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DATA SECURITY CHALLENGES IN THE ALL TOO PUBLIC AND NOT SO PRIVATE SECTORS

I want you to take home four points

- Understand
- Educate
- Collaborate
- Prepare

It's a great to be in Vienna today, but uh, do you know where your data is right now?



It's all about data, your data

- The confidentiality
- The integrity
- The availability



It's hard to protect that which we have no idea as to its whereabouts

- So, where is your data today?
- It's in the cloud
- On any device
- Any place
- Any time

When “aren’t” we working anymore?



Mobile Apps

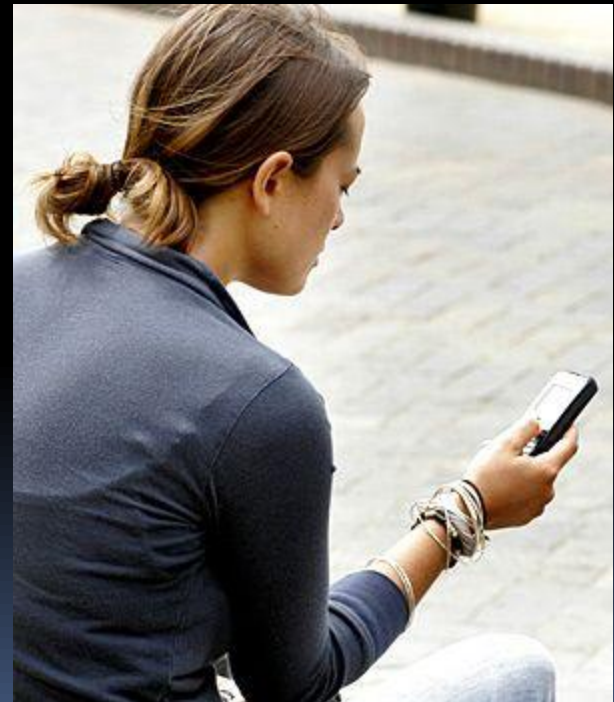


Your apps



Today, it's about mobility...

- In the past few years we shifted our lives to the PC and the Internet
- Now, it's all about being mobile
- A PC in your pocket
- Our mobile work force is growing and expanding



Where?

- Where does work happen?



It happens wherever we are!

- No longer does business take place solely behind network walls
- The critical work is happening increasingly on social networks, on handheld devices, in the field, and at local cafes



Diminishing Border

- The traditional perimeter, with clearly identifiable boundaries, has diminished
- In its place, a network with limitless potential is rising
- One where Universities, agencies, companies, their customers, and their partners demand access to information whenever and wherever they need it



New Considerations

- It is information technology's role to ensure that the appropriate people, using the correct devices, are accessing the proper resources while having a highly secure yet positive user experience within your networks

A blurring of activities

- In addition, it is common for workers to blend business and personal communications on these social networks, further blurring the network perimeter

Where are we going and what are we doing?



Some bone-jarring statistics

- 50% of Facebook active users log on to Facebook on any given day
- More than 60 million users update their status - daily
- People spend over 500 billion minutes per month on Facebook



Billions

- More than 3 billion photos uploaded to the site each month
- More than 5 billion pieces of content (web links, news stories, blog posts, notes, photo albums, etc.) shared each week



The involvement is viral

- Millions of local businesses have active Pages on Facebook
- More than 20 million people become fans of Pages each day
- Pages have created more than 5.3 billion fans



**WE'RE ON
FACEBOOK!**

Mobility

- There are more than 200 million active users currently accessing Facebook through their mobile devices

I just have to check...

- Checking your Facebook account has become the default Water Cooler
- It's the most commonly visited website at the workplace, twice as popular as Google and three times as popular as Yahoo

The keypad is mightier than the sword



PunditKitchen



If you think it's a fad, think again...



“ “ This Revolution Will Be Tweeted! ” ”

Cisco on Facebook

The screenshot shows the Cisco Facebook page interface. At the top, there's a navigation bar with the Facebook logo, a search bar, and links for Home, Profile, and Account. The main header area features the Cisco logo and the tagline "Welcome to the human network." Below this, there are tabs for Wall, Info, News, Twitter, YouTube, and Boxes. The central post area contains a text input field, an "Attach" button, and a "Share" button. The post itself is titled "Cisco Community Central: Collaboration TweetChat: Enterprise Collaboration: Is Social Enough?" and includes a video player. The video player shows a panel of experts discussing enterprise policy. The post has 40 likes and 6 comments. On the left sidebar, there are sections for "Suggest to Friends", "Subscribe via SMS", "The Cisco Vision: Changing the Way We Work, Live, Play and Learn.", "21 Friends Like This" (with profile pictures of Chris Tobkin, Russell Smoak, Ron Malenfant, Jay Lane, Dave Klein, and David Martin), and "59,383 People Like This" (with profile pictures of Mohammed Alkhadra, Sudeep Navak, and Shri Charan). On the right sidebar, there are advertisements for "Atlanta Bucket List", "AARP Medicare Supplement", and "Xpressive Signs & Designs". The bottom of the page shows the browser's address bar with the URL "http://www.facebook.com/ajax/emu/f.php?eid=AAAAAwAgACAAAFAKQd1nCuUP9kgkPHNpzRrVlv3J3Cfx8I58EXLHYc3Vc8FBFjxkLpX8lwevJ1LEG4w24p" and the text "Unknown Zone".

Cisco on Twitter

twitter Home Profile Find People Settings Help Sign out

CiscoSecurity

✓ Following Lists Settings

Understanding the Trust Gap: Certificate-Signed Malware (new Cisco Security blog post)
<http://j.mp/cYgfJ7>
33 minutes ago via Futuretweets V2

@windexh8er Being awesome in IPS? I'm missing the humor. Unless you're talking abt the electrical femala/male parts story. That was amusing.
about 2 hours ago via web in reply to windexh8er

@GeekChickUK Yes? :)
about 2 hours ago via web in reply to GeekChickUK

Woof! RT @infonetics: Cisco's top-dog status confirmed in new #PS vendor ratings survey: <http://j.mp/98rgQX> @SecurityJeff
about 2 hours ago via web

@standaloneSA I used to hear that in lab. The other students were actually talking abt electrical components but it still weierded me out.
about 2 hours ago via web in reply to standaloneSA

Cisco's Security Week in Highlights: Cyber Risk Report
<http://j.mp/cBvbEY>
about 3 hours ago via Futuretweets V2

Threat Outbreak Alert: Fake Automobile Tax Document Spam

Name Cisco Security
Location In the network
Web <http://www.cisco.com>
Bio Security * technology * events * news * humor * Cisco! (Updated by @lauren)

505 following 9,479 followers 832 listed

Tweets 2,337

Favorites

Lists
@CiscoSecurity/borderless-networks
@CiscoSecurity/testlist
@CiscoSecurity/cisco-feeds
View all

Actions
block CiscoSecurity
report for spam

Following

RSS feed of CiscoSecurity's tweets

Done Internet 100%

Cisco on YouTube



Search

Browse

Upload

Create Account

Sign In



CISCO PR
CSCOPR's Channel

Subscribe

All

Uploads

Favorites

Playlists



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Date Added | Most Viewed | Top Rated



Cisco Announces Webex Connect

155 views
2 days ago



Dialogue Cafe Portuguese

19 views
3 days ago



Dialogo Cafe Launch in Rio de

13 views
3 days ago



Cisco Digital Media Suite

110 views
4 days ago



Jerry Monroe, head of Cisco's

34 views
4 days ago



Cisco TelePresence

303 views
4 days ago



Holyoke Smart+Connected

164 views
4 days ago



Cisco Introduces Flip Prosumer

265 views
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Mike Baird, Cisco TTG Director of

114 views
5 days ago



TELUS Changes the Game with

130 views
5 days ago



Marthin De Beer, SVP of Cisco's

101 views
5 days ago



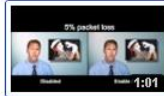
Howard Charney talks from

38 views
6 days ago



Cisco Demos Multi-Vendor, Multi-

613 views
1 week ago



ClearPath Demo

474 views
1 week ago



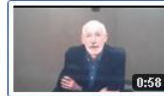
Cisco Sports and Entertainment:

153 views
1 week ago



Cisco at UTTelecom

113 views
1 week ago



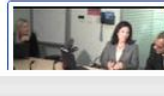
Talk2Cisco Promo: Global Demand for

94 views
1 week ago



Cisco and Apollo to Create Smart

111 views
2 weeks ago



CSCOPR

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Friends (13)

ideas.
insights.
information



FIRST

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Save the Date
23rd Annual FIRST Conference
Hilton Vienna, Austria
12-17 June 2011

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FIRST is the premier organization and recognized global leader in incident...
More

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Report Page
Share

FIRST.Org Annual Conference

Non-Profit Organization

ValidEDGE **YNGRES** **COMPUTER** **T** **SAP**

Wall FIRST.Org Annual Conference · Top Posts

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Write something...

FIRST.Org Annual Conference
It's almost time for the conference!!!! Who else is super excited? New podcast with Iftach Ian Amit is ready for your listening pleasure. (@iamit).

IftachIanAmit
By: FIRST2011
media.first.org
June 8 at 11:53am · Like · Comment · Share

2 people like this.

Morgana Banan I am super excited! I am sitting in the Hilton as I speak!
Saturday at 1:11pm · Like

Write a comment...

FIRST.Org Annual Conference
Have a great weekend FIRSTies! #FIRST2011 attendees, we will send you general reminders, etc. early next week!
June 3 at 7:12pm · Like · Comment

Gonzalo Alfredo Romero Borda likes this.

Write a comment...

FIRST.Org Annual Conference
Interview with Friday keynote Mikko Hypponen is up!

Pokes
Jocelyn Gray has poked you.
Poke Back

People You May Know See All
Krista Conard
1 mutual friend
Add as friend

Sponsored Create an Ad
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chooseaaronplumbing.com

np
Save money and energy with a tankless water heater from Aaron Plumbing! Call today to save up to \$800 through rebates & tax credits!

Natural Release Massage ~A...
30 minutes FREE for your first session at the Roswell location. SAVE \$50, 90 minutes for \$85, 2 hours for \$100.
Like · 66 people like this.

IT Security HS Degree
Secure the future of your career with a Master's in Computer Information Systems with a Security concentration from Boston University.

Lotus Vision
Comprehensive Eye Care
Free LASIK Consultation!
Glasses and Contacts Top Rated, Emory MD. Call 678.76...
Chat (7)

Done Internet 100%

Vienna on Facebook

facebook Search Home Profile Account

Vienna

Travel/Leisure · Vienna, Austria

Like

Wall Vienna · Top Posts

Welcome to Vienna! **Vienna** wishes you a wonderful long weekend! ♥ Here some tips what to do: 11 festival for fashion & photography, CmyK pres. Club Pompadour 2 mit Steve Bug (Jack is Back), BOINK! - MEGA RAVE 1000, Eristoff Tracks FUTURE BEATZ NATIONAL EDITION, PRATEREI #19 w/ RICK WILHITE & CHICAGO SKYWAY, CITY OF BASS Vienna - LAST 4 SUMMER - feat FRISK & MISS RITA

Friday at 10:55am · Share

101 people like this.

View all 12 comments

Natasha Rybar I was in Vienna today. I just loved it. It is amazing, really something you just have to see.
Saturday at 7:30pm · 2 people

David J. Logan Wien ist immer eine schoene Stadt!
Yesterday at 12:36am · 1 person

Welcome to Vienna! **Vienna** asked What infos do you wish to receive on our page or what topics are you interested in:

- Culture/exhibitions
- Concerts and latest Events
- Nightlife

9 More...

Friday at 5:48am · 1 · Follow · Ask Friends

Welcome to Vienna! **Vienna**

Pokes
Jocelyn Gray has poked you. Poke Back

People You May Know See All
Tom Montgomery 21 mutual friends Add as friend

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30 minutes FREE for your first session at the Roswell location. SAVE \$50, 90 minutes for \$85, 2 hours for \$100.
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Go Tankless, Save \$800!
chooseaaronplumbing.com
Save money and energy with a tankless water heater from Aaron Plumbing! Call today to save up to \$800 through rebates & tax credits!

Gibbs Lawn Design & Services, Inc.
GLDS. Landscaping & Full-Service landscape maintenance & Lawn care company. Serving: Cumming, Alpharetta & N. Fulton county since 2003.
Like · 10 people like this.


Repeal Obamacare?
newsmax.com
Should Congress Repeal Obama's Policies here in national

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Graz

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Info

- Related Posts
- Wikipedia
- Nearby Places
- Community Edits

661 check-ins

9,423 people like this

Top Contributors

-  **Jakob Unt**
BG Seebachergasse
-  **A1**
-  **Philip Pacanda**
Graz Uni.
-  **Simon Wendelin Burger**
Graz Uni.
-  **Lacy Leon**

Graz, Austria

Like

City

Description

From Wikipedia, the free encyclopedia

Graz is the second-largest city in Austria after Vienna and the capital of the federal state of Styria. On 1 April 2010 it had a population of 291,890 (of which 258,605 had principal residence status).


Graz has a long tradition as a student city: its six universities have more than 44,000 students. Its "Old Town" is one of the best-preserved city centres in Central Europe.

Politically and culturally, Graz was for centuries more important for Slovenes than Ljubljana, the capital of Slovenia, and still remains influential.




In 1999, Graz was added to the UNESCO list of World Cultural Heritage Sites, and the site was extended in 2010 by Schloss Eggenberg. Graz was sole Cultural Capital of Europe for 2003 and got the title of a City of Culinary Delights in 2008.

Geography




Graz is situated on the Mur River in the southeast of Austria. It is about 200 km (120 mi) southwest of Vienna. The nearest larger urban center is Maribor in Slovenia which is about 50 km (31 mi) away. Graz is the capital and largest city in Styria, a green and heavily forested area.




Nearby Places Create a Page See All

-  **Stadtpark Graz**
298 check-ins · 204 likes Like
-  **SCS**
573 check-ins · 253 likes Like
-  **Uni Resowì**
357 check-ins · 57 likes Like


Nearby Cities

-  **Frohnleiten, Steiermark, Austria**
City
163 people like this.
-  **Gratkorn, Steiermark, Austria**
City
250 people like this.
-  **Weiz**
City
721 people like this.

Pokes


-  **Jocelyn Gray**
has poked you. Poke Back

People You May Know See All

-  **Ron Dille**
1 mutual friend
Add as friend


Sponsored Create an Ad

Go Tankless, Save \$800!
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Save money and energy with a tankless water heater from Aaron Plumbing! Call today to save up to \$800 through rebates & tax credits!

Natural Release Massage ~A...



30 minutes FREE for your first session at the Roswell location. SAVE \$50, 90 minutes for \$85, 2 hours for \$100.

Like · 66 people like this. Chat (7)

Done Internet 100%

This is viral

- Overall, Facebook is now used by 1 in every 13 people on earth



What else are they doing?

- Over 250 million people interact with Facebook from outside the official website on a monthly basis, across 2 million websites

Austrian Facebook users

There are over 2,559,180 Facebook users in
Austria

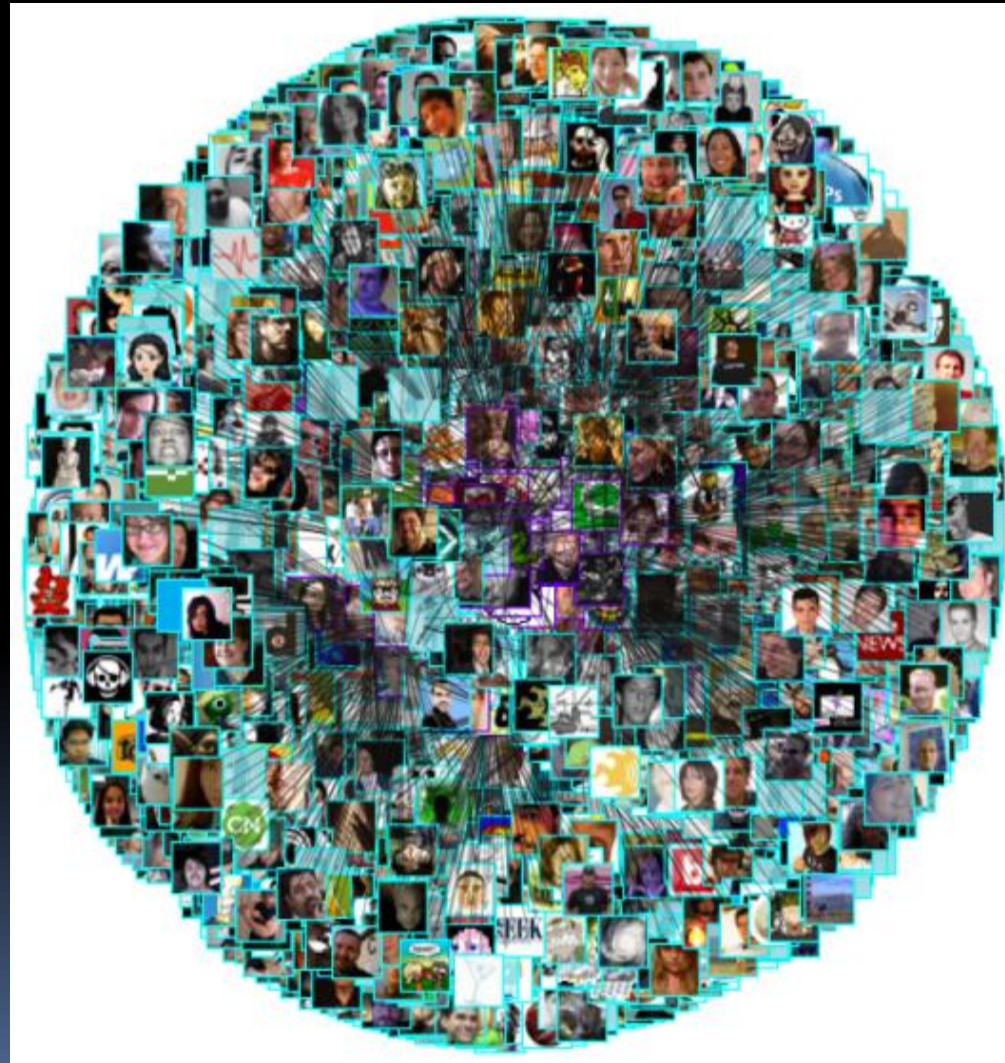


There is a human element to all of this, an element that is more often than not, overlooked...



It's no longer just close relationships

- Our employees are going places they've never gone before and are touching technology daily
- That which they are touching is touching our networks as well



That being said...

- There are things we really need to be aware of
- The bad guys know what we're doing, where we're going and want to make the trip a wee bit more difficult

With Web 2.0

- A new breed of malware is evolving
- Google Mashups, RSS feeds, search, all of these can be misused by hackers to distribute malware, attack Web surfers and communicate with botnets

Risk – it's everywhere

- And no one knows that better than IT security professionals
- Disgruntled employees, students, fired employees, clueless employees who succumb to social engineering, passwords left on Post-it notes, wide-open instant messaging and increasingly powerful hacker tools in the hands of teenagers, Web Mobs and Organized Crime targeting Social Media sites

Objective?

- The key objective, of course, is to recognize risk, safeguard your reputation and not reveal sensitive or confidential information that may prove quite harmful

Two biggest vectors for Malware

- Email
- Web-based

The Human Firewall – an invaluable tool

- A good *human firewall employee* is one who filters good security practices and rejects any others—much like a network firewall only allows authorized traffic and rejects any other
- The only way to build a good human firewall is to raise people's awareness; to teach them good habits, to make them recognize bad practices and change them into good practices
- Your cyber security is only as good as the people who manage it and those who use it

So Patrick, why do we really need that Human Firewall?



Because, 'Friend' has become a verb

- Social media users believe there is protection in being part of a community of people they know
- Criminals are happy to prove this notion wrong

My new friends...

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news **ULTIMATE HOLIDAY TECH GUIDE**

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Home > News > Webware

Webware

COOL WEB APPS FOR EVERYONE

December 7, 2009 7:34 AM PST

Study: Facebook users willingly give out data

by Don Reisinger Font size Print E-mail Share 27 comments

263 retweet Share 179

Facebook users are too willing to give out their personal information, security firm Sophos has found.

According to Sophos' Australian team, which **conducted a study** to see how likely Facebook users were to offer up personal information, 41 to 46 percent of the 100 people Sophos contacted "blindly accepted" friend requests from two fake Facebook users created by the security firm.

After becoming friends with Sophos, the security firm was able to access up to 89 percent of the users' full dates of birth, all of their e-mail addresses, where they went to school, and more. Half of all the users Sophos befriended displayed the town or suburb where they live. They even offered up information on family and friends.

Younger users were "more liberal" with their workplace or school information than older users. "Both groups were very liberal with their e-mail addresses and with their birthdays," the security firm wrote in a blog post Sunday announcing the results. "This is worrying because these details make an excellent starting point for scammers and social engineers."

The security firm added that "10 years ago, getting access to this sort of detail would probably have taken a con-artist or an identify thief several weeks, and have required the on-the-spot services of a private investigator. Sadly, these days, many social networkers are handing over their life story on a plate."

facebook

Ad Feedback

HIT PRINT INTELLIGENTLY **hp**

ORIGINAL HP INKS *give you*
UP TO 65% MORE
PAGES *than* BARGAIN INKS.

» shop now

About Webware

Say No to boxed software! The future of applications is online delivery and access. Software is passé. *Webware* is the new way to get things done.

Subscribe via RSS
Click this link to view as XML.

Add this feed to your online news reader

Done

Causation

- The threats and security issues that come with social media aren't usually caused by vulnerabilities in software
- More commonly, these threats originate from individuals who place an unwarranted amount of "transitive trust" in the safety of these communities

Remember...

- On social sites –
 - Your privacy is history
 - They don't have your best interests in mind
 - Social engineering attacks are getting more targeted

Trust?

- Users will trust something or someone because a user they know has also expressed trust in that person or subject
- We trust because we are curious and curiosity...

Curious? This is why! Out of date???


YuoTube - Broadcast Yourself. - Secret video Tom - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.youtube.com/watch?v=.../1.html?schk=sket=


Secret video by Tom

Rate:
24 ratings
[Sign in](#) to rate
Views: 2,609



Your version of Flash player is out of date.
Please download this update.

Download



From: [Tom](#)
Joined: 1 year ago
Videos: 5
Subscribe

Added: **August 09, 2007** ([more info](#))

Embed: [Customize](#)

```
<object width="425" height="344"><param name="movie"
```

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Video Responses: 10 Text Comments: 70
[babachat](#) (4 hours ago)
0 ●●
Marked as spam
Reply
Funniest thing EVER!!
[cmith1199](#) (6 hours ago)
0 ●●

Done

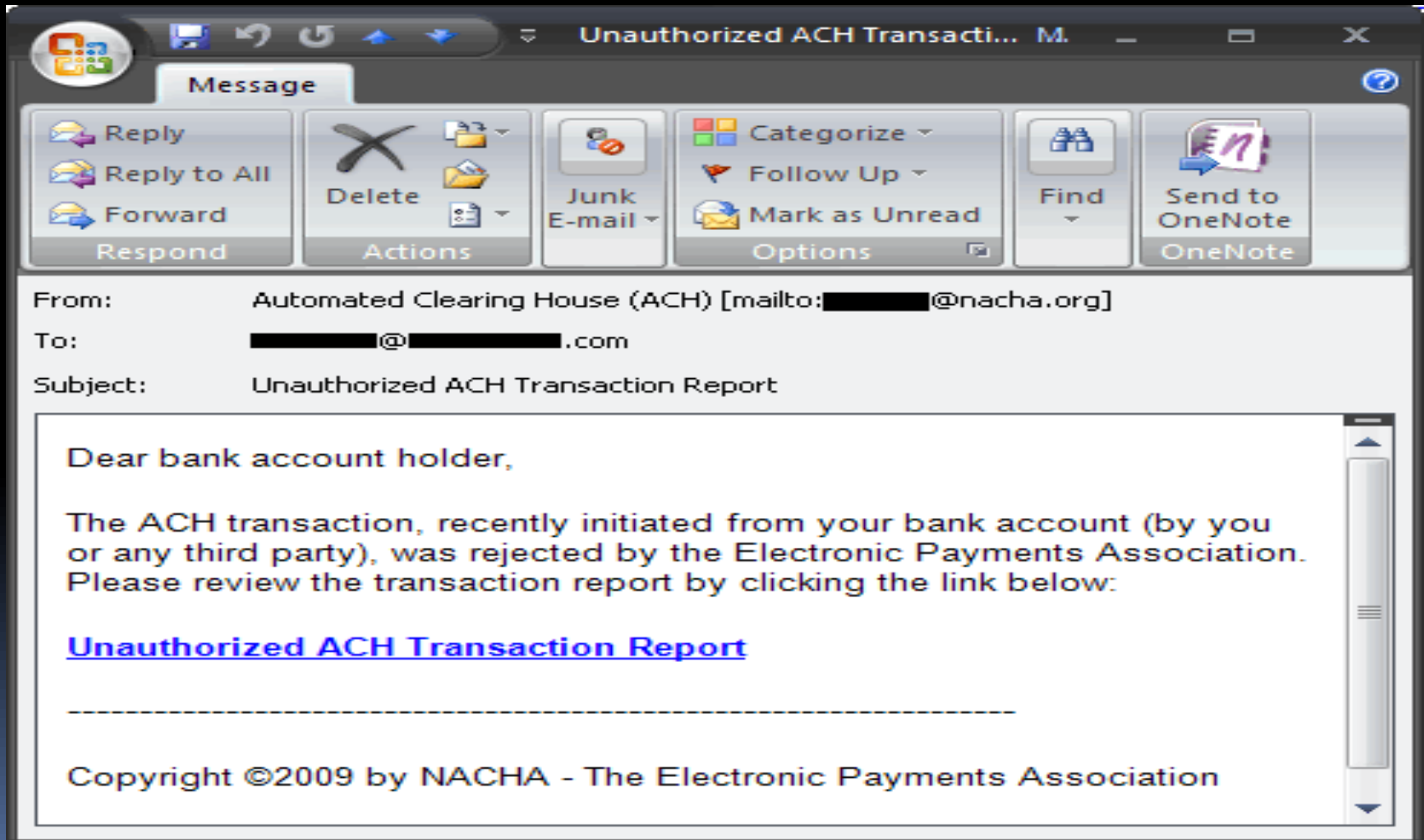
Opening flash_update.exe

You have chosen to open


flash_update.exe
which is a: Application
from: http://www.sdkpc.org


Would you like to save this file?

They want to send us somewhere else...






The unknown... DO NOT TOUCH THIS!!!

WARNING!!! Quick System Scan Results 



XP antivirus Online Scanner detected dangerous spyware on your system!

Detected malicious programs can damage your computer and compromise your privacy. It is **strongly recommended** to remove them immediately.

Name	Type	Risk level
 Spyware.IEMonster.b	Spyware	CRITICAL
 Zlob.PornAdvertiser.Xplisit	Spyware	High
 Trojan.InfoStealer.Banker.s	Trojan	Medium

Windows Security Alert



To help protect your computer, Windows Firewall has detected activity of harmful software.

Do you want to block this software from sending data over the Internet?



Name: **Trojan-Spy.Win32.GreenScreen**

Risk Level: **CRITICAL**

Description: This is spy trojan that installs itself to the system, hides itself and then captures screen images and saves them to disk files in encrypted form. Thus it allows to a hacker to watch screen images.

Keep Blocking

Unblock

Enable Protection

Windows Firewall has detected unauthorized activity, but unfortunately it cannot help you to remove viruses, keyloggers and other spyware threats that steal your personal information from your computer, including your Credit Card data and access passwords to the online resources you use. [Click here to pick recommended software to resolve this issue.](#)



SystemDefender

[HOME](#)

[DOWNLOAD](#)

**YOUR SYSTEM MAY BE
INFECTED!**

Scanning:

Internet threats and viruses found:

FREE SCAN NOW!

This is what our users are up against...
Malware popping up out of nowhere !

- Don't go there!
- Stay on the path that you know well!
- Okay to trust but please verify
- So, have fun! But monitor...
- Be a bit more vigilant
- And manage appropriately

But what does all this mean?

- I am just a user and am not an engineer or a technician or a programmer or a geek!
- I'm just sitting at my desk, talking to friends and all sorts of people
- How in the world am I threatening our network???



2 Reasons...

- You probably do not understand policies, procedures, best practices and standards
- If you do understand them, they are violated because there are no consequences – the policies are not enforced
- Who, me?

The Seven Deadly Sins of Network Security

1. Not measuring risk
2. Thinking compliance equals security
3. Overlooking the people
4. Lax patching procedures
5. Lax logging, monitoring
6. Spurning the K.I.S.S.
7. Too much access for too many

The Opposing Team

- The Hackers
- Disgruntled Insiders
- Clueless employees
- Competitors
- Foreign Governments
- Terror organizations

Top 8 Perceived Threats

- System penetration
- Sabotage of data
- Theft of proprietary information
- Denial of service
- Viruses and Worms
- Unauthorized insider access
- Laptop theft
- Insider abuse of the Internet

System Penetration

- It is an unfortunate reality that you will suffer a breach of security at some point
- To bypass security, an attacker only has to find one vulnerable system within the entire network
- But to guarantee security, you have to make sure that 100 percent of your systems are invulnerable -- 100 percent of the time

Not good...

- But Patrick! It won't happen to us!

Whether you get hacked depends...

- Do you assume the posture of, “It can’t happen here.”
- Do you hear, “We haven’t heard of any worm outbreaks and all seems quiet. Why upgrade those devices?”
- “We have no budget.”
- “We’re just hanging out in Vienna!”
- “They’re only going after the Government and those really big banks.”
- Then my question is, “Can you really afford to give up data today?”

You can't afford to give up data,
so be prepared and alert...

- “Every man has a plan, until he gets hit!”
- Watch for anomalous behavior

So, what are they really after?

- Your data
- Your assets
- Your employee's data
- Your personal data
- Your paycheck
- Your friends
- Your family

Know who to call...



You are the last line of Defense! Step up!

- Understand
- Educate
- Collaborate
- Prepare



Thank You!



pagray@cisco.com