



**CALIFORNIA
REPUBLIC
BANK**

Serving Southern California's Most Successful Companies and Their Owners

Protecting your Trust Accounts Against Cyber Fraud

Why I am here tonight!



**CALIFORNIA
REPUBLIC
BANK**

Protecting your Trust Accounts Against Cyber Fraud

*Dealing with Competition, Interest Rates,
Compliance & Market Conditions are all critical
issues for your business but none of them can
put you out of business overnight!*

Cybercrime Can.....



**CALIFORNIA
REPUBLIC
BANK**

Cybercrime:

What every Escrow Company needs to know

- An oft-repeated urban legend recounts a newspaper reporter asking famous gangster Willie Sutton why he robbed banks, His answer... *“Because that’s where the money is.”*
- Frequency vs. Severity – Dynamite Factory



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

FACT: Criminals go after businesses with lots of cash, small IT infrastructure and few controls!



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

What every Escrow Company needs to know

- No organization is immune.
 - Target
 - Sony
 - Anthem
 - US Govt.
- Every business connected to the internet can expect to fall victim to cyber crime at some point
- Employees are the weakest link due to phishing and social engineering;
- Cyber Crime boils down to cyber-enabled theft of **money** or theft of **data**.



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

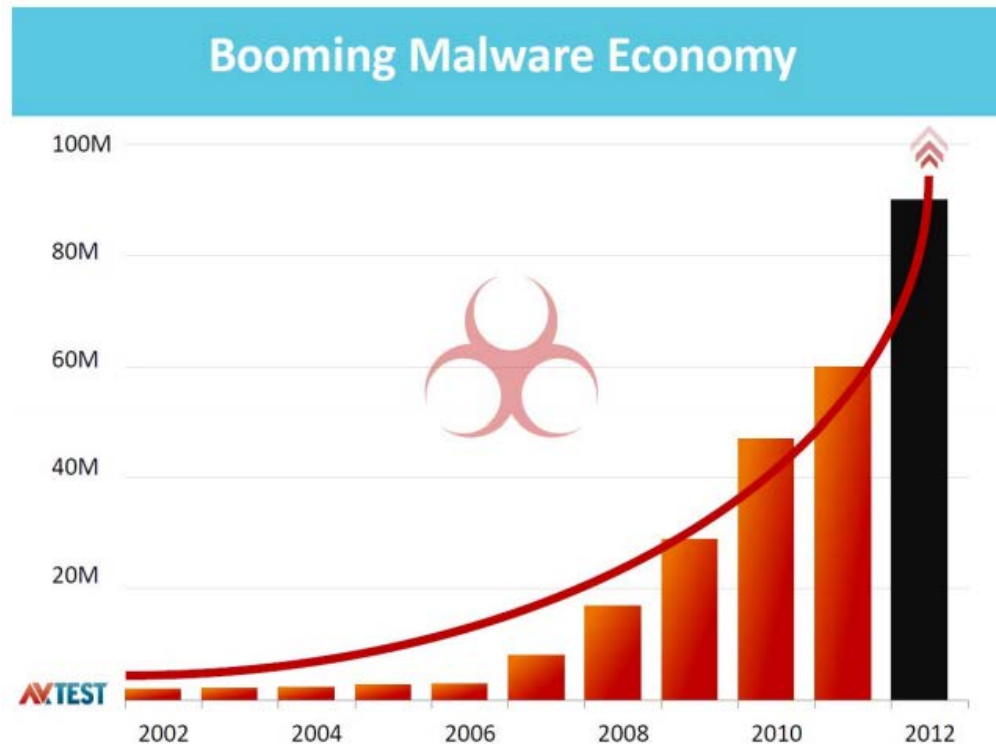
The worst kept secret is how vulnerable the average settlement agent's escrow account is to fraud, embezzlement, cyber-attacks and unintentional mistakes!



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

What every Escrow Company needs to know



**CALIFORNIA
REPUBLIC
BANK**

Cybercrime:

What every business needs to know

- The availability of a whole set of services is accelerating this trend, putting sophisticated cyber tools in the hands of criminals who do not have any cyber expertise.
- Malware, Trojans, Key loggers, Spear Phishing, etc. just some of the techniques being used to steal your client's money.



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

FBI Stats 2014

BUSINESS E-MAIL COMPROMISE

Total U.S. victims: 1198

Total U.S. dollar loss: \$179,755,367.08

Total non-U.S. victims: 928

Total non-U.S. dollar loss: \$35,217,136.22

Combined victims: 2126

Combined dollar loss: \$214,972,503.30



**CALIFORNIA
REPUBLIC
BANK**

Cybercrime:

What every business needs to know

- Bottom Line – Only **two things** can enable Cybercrime.
 - **Human Error & System Infections!**
- ***Unfortunately Human Error enables 99% of System Infections!***
 - San Diego Story



CALIFORNIA
REPUBLIC
BANK

Cybercrime: Latest Threats

- **“Man in the middle”**
 - Malware that ‘takes over a wire transaction after you log in’
 - Zeus/SpyEye, etc.



**CALIFORNIA
REPUBLIC
BANK**

Cybercrime:

Latest Threats – Email Scams

- **Businesses are being tricked by email notifications into sending payments to criminals;**
- **Escrow Agents are being tricked by email notifications into sending payments to criminals;**



CALIFORNIA
REPUBLIC
BANK

Cybercrime: Latest Threats

- **"Phishing"** is a rampant Internet scam that relies on "spoofed" e-mails, purportedly from well-known firms, to lure individuals to fraudulent web sites that look and feel like the well-known firm's web site.
 - These fraudulent e-mails and web sites may also try to install malicious software on your computer that monitors your activities and sends sensitive personal information (your passwords, for example) to a remote location.
 - With that information, criminals can commit identity theft, credit card fraud and other crimes.



CALIFORNIA
REPUBLIC
BANK

M.O. To Fake E-Mail Schemes

- Hack into E-Mail Accounts
- Monitor E-mail Exchanges
 - Discover:
 - Parties
 - Property
 - Sales Price
 - Closing Date
 - File Numbers
 - Parties' E-Mail Formats



**CALIFORNIA
REPUBLIC
BANK**

Cybercrime:

Latest Threats

- Example of “Spoofing” – With data they get from hacking into emails – Cyber-thieves then create similar email accounts.
 - mtroncale@crbnk.com – Correct Email
 - mtroncale@crbmkn.com – **Spoofed Email**



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

Latest Threats – “Spoofing”

- The Cyber Thieves then begin communicating with all parties representing the Broker to the seller – The seller to the escrow Agent, etc.
- ***Usually includes last minute instructions to change the wire instructions.***



CALIFORNIA
REPUBLIC
BANK

E-MAIL INSTRUCTIONS

- **Forged Instructions from Escrow**

- **From:** "Escrow-Officer, Suzy" <SEscrowofficer@firstam.com>
To: Realtorvictim@yahoo.com
Sent: Friday, December 12, 2014 11:39 AM
Subject: Re: 731 NW Willamina Drive (Email Ref=969390257)
- Barb,
I have just been informed by our accountant that we cannot receive wire in an amount below \$100,000 with our title bank account. please disregard the previous wiring instructions and ensure that the funds is wired to the attached susidiary wiring instructions immediately for Monday's closing.
- Email me if you have any questions.
- Thank you.
- **Suzy Escrow-Officer**
- **Escrow Officer**
- **Escrow Branch Address, Portland | OR | 97232**
- **Office: 503.239.XXXX |**
Fax: 866.734.XXXX



**CALIFORNIA
REPUBLIC
BANK**

Cybercrime:

What every Escrow Officer needs to know

- Your Clients at the closing table are all looking at you and your escrow trust account with the expectation of security.
- **Knowing what you now know - *Can you look them all in the eye and say that their money, their financial security, and their reputations are all secure?***
- Cannot afford to “Play Ostrich!”



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

Latest Threats – What you can do!

- **Out of Band Communication:** Establish other communication channels, such as telephone calls, to verify significant transactions.
- *Arrange this second-factor authentication early in the relationship and outside the e-mail environment to avoid interception by a hacker. “Code Word”*
- **Forward vs. Reply: Do not use the “Reply” option to respond to any business e-mails.**
 - Instead, use the “Forward” option and either type in the correct e-mail address or select it from the e-mail address book to ensure the intended recipient’s correct e-mail address is used.
- **Significant Changes: Beware of sudden changes in business practices.**
 - For example, if a current business contact suddenly asks to be contacted via their personal e-mail address when all previous official correspondence has been on a company e-mail, the request could be fraudulent.
 - **Always verify via other channels that you are still communicating with your legitimate business partner.**



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

What you can do – Layer I

- **Daily Three Way Reconciliation of all Trust Accounts – Not Monthly!**
- **Bank Services – that you Must Utilize**
 - Positive Pay
 - Dual Control Authorization wit Tokens & Passwords
 - Immediate Email notification of wire activity – Not Fax!
 - Block all International wires
 - Does your bank have a dedicated department of bankers trained in the settlement business?



**CALIFORNIA
REPUBLIC
BANK**

Cybercrime:

Personal Computer Security Tips

Make sure Your IT team is doing the following:

- **Install antivirus and anti-spyware software on your computer** and make sure it is up to date with the most recent virus/spyware signatures.
- **Make sure your computer is up to date with the most recent software patches.** Patches are software updates that often address software vulnerabilities that phishing scams and viruses exploit.
- **Install a firewall between your computer and the Internet.** A firewall is software or hardware that acts as a buffer between your computer and the Internet that limits access to your computer and blocks communications from unauthorized sources.



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

What you can do – Layer II



- Install Stand Alone PC for wires ONLY!!
- Install Antivirus software and
- Check weekly for updates and Patches

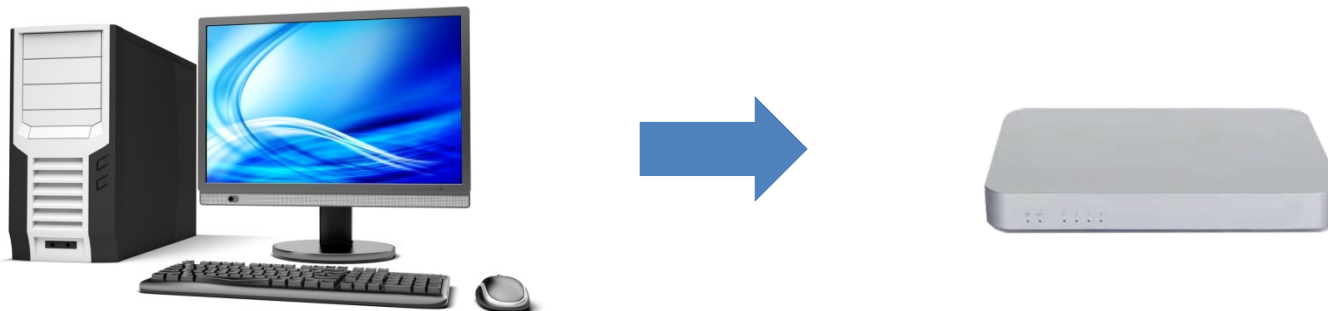


CALIFORNIA
REPUBLIC
BANK

Cybercrime:

What you can do – Layer III

- Isolate Stand Alone PC by connecting to a separate – “Off Network” modem



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

What you can do – Layer IV

- Replace PC with Apple Mac
- 99.6% of all malware written for Microsoft based PC



CALIFORNIA
REPUBLIC
BANK

Cybercrime:

What Else you can do

- If YOU will do all of this you will be in a significantly safer position.
- Unfortunately, even after YOU do all these things a major problem still exists:
 - *Even though you are on a separate machine and on a separate modem,*
 - *All wire activity is processed through the same online banking system utilizing the same passwords and tokens.*



CALIFORNIA
REPUBLIC
BANK

*SO YOU can do all of this
OR*



**CALIFORNIA
REPUBLIC
BANK**

Let CRB do all of this and More!



Brand New iMac(s) > CRB VPN Router > Separate Modem > PAYplus Wire System

- **iMac Based PayPlus Wire Transfer System Isolated from all other Online Banking Activities**
 - Separate System - Separate Login + Separate Tokens
 - All communications Inside CRB's Virtual Private Network
 - ***Only CRB Provides this level of Trust Account Protection***
- CRB Procures, Configures, Installs, & Maintains all Equipment with no upfront costs.

Our Pledge to YOU!

If you bank with CRB the only way you can lose money out of your Trust Account to Fraud is if one of your employees is “Duped” into intentionally putting fraudulent information into our PayPlus System.

*CRB has solved the ‘**Infected System**’ issue so that you only have to focus on understanding the threats and staying alert to prevent “**Human Errors**”.*



CALIFORNIA
REPUBLIC
BANK

Thank You

Thank you for the opportunity to present information about California Republic Bank to you. We look forward to developing a mutually rewarding relationship.

Lane Elliott

Senior Vice President

Director, Business Development

18400 Von Karman Ave.

Suite 1100

Irvine, CA 92612

Direct Phone: 949-270-9704

Mobile: (714)330-9614

lelliott@crbnk.com

www.crbnk.com



**CALIFORNIA
REPUBLIC
BANK**