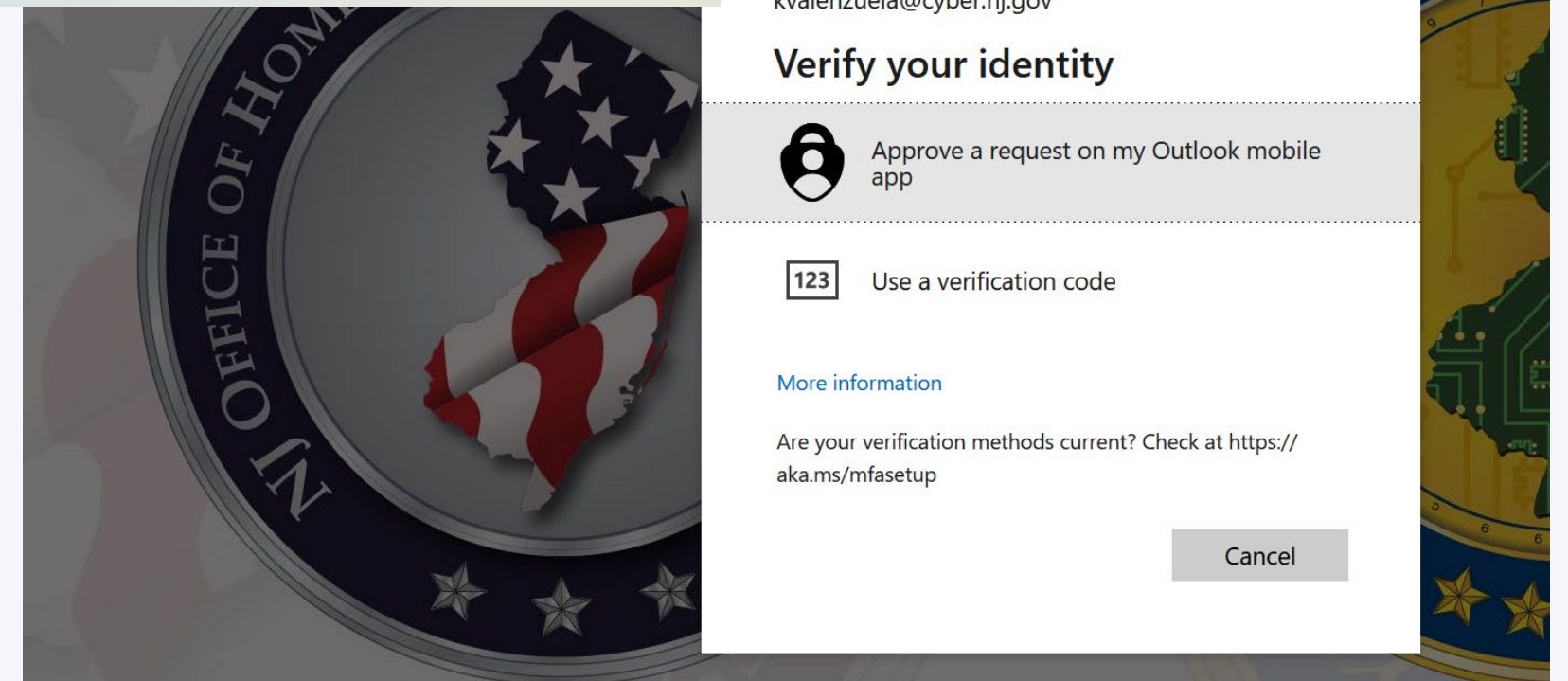
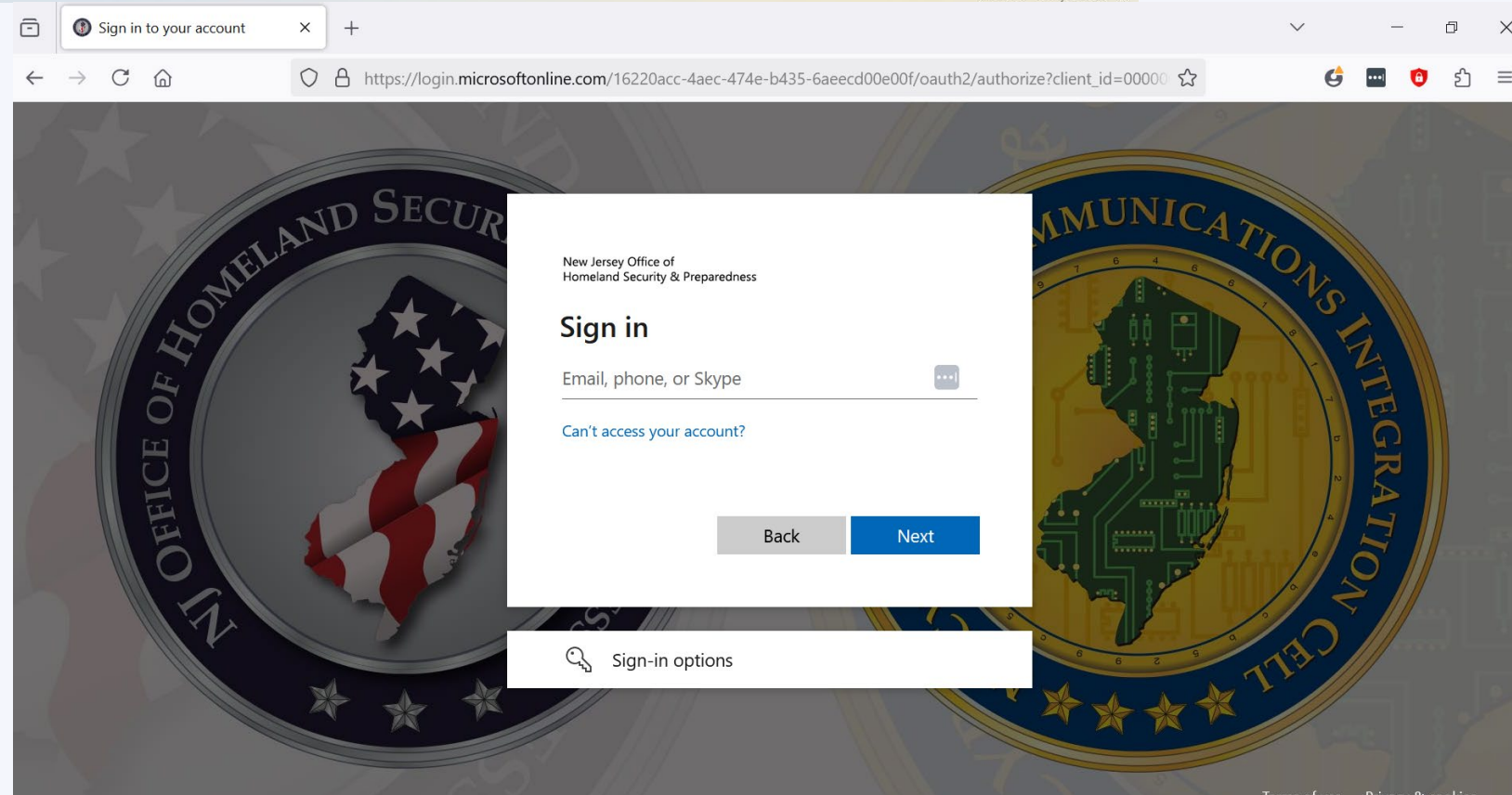
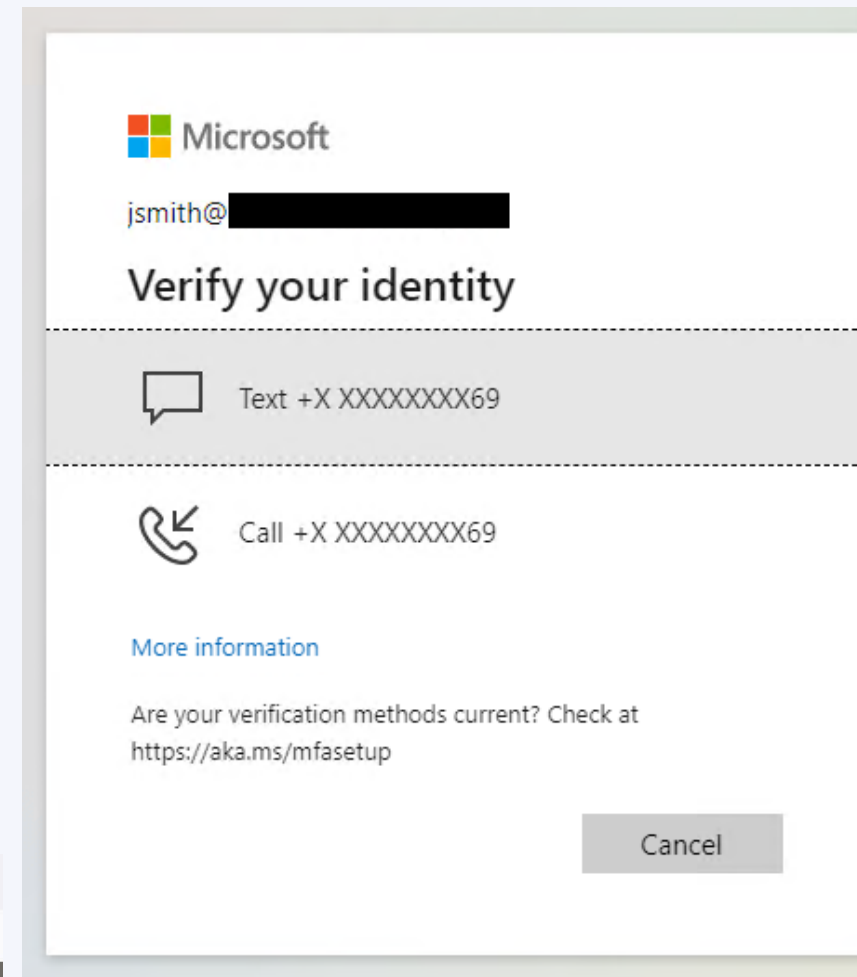
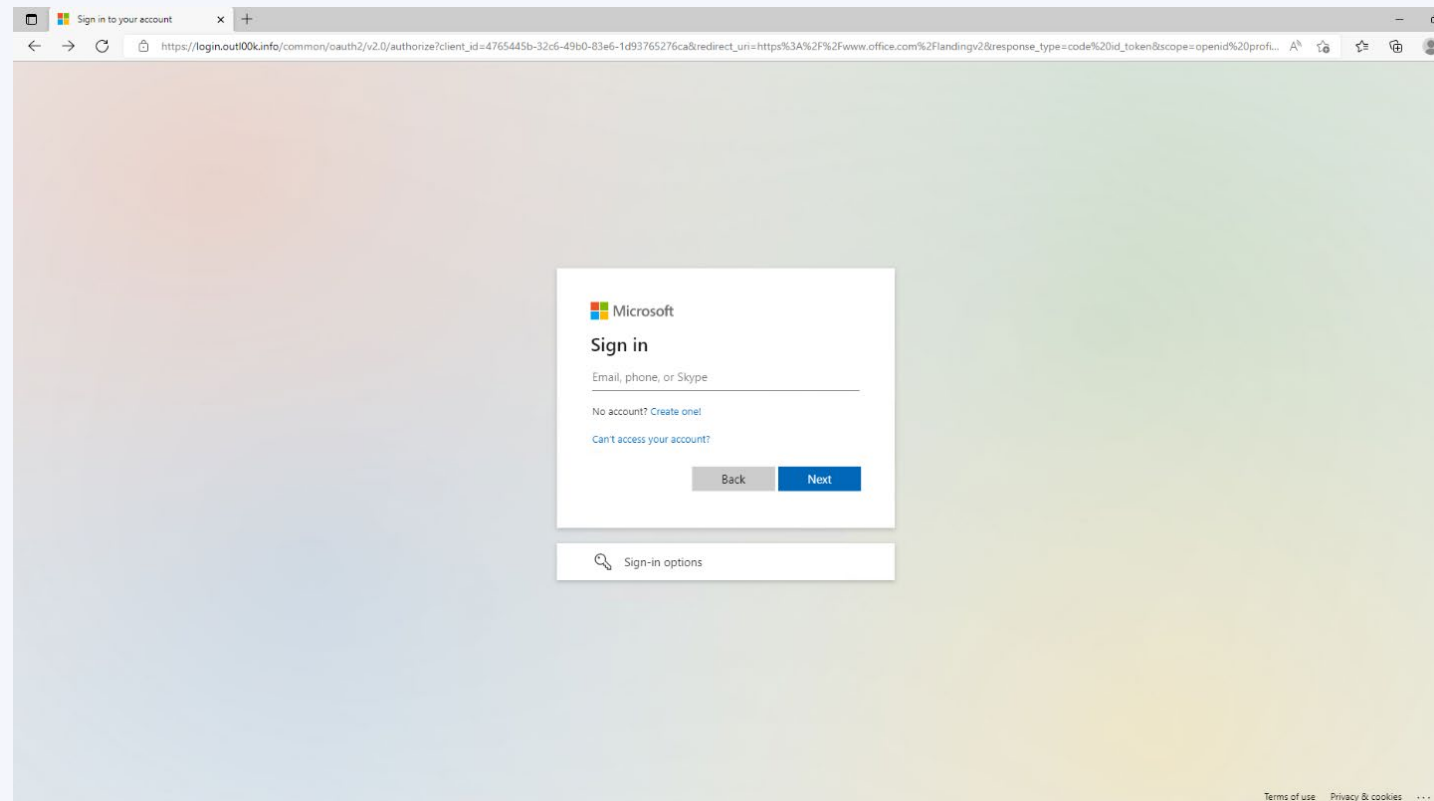


YOU OFTEN ARE DIRECTED TO A WEBPAGE REQUESTING YOU TO LOG IN TO VIEW A DOCUMENT OR MESSAGE.

IF CREDENTIALS ARE ENTERED, THEY'RE STOLEN. THEN YOUR ACCOUNT IS COMPROMISED TOO.



Attempting to Bypass MFA

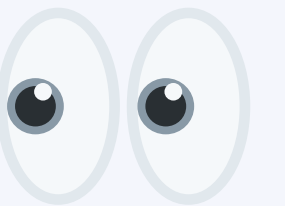


Credential Compromise

GETTING THE KEYS TO THE KINGDOM

How many accounts do you think you have?

Do you ever reuse passwords?



Account compromises often precede ransomware infections.

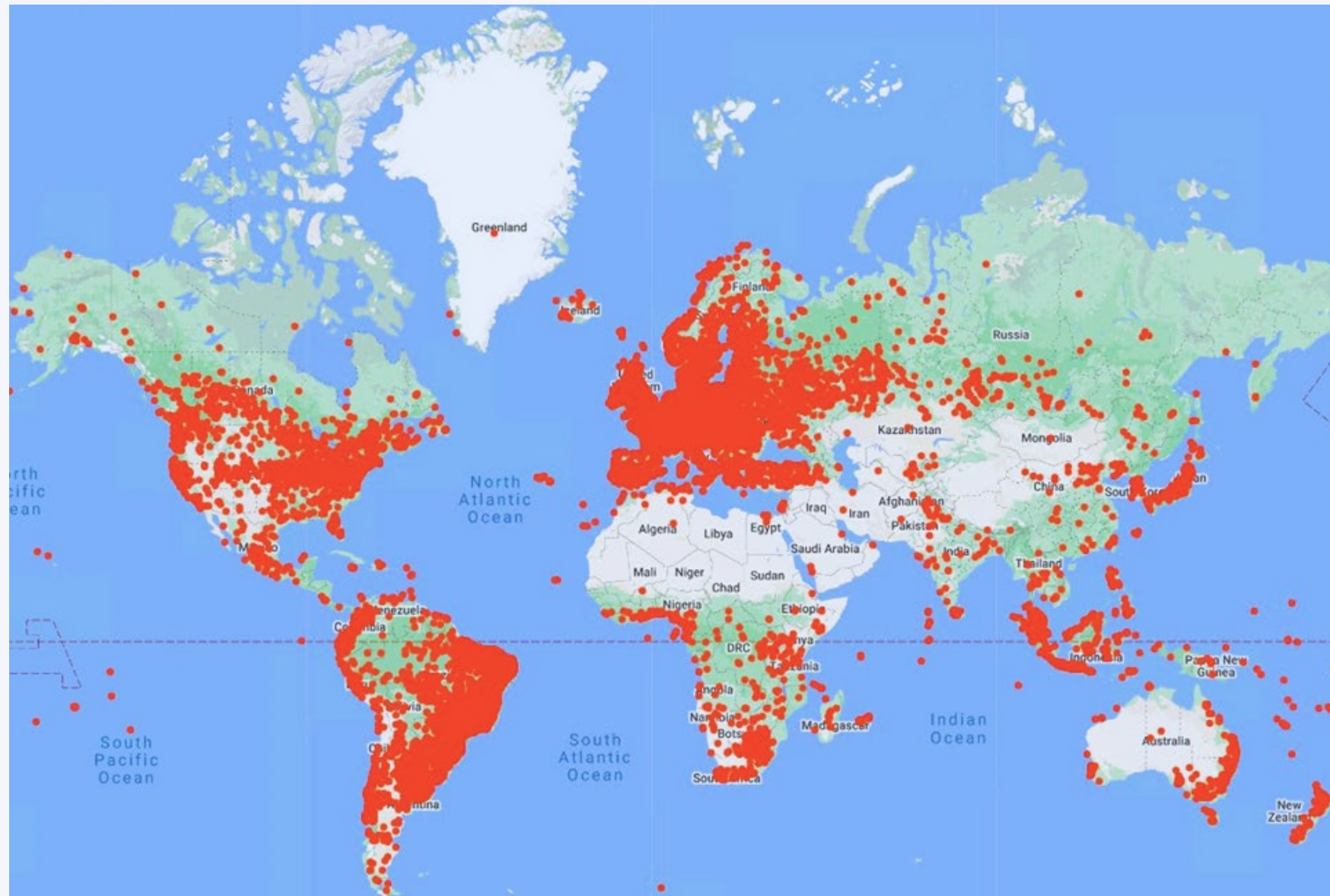
SO, WHAT SHOULD WE DO?

MULTI-FACTOR AUTHENTICATION

- Something you know
- Something you have
- Something you are

How Are They Compromised?

GETTING THE KEYS TO THE KINGDOM



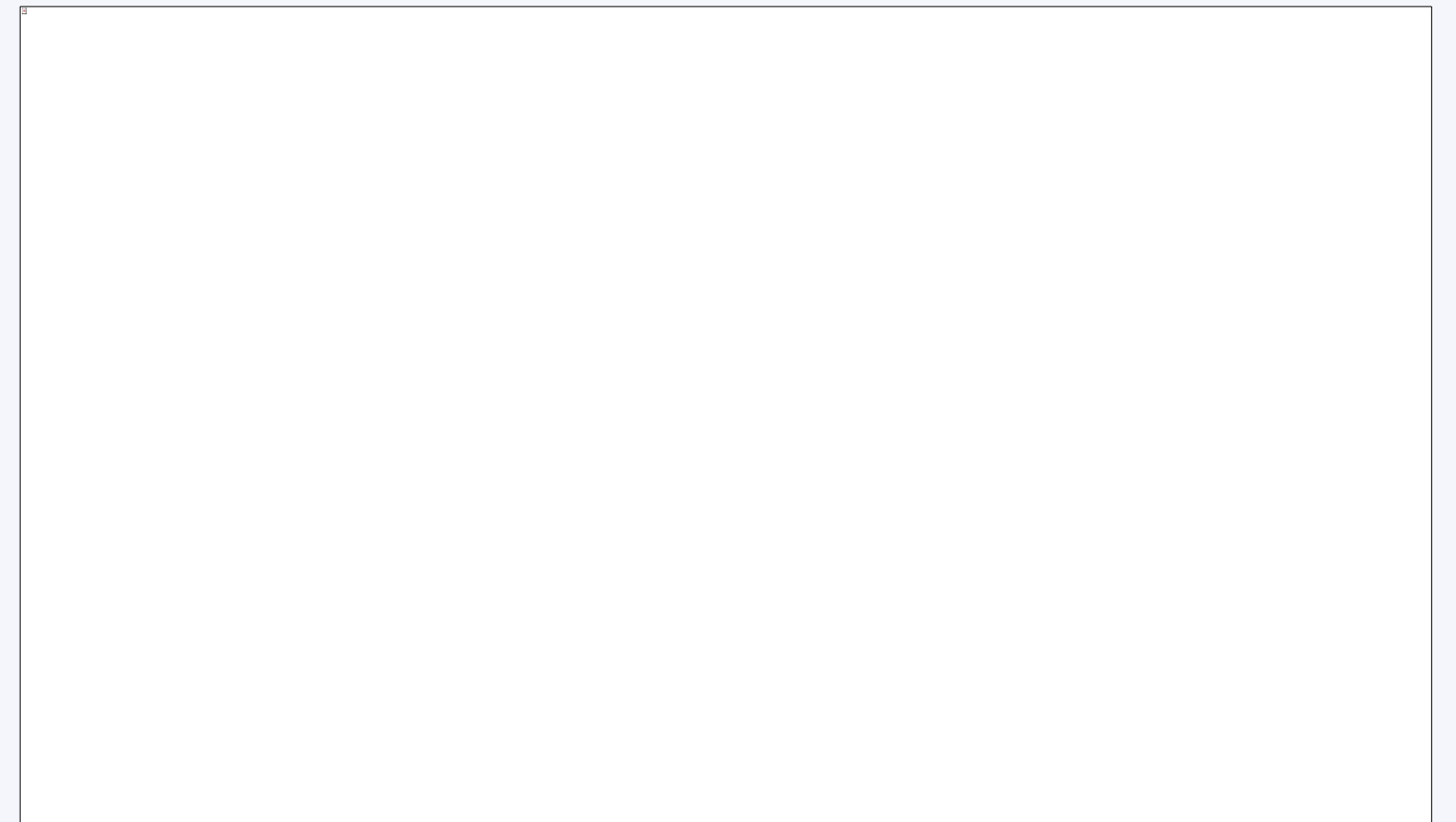
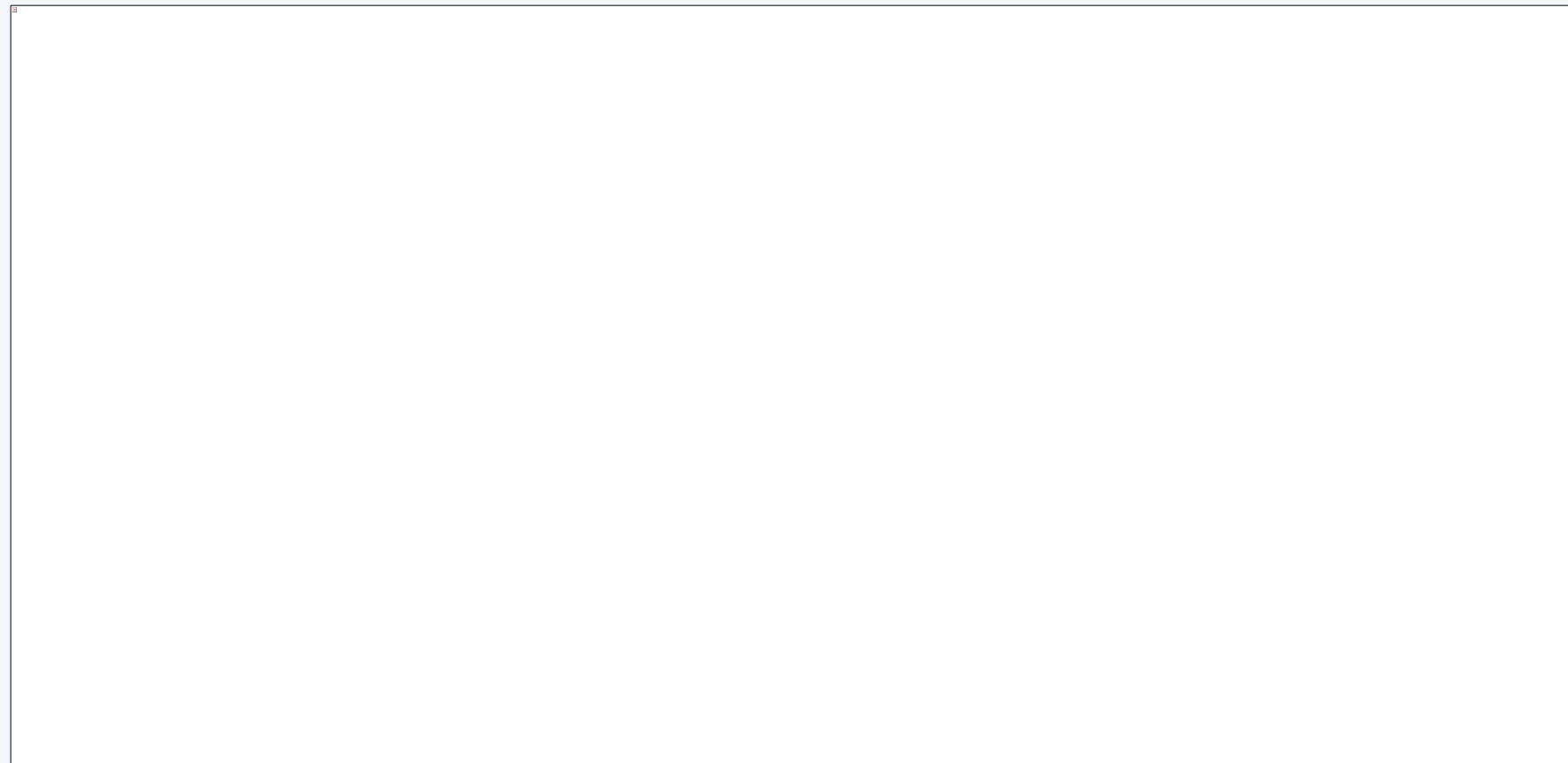
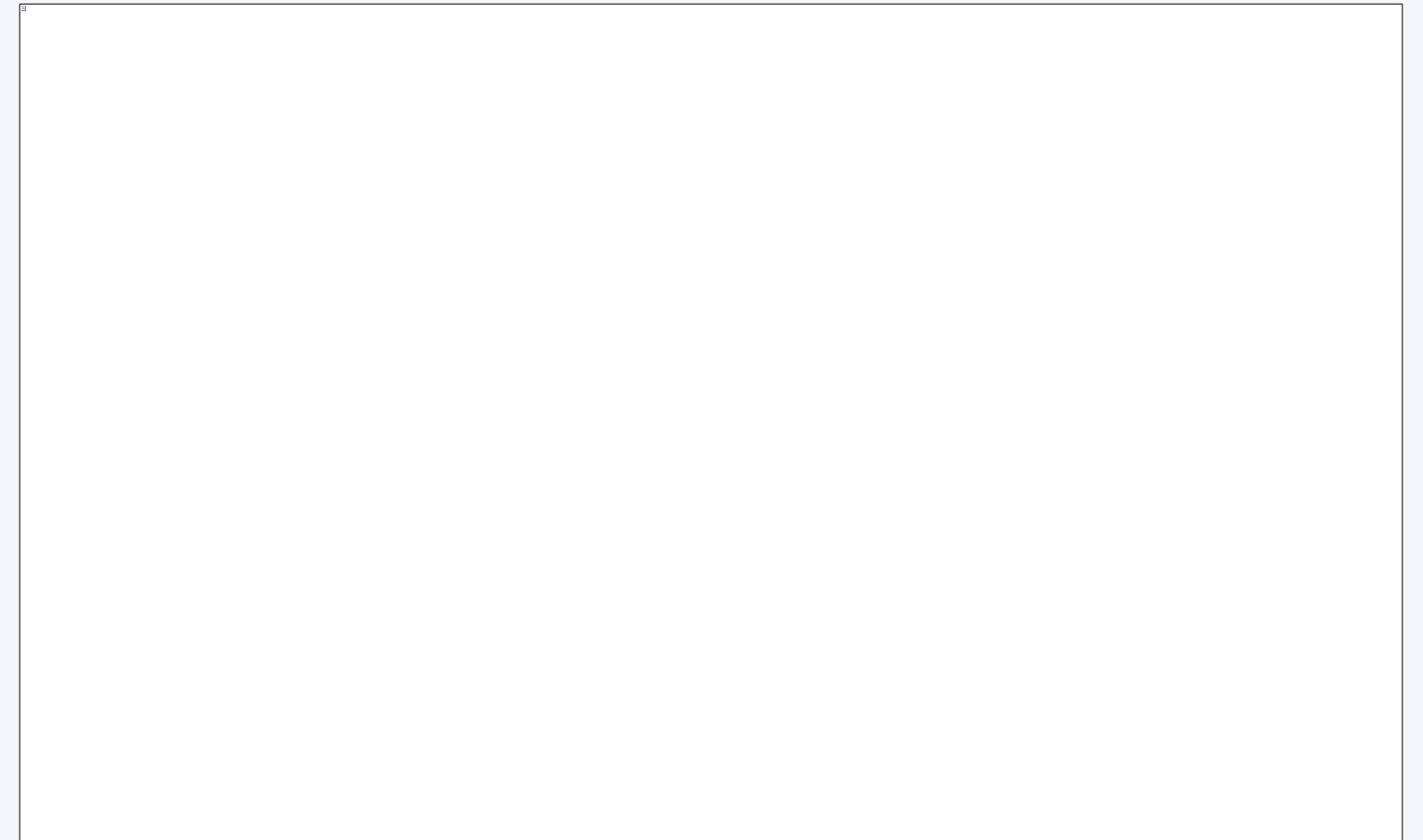
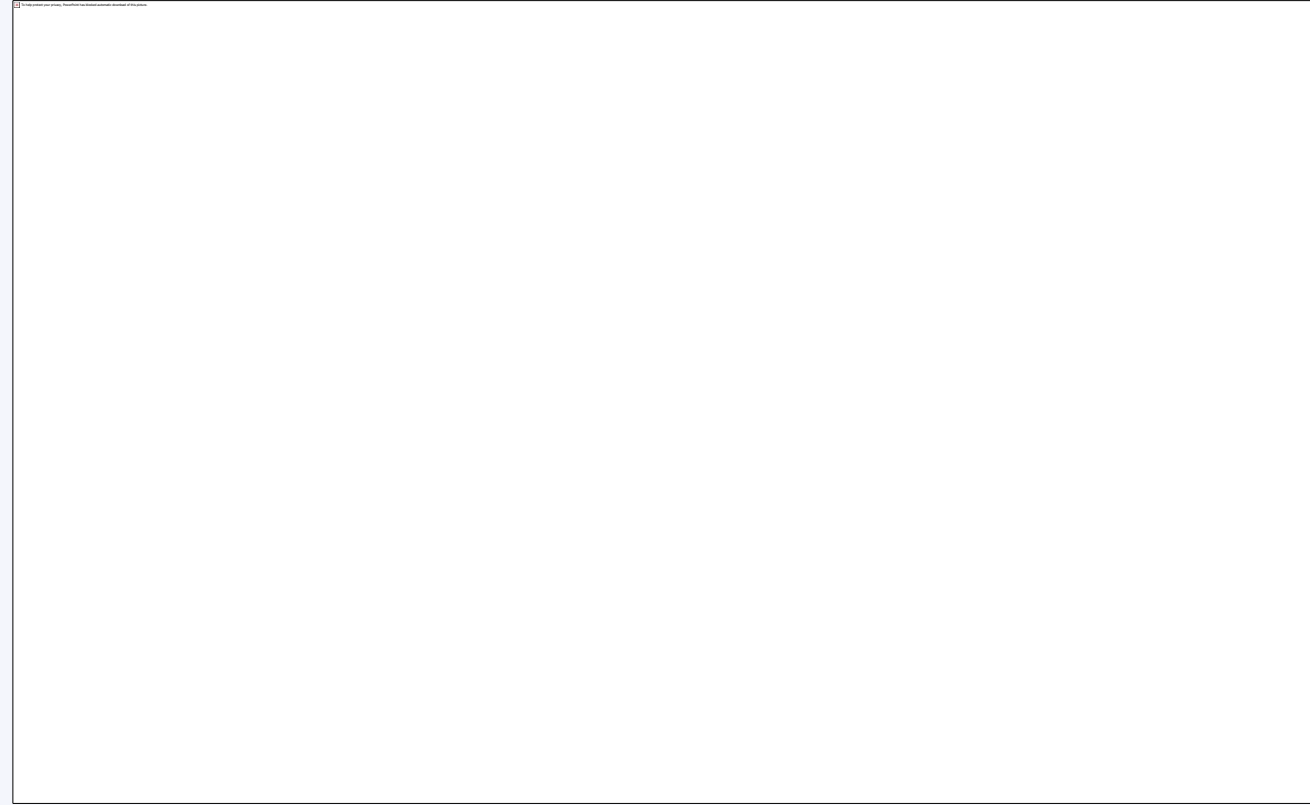
INFOSTEALERS

DATA BREACHES

WEAK PASSWORDS

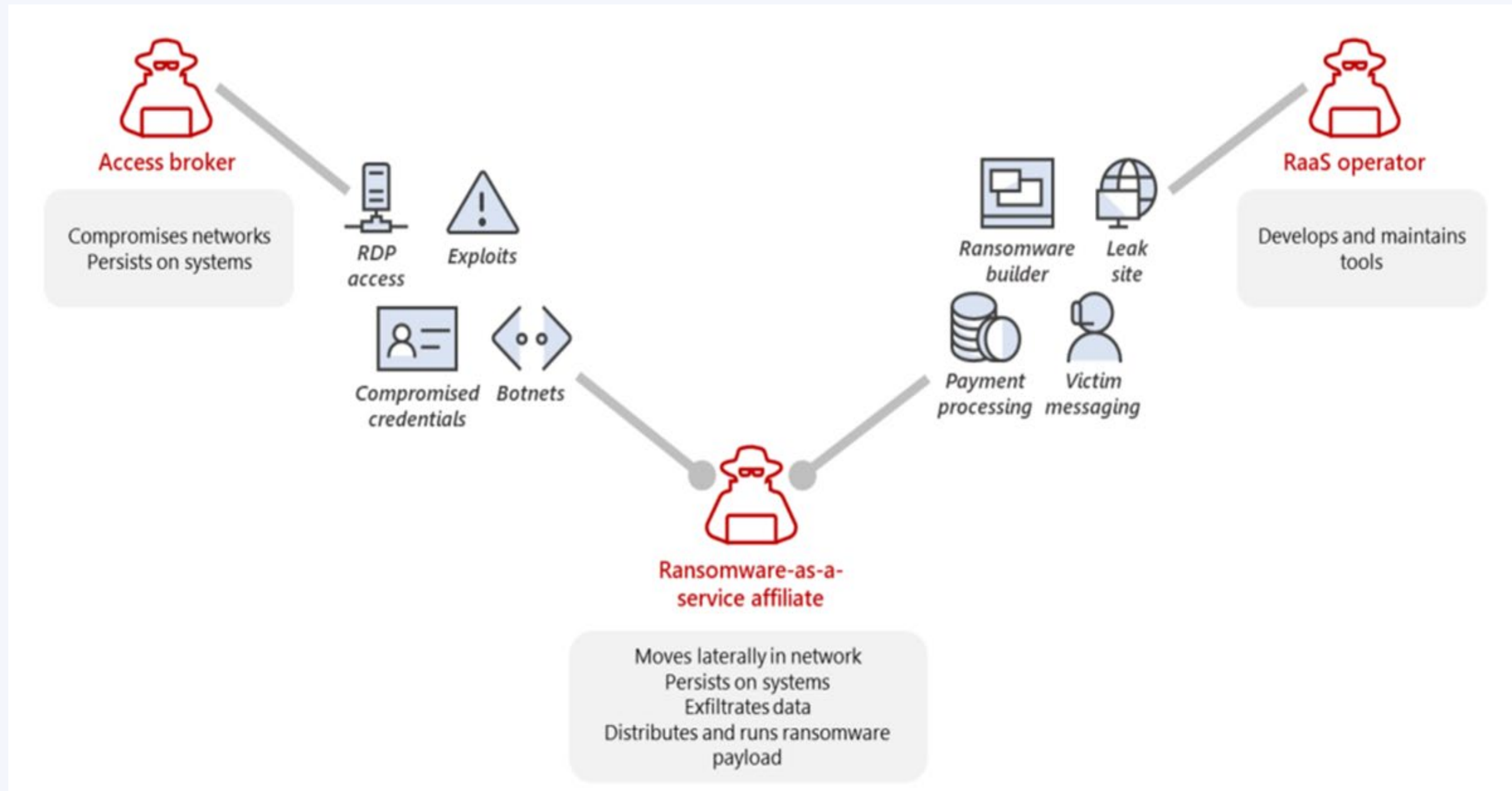
SOCIAL ENGINEERING

Infostealers



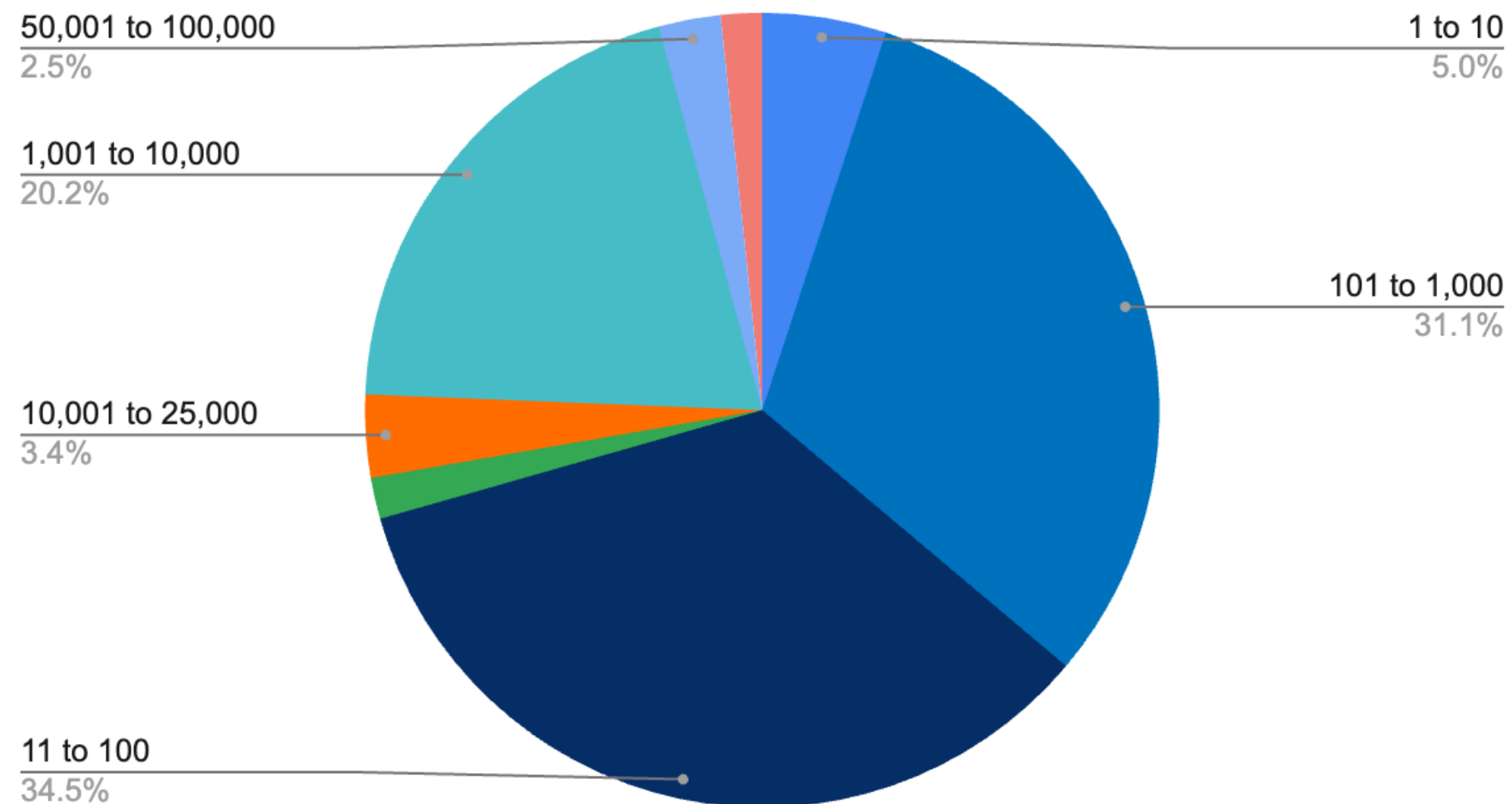
Ransomware

Ransomware-as-a-Business



Ransomware

Ransomware Impacted Companies by Size (Employee Count)



average ransom: \$390,000

avg downtime ~24 days

remote access, phishing

data exfiltration in 75% of incidents

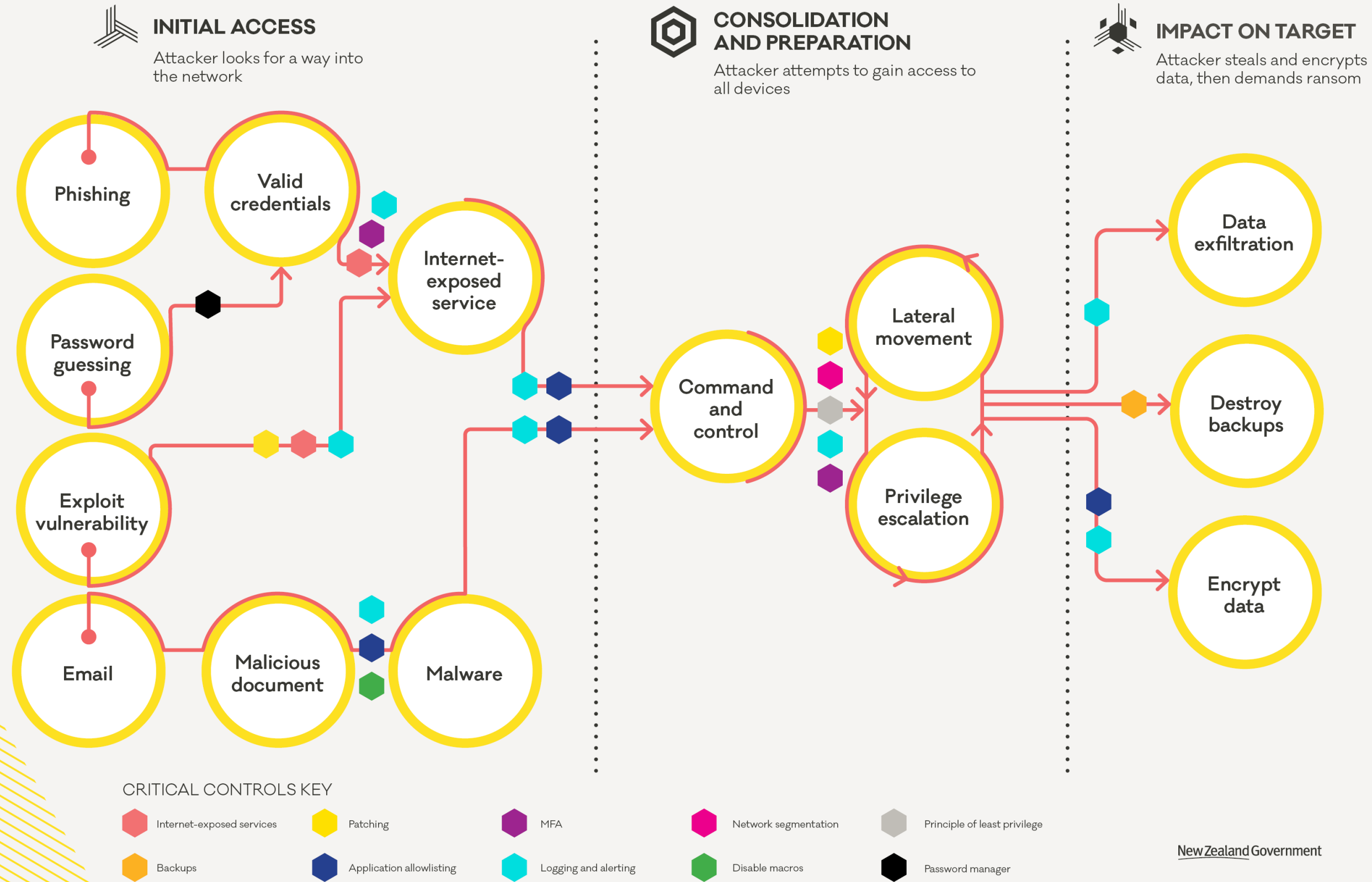
target of opportunity

SMBs targeted

No encryption extortion

LIFECYCLE OF A RANSOMWARE INCIDENT

How the CERT NZ Critical Controls can help you stop a ransomware attack in its tracks.



Change Healthcare Incident

Change Healthcare is a provider of revenue and payment cycle management for healthcare providers and patients within the United States.

Processes about half of all medical claims in the United States for approximately 900,000 physicians, 33,000 pharmacies, 5,500 hospitals and 600 laboratories.

On **February 21**, a major ransomware attack targeted Change Healthcare.

Service were completely down from February 21 to February 26, **5 days**.

AHA predicted that **94%** of hospitals experienced a **financial** impact.

Some patients were forced to pay **out-of-pocket for prescriptions**.

Approximately **4 terabytes** of Protected Health Information (PHI) was stolen.

The culprit was the **BlackCat** ransomware group.

Who is BlackCat?

BlackCat is a Russian-based ransomware organization.

They are also known as ALPHV.

They offer a **ransomware -as-service** business model.

BlackCat offers their ransomware to third-party affiliates to infect organizations in exchange for a **percentage** of the ransom payment.



Timeline of Events

February 12:

Threat actors first access Change Healthcare network.

February 21:

Ransomware attack initiated.

March 1:

A \$22 million payment sent to BlackCat cryptowallet .

March 1:

BlackCat exit Scam began by taking their data leak blog offline

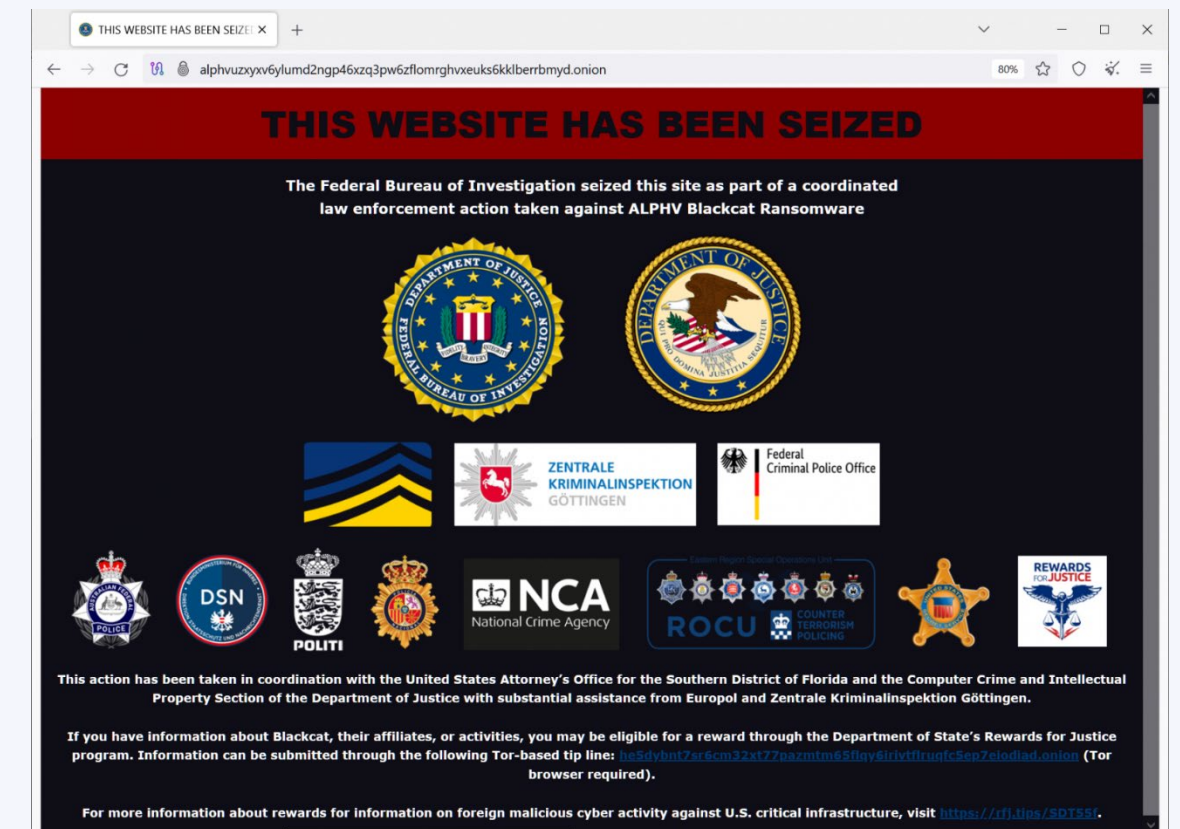
March 3:

An affiliate “Notchy,” claimed responsibility for the incident on a Russian hacking forum.

They claimed BlackCat took the money, did not pay them as an affiliate; therefore, the data would not be deleted.

March 7:

Pharmacy electronic prescribing is fully functional for claim submission and payment transmission.



Timeline of Events Cont.

March 15:

Forensic investigations identified the original vulnerability that acted as the initial attack vector, though United Health did not disclose the vulnerability. It is believed to be a remote access compromise of an account without MFA enforced.

March 27:

The U.S. Department of State's Rewards for Justice (RFJ) program, is offering a reward of up to \$10 million dollars for information leading to the identification of BlackCat members.

April 8:

A new ransomware group known as " RansomHub" allegedly claimed that they obtained Change Healthcare's stolen data and demanded a second ransom to keep them from leaking the data.

April 16:

RansomHub began selling the stolen Change Healthcare data, which includes medical and dental records, payment claims, insurance details, and personal information such as Social Security numbers and email addresses. Post was later removed, causing speculation that a second payment was made.

Impacts

UnitedHealth stated that the ransomware incident caused **\$872 million** in losses so far.

UnitedHealth reported **\$1.521 billion** in direct response costs and expected **\$2.87 billion** in total cyberattack impacts for 2024.

The cyberattack affected at least 100 million individuals' protected health information.

Largest known breach of PHI.

Why is this significant?

Healthcare providers:

94% of all US Hospitals were financially impacted by the cyberattack.

~60% of US Hospitals lost at least \$1M per day during this incident .

Physician practices (as of April 2024, issues continued after):

80 percent of physician practices lost revenue from unpaid claims

36 percent reported delays in claim repayment

Small practices (10 or fewer physicians) were hit particularly hard.

Ransomware attacks against health care organizations surged following the hack of Change Healthcare.

Artificial Intelligence

The Good and The Bad

CYBERSECURITY

GENERATIVE AI

AUTOMATION

ENHANCED CUSTOMER EXPERIENCE

REDUCTION IN HUMAN ERROR

EFFICIENCY AND EFFECTIVENESS

CYBER THREATS

AUTOMATING ATTACKS

VULNERABILITY DISCOVERY

GENERATIVE AI

VOICE REPLICATION

DISINFORMATION

RELIANCE ON TECH

Cyber Resiliency

Data Backups

Patch
management

Multi-Factor
Authentication

Endpoint
Detection and
Response

User
Awareness
Training

Password
Manager

Cybersecurity
Plans

Tabletop
Exercises

Caution with
Email

Network
Segmentation

Limit sharing
of information

NJ CCIC Services

● weekly bulletin

● presentations

● cybersecurity reports

● risk management

● incident reporting

● alerts, advisories

● assessments

● grant management

● training

● cyber range

cyber.nj.gov/members

CONNECT



1-833-4-NJCCIC



KVALENZUELA@CYBER.NJ.GOV



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