CYBER SYNC UP

NSB Cyber
No Steps Backward

Triskele Labs

Hall&Wilcox
smarter law

McGrathNicol

WOTTON KEARNEY

HWL EBSWORTH
LAWYERS

Navigating New Zealand's Cyber Future

Key Trends and Guidance from the NCSC

TOM ROBERTS

Team Lead for Response and Investigations

NSCS

National Cyber Security Centre

What we want you to know

- Who we are and what we do
- Understand the NZ cyber security risk environment
- Know what you can do to be more cyber resilient
- Understand how you can encourage your customers to be more secure

What do we do?

We are the lead operational cyber security agency

We detect & disrupt malicious cyber activity

We support individuals & organisations to raise cyber resilience

Geo strategic shift

A shift from rules to power

Multipolar world where rules are more contested

A shift from economics to security

Economic relationships are reassessed

A shift from efficiency to resilience

Building greater resilience becomes more prominent

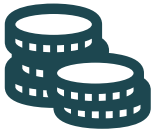
New Zealand's cyber threat landscape - 5 judgements

NCSC

Real world impact

According to our research, around half of **New Zealanders** have experienced an online **security threat** in the past six months:

We estimate $1.6 billion is lost to **these threats** last year in NZ



830,000 people lost money

Average loss was **$1260**

NCSC

National Cyber Security Centre

So, what can you do to protect your systems?

own your online

National Cyber Security Centre

Data collection, storage and encryption

Data collection

Consider what information you really need to collect from clients and contacts. Your level of risk is based on the amount of data you have —

Data storage

If you use a cloud service for data storage, check the provider can give you the services and protection you need.

Encryption

Make sure you're encrypting any data you collect.

- in transit
- at rest

own your online
cyber smart week

National Cyber Security Centre

Least Privilege - Manage and limit access

Principle of least privilege:

- reduces the risk of data being accidentally shared.
- needs clear guidance for staff.

own your online
cyber smart week

National Cyber Security Centre

Create an incident response plan

Develop a response plan for what to do if your business is affected by a data breach.

Make sure your staff know to report any security breach to your IT person or team.

own your online
cyber smart week

National Cyber Security Centre

Actions you can take to protect yourself

National Cyber Security Centre

Create a long, strong and unique password

- Longest is strongest: use at least 16 characters.
- Use a passphrase of four or more random words.
- Avoid common patterns and personal information.

National Cyber Security Centre

Reusing passwords

Reusing passwords means more damage if you are involved in a cyber incident.

- Many online accounts use your email address as your username.
- Many online accounts are accessed through your social media login.

National Cyber Security Centre

2FA helps stop 99% of automated online attacks

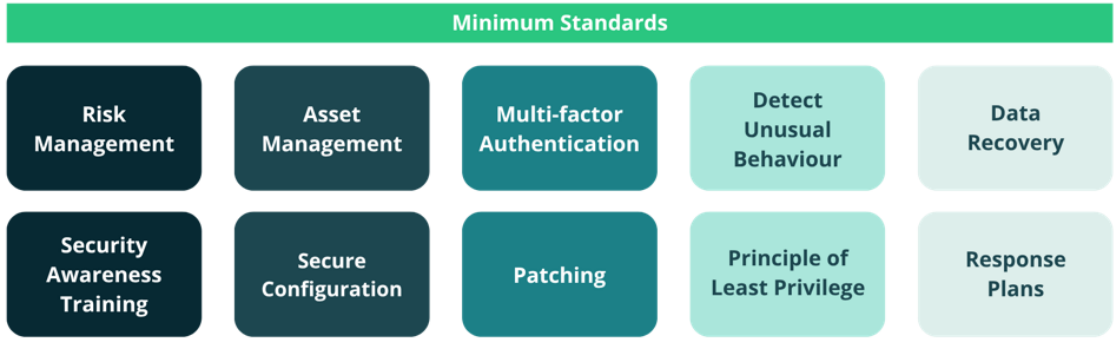
- 2FA is an additional security step on top of your username and password
- 2FA is a way of ensuring that it’s really you logging into an account.
- Find out how to do this for your bank, email and social media accounts at ownyouronline.govt.nz

How we can support you

MFN

Advantage, DEFEND, INSTILLERY, PLAN.B, AMARU, kordia, Lightwire, SAFESURFER, CASSINI, NODE, liquid, Spark nz, Cello., FENRIR SECURITY, LIVERTON SECURITY LIMITED, CyberCX, FUJITSU, N4L, SSS CYBERSECURITY SPECIALISTS, DATACOM, inde, one.nz, UNIFY SOLUTIONS

Minimum Standards



Vulnerability Alerting

Incident Response Support

Report to us via
www.ncsc.govt.nz/report

NCSC

Key takeaways

State-sponsored actors are actively testing New Zealand targets

The commercialisation of cybercrime means cybercriminals have more tools.

Hacktivists are targeting New Zealand organisations as global conflicts escalate

Threat actors are exploiting supply chains, hidden dependencies and organisational blind spots to cause impact

Known weaknesses and unpatched vulnerabilities are providing threat actors with easy access

Doing some basics will make you and your customers more secure.

Ransomware

Cautionary Tales from the Front Lines

JAMES FINLAY

Lead Director of Incident Response, Asia-Pacific

Coveware

SLIDES CAN'T BE SHARED DUE TO CONFIDENTIALITY

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First-Hand Lessons

An Insured's Cyber Incident Story

EDWIN LIM

Partner

Hudson Gavin Martin

NSB Cyber No Steps Backward

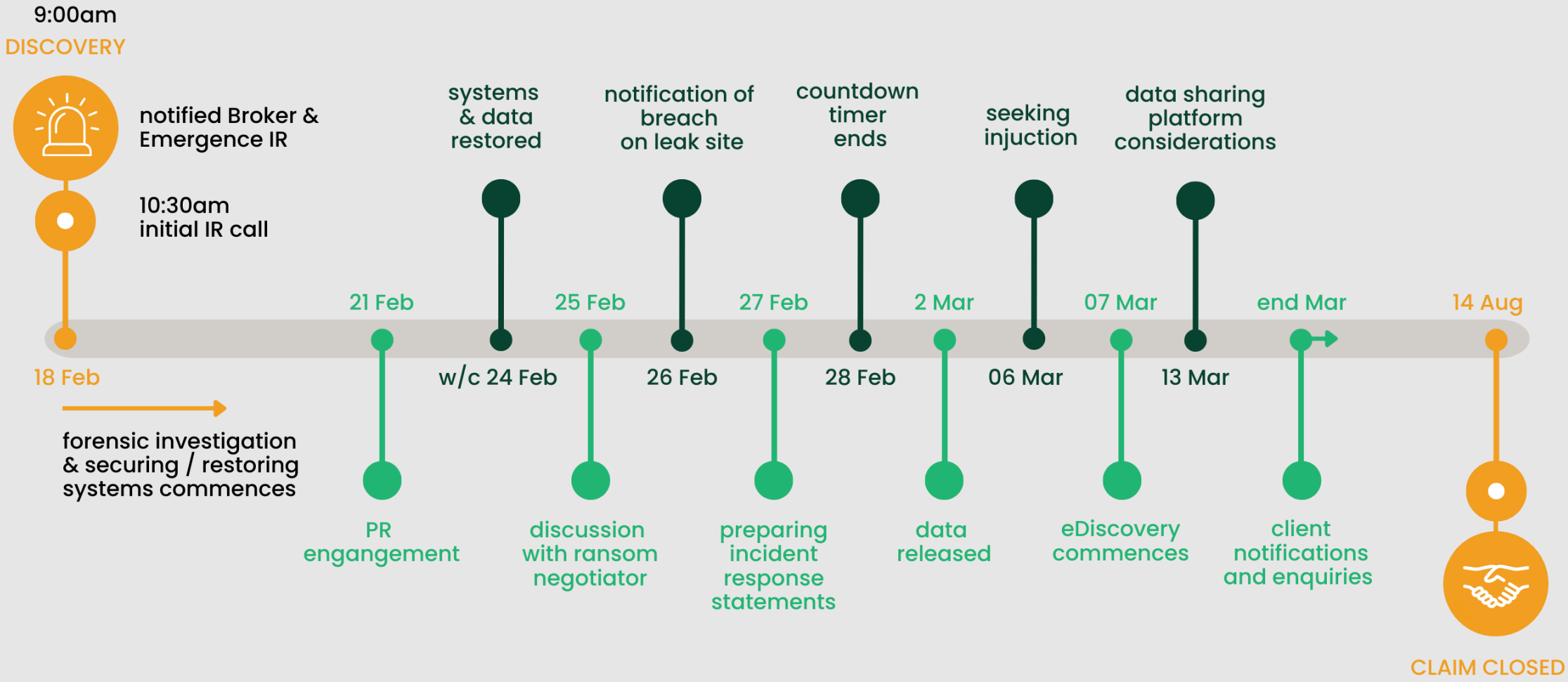
Triskele Labs

Hall&Wilcox smarter law

McGrathNicol

WOTTON KEARNEY

HWL EBSWORTH LAWYERS


9:00am
DISCOVERY
notified Broker & Emergence IR
10:30am initial IR call
18 Feb
forensic investigation & securing / restoring systems commences
21 Feb
PR engangement
w/c 24 Feb
systems & data restored
25 Feb
discussion with ransom negotiator
26 Feb
notification of breach on leak site
27 Feb
preparing incident response statements
28 Feb
countdown timer ends
2 Mar
data released
06 Mar
seeking injuction
07 Mar
eDiscovery commences
13 Mar
data sharing platform considerations
end Mar
client notifications and enquiries
14 Aug
CLAIM CLOSED

Demonstrating Real-World Threat Actor Tactics

Cyber-Attack Simulations

BRENDAN PAYNE

Partner

McGrathNicol

ANDREW MCMASTER

Manager

McGrathNicol

NSB Cyber No Steps Backward · Triskele Labs · Hall&Wilcox smarter law · McGrathNicol · WK WOTTON KEARNEY · HWL EBSWORTH LAWYERS

Agenda

- Case Study 1: Ransomware
- Cyber-Attack Simulation 1: Info Stealer
- Case Study 2: Business Email Compromise
- Cyber-Attack Simulation 2: Multi-Factor Authentication Bypass
- Mitigation Strategies

Case Study 1

Ransomware

Ransomware Overview

Ransomware is a business disruption event, not just a cyber incident.

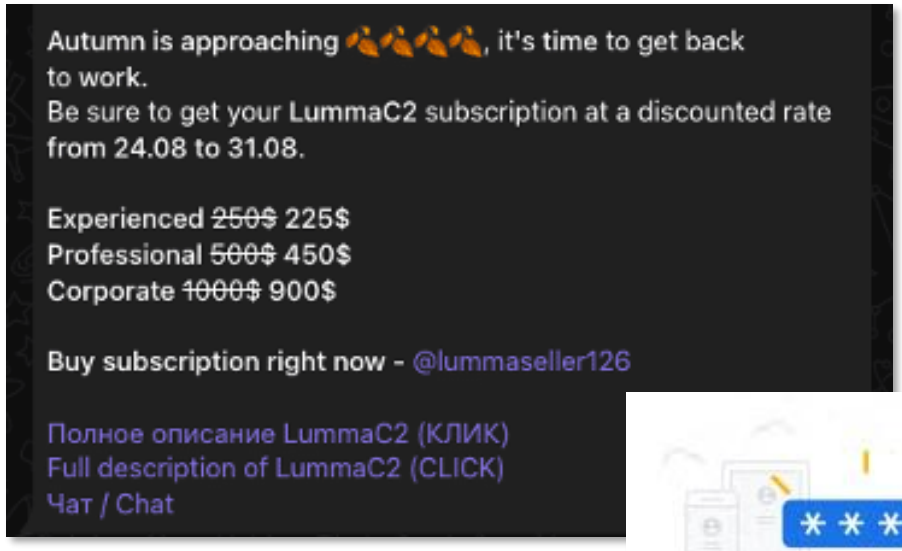
Decline in ransom payments

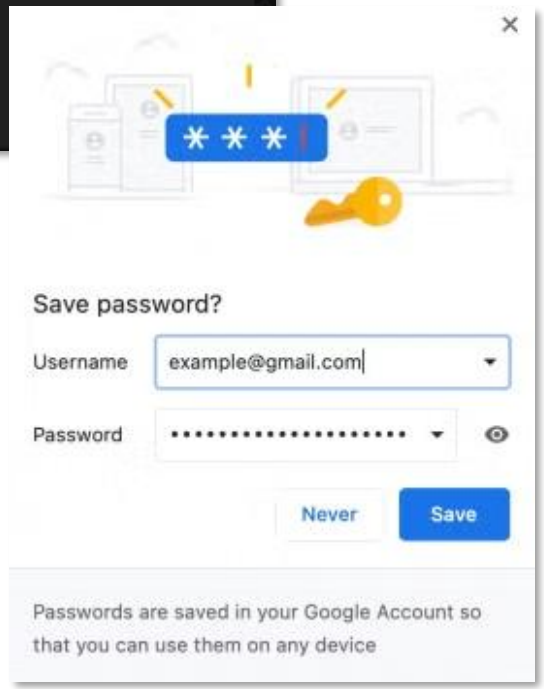
Preparedness varies

70+ Ransomware groups

What is an Infostealer?

- Infostealers are a class of malware designed to quietly steal sensitive information
- Once installed, infostealers operate in the background
- Stolen credentials are rapidly monetised or reused
- Sold as malware-as-a-service, lowering the barrier to entry for cybercriminals and driving widespread adoption





Lumma Infostealer – Information Captured

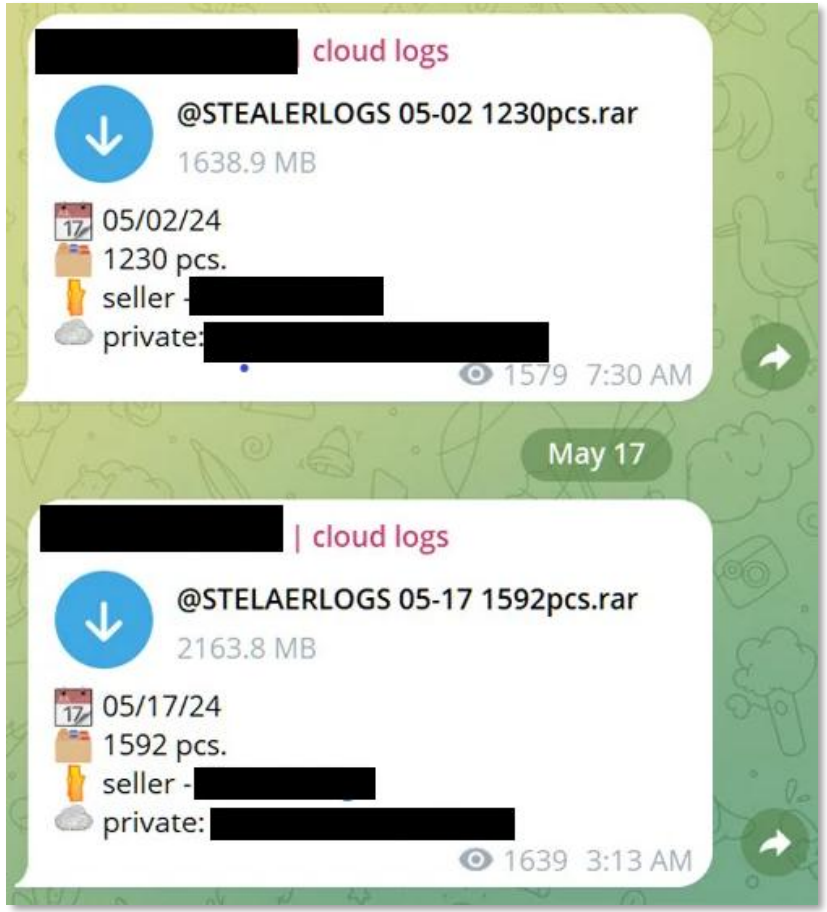
System information and stored credentials captured from the victim's device

```
LummaC2, Build 20231409
LID(Lumma ID): BhgGkI--IB2

- PC: [redacted]
- User: [redacted]
- Domain:
- Workgroup: [redacted]
- ComputerNameDnsHostname: [redacted]
- ComputerNameNetBIOS: [redacted]
- OS Version: Windows 10 (10.0.19045)
- HWID: [redacted]
- Screen Resoluton: 3840x2160
- Language: en-US
- CPU Name: Intel(R) Core(TM) i7-6700K CPU @ 4.00GHz
- GPU: NVIDIA GeForce RTX 3060
- Physical Installed Memory: 32768MB

- IP Address: [redacted]
- Country: AU

-----------------------------------
Брут и отработка крипты 70/30 > https://t.me/HUBHEAD

Депозит на форумах 5BTC. Берем балансы от 1000$. За время работы снято более 5.000.000$
Brute and withdraw cryptowallets 70/30
```

```
SOFT: Chrome
URL: https://www.bcf.com.au/Member/Login
USER:
PASS: [redacted]

SOFT: Chrome
URL: http://www.entropialife.com/about/Signup.aspx
USER:
PASS: [redacted]

SOFT: Chrome
URL: https://www.seek.com.au/jobdetails/29883139/apply
USER:
PASS: [redacted]

SOFT: Chrome
URL: https://login.eveonline.com/Account/LogOn
USER:
PASS: [redacted]

SOFT: Chrome
URL: https://www.polarpersonaltrainer.com/
USER:
PASS: [redacted]

SOFT: Chrome
URL: https://careers.careersaustralia.edu.au/jobtools/jncustomlogin.
JobSeekerToolBoxAction
USER:
PASS: [redacted]
```

Cyber Threat Intelligence – Credentials For Sale

Credentials sold and bough on dark web



"Brute and crypto mining 70/30 > https://t.me/HUBHEAD

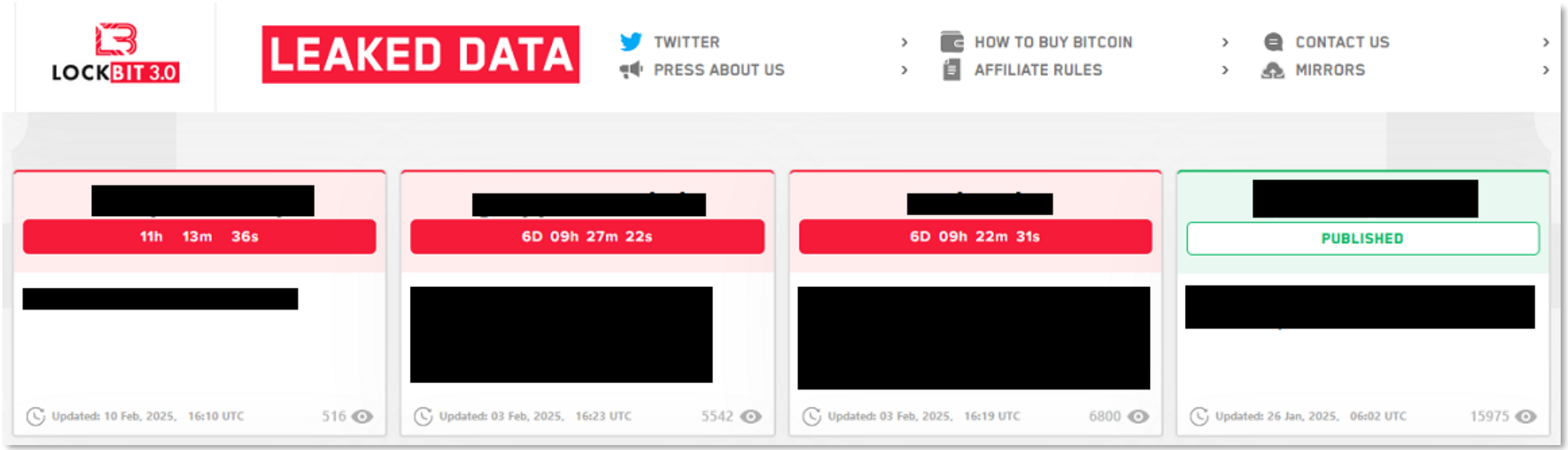
Deposit on forums 5BTC. We take balances from $1000. Over $5,000,000 withdrawn during operation

Brute and withdraw cryptowallets 70/30"

- Infostealers are a class of malware designed to quietly steal sensitive information
- Once installed, infostealers operate in the background
- Stolen credentials are rapidly monetised or reused

Threat Actor Group – LockBit 3.0

Dark web leak site



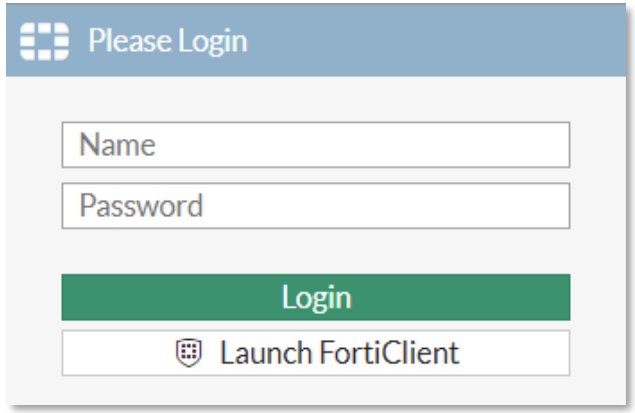
Doxing

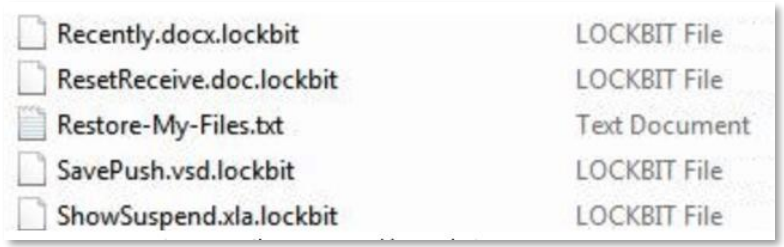
We pay exactly one million dollars, no more and no less, for doxing the affiliate program boss. Whether you're an FBI agent or a very clever hacker who knows how to find anyone, you can write us a TOX messenger, give us your boss's name, and get $1 million in bitcoin or monero for it.

We have no payout limits - you can encrypt RDP individuals or companies with any income level, any payout is nice for us - both $5,000,000 and $50 million, because we love our work and the process itself, and money is just a nice addition.

Initial Access, Data Exfiltration and Deployment

Dark web leak site





Negotiation Logs

Hello?

DATE REDACTED

Hello

DATE REDACTED

You will be sent a File List with the files we took from you, you can also choose 4-5 files to demonstrate decryption and send them to the chat room

Contacting any government agencies before this situation is resolved may negatively affect the negotiations.

A text file with a list of the stolen data: http://temp.sh/QpBWi/filelist.txt

DATE REDACTED

After transferring 300000$ in Bitcoin you get:
1. A full report on your vulnerabilities and recommendations for their elimination.
2. Decryption key.
3. A log of your data deletion from our vaults.

DATE REDACTED

Ok thank you. We will review this. Is this a list of everything you took from us?

DATE REDACTED

Yes

DATE REDACTED

There are 6 days until your data is published and the decryption key is destroyed, by which time the transaction should be done

You can also send us 4 encrypted files, we will send you decrypted copies

DATE REDACTED

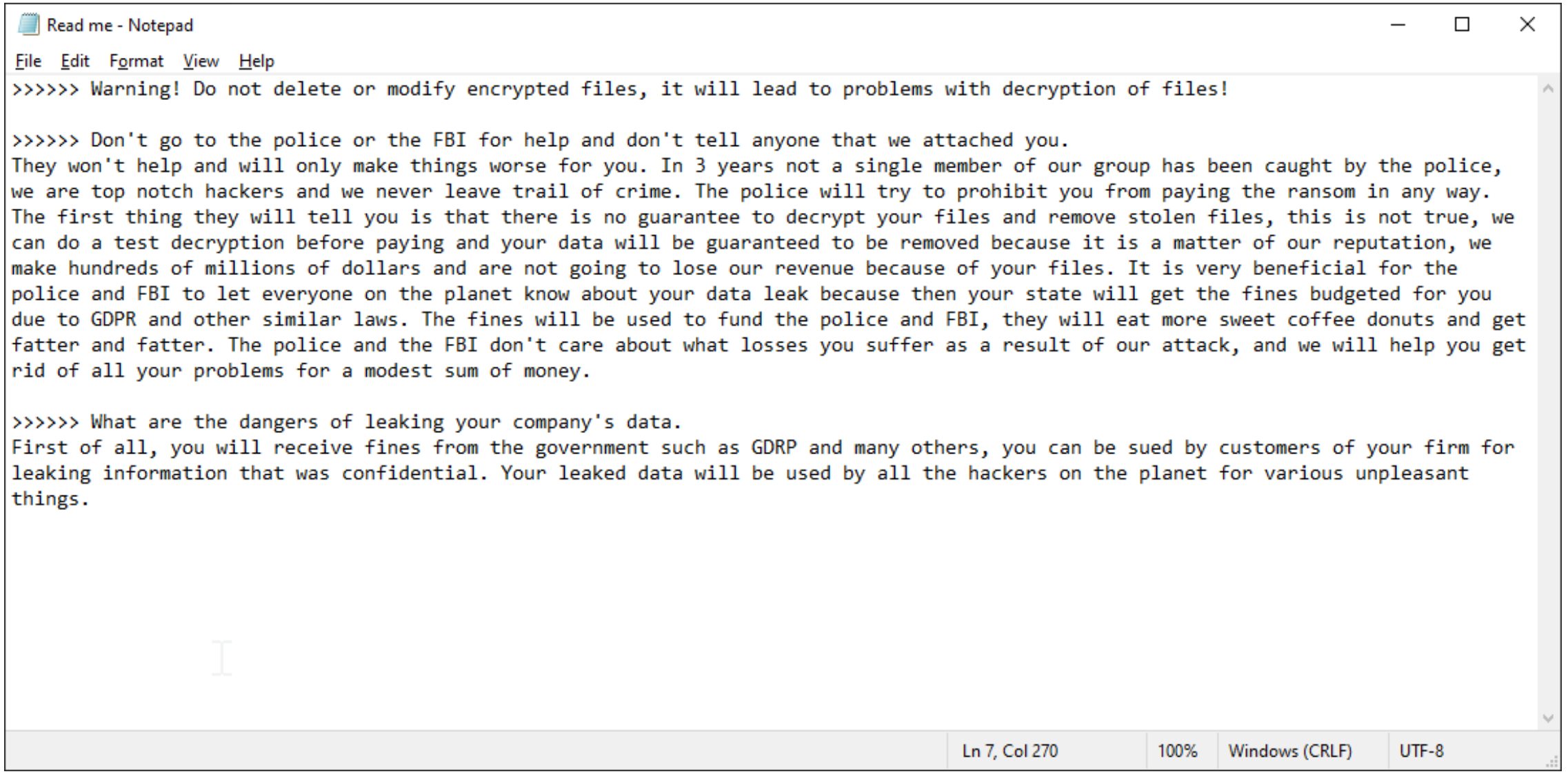
DATE REDACTED

We have looked at the list. Can you prove you have these files?

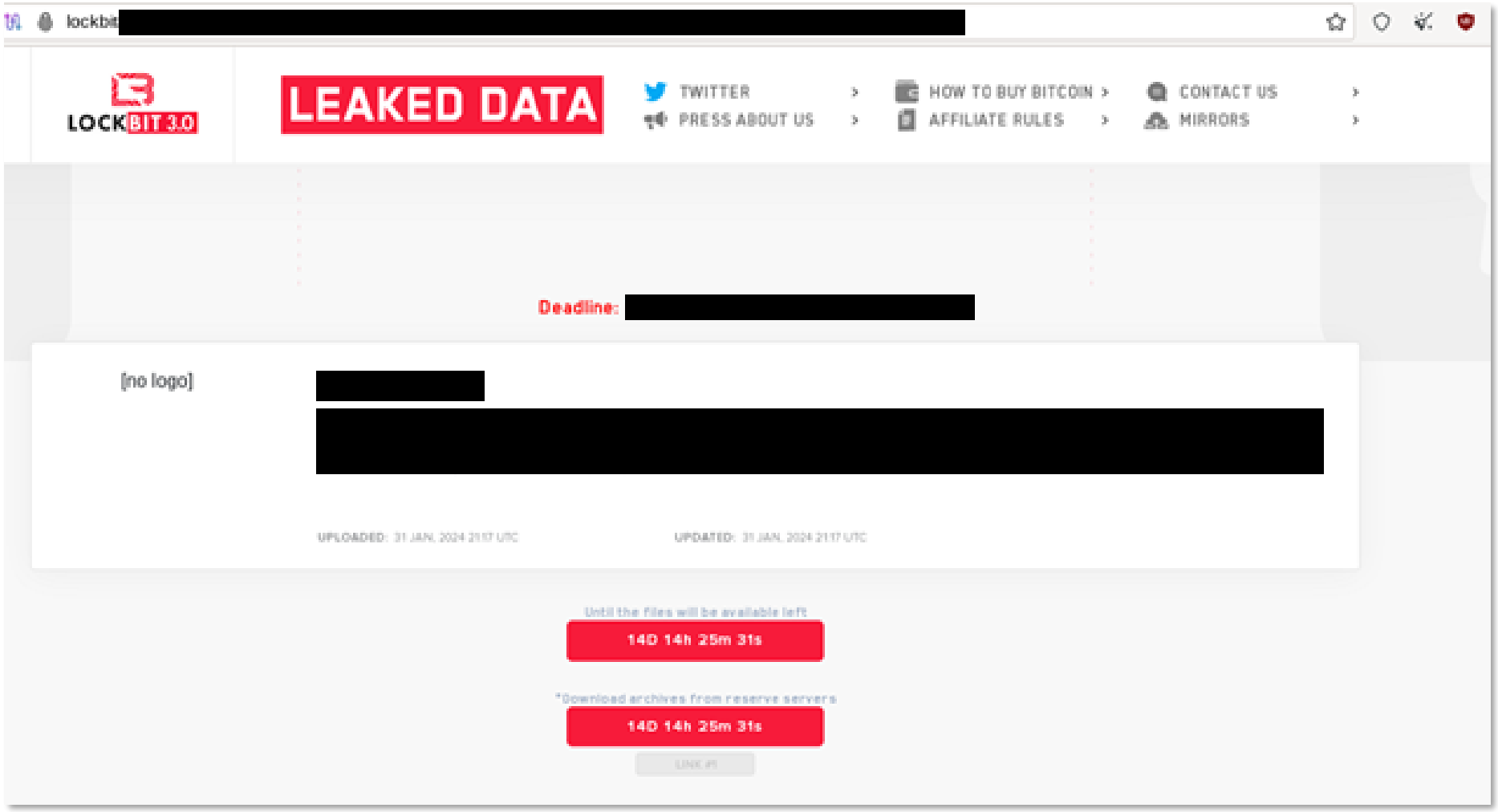
TEXT REDACTED

- Stolen credentials belonged to corporate IT Administrator for corporate VPN
- Remains undetected inside network for two weeks exfiltrating data
- The ransomware payload is executed across the network, encrypting critical infrastructure such as operational servers.

The Ransom Note

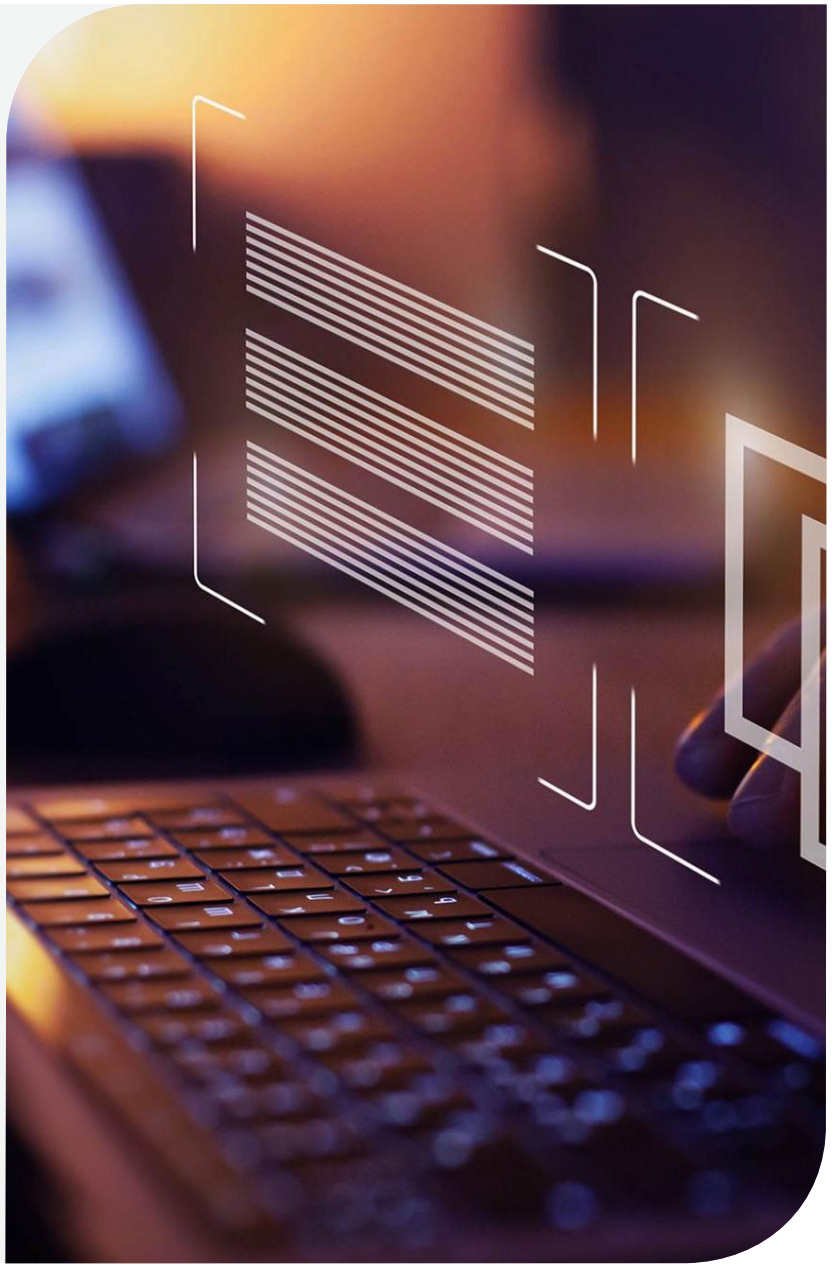


Breach Announcement



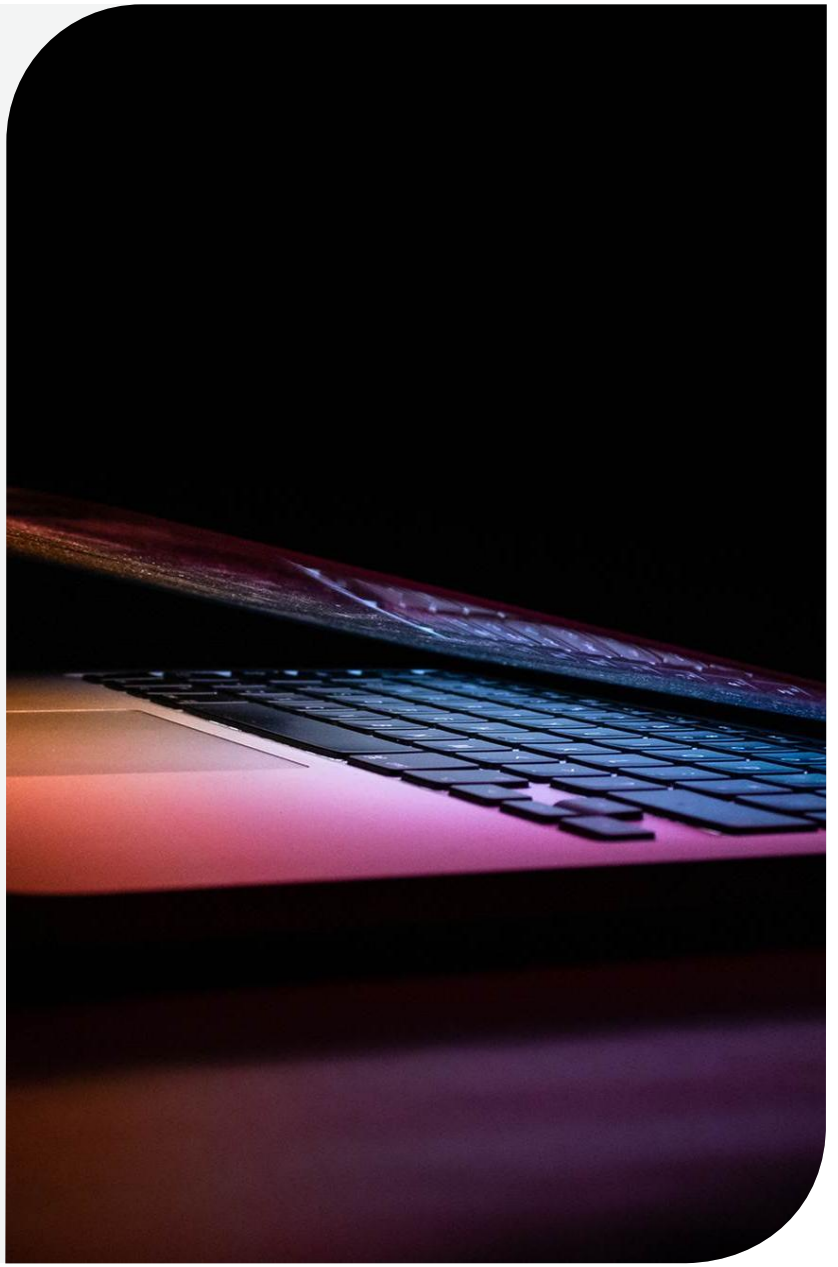
Cyber-Attack Simulation 1

Attack Type: Infostealer

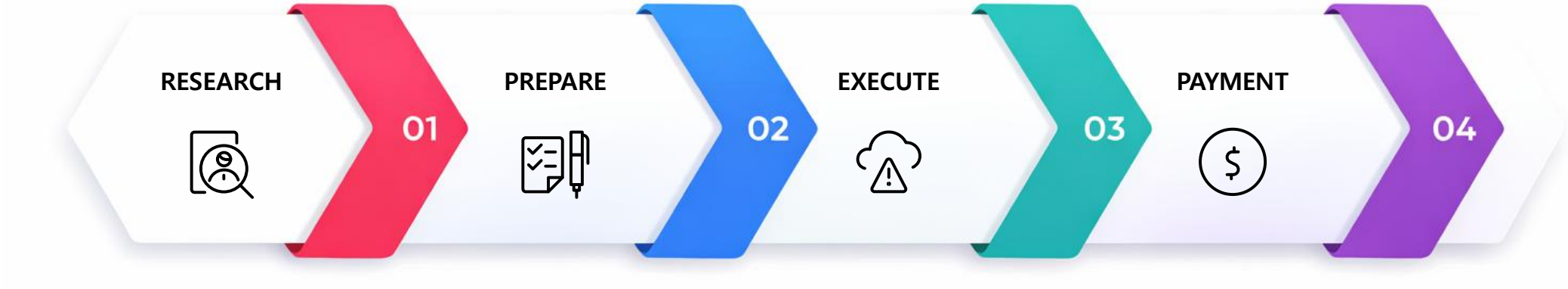


Case Study 2

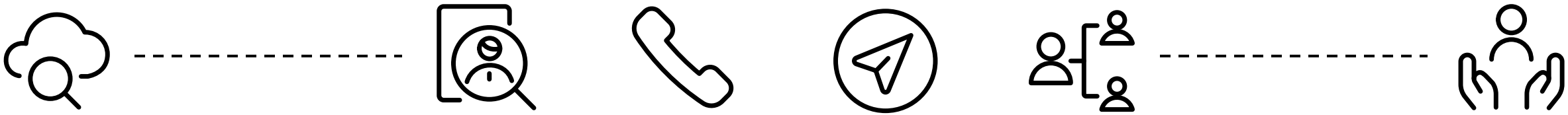
Business Email Compromise



Attack Vector



Phase 1 - Research



Bloomberg

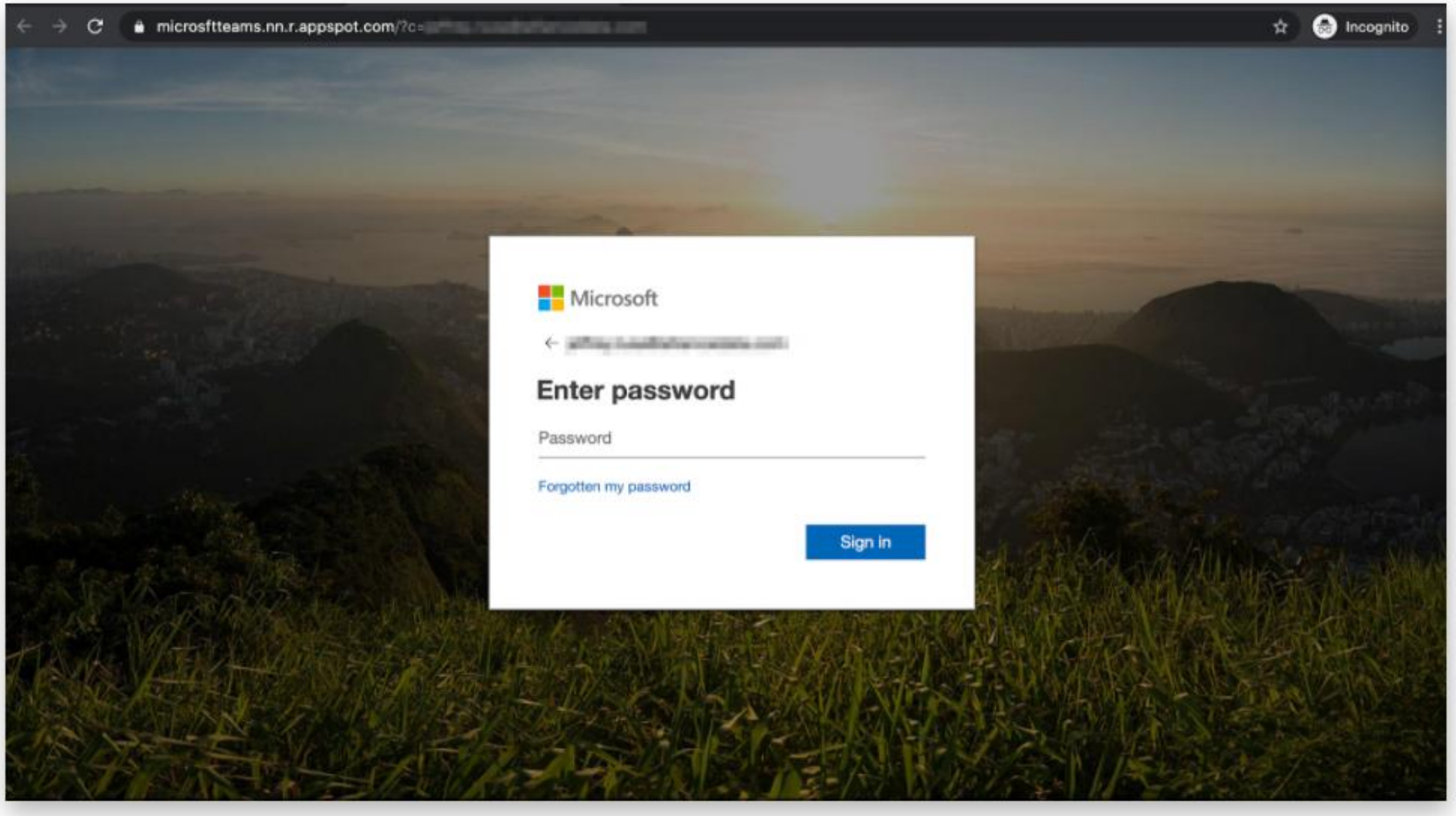
THE WALL STREET JOURNAL.

LinkedIn

facebook

reddit

Phase 2 – Prepare

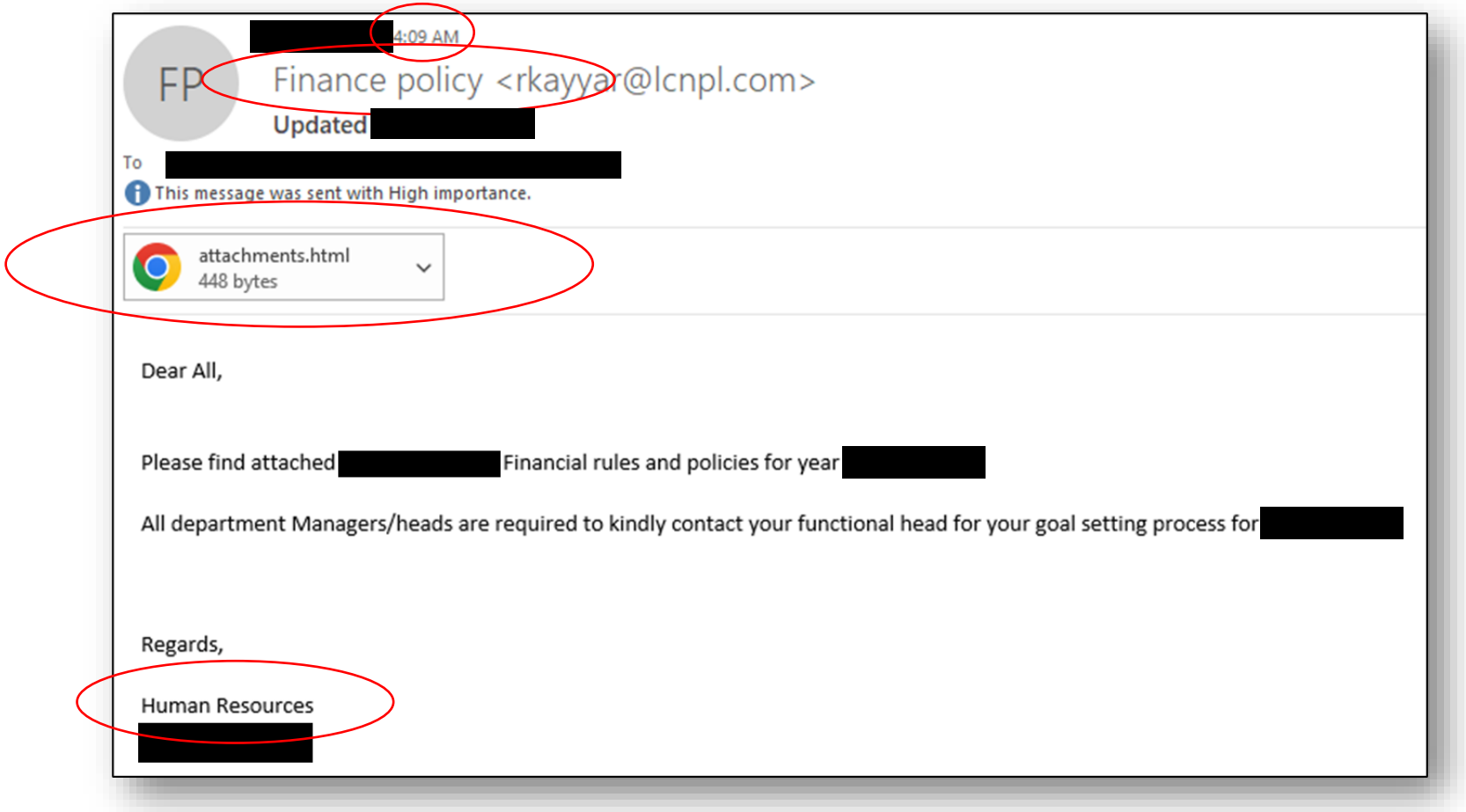


Phase 3 - Execution

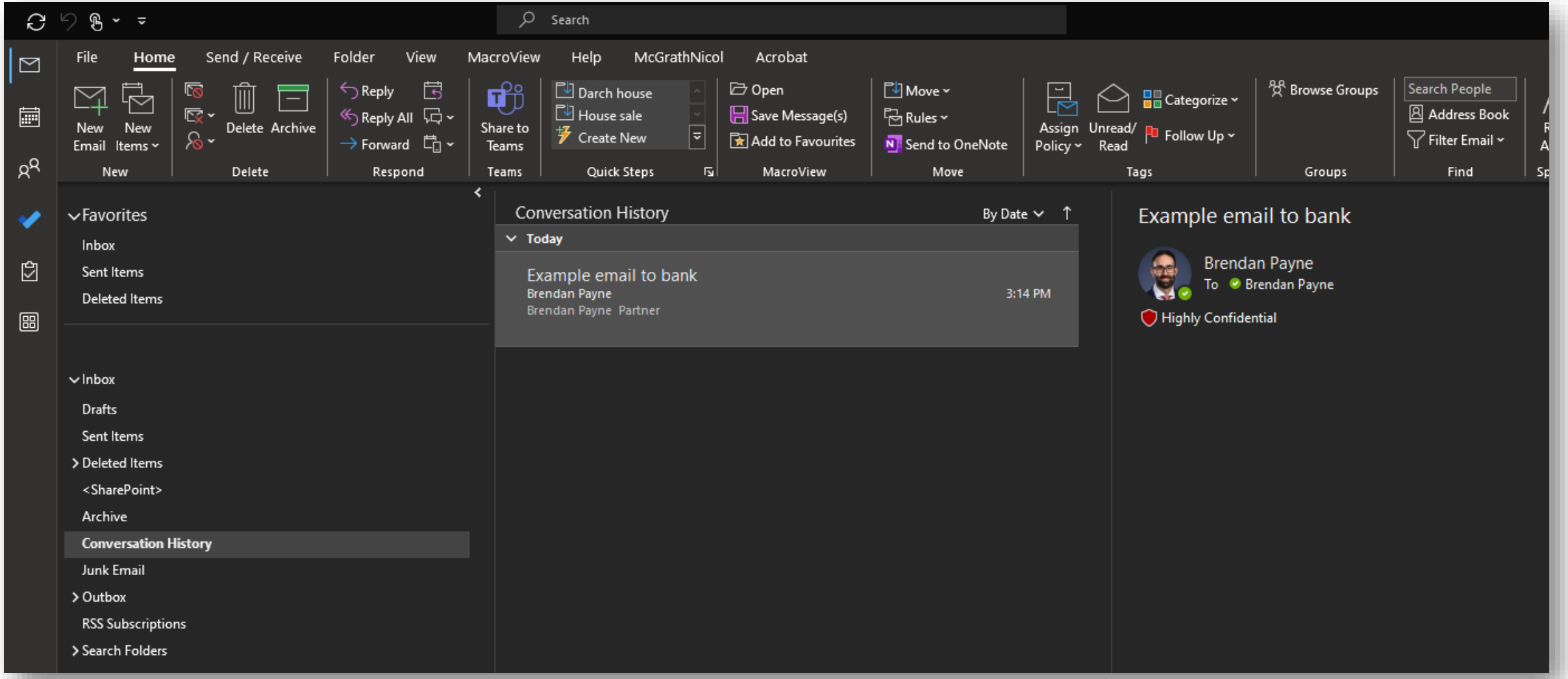
Actioned by: Threat actor

Mailbox From: External user

Recipient: CFO



Phase 3 - Execution



Phase 3 - Execution

Actioned by: Threat actor

Mailbox From: CFO

Recipient: Bank

From:
Sent: [redacted] 2:50 PM
To:
Cc:
Subject: EXTERNAL [redacted] New Online Banking Administrators

Hi folks.

I am delighted to introduce you all to the newly appointed Controller and Assistant Controller in persons of Christian [redacted] and David [redacted] (both copied on this email) and have them enrolled as Administrators in [redacted]

Christian and David should both be granted full authorities, approvals, and privileges in [redacted] banking with full access to Cash Management services (wire transfer) under dual control security setup where one person initiates a payment and the other approves.

Following their new roles, they would be handling all Treasury related activity, payments and operations going forward.

Christian and David resumed appointment on [redacted]

Thank you.

Phase 3 - Execution

Actioned by: Bank

Mailbox From: Bank

Recipient: CFO

From:
Sent: [redacted] 18:03
To:

Cc:
Subject: RE: EXTERNAL: [redacted] New Online Banking Administrators

Hi [redacted]

Thank you for the introduction and I look forward to working with you both, David and Christian.

Do you have two active System Admins on [redacted] If so, then you'll need to add them through the entitlement screens. I've attached a guide for you here, which is hopefully helpful.

In the event you don't have two System Admins, we can look into a work-around, but it's unfortunately not a simple process as we don't generally add users due to liability and security.

Thank you,

Phase 3 - Execution

Actioned by: Bank

Mailbox From: Bank

Recipient: CFO

Cc:
Subject: RE: EXTERNAL: Re: [redacted] New Online Banking Administrators

Hi

Absolutely. I'll start the process to have the additional administrators added. We'll need some personal information on Christian and David in order to populate the paperwork. In addition to what you've already provided us, can you please let us know the following:

- Date of birth
- Cell Phone and office phone numbers
- Address (can be an office address, but this would be for token delivery if required)
- If you would prefer a hard token or a mobile token for authentication

On an unrelated note, I was wondering if you had any availability next week for a call with our Senior Management. They just wanted to express to you directly how profusely apologetic we are for the delays and communication related to th[redacted].

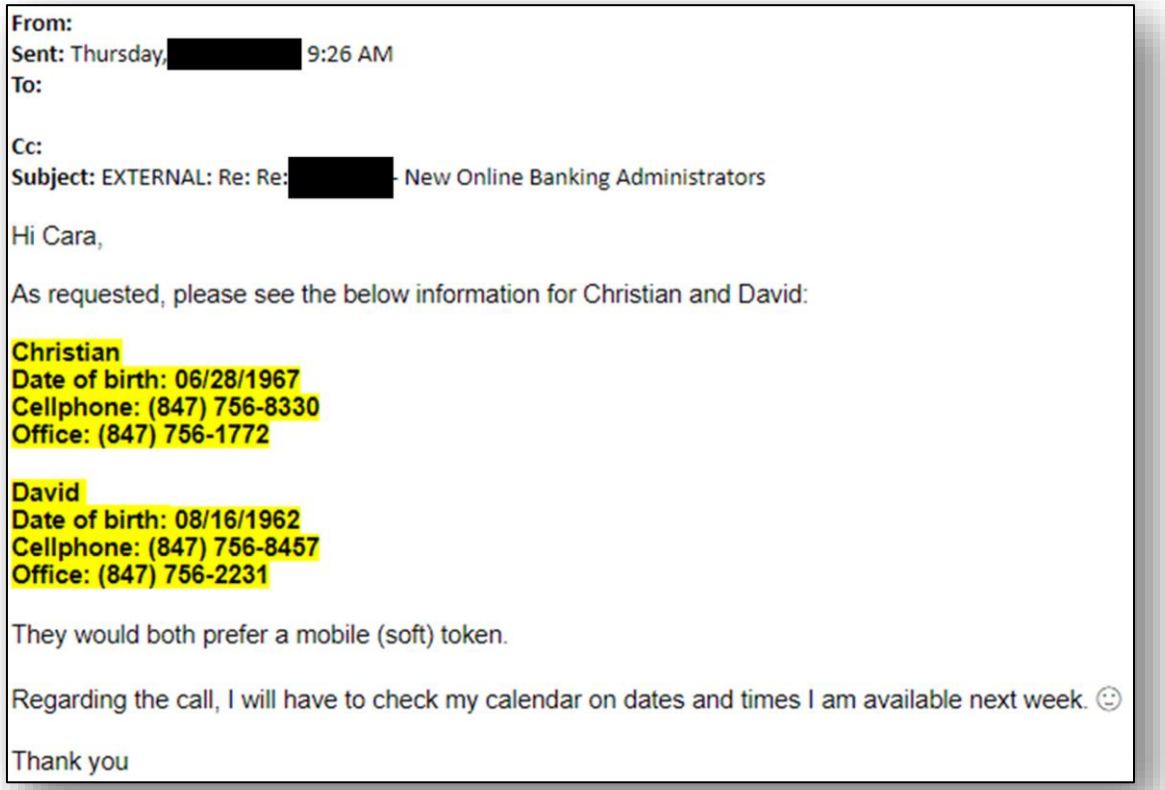
Thank you,

Phase 3 - Execution

Actioned by: Threat Actor

Mailbox From: CFO

Recipient: Bank



From:
Sent: Thursday, [redacted] 9:26 AM
To:

Cc:
Subject: EXTERNAL: Re: Re: [redacted] New Online Banking Administrators

Hi Cara,

As requested, please see the below information for Christian and David:

Christian
Date of birth: 06/28/1967
Cellphone: (847) 756-8330
Office: (847) 756-1772

David
Date of birth: 08/16/1962
Cellphone: (847) 756-8457
Office: (847) 756-2231

They would both prefer a mobile (soft) token.

Regarding the call, I will have to check my calendar on dates and times I am available next week. ☺

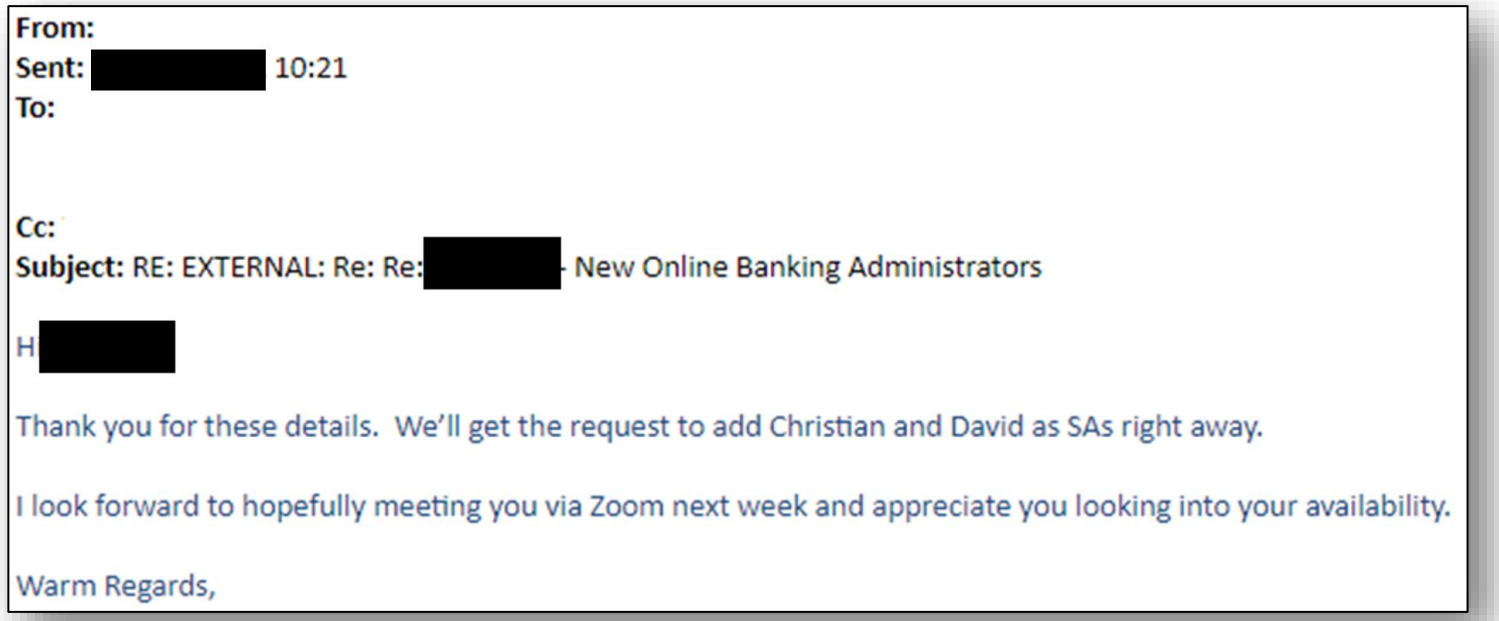
Thank you

Phase 3 - Execution

Actioned by: Bank

Mailbox From: Bank

Recipient: CFO



From:
Sent: [redacted] 10:21
To:

Cc:
Subject: RE: EXTERNAL: Re: Re: [redacted] - New Online Banking Administrators

H[redacted]

Thank you for these details. We'll get the request to add Christian and David as SAs right away.

I look forward to hopefully meeting you via Zoom next week and appreciate you looking into your availability.

Warm Regards,

Phase 3 - Execution

Actioned by: Bank

Mailbox From: Bank

Recipient: CFO

Sent: [redacted] 9:34:34 AM

Dear [redacted]

By way of introduction, my name is [redacted] and I work for [redacted] team. We have received a request to add new system administrator to the [redacted]

Attached is the required [redacted] document. Please print the document, complete and have it executed in accordance with the appropriate bank mandate(s) and reply to this e-mail with the scanned document for further review.

Post review, I will keep you posted on the next step for the setup. It is our goal to have your request completed at the earliest. Please ensure you inform us of any delays which may keep us from meeting this goal.

Your satisfaction with the way we implement your new products is very important to us. We may send you a survey so you can let us know how we did in meeting your expectations. If you do receive a survey, please take a few minutes to complete it so we can use your feedback.

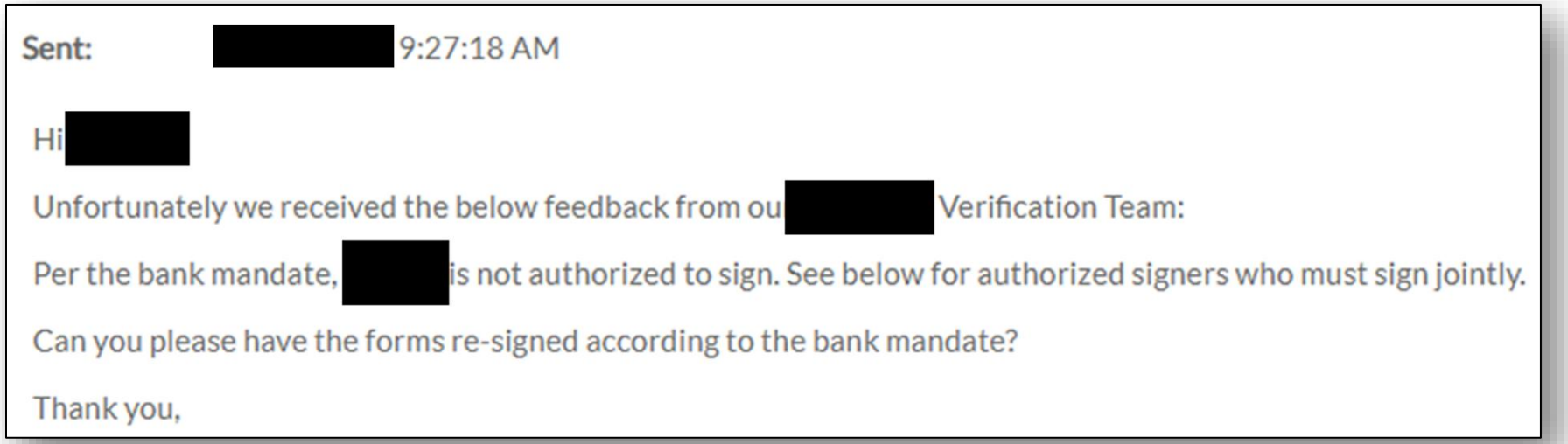
Please feel free to call or email me, if you have any questions or need additional information.

Phase 3 - Execution

Actioned by: Bank

Mailbox From: Bank

Recipient: CFO



Sent: [redacted] 9:27:18 AM

Hi [redacted]

Unfortunately we received the below feedback from ou[redacted] Verification Team:

Per the bank mandate, [redacted] is not authorized to sign. See below for authorized signers who must sign jointly.

Can you please have the forms re-signed according to the bank mandate?

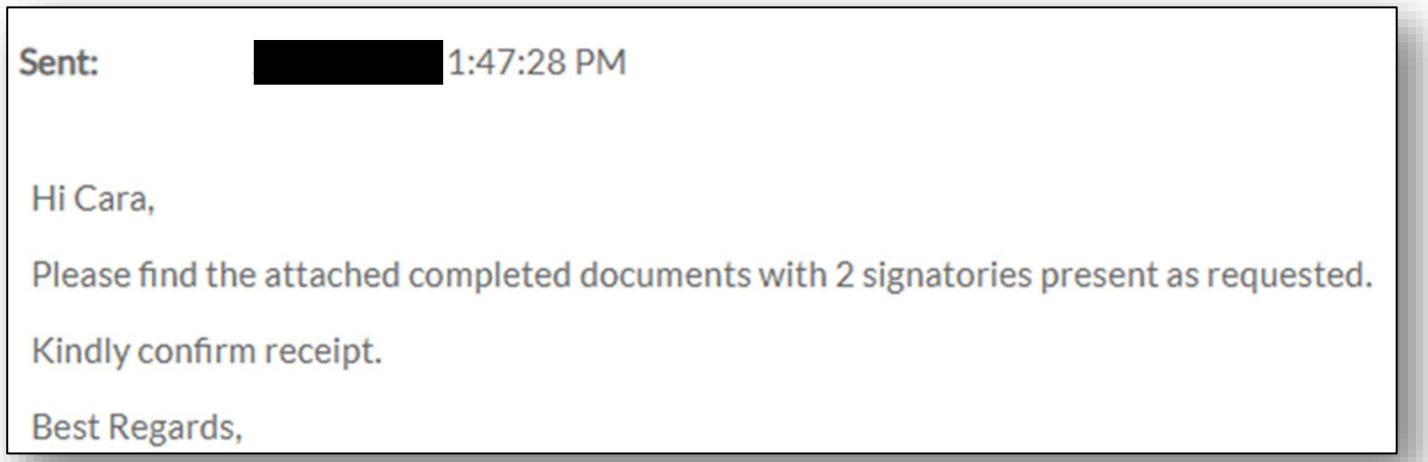
Thank you,

Phase 3 - Execution

Actioned by: Threat Actor

Mailbox From: CFO

Recipient: Bank



Sent: [redacted] 1:47:28 PM

Hi Cara,

Please find the attached completed documents with 2 signatories present as requested.

Kindly confirm receipt.

Best Regards,

Phase 3 - Execution

Actioned by: Bank

Mailbox From: Bank

Recipient: CFO

Dear [redacted]

I am pleased to inform you that we have completed the implementation of the following Services:

Adding 2 new System Administrators

Please note that it may take 24 to 48 hours before the account/service is visible on their [redacted]

Please be sure to have the System Administrator(s) make the necessary changes to the Entitlements.

The Customer Relationship Center will serve as your main point of contact going forward. Their hours of operation are 8:00 - 21:00 EST. Their telephone numbers are listed below for your reference.

[redacted]

Should you have questions about adding new services, please contact your [redacted]

Your satisfaction with the way we implement your new products is very important to us. We may send you a survey so you can let us know how we did in meeting your expectations. If you do receive a survey, please take a few minutes to complete it so we can use your feedback.

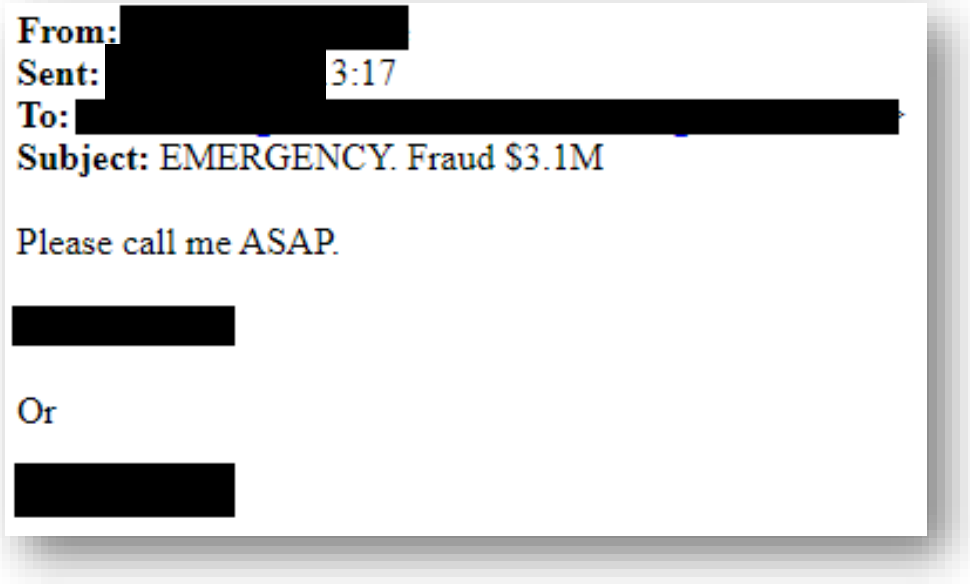
It was a pleasure working with you and your team and we thank you for your business and look forward to working with you in the future.

Phase 3 - Execution

Actioned by: CFO

Mailbox From: CFO

Recipient: Bank



Phase 3 - Execution

Actioned by: Threat Actor

Mailbox From: CFO

Recipient: Bank

From: [redacted]
Sent: Monday[redacted]1:25:38 PM
To: [redacted]
Cc: [redacted](Spoofed email address)
Subject: EXTERNAL: Re: EMERGENCY. Fraud $3.1M

Never mind. I just rectified with [redacted] (copied) that the payment was for a [redacted] request that was received today.

Please ignore the initial fraud alert.

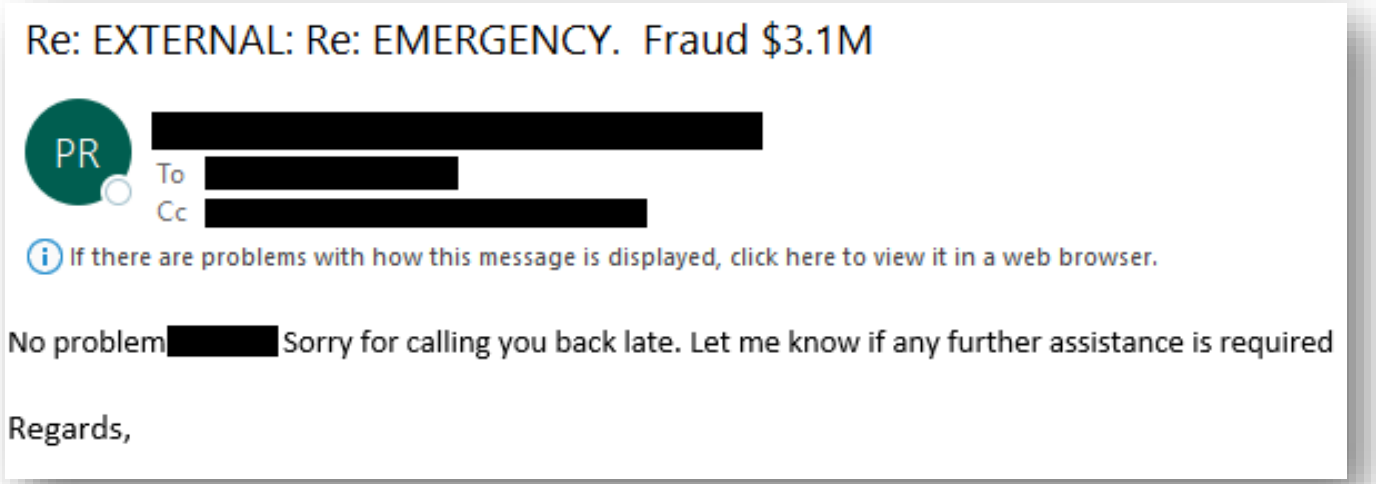
Thanks

Phase 3 - Execution

Actioned by: Bank

Mailbox From: Bank

Recipient: CFO

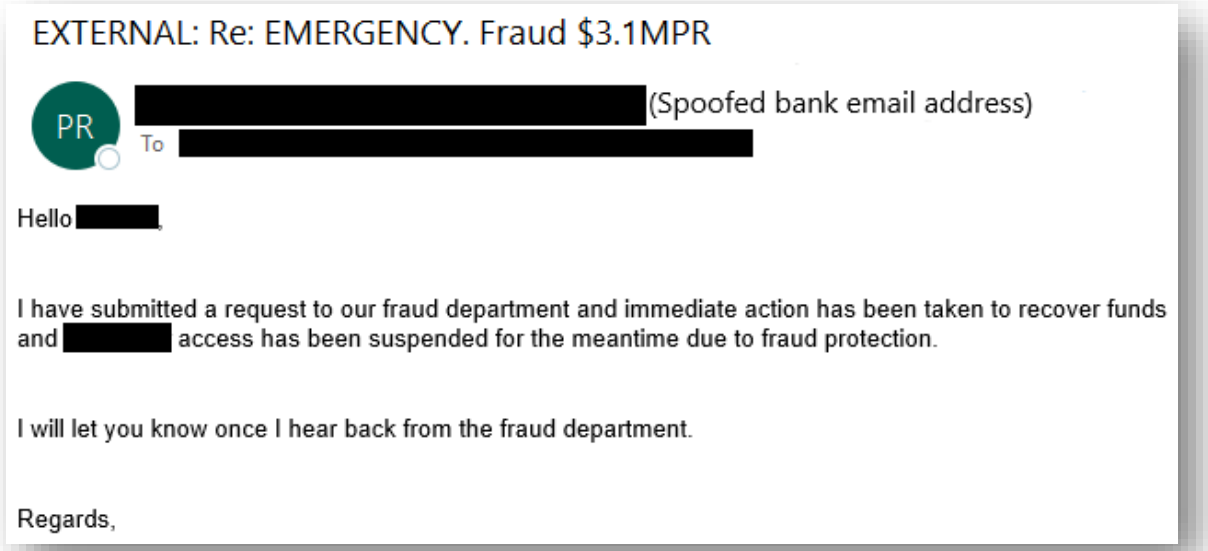


Phase 3 - Execution

Actioned by: Threat Actor

Mailbox From: Spoofed

Recipient: CFO



EXTERNAL: Re: EMERGENCY. Fraud $3.1MPR

PR [redacted] (Spoofed bank email address)

To [redacted]

Hello [redacted],

I have submitted a request to our fraud department and immediate action has been taken to recover funds and [redacted] access has been suspended for the meantime due to fraud protection.

I will let you know once I hear back from the fraud department.

Regards,

Cyber-Attack Simulation 2

Attack Type: Multi-Factor Authentication Bypass

Mitigation Strategies

Protect

- Multi-factor authentication
- Email filtering
- Patch management policy
- Security awareness training

Detect

- Extended detection & response
- Account monitoring
- Centralised logging & alerting
- Threat intelligence monitoring

Contain

- Principle of least privilege
- Network segmentation
- Automated endpoint isolation
- Pre-defined IR workbook

Recover

- Immutable backups & testing
- Disaster recovery plan
- Post-incident review
- Cyber insurance policy

The Anatomy of Cyber Incident Response

Shane Bell

CEO

NSB Cyber

Joseph Fitzgerald

Partner

Wotton & Kearney

Russell Pilcher

Strategic Communications Principal

NCSC

Troy Filipcevic

CEO

Emergence Insurance

NSB Cyber No Steps Backward

Triskele Labs

Hall&Wilcox smarter law

McGrathNicol

WK WOTTON KEARNEY

HWL EBSWORTH LAWYERS

THANK YOU

CYBER SYNC UP

NSB Cyber
No Steps Backward

Triskele Labs

Hall&Wilcox
smarter law

McGrathNicol

WOTTON KEARNEY

HWL EBSWORTH
LAWYERS