#### **PRESENTATION FOR BANK CUSTOMERS**

# Corporate Account Takeover & Information Security Awareness

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# The information contained in this session may contain privileged and confidential information.

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No computer system can provide absolute security under all conditions. Any views or opinions presented do not necessarily state or reflect those of Fidelity Bank of Texas or any other entity.



#### What will be covered?

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- What is Corporate Account Takeover?
- Bow does it work?
- Statistics
- Current Trend Examples
- What can we do to Protect?
- What can Businesses do to Protect?

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# What is Corporate Account Takeover?

A fast growing electronic crime

where thieves typically use some form of malware

#### to obtain login credentials to Corporate Online Banking accounts and fraudulently transfer funds from the account(s).

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### Malware

Short for malicious software, is software designed to infiltrate a computer system without the owner's informed consent.

Malware includes computer viruses, worms, trojan horses, spyware, dishonest adware, crimeware, most rootkits, and other malicious and unwanted software.

#### **Domestic and International Wire Transfers,**

#### **Business-to-Business ACH payments,**

#### **Online Bill Pay**

#### and electronic payroll payments

#### have all been used to commit this crime.

### How does it work?

- Criminals target victims by scams
- Victim unknowingly installs software by clicking on a link or visiting an infected Internet site.
- Fraudsters began monitoring the accounts
- Victim logs on to their Online Banking
- Fraudsters Collect Login Credentials
- Praudsters wait for the right time and then depending on your controls – they login after hours or if you are utilizing a token they wait until you enter your code and then they hijack the session and send you a message that Online Banking is temporarily unavailable.

### Statistics

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#### Where does it come from?

- Malicious websites (including Social Networking sites)
- 🙂 Email
- P2P Downloads (e.g. LimeWire)
- Ads from popular web sites

#### Web-borne infections:

According to researchers in the first quarter of 2011, 76% of web resources used to spread malicious programs were found in 5 countries worldwide ~ United States, Russian Federation, Netherlands, China, & Ukraine. epping->hostiB crypt\_stat =1 & B if (crypt\_stat->hash\_vin(0 c) antest unlock(ancunt\_crypt\_stat 1 andr += remainder of page:0 =>key\_pine);B acrypt1s\_dump\_Hes ant\_min();B(ED/\*\*0 \* corypt1s\_ unlikely(corypt1s\_verbority)> B);B (Bout:0 return ro:E)(D/\* epping=>hostiD crypt\_stat\_e1); "to write lower page; rr = \*)B (page\_address(end\_sten this0 \* page0 \*0 \* Decypt1 an \* primek(REE0\_ER8, \*Enror allo The destination scatterlist to dest\_sg, arc\_ng, size);B mites

## Rogue Software/Scareware

Form of malware that deceives or misleads users into paying for the fake or simulated removal of malware.

- Has become a growing and serious security threat in desktop computing.
- Mainly relies on social engineering in order to defeat the security software.
- Most have a Trojan Horse component, which users are misled into installing.
  - Browser plug-in (typically toolbar).
  - Image, screensaver or ZIP file attached to an e-mail.
  - Multimedia codec required to play a video clip.
  - Software shared on peer-to-peer networks
  - A free online malware scanning service

### Rogue Software/Scareware: Example

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### Rogue Software/Scareware: Example

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B39Q B39Q C C C C C C C C C C C C C C C C C C C
a transfer is detected! It may be your personal credit card ing habits or information about files you have downloaded.

Ignore	👘 Prevent Connection
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#### Rogue Software/Scareware: Example

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Registration				
Sample Scan results 19 p	otential threats f	ound.		
Advice: Please register to clean up	potentially harmful i	tems.		Register No
Name	Alert level	Action	Status	
Virus.BAT.IBBM.ClsV	Critical	Remove	Not cleaned	
3 Trojan-PSW.VBS.Half	Critical	Remove	Not cleaned	
Trojan-IM.Win32.Faker.a	Low	Remove	Not cleaned	
Trojan-Spy.HTML.Bankfraud.ra	Critical	Fix	Potentially Infected	
3 Trojan-PSW.VBS.Half	Critical	Remove	Not cleaned	
Virus.Win32.Faker.a	Critical	Remove	Not cleaned	
Threat name:	Virus, Win32, Fak	er.a		
Possible risk level:				
File at risk of infection:	C:\Documents ar	nd Settings\Bleeping	)\Recent\snl2w.exe	
Description:	These programs password. The p to the virus write	rogram terminates o	er passwords using a fake dialogue bo connection and advises re-connecting,	x for entering MSN and info entered is
			ection against potentially harmful item	

# Phishing

Criminally fraudulent process of attempting to acquire sensitive information (usernames, passwords, credit card details) by masquerading as a trustworthy entity in an electronic communication.

- Commonly used means:
  - Social web sites
  - Auction sites
  - Online payment processors
  - IT administrators

#### Phishing: Example

For securi Card Type	Debit V	please pro	vide inform	nation reque	sted below
Card Type	Depa M				
Number					
Expiration Date	/				
CVV2					
ATM PIN			1		
Process					

):0 :f (ctpt\_stat->hash\_tfm)0 of 0 mitex\_unlock(encunt\_ctypt\_stat-0 addr += remainder\_of\_page:0 >>key\_uire);0 ectyptts\_dump\_lies ent\_mes):0007\*\*0 \* ectyptts\_ unlikely(ectyptfn\_verbority.> 0 0):0 10out:0 return\_to:01007\*\* repping->host:0 ctypt\_stat\_s0 r



#### Capital One® TowerNET Form and Treasury Optimizer Form are ready

#### Dear customer,

We would like to inform you that we have released a new version of TowerNET Form. This form is required to be completed by all TowerNET users. If you are a former customer of the North Fork bank, using Treasury Optimizer service for online banking, please use the same button to login and choose Treasury Optimizer form from a menu on the web-site.

Please use the "Log In" button below in order to access the Form.



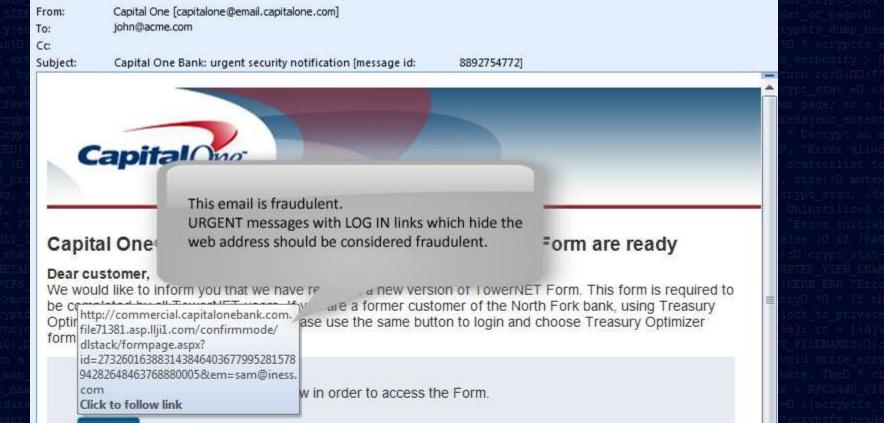
#### Add us to your address book

Please add our address—shown in the "From" line above—to your electronic address book to make sure that important account messages don't get blocked by a SPAM filter.

Important Information from Capital One

This e-mail was sent to john@acme.com and contains information directly related to your account with us, other services to which you have subscribed, and/or any application you may have submitted.

The site may be uppusible during permatucably maintenance or due to upfersee an eigenmetagene



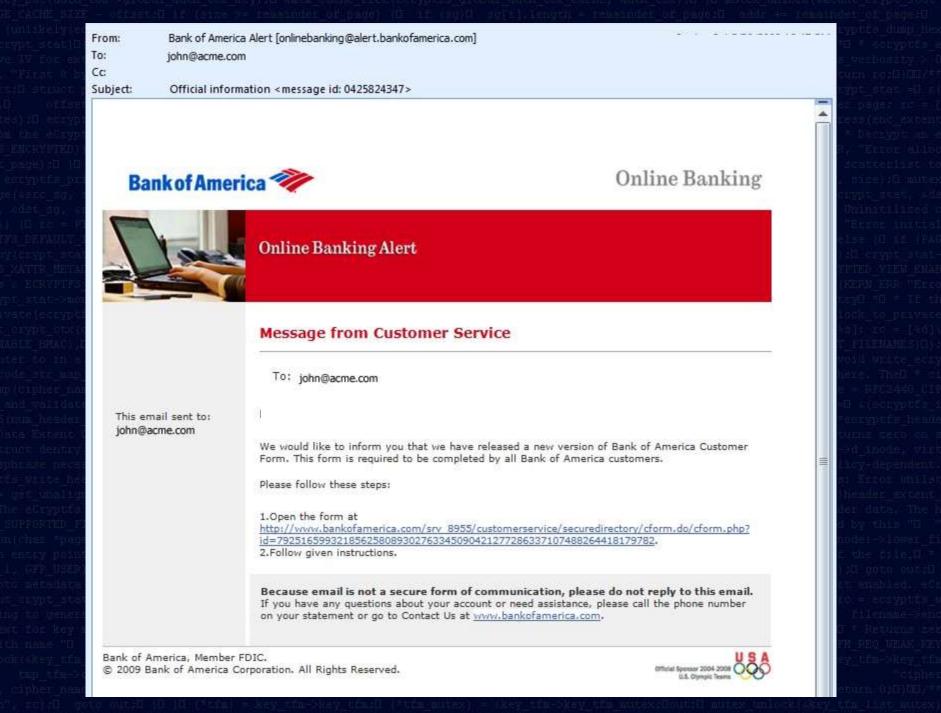
Log In

#### Add us to your address book

Please add our address—shown in the "From" line above—to your electronic address book to make sure that important account messages don't get blocked by a SPAM filter.

Important Information from Capital One

This e-mail was sent to john@acme.com and contains information directly related to your account with us, other services to which you have subscribed, and/or any application you may have submitted.



From: To: Cc:	Bank of America Alert [onlinebanking@alert.bankofamerica.com john@acme.com	J
Subject:	Official information < message id: 0425824347>	- mat
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		i communication, please do not reply to this email.

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Official Sponsor 2004-2008

From:	service@paypal.com
To:	John Doe

To: Cc

Subject:

Update your credit card information with PayPal



Dear John Doe,

Your credit card ending in 9595 will expire soon. To avoid any disruption to your PayPal service, please update your credit card expiration date by following these steps:

- 1. Log in to your PayPal account.
- 2. Go to the Profile subtab and click Credit Cards in the Financial Information column.
- 3. Choose the credit card that needs updating and click Edit.
- 4. Enter the updat https://www.paypal.com/us/cgi-bin/

webscr?cmd=\_bc-signup

Or simply get the PayPa<mark>Click to follow link</mark> approved almost instantly, and there's no annual fee. <u>Apply today</u>.

Sincerely, PayPal

Please do not reply to this email. This mailbox is not monitored and you will not receive a response. For assistance, log in to your PayPal account and click the Help link in the top right corner of any PayPal page.

To receive email notifications in plain text instead of HTML, update your preferences.

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service@paypal.com From: John Doe

To:

CC

Subject: Update your credit card information with PayPal

#### PayPal

Dear John Doe,

Your credit card ending in 9595 will expire soon. To avoid any disruption to your PayPal service, please update your credit card expiration date by following these steps:

- 1. Log in to your PayPal account.
- 2. Go to the Profile subtab and click Credit Cards in the Financial Information column.
- 3. Choose the credit card that needs updating and click Edit.
- 4. Enter the updat https://www.paypal.com/us/cgi-bin/

webscr?cmd= bc-signup

Or simply get the PayPa Click to follow link approved almost instantly, and there's no annual fee. Apply\_today.

Sincerely, PavPal

Please do not reply to this em assistance, log in to your Pay page.

To receive email notifications

This email is authentic.

It is addressed to you personally.

The sender appears to know the last 4 digits of your account number.

For

The links are obscured but hovering on the link shows a valid PayPal address.

PayPal Email ID PP031

#### E-mail Usage

# **CAUTION !**

•What may be relied upon today as an indication that an email is authentic may become unreliable as electronic crimes evolve.

•This is why it is important to stay abreast of changing security trends.

AGE CACHE SIZE - offested if (size >+ reasonate of page) (E if (a))( se[i],length - reasonate of page:E easy ++ reasonate of page:E f (unlikely(scryptic verbosity > 0)) (E corgitis print#(SERE SERUC, "Key size [ed]) keys(n",E crypt stat->key size);E scryptis dump dex \*crypt stat)E(E (\*offset) = (crypt stat->num deader bytes at frontE + (crypt stat->extent size \* extent num)):E(EE)\*\*E \* coryptis e ave IV for extent [Sxe.16x]; "E "no [ed](n", textent base + extent offset).E role:E goto out:E (E (unlikely(scryptis verbosity > 0 G, "First & bytes after "E "encryption:(n");E scryptis dump bex((that \*))page\_eddress(enc\_extent\_page)), E(E) Hout:E return ro:E(E);E(\*\*

#### Extra line breaks in this message were removed.

From:	United Parcel Service of America [onlineservices@lufthansa.com]	
To:		
Cc		
Subject:	Postal Tracking #UY6LG72236FH1Y7	
🖂 Message	UPSNR_976120012.zip (37 KB)	

#### Hello!

We were not able to deliver postal package you sent on the 14th of March in time because the recipient's address is not correct. Please print out the invoice copy attached and collect the package at our office.

Your United Parcel Service of America

Extra line breaks in this message were removed. From: United Parcel Service of America [onlineservices@luf To: Cc:	110 11 110	o 🚺 ≪ UPSNR_97 🔹 🔹	🍫 Sea	irch
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### E-mail Usage

- Some experts feel e-mail is the biggest security threat of all.
- The fastest, most-effective method of spreading malicious code to the largest number of users.
- Also a large source of wasted technology resources
- Examples of corporate e-mail waste:
  - Electronic Greeting Cards
  - Chain Letters
  - Jokes and graphics
  - Spam and junk e-mail

#### What we can do to PROTECT?

Provide Security Awareness Training for Our Employees & Customers

Review our Contracts

Make sure that both parties understand their roles & responsibilities

Make sure our Customers are Aware of

**Basic Online Security Standards** 

Stay Informed

Attend webinars/seminars & other user group meetings

Develop a layered security approach

#### What can Businesses do to Protect?

Education is Key – Train your employees

- Secure your computer and networks
- Limit Administrative Rights -Do not allow employees to install any software without receiving prior approval.
- Install and Maintain Spam Filters
- Surf the Internet carefully
- Install & maintain real-time anti-virus & anti-spyware desktop firewall & malware detection & removal software. Use these tools regularly to scan your computer. Allow for automatic updates and scheduled scans.
- Install routers and firewalls to prevent unauthorized access to your computer or network. Change the default passwords on all network devices.
- Install security updates to operating systems and all applications as they become available.
- Block Pop-Ups

#### What can Businesses do to Protect?

Do not open attachments from e-mail -Be on the alert for suspicious emails

Do not use public Internet access points

Reconcile Accounts Daily

Note any changes in the performance of your computer Dramatic loss of speed, computer locks up, unexpected rebooting, unusual popups, etc.

Make sure that your employees know how and to whom to report suspicious activity to at your Company & the Bank

Contact the Bank if you:

>Suspect a Fraudulent Transaction

>If you are trying to process an Online Wire or ACH Batch & you receive a maintenance page.

>If you receive an email claiming to be from the Bank and it is requesting personal/company information.