

INNOVATIVE TECHNOLOGIES: PROTECTING YOUR ORGANIZATION AGAINST IT COMPROMISES AND INCORPORATING YOUR EMPLOYEES INTO YOUR IT SECURITY PLAN

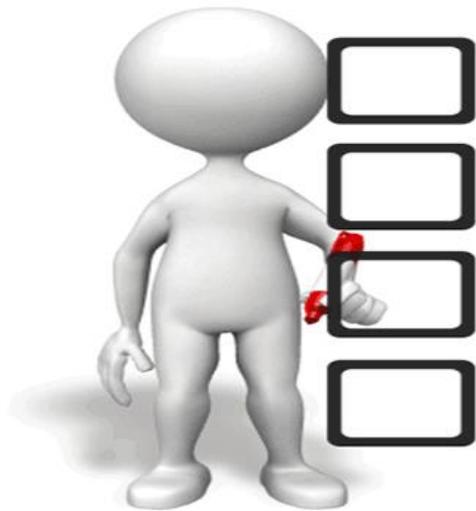
Presented By:

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Principal



› Agenda



Innovative Technologies

Data Security

Employee Integration

Basic IT Controls

➤ Innovative Technology

What is the difference between the Internet of Things and Artificial Intelligence?



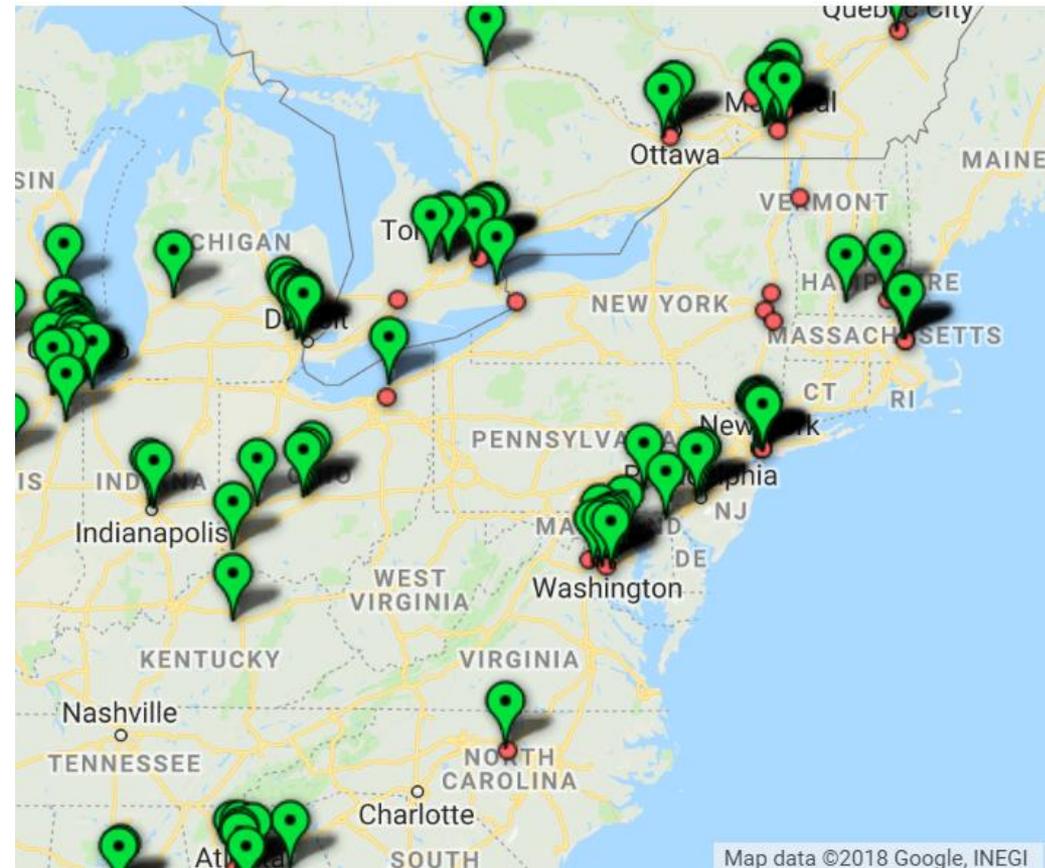
➤ Innovative Technology

Accepting Donations via Cryptocurrency

- **Bitcoins**
- **Ethereum**
- **Litecoins**
- **Namecoins**
- **Peercoins**
- **Monero**



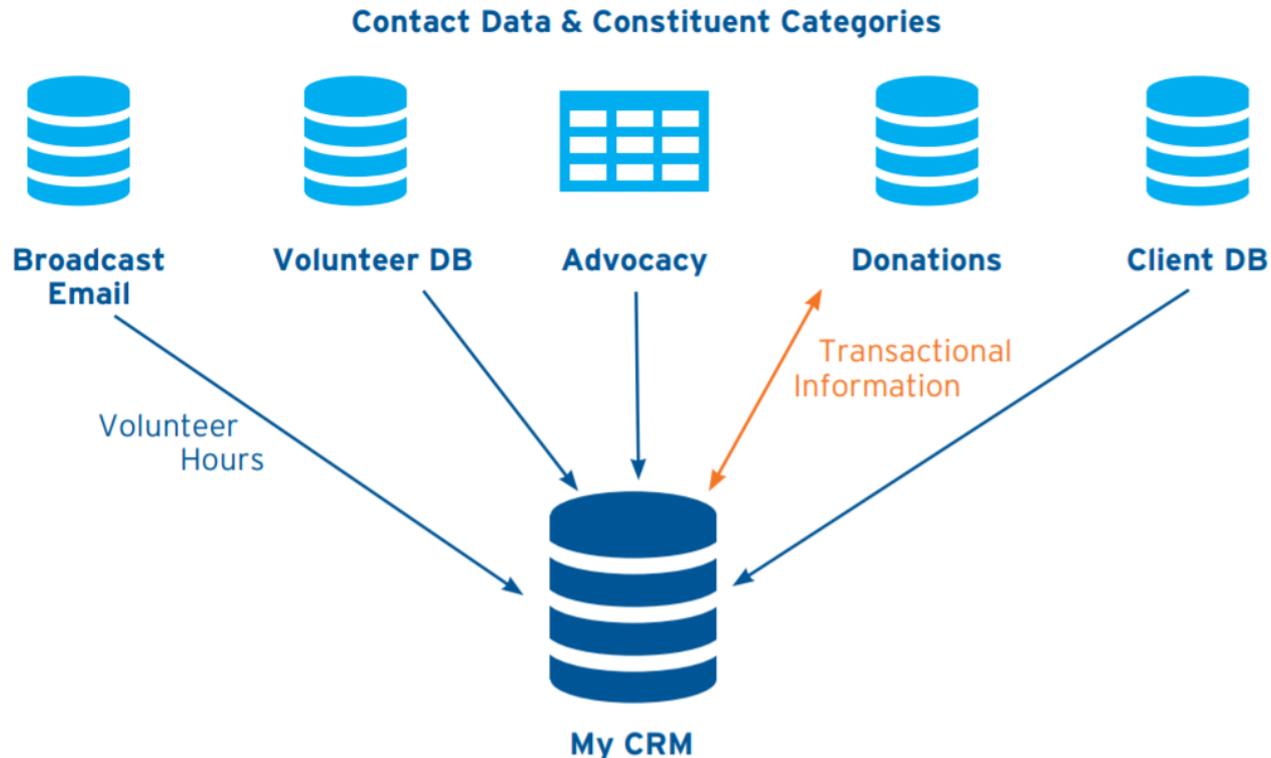
➤ Innovative Technology



› Innovative Technology

CRM Integration - what is CRM?

Constituent Relationship Management (CRM) software



› Innovative Technology



A universe of customized solutions, apps, integrations, & partners to help your organization do more with Neon.

[NEONCRM.COM/ONE](https://neoncrm.com/one)

INTEGRATION IMPACT:

All of your data has a home in NeonCRM

Whether plug-n-play, DIY, or tailor-made, Neon allows you to:

Track any data you want

Neon can track and make useful the data unique to your organization.

Do more than just store

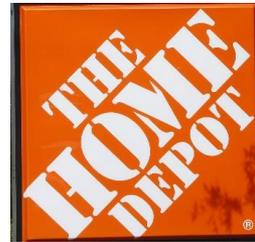
Your unique or externalized data becomes reportable alongside standard metrics.



DATA BREACH

DATA SECURITY

› Data Breaches



› Data Breaches



How many records does your company store?

According to IBM Security, the average breach will cost you \$148 per record.

› Data Breaches

Reasons small nonprofits may be especially targeted

- ✓ Utilize volunteers rather than paid professional staff
- ✓ Lack resources to implement and maintain best security practices
- ✓ Think they are completely covered after using an online payment system to protect credit card information
- ✓ Volunteers transfer data from a secure database to an unsecure spreadsheet
- ✓ Use unsecure email



› Data In The Cloud

What is the Cloud?

Does anyone here have their IT resources in the Cloud?

What is the fundamental difference between a traditional IT department and the Cloud?



› Data In The Cloud

IT Models

- Completely in-house
- Vendor hosted core application
- IT managed assistance
- Partial cloud
- Complete cloud



➤ Data In The Cloud

Reduced cost is a major advantage

- ✓ Fewer IT employees
- ✓ Fewer IT devices
- ✓ Less replacement cost
- ✓ Fewer backup IT devices
- ✓ Less cost to spin up a new virtual server
- ✓ Less IT training cost



EMPLOYEE INTEGRATION

GREATEST ASSET

GREATEST SECURITY LIABILITY

➤ Password Security

Which is the strongest password?

D0g

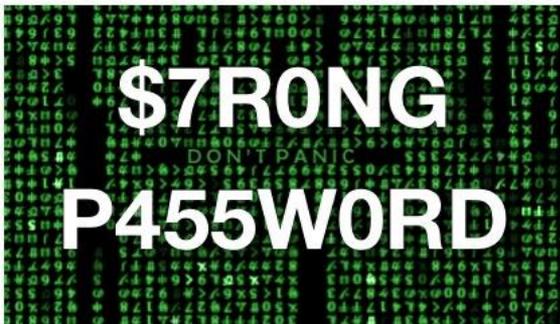
PrXyc.N(n4k77#L!eVdAfp9



➤ Password Security

What is password Entropy?

Entropy - The randomness and unpredictability of data.



➤ Password Security

What is password Padding?

A password **doesn't** need to have “complex length”, because “simple length” is just as unknown to the attacker and **must be searched for**, just the same.

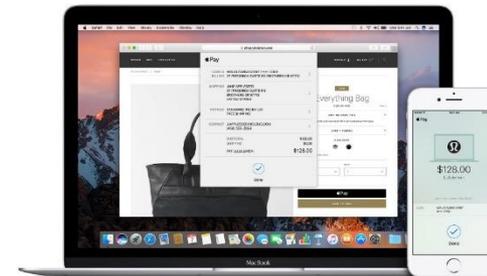
“Simple length”, which is easily created by **padding an easily memorized password** with equally **easy to remember (and enter) padding** creates unbreakable passwords that are also **easy to use**.

D0g.....

➤ Mobile Devices

Mobile device management features

-  Wipe the phone
-  Lock the phone
-  View on map
-  Remote control alarm
-  Camera
-  Text to speech
-  Antivirus



› Mobile Devices

We take our devices everywhere. Which means we might leave them anywhere.



<https://www.apple.com/icloud/find-my-iphone/>



AndroidLost

<https://www.androidlost.com/>



Cerberus

<https://www.cerberusapp.com/>



PREY

<https://preyproject.com/>



Lookout

<https://www.lookout.com/>



➤ Mobile Devices

- 🍏 Is anyone familiar with the term “jailbreaking” as it relates to iPhone? What is it?

Jailbreaking is the process of freeing your device from the limitations that are imposed by Apple.

- 🍏 Why do people jailbreak their device?

To get free apps from places such as Cydia.

- 🍏 What are the disadvantages?

Voiding your warranty.

Makes it more susceptible to malware
KeyRaider and YiSpector.





If you believe you may have been a victim of Facebook's latest data breach, you may have a legal claim.

Facebook has acknowledged a security incident that has compromised approximately 50 million users' personal data in late September, 2018.





If you also found yourself logged out of Facebook 2 weeks ago, you are not alone.

Facebook forced more than 90 million users to log out and back into their accounts in response to a massive data breach.

Believed to be the most significant security blunder in Facebook's history.





Controls

Basic CIS Controls

- 1 Inventory and Control of Hardware Assets
- 2 Inventory and Control of Software Assets
- 3 Continuous Vulnerability Management
- 4 Controlled Use of Administrative Privileges
- 5 Secure Configuration for Hardware and Software on Mobile Devices, Laptops, Workstations and Servers
- 6 Maintenance, Monitoring and Analysis of Audit Logs



NSA



How did a 29-year-old contractor gain access to what should have been highly compartmentalized information?

Could something similar happen in your organization?

How could it be prevented?





Foundational CIS Controls

-  Email and Web Browser Protections
-  8 Malware Defenses
-  9 Limitation and Control of Network Ports, Protocols, and Services
-  10 Data Recovery Capabilities
-  11 Secure Configuration for Network Devices, such as Firewalls, Routers, and Switches
-  12 Boundary Defense
-  13 Data Protection
-  14 Controlled Access Based on the Need to Know
-  15 Wireless Access Control
-  16 Account Monitoring and Control

› Phishing

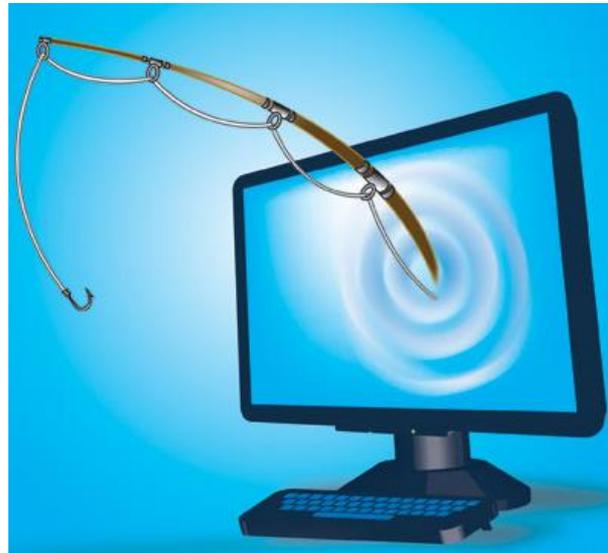
What – Did you receive an unexpected email?

Where – Did it come from an unusual URL (boris.ru)?

When - Was the email sent at an unusual time?

Why - Were you expecting an email from the sender?

Who - Do you know the sender?



From: VISA
Subject: Billing Information

To: Steve Palm
Cc:

VISA — USE OF A TRUSTED
COMPANY LOGO

Dear Visa customer,

GENERIC SALUTATION

UNPROFESSIONAL MANNER

This email is to inform you of a recent update we made to our systems,
To avoid service interruption we require that you confirm
your account as soon as possible.

Please take a moment to confirm your account by going to the following address:

http://visa-secure.com/personal/secure_with_visa/

POSSIBLE DISGUISE
FOR WWW.VISA.COM

Follow these steps:

- 1: Confirm your account by clicking the link above.
- 2: Verify your visa card information.
- 3: Your account will then be updated, you may continue using your visa without any in

STATEMENT URGING
IMMEDIATE ACTION

*** Please note: If you FAIL to update your visa card, it will be temporarily disabled.

We apologize for any inconvenience this may cause.
The visa team is working hard to bring you the best services on the web.

From: Amazon <management@mazoncanada.ca> on behalf of
To: @sheridanc.on.ca
Cc:
Subject: Suspension

not an Amazon email address
(note the missing A in Amazon)

amazon.com[®]

Dear Client,

Generic non-personalized greeting

We have sent you this e-mail, because we have strong reason to believe, your account has been used by someone else. In order to prevent any fraudulent activity from occurring we are required to open an investigation into this matter. We've locked your Amazon account, and you have 36 hours to verify it, or we have the right to terminate it.

To confirm your identity with us click the link below:

<https://www.amazon.com/exec/obidos/sign-in.html>

Sincerely,

Hovering over the link reveals it points to a non-Amazon site - "http://redirect.kereskedj.com"

The Amazon Associates Team



➤ Vishing

What is vishing?



Safe Browsing site status

Google's Safe Browsing technology examines billions of URLs per day looking for unsafe websites. Every day, we discover thousands of new unsafe sites, many of which are legitimate websites that have been compromised. When we detect unsafe sites, we show warnings on Google Search and in web browsers. You can search to see whether a website is currently dangerous to visit.

Check site status

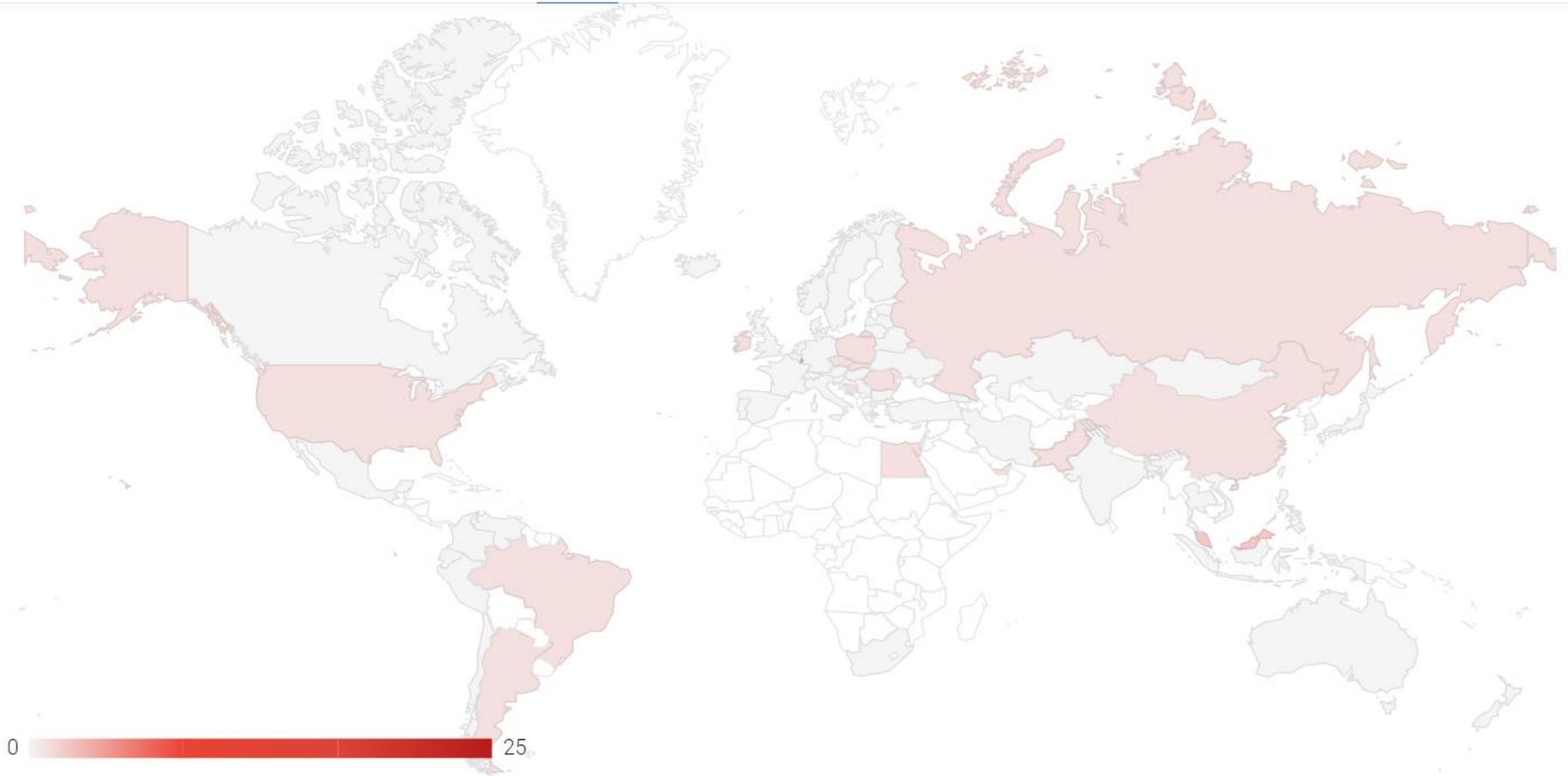
www.rklcpa.com



Current status

 No unsafe content found

Safe Browsing



CYBER-SECURITY

BASIC IT CONTROLS



Foundational CIS Controls

-  Email and Web Browser Protections
-  8 Malware Defenses
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-  13 Data Protection
-  14 Controlled Access Based on the Need to Know
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➤ Data Backup





Foundational CIS Controls

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➤ Data Protection

Do you allow employees or volunteers to export donor privacy information?

Do you allow employees or volunteers to use flash drives?

Do you use secure encrypted email?



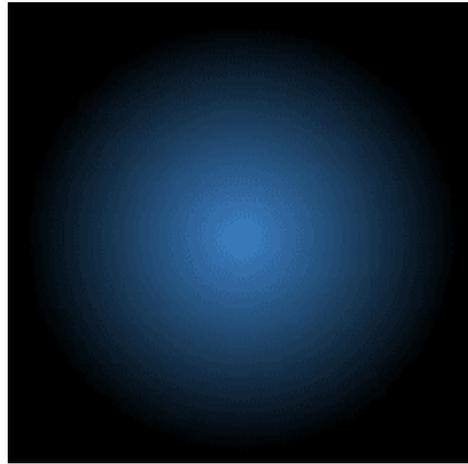


Controls

Organizational CIS Controls

-  Implement a Security Awareness and Training Program
-  Incident Response and Management
-  18 Application Software Security
-  20 Penetration Tests and Red Team Exercises

› Incident Response



Do you have an incident response plan?
You'll save more than
\$340,000 per breach
if you do.

FOCUSED. ON YOU.

RANDY CONEBY

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