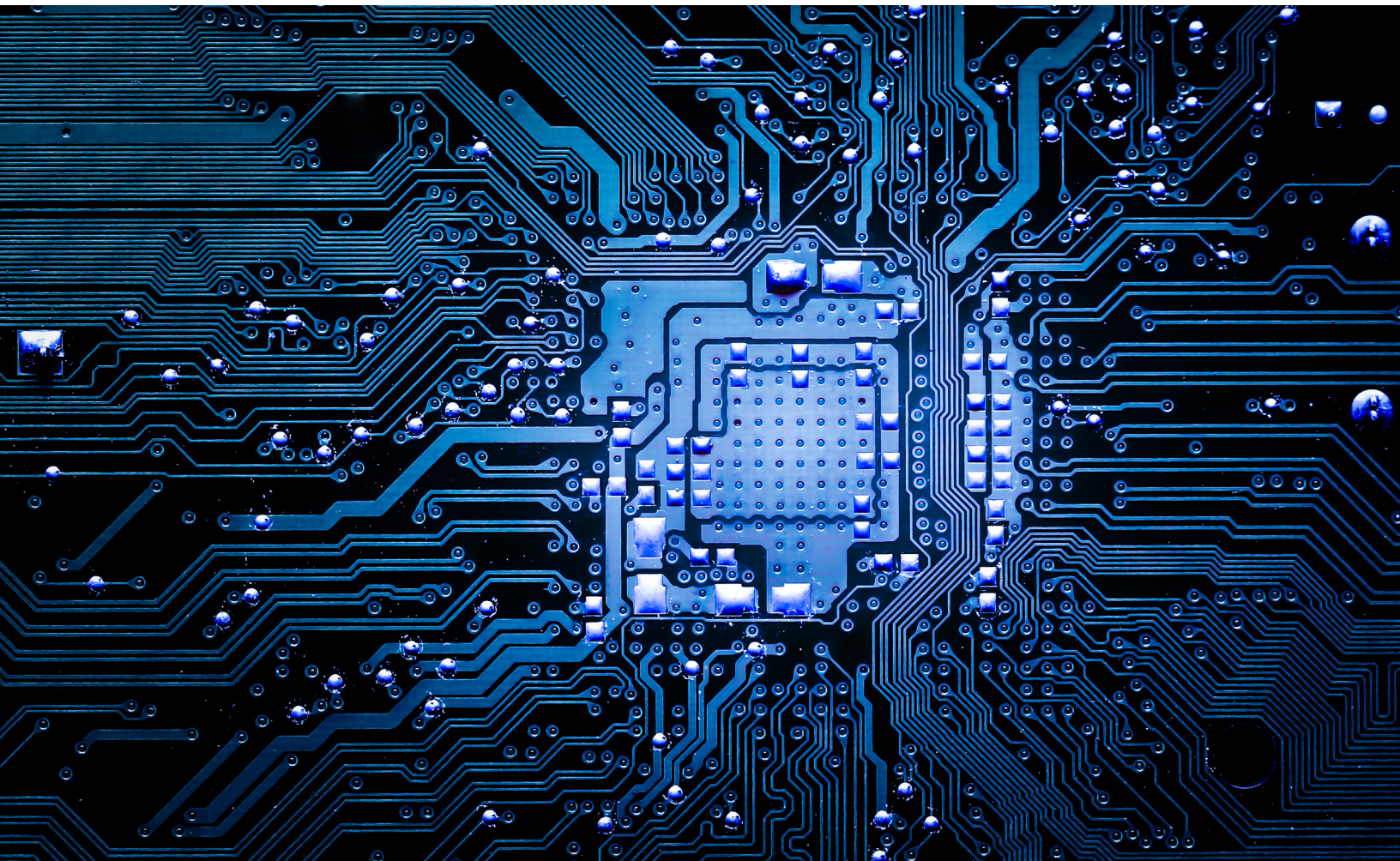
J.P.Morgan | CHASE

CYBERSECURITY & TECHNOLOGY CONTROLS

Identifying and Responding to Wire Fraud Attacks



INTRODUCTION

Wire fraud attacks are pervasive and can be costly. They disrupt business operations—including payments systems—and impact corporate reputations. Cybercriminals conduct wire fraud attacks that target payments employees to gain access to sensitive data and steal funds. These attacks use various methods, including business email compromise (BEC), which have cost businesses more than **$26 billion** in domestic and international exposed dollar losses between June 2016 and July 2019.

As this threat continues to grow, it is important that companies develop resiliency strategies to mitigate their risk and lessen the impact of attacks.

The information provided here is intended to help clients protect themselves from wire fraud. It does not provide a comprehensive list of wire fraud activities or best practices. Your organization is responsible for determining how to best protect yourself against wire fraud and for selecting the best practices that are most appropriate to your organization's needs.

What Is Wire Fraud?

A **wire transfer** is an electronic payment method to move money—domestically or internationally— from one person to another using a bank or a nonbank provider, such as a transfer agency.

Wire fraud is any fraudulent activity that occurs over interstate wire communications, which includes the telephone and internet. In many cases, the fraud attempt occurs over email. If such a payment request is not authenticated, it can result in a fraudulent transfer of money.

Wire Fraud Methods

Cybercriminals use a variety of methods to conduct wire fraud. These include:

Malware, which occurs when a user opens an email or clicks on a link that redirects to a website that downloads malware and infects the computer operating system. Criminals can also send malware through removable media, such as a USB flash drive. After the removable media is inserted into a computer drive, criminals can gather user credentials to gain access to payments systems.

Phishing, which occurs when criminals send emails that appear to be sent from a known company or vendor, such as a bank. The criminal asks the user to reply to the email or visit a website that looks similar to the company's domain and submit a username, password, account number or other personal information.

Note: It is not the practice of JPMorgan Chase to ask for your personal information or log in credentials in an email.

Voice phishing (vishing) and SMS phishing (SMShing), which use live or automated calls (vishing) or text messages (SMShing) to intimidate callers into providing personal information by threatening to close or freeze their bank accounts. The personal information is used to gain access to payment systems or take over accounts.

Note: It is not the practice of JPMorgan Chase to send clients emails threatening to close their account if they do not take immediate action. If you receive a suspicious email, forward it to **phishing.org**.

BEC or email account compromise (EAC), which occurs when cybercriminals use stolen credentials, look-alike domains, spam or phishing to gain access to an email account. Cybercriminals may impersonate a known vendor or C-suite executive, such as the chief executive officer, and direct another employee to transfer funds to a fraudulent account.

Spotting and Preventing BEC

Senior Executive Spoofing

Cybercriminals rely on social engineering and high-pressure tactics to trick payments employees into wiring funds to fraudulent bank accounts, often by impersonating C-suite executives.

Common tip-offs an email is fraudulent include:

The email address should be "@yourcompany". The email address is incorrect (the word company is spelled) with two "n"s instead of an "m".

From: "Smith, Joe" [mailto:Smith.Joe@yourconnpany.com]
Date: Monday, January 6, 2020 at 2:08 PM
To: "Smith, Jane"
Subject: Pending Payment

Familar greeting

Hi Jane,

Mentioning away from the office could be a red flag.

I'm in China traveling for business. I just met with our client, ABC Company, and they did not receive our last payment.

ABC Company
SWIFT Code: 945ddd02e
Account#: 543a987b2c

Urgent request to send payment again and modify payment instructions is highly suspicious. Modification of payment instructions, including receiving account, should be in compliance with your company's internal procedures, which should include confirming request with a known contact using a phone number on file.

It is imperative they get paid please resend our payment to them and ensure you follow up with our Bank to have the payment settles by tomorrow. Also, modify our payment instructions to reflect the new information for this client so that there are no issues going forward.

Thank you!

Regards,
Joe Smith
CEO
Your Company

Sent from mobile device

Vendor Spoofing

In a different scenario, a payments employee may receive an email from a trusted vendor requesting a change in payment instructions, like the example below.

From: billl.jones@xyz.contract.company.com
Date: Friday, January 10, 2020 at 4:24 PM
To: George.Williams@company.com
Subject: URGENT - Payment Past Due

Hi George,

We did not receive the regular payment per our supplies contract. Please check that you sent it to our updated account:

Amount: $867,123.00
Routing Number: ABC12345
Account: 12345678

There will be an additional fee if we do not receive the funds tomorrow. Do not hesitate to call me at 123-456-7890 if you have any questions.

Regards,

Bill Jones
XYZ Contract Company
Phone: 123-456-7890

Without due diligence and validation processes to confirm the request, the employee transfers the funds to the criminal's bank account. A few days later, the vendor calls informing the company that it has not received the payment. During an investigation, the company discovers that the employee's email account was compromised.

Training Employees to Prevent Attacks

Your organization can help prevent these malicious attacks by learning how to spot suspicious emails and using multifactor authentication (MFA)[1] with strong passwords on personal and business accounts.

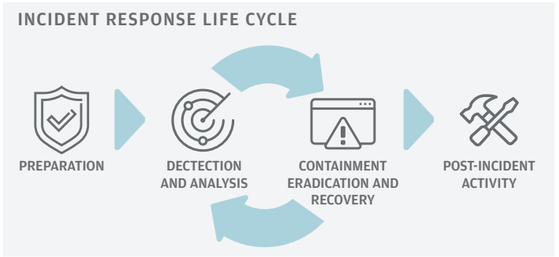
While training employees to validate every request may seem like a daunting task, the repercussions of not doing so can be significant. To prevent wire fraud attacks from reoccurring, companies may consider additional best practices in Cybersecurity: Technology and Tactics.

[1] Courtesy of the National Institute of Standards and Technology, US Department of Commerce. Not copyrightable in the United States.

Response Planning

An effective incident response plan should define who is responsible for leading the response effort, plus actions to complete before returning to business operations. The plan should also establish incident categories and severity levels and set clear response time periods and escalation procedures.

The incident-response process has four stages: **preparation**; **detection and analysis**; **containment, eradication and recovery**; and **post-incident activity**. Your organization's response plan should address each stage and include specific actions.



In addition, an effective incident response plan should:

Include a diagram of the incident response process.

Outline roles and responsibilities.

Define terms and lexicon.

Describe each phase of the incident response life cycle, including:

- Incident detection and reporting procedures
- Response time requirements and escalation criteria
- Assessment procedures, including forensic data collection and different severity or priority levels

List contacts.

- Law enforcement
- Legal teams
- Cyber insurance provider
- Banks
- Vendors
- Members of the fraud or incident response team

Define procedures, including:

- Containment, including system quarantine, such as removing access to email accounts
- Remediation and eradication, including disaster recovery, business continuity, public and media relations, and external support
- Post-incident activities, including a review of incident de-escalation, system restoration and obtaining response team feedback to strengthen the process

Test the incident response plan at least once a year by using tabletop exercises, operational drills or simulated attacks.

Investigate the Incident

Once your organization discovers fraud, it is important to act quickly and gather as much information as possible.

INCIDENT INVESTIGATION CHECKLIST

- ☐ **Pinpoint** when the fraud occurred.
- ☐ **Determine** who authorized the transaction(s).
- ☐ **Establish** how many times the fraud occurred.
- ☐ **Calculate** the value of the transaction(s).
- ☐ **Find** out who—if anyone—validated the transaction before it was released.
- ☐ **Identify** the type of account compromised (i.e., bank, credit card, and email and user names).

This investigation will help **identify** compromised systems so your organization can isolate, investigate and analyze the attack.

You should also **contact** your Commercial Banking Client Service team. Reporting fraud to the **FBI** may help your business and others avoid similar fraud attempts. The sooner you identify a fraudulent transaction, the more likely the payment can be reversed.

Recovery

After your organization resolves any financial losses, computer systems are still vulnerable. Your company's IT team should scan your organization's computer network for signs of malware and reimage any affected systems. If an email account was compromised, identify and delete the affected emails, then secure the accounts with new, stronger, unique passwords.

You may also want to engage with an independent, third-party incident response vendor that specializes in digital forensics and remediation. Your cyberinsurance provider may provide additional assistance.

Finally, organizations should develop an **After Action Report (AAR)**[2] to help lessen the impact of future incidents. The AAR allows businesses to review incident response processes and identify what worked and how to make improvements.

[2] Colorado Department of Transportation