

Sound Business Practices for Companies to Mitigate Account Takeover

I. Executive Summary

Account Takeover is a type of business identity theft in which a criminal entity steals a company's valid online banking credentials. Small to mid-sized businesses remain the primary target of criminals, but any business can fall victim to these crimes.

Attacks can be perpetrated quietly by the introduction of malware or viruses through a simple email or infected website or through social engineering. Malware or virus introduced into a computer system may remain undetected for weeks and even months as it tracks and stores security credentials or other sensitive data. Social engineering can come in many forms and is not as easily recognizable as it once was. Fraudsters may initiate contact by email, phone calls, faxes or letters in the mail in their effort to receive sensitive information. By introducing layered security processes and procedures, technological and otherwise, and other tightened security efforts, financial institutions, through their agreements and processes, can help protect their customers from criminals seeking to drain accounts and steal confidential information. These increased security procedures may help reduce the incidence of, and mitigate the financial losses, business risks, and reputational damage that can result from such attacks.

NACHA's Risk Management Advisory Group has developed the following sound business practices for companies of all sizes to consider when reviewing and implementing security procedures to mitigate the threat of Account Takeover. The sound business practices outlined in this paper are not meant to be taken as the exclusive approaches businesses should implement to address the risks associated with Account Takeover, nor are they meant to be considered mandatory requirements. No single security measure alone is likely to be effective in preventing or mitigating all risks associated with Account Takeover. Similarly, some of these sound business practices may not be appropriate for all businesses. Accordingly, each business must identify its own risks, and design and implement the appropriate security measures to prevent, and mitigate the risks associated with Account Takeover.

The sound business practices for companies outlined in this document are:

Computer Security:

- Layered System Security
- Online Banking Safety
- Education
- Websites
- User Accounts
- Staying Informed

Account Security:

- Dual Control
- Reconciliation
- Account Services

- Reporting of Suspicious Activity
- Credentials

II. Sound Business Practices

Each business should evaluate its risk profile with regard to Account Takeover and develop and implement a security plan, including sound business practices, to prevent and mitigate the risk of Account Takeover. Such plan should be appropriate to the unique circumstances of the business. However, in developing such a plan, each business should consider the following sound business practices, which are recommended in most cases, and any other sound business practices determined by the company regardless of whether such practices have been communicated by NACHA.

Computer Security

Layered System Security

It is recommended that a business:

- Use appropriate tools to prevent and deter unauthorized access to its network and periodically review such tools to ensure they are up-to-date. These tools include:
 - Firewalls
 - Security suites
 - Anti-botnet, anti-malware, and anti-spyware programs
 - Encryption of laptops, hard drives, VPNs or other communications channels
 - Education of all computer users
- Install robust anti-virus and security software for all computer workstations and laptops and ensure that such software automatically is patched regularly and remains current.
- Implement multi-layered system security technology. Anti-virus software, alone, will not protect a business from most threats. Layering security software constructs a multi-level barrier between business' networks and criminals attempting to access such networks.
- Implement security suites so all security options (i.e., firewall, anti-virus, anti-spyware, anti-malware, etc.) work harmoniously to provide superior protection since security programs from multiple companies sometimes do not work well together, often working against each other, which could leave the computers just as vulnerable as if they had no protection.

Online Banking Safety

It is recommended that a business:

- Create a secure financial environment by dedicating one computer exclusively for online banking and cash management activity. This computer should not be connected to the business network, have email capability, or connect to the Internet for any purpose other than online banking.

- Disallow a workstation used for online banking to be used for general web browsing and social networking.
- Verify use of a secure session (“https”) in the browser for all online banking.
- Disallow the conduct of online banking activities from public Wi-Fi hot spots like airports.
- Cease all online banking activity if the online banking application ‘looks’ different than usual. Do not continue and contact the financial institution immediately.
- Make ACH payment/information forms available only via secure means

Social Engineering Education

It is recommended that a business:

- Educate all computer users about cybercrimes so everyone understands that even one infected computer can lead to an account takeover.

A user whose computer becomes infected can infect the entire network. For example, if an employee takes their laptop home and accidentally downloads credential-stealing malware, criminals could gain access to the business’s entire network when the employee connects at work. All users, even those with no financial responsibilities, should be educated about these threats.

- Always ask, “Does this email or phone call make sense?”
 - Educate all of employees to think critically about each email and phone call received. A business should advise its employees to:
 - Not open suspicious emails or emails from unknown persons. Even opening an email may expose a computer and the network to malware.
 - Ask, “Does this make sense?” before taking action in response to an email. If an email is suspicious, do not click on the link or open the attachment. The link can take the user to an infected website or download a malware program. Likewise, attachments and .zip files (compressed files) can contain malware. Users should be instructed to simply delete the suspicious email and not to click the link or open the attachment. The business also can inquire of a domain lookup service like “whois.net” or similar service that allows users to view the domain registration information of an email sender. If the user does not stop to think and take appropriate action, criminals may be able to lure an unsuspecting user into an action that may infect their computer.

- Be particularly suspicious of emails or calls purporting to be from a financial institution, government agency, vendor, contractor or other organization requesting account information, account verification or banking access credentials such as usernames, passwords, Personal Identification Numbers (PINs) and similar information. If such a suspicious email is identified or call received, the business should call the financial institution to verify legitimacy. The business should not call the phone number included in the email, click on the link or reply to the sender of such an email.
- Be wary of other communications channels, i.e. fax or social media, through which fraudsters may attempt to perpetuate fraud. Emails and phone calls are not the only modes of communication in which suspicious activity can occur.

Websites

It is recommended that a business:

- Block access to unnecessary or high-risk websites. At a minimum, a business should prevent access to websites that employees should not visit during work hours. Common sites that carry a high-risk are adult entertainment, online gaming, , and personal email.

User Accounts

It is recommended that a business:

- Establish user accounts for every computer and limit administrative rights. Many malware programs require the user to have network administration privileges to infect the computer.
- Employ “user” settings to avoid accidentally downloading a credential-stealing program. Many small and mid-sized businesses allow all employees to be the network administrator of their computer. Most malware requires the user to be logged in as the network administrator for the malicious program to download.
- Require all employees use strong passwords and change their passwords frequently on both the computer and online banking access.
- Promptly deactivate or remove access rights from employees that no longer require access (e.g., inactive, transferred or terminated employees).
- Take full advantage of options offered by financial institutions to reduce the risk of a large payment being initiated fraudulently. Many financial institutions allow customers to set a “user limit” for ACH and wire transfer initiation via their online banking portal.

Staying Informed

It is recommended that a business:

- Stay informed about defenses to Account Takeover. Since cyber threats change rapidly, it is imperative that all businesses stay informed about evolving threats and adjust security measures timely. Among other things, this can be done by connecting with alert groups, businesses and industry resources about threats and frauds.

Account Security

Dual Control

It is recommended that a business:

- Initiate payments under dual control, with assigned responsibility for transaction origination and authorization. Dual control involves file creation by one employee with file approval and release by another employee on a different computer. Or, require dual use of tokens where a single employee creates a file, but can only release the same file by logging in a second time using a new passcode on the token. Avoid having employees initiate and authorize payment transactions with administrator credentials.

Reconcilement

It is recommended that a business:

- Reconcile accounts online daily; at a minimum, review pending or recently sent ACH files and wire transfers.

Account Services

It is recommended that a business:

- Take advantage of appropriate account services offered by its financial institution. Financial institutions offer a variety of services like positive pay, security tokens, debit blocks, call-backs, etc. Consult your financial institution to identify what security services it offers.
- Use multi-factor and multi-channel authentication for business accounts that are permitted to initiate funds transfers. Multi-factor authentication includes at least two of the following: 1) something the person knows (user ID, PIN, password), 2) something the person has (password-generating token, USB token), and 3) something the person owns (biometrics, i.e., fingerprint scan).

Reporting of Suspicious Activity

It is recommended that a business:

- Monitor and report suspicious activity. Ongoing monitoring and timely reporting of suspicious activity are crucial to deterring or recovering from these frauds. A business should report anything unusual to the financial institution, such as log-ins at strange times of

day, new user accounts, unauthorized transfers, etc., so the financial institution can immediately block the account and monitor activity.

Credentials

It is recommended that a business:

- Not use administrator credentials issued by its financial institution for day-to-day processing. Criminals use compromised administrator rights to create new users to perpetrate fraud. If criminals gain access to these credentials, they will set up their own users and profiles on your system to facilitate fraudulent transactions. The criminals can even use the administrator credential to lock legitimate users out of the system.