
Community
credit union
FLORIDA
ICI
Member Seminar:
How to protect against Online Fraud?
Greg Schratwieser
www.ici-consulting.com

"You know, you can do this just as easily online."

Agenda

- Online Fraud Trends & Incidents
- How are cyber crooks perpetrating online fraud?
- How to Protect against Online Fraud?

Greg Schratwieser: ICI President, CEO

- Information Technology Industry: 28 years
- Founded ICI: 1994
- ICI Consulting Services:
  - Strategic Recommendations
  - Compliance
  - Security Assessments
  - Penetration Tests
  - Employee Cyber Security Seminars
  - Vendor Evaluations
  - Project Manage Implementations

Recent Cyber Scams & Trends

"The Internet is the crime scene of the 21st Century”

WSJ

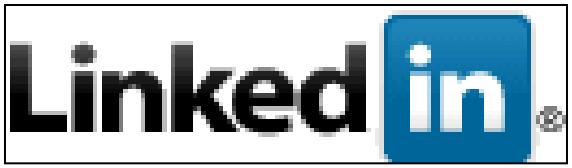
Cyrus Vance, Jr.,

New York District Attorney

Who is at risk with Online Fraud?

- Anyone online…
- Where is the most money?
  - **High Net Worth** Individuals
  - **Executives**
  - **Business Travelers**

Password Theft



- **6.5 M Linked In** passwords stolen & published on unauthorized website **June 2012**

- **453,000 Yahoo** unencrypted user names & passwords **July 2012**

Mobile Phone Vulnerability

- McAfee found **8,000 samples of mobile malware**
- "Burglar cannot rob 300 homes in (1) night but a cybercriminal can attack **300 mobile phones** at a time."

Dr. Markus Jakobsson, PayPal

American Banker, July 1, 2012

What is Malware?

What is a Trojan?

- Trojans most popular form of “malware”
- Trojan is a type of virus that infects your PC
- Takes control of your PC
- Install key-logging software

Fraud Techniques

- **Phishing**:
  - Lure online consumers to fake websites
  - Malware then downloaded to PC

- **Spoofing**
  - Fraudulent site where personal identification information is collected & used to steal funds
  - Email "click here to update your account information"

Fraud Techniques

- **Vishing**
  - Solicitation via email, text message or phone call
  - Claims account was suspended, deactivated or terminated

Vishing

- Example: **IRS late Fri call**

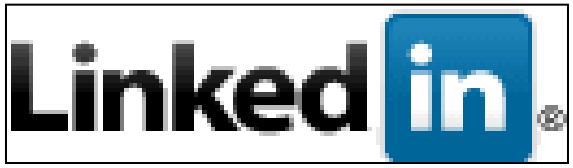
How does this happen?

How many attendees use following solutions?

- Company Website
- Facebook
- I-Tunes
- Linked In
- Plaxo
- Twitter

Where do Hackers get their info on you?

- Company Website
- Facebook
- I-Tunes
- Linked In
- Plaxo
- Twitter



Airports, Coffee Shops & Hotels

- Reluctance to do Online Banking
  - People looking over your shoulder
- Real Problem: Non-secure environment or unprotected device

Juice Jacking

- A free charging kiosk: airport, hotel or shopping mall
- Upload Malware to or Download info from phone
- Turn Phone completely off but…

Distribution of Malware Exploding

Distributing
- Zeus
- SpyEye
- Ice IX
- Carberp

Google

22% search results lead to malicious links *(Websense)*

- FDIC
- NACHA
- Irene
- IRS
- Job posting

facebook

43% of Facebook users report being phished *(Sophos)*

50 apps infected with malware pulled from Android app store *(eWeek)*.

Who is usually at fault in these examples?

Is your name on your organization's website?

Spear Fishing

- Target Executives & Business Owners

<u>Most Execs</u>

- Run MS Updates, Firewall, AV, etc.?
- AV scan every morning?
- Use online banking with private questions?
- Change passwords every month?
- **Are you safe online?**

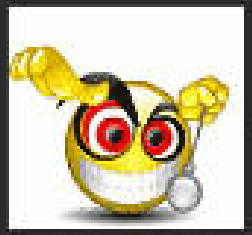
Yikes!!!

Trojans detected by anti-virus programs 23%

Spear Fishing: Small Businesses & Executives

- Most hackers get busy after your 6 AM AV scan
- Zeus Trojan 96,000 versions & counting
  - AV cannot keep up
- Trojans can hijack live online banking sessions or…
- Hacker can return later or…
- Auto-transfer your $$

So effective, cyber crooks offer 6 month Warranty



Reviewed Vendor (SPYWARE)

Silo Super Trojan

http://www.. . . . . /packag...screenshot.JPG

-File Manager
-Process Manager
-Remote shell
-Http Server
-Http Proxy
-Port redirect
-Information
-Pws (Protected storage)
-Advanced keylogger
-IMS spy
-VNC
-Download/ upload/ Exicute
-temp switch/redirect
- 6 months (undetect) support

Price: $600 USD
Egold/WMZ Only
Escrow Accepted and Encouraged

Who is perpetuating Online Fraud?

Organized Crime

- "Organized Crime is bringing in social psychologists & social engineers to look at everything to figure out how to get you to fork up data.”
- “They are very good at it, & they are only going to get better."

Robert Siciliano

McAfee Security

Organized Crime

- “We have to be right all the time & Bad Guys have to be right once”
- Phishing emails **do not end up in Spam Folders**
- Card skimming schemes

Organized Crime perpetuating Online Banking Fraud

- Well **Financed**
- **Distribute** or **accidently download**
- **Operational Teams**
  - **Mules**
  - Hack **Victims**
  - **Transfer $**
  - **Collect $**

Community credit union
FLORIDA

How to protect against Online Fraud?

Who is helping to protect you?

- **Community Credit Union**
- Security Software Companies
- DHS
- FBI
- FCC
- FDIC
- Interpol
- Secret Service
- Nat Institute of Standards & Tech
- Etc.

Federal Reserve Reg E

- **Consumers who bank online in U.S.** are protected by Regulation E
  - Consumer's liability: $50
  - Consumer must notify FI & prove no involvement
- **Commercial Business Account Holders**:
  - If a company gets hacked….

Do Not Key Chain Passwords

- **Facebook Friend Request….**
- "**73%** of online banking customers use their **same password** to access other websites"
- Cyber Criminal steals common username & password

Security Recommendations

- Strong / **complex passwords**
- **Switch off PC** when not being used:
  - Many people leave their PCs running 24/7

Challenge Question Answers Listed Online

- Birthday
- Phone #
- Email address
- School
- Hometown
- Employment History
- Etc.

Security 101

- No Silver Bullet
- **Online Back Up**
- **Anti-Virus** software is up to date
- **Firewalls:** highest level
- **Microsoft Updates**

Anti-Virus Status

46% of PCs are susceptible to Cyber Criminals

- **No AV** Engine
- AV: **off**
- **AV not up-to-date**
- **Firewall: turned off**
- **MS updates**: turned **off**

Online Security Recommendations

- **CCU Website**: Follow Online Security Suggestions
- Attend Member **Seminars & Webcasts: proactive**
- **Dedicated PC**
- **Apple**
- **Multi-Factor Authentication…**

Security Recommendations

- Never open an **email attachment**
- Business PC: **remove administrative rights**
- Set Transfer **limits**

Security Recommendations

- Do not leave **“tabs napping”**
- Never click on a link from your CU or brokerage firm & enter **personal info / passwords**
- Limit **Debit Card** online usage: hard to get $ back

Shred Documents & Destroy Disk Drives

- Laptops
- Desktops
- **Photocopiers**

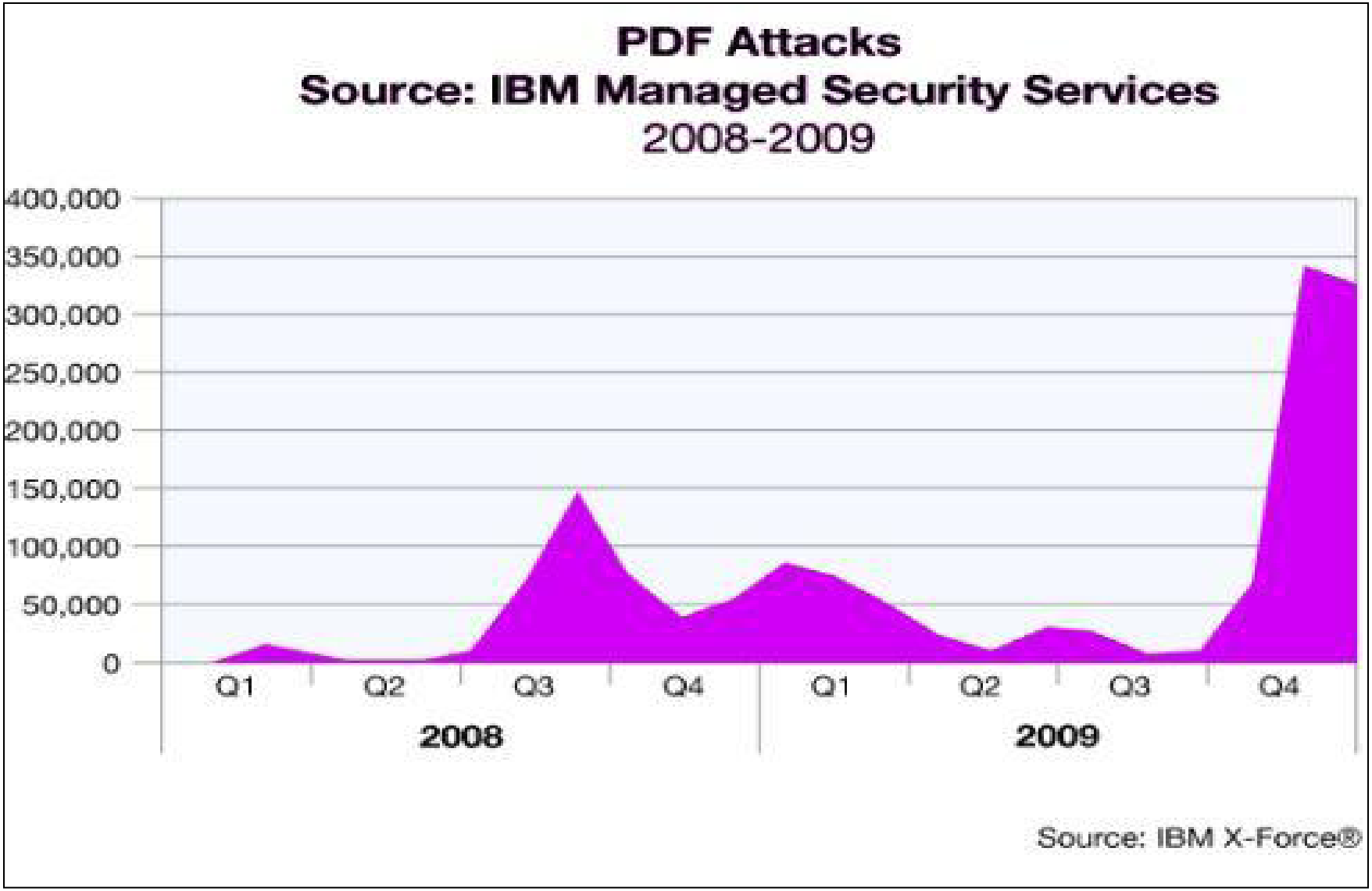
Dedicated PC for all business online transactions

- "**Casual browsing** on the Internet can expose a PC to unwanted malware installations"
- Using a **dedicated PC** will help **reduce** fraud
- **Low Cost PCs**… small businesses / agencies may perceive as frivolous

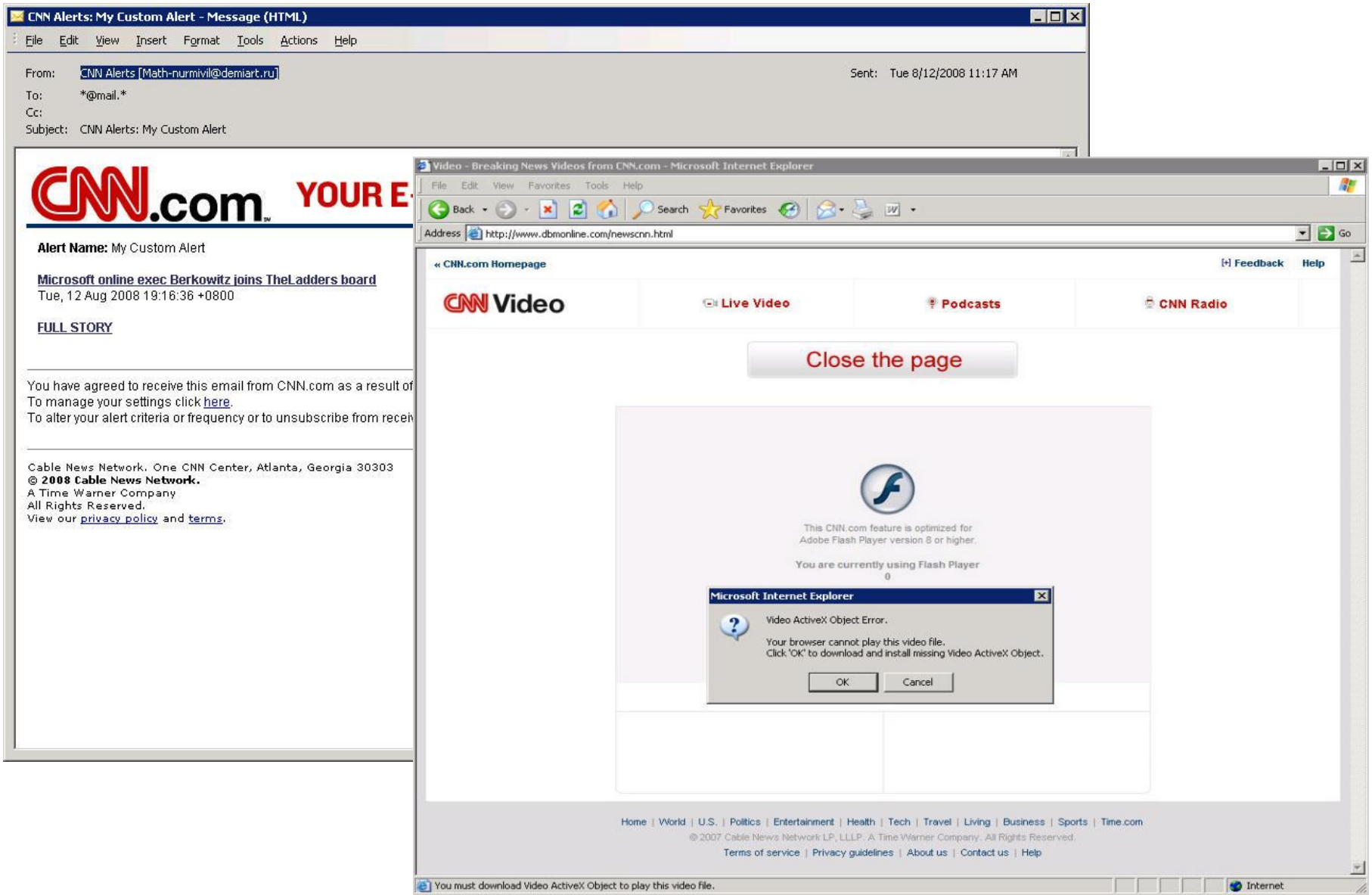
Avoid Malvertisements: Free Anti-Virus Offer

- Malware disguised as legitimate AV software that loads Trojans to the user's PC

Beware PDF Attacks



Watch out for News Alerts: Blend of Phishing & Malware



Security Recommendations

- Employees
  - Never run **Non-Business applications & websites** while at work
  - **No IM-ing**
- Credit Report Agencies: Notify you if Macy's is doing a credit check on you…
  - www.equifax.com
  - www.experian.com
  - www.transunion.com
- Watch out for **small unknown cc transactions**

What to do if you are hacked?

- If you think your PC has been infected,
  - **Contact CU** immediately & **AV** company to remove malware
  - Change passwords & **monitor**
- Report theft to 3 credit reporting agencies & ….
  - Secure a **fraud alert & victim's statement**
  - FREE **copy of your credit report**
  - **Remove fraudulent accounts** stemming from the theft

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