



BUSINESS EMAIL COMPROMISE: HOW TO PROTECT YOUR ORGANIZATION

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NORTH RISK WEBINARS | 2025



PRESENTER



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**\$2.7 BILLION LOST
TO BEC ATTACKS
IN 2024**



WHAT IS BEC?

- Definition of Business Email Compromise (BEC)
- Difference between BEC & Phishing or Ransomware

Common BEC Scenarios

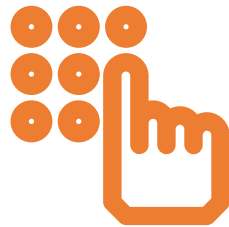
- CEO/CFO impersonation
- Vendor email compromise
- Payroll diversion
- Gift card scams



HOW BEC ATTACKS WORK & ATTACK LIFECYCLE



Reconnaissance



**Credential
Compromising
or Spoofing**



**Social
Engineering &
Message Crafting**



**Fraudulent
Communication &
Fund Redirection**

CASE STUDY: BEC ATTACK ON A MID-SIZED MANUFACTURING FIRM

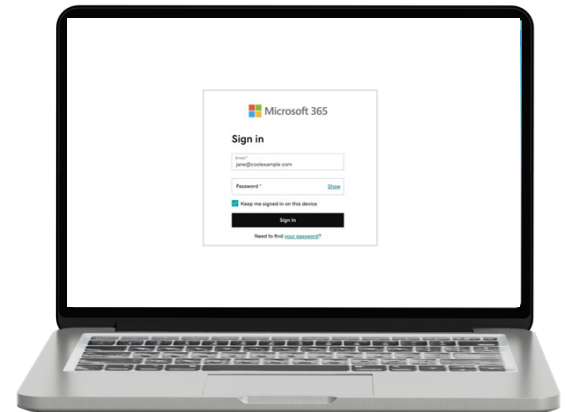
- 150-employee manufacturing firm
- U.S. headquarters with overseas suppliers
- Relies heavily on email for invoice approval and payment workflows



CASE STUDY: BEC ATTACK ON A MID-SIZED MANUFACTURING FIRM

The Attack

- Compromised CFO's email account using a phishing email mimicking a Microsoft 365 login page
- Spent two weeks observing internal communications to identify payment patterns
- Sent a fraudulent but convincing email to accounts payable
- Urgent wire transfer request
- Claimed vendor banking details had changed due to a merger
- Included correct vendor name, invoice number, and dollar amount
- Accounts payable completed the transaction without secondary verification



CASE STUDY: BEC ATTACK ON A MID-SIZED MANUFACTURING FIRM

The Impact

- \$147,000 transferred to an attacker-controlled offshore account
- Fraud discovered ~48 hours later after real vendor inquired about missing payment
- Funds unrecoverable
- Cyber insurance only covered \$80,000 due to lack of documented secondary approval process

CASE STUDY: BEC ATTACK ON A MID-SIZED MANUFACTURING FIRM

Key Lessons Learned

Technical Controls Alone are Insufficient:

- Antivirus and email filtering didn't stop the phishing attack; MFA was not enabled

Business Process Controls Matter:

- No out-of-band confirmation for changes in vendor payment instructions

Cyber Insurance Has Conditions:

- Missing or undocumented security practices can lead to reduced or denied payouts

Social Engineering Is Highly Effective:

- Attackers exploited trust and timing, not malware

WHY BEC IS SO EFFECTIVE?

Why it is Effective

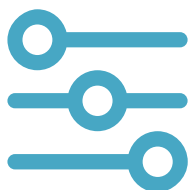
- Human Trust and Urgency
- Lack of Multi-Factor Authentication (MFA)
- Poor Email Authentication (SPF, DKIM, DMARC)
- Insider Knowledge from Reconnaissance or Breach

Red Flags to Watch For

- Unusual or urgent requests
- Changes in payment instructions or account info
- Domain name lookalikes (e.g., amaz0n.com)
- Tone or timing inconsistencies
- Messages outside normal workflow

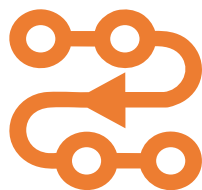


WHY BEC IS SO EFFECTIVE?



Technical Controls

- Implement MFA, especially for email accounts
- Configure SPF, DKIM, and DMARC
- Email filtering and anomaly detection tools
- Monitor for credential reuse and data leaks



Business Process Controls

- Require out-of-band verification (phone call, internal system)
- Segregation of duties for financial approvals
- Set limits and review procedures for wire transfers



User Awareness Training

- Regular phishing simulations
- Promote reporting with tools like the Phish Alert Button
- Encourage a “pause and verify” culture


WHAT TO DO IF YOU SUSPECT BEC


Immediate Steps


- Notify IT/Security Team
- Contact bank or payment processor
- Change compromised credentials
- Incident Response Plan & Legal Considerations
- Reporting to Authorities (e.g., FBI IC3)




KEY TAKEAWAYS


 How Business Email Compromise (BEC) attacks unfold

 Red flags to watch for

 Key security measures to have in place

 Recognize and prevent BEC threats

 Real financial and insurance impacts of BEC

 Practical steps you can take to protect your business

QUESTIONS?



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