WATER COOLER – DIGITAL RESOURCES COMPROMISED?

Date/Time
Date(s) - 10/01/2020
4:00 pm - 5:00 pm

Category(ies)

Virtual Event
Water Cooler

October 01, 2020

"Were Your Digital Resources Compromise, Working Remotely?".
Register here: https://us02web.zoom.us/meeting/register/tZMsd-ihpj0iG9DPc-GvCU5GyTLtNSJrgdLI

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Your Speaker

Marco Ciavolino

- General Marketing Communications
- STEM training materials by RobotMats
- Web Development in JOOMLA and Wordpress
- Graphic Design/Corporate ID
- Photography/Video
- Tech Research & Development
- Founder of Techbrick Robotics
- Founder of RobotMats.com

NMTC Member

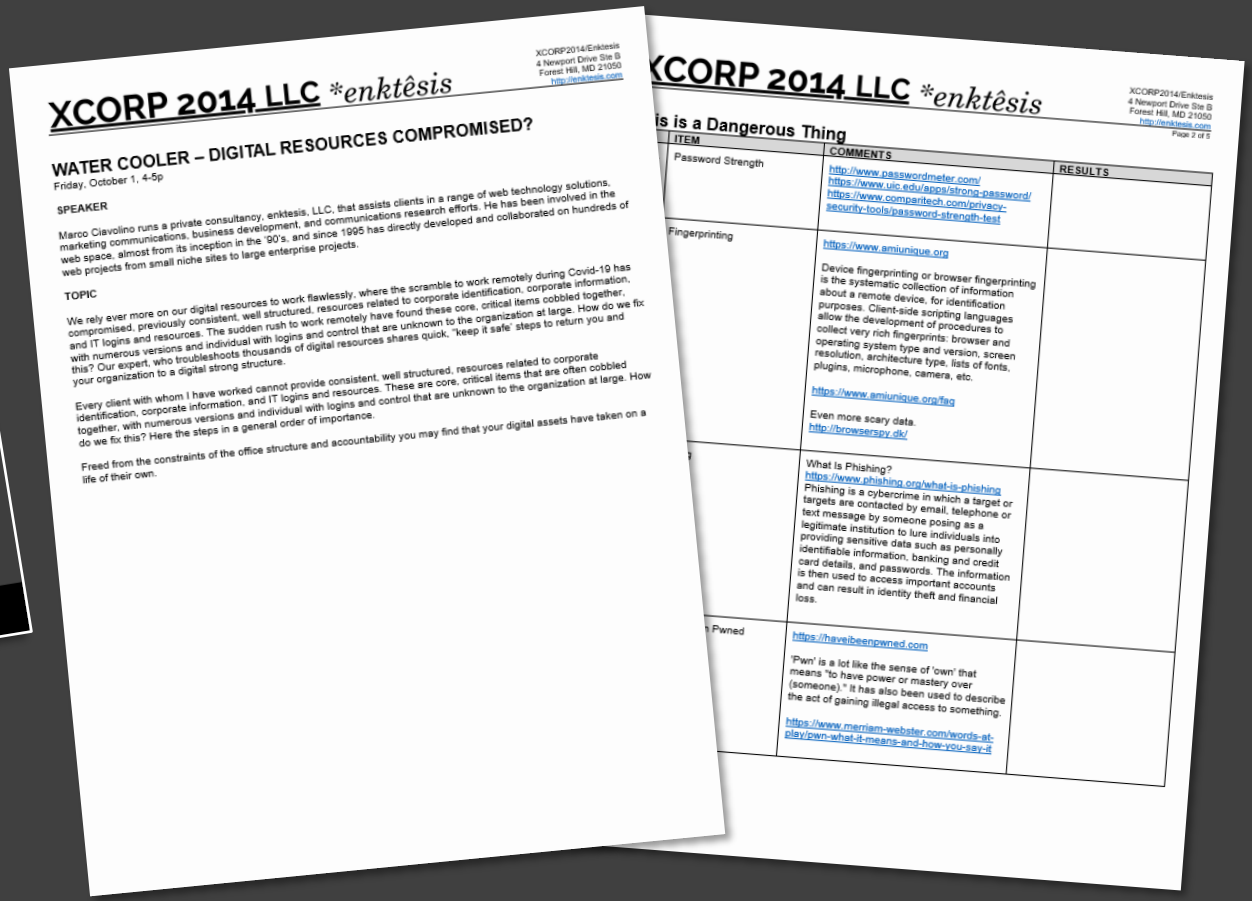
http://enktesis.com

Darcy, the web cat.

Marco Ciavolino * www.enktesis.com * 410.838.8264

Resources

After the talk we will send you the PPT and Word Document.



XCORP 2014 LLC *enktêsis

XCORP2014/Enktesis
4 Newport Drive Ste B
Forest Hill, MD 21050
http://enktesis.com

WATER COOLER – DIGITAL RESOURCES COMPROMISED?

Friday, October 1, 4-5p

SPEAKER

Marco Ciavolino runs a private consultancy, enktesis, LLC, that assists clients in a range of web technology solutions, marketing communications, business development, and communications research efforts. He has been involved in the web space, almost from its inception in the '90's, and since 1995 has directly developed and collaborated on hundreds of web projects from small niche sites to large enterprise projects.

TOPIC

We rely ever more on our digital resources to work flawlessly, where the scramble to work remotely during Covid-19 has compromised, previously consistent, well structured, resources related to corporate identification, corporate information, and IT logins and resources. The sudden rush to work remotely have found these core, critical items cobbled together, with numerous versions and individual with logins and control that are unknown to the organization at large. How do we fix this? Our expert, who troubleshoots thousands of digital resources shares quick, "keep it safe' steps to return you and your organization to a digital strong structure.

Every client with whom I have worked cannot provide consistent, well structured, resources related to corporate identification, corporate information, and IT logins and resources. These are core, critical items that are often cobbled together, with numerous versions and individual with logins and control that are unknown to the organization at large. How do we fix this? Here the steps in a general order of importance.

Freed from the constraints of the office structure and accountability you may find that your digital assets have taken on a life of their own.

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Page 2 of 5

is is a Dangerous Thing

ITEM	COMMENTS	RESULTS
Password Strength	http://www.passwordmeter.com/ https://www.uic.edu/apps/strong-password/ https://www.comparitech.com/privacy-security-tools/password-strength-test	
Fingerprinting	https://www.amiunique.org Device fingerprinting or browser fingerprinting is the systematic collection of information about a remote device, for identification purposes. Client-side scripting languages allow the development of procedures to collect very rich fingerprints: browser and operating system type and version, screen resolution, architecture type, lists of fonts, plugins, microphone, camera, etc. https://www.amiunique.org/faq Even more scary data. http://browserspy.dk/	
	What Is Phishing? https://www.phishing.org/what-is-phishing Phishing is a cybercrime in which a target or targets are contacted by email, telephone or text message by someone posing as a legitimate institution to lure individuals into providing sensitive data such as personally identifiable information, banking and credit card details, and passwords. The information is then used to access important accounts and can result in identity theft and financial loss.	
Pwned	https://haveibeenpwned.com 'Pwn' is a lot like the sense of 'own' that means "to have power or mastery over (someone)." It has also been used to describe the act of gaining illegal access to something. https://www.merriam-webster.com/words-at-play/pwn-what-it-means-and-how-you-say-it	

Are Your Digital Assets Compromised?

Let's see if you can find your ID.

Marco Ciavolino * www.enktesis.com * 410.838.8264

Are Your Digital Assets Compromised?

We rely ever more on our digital resources to work flawlessly, where the scramble to work remotely during Covid-19 has compromised, previously consistent, well structured, resources related to corporate identification, corporate information, and IT logins and resources. The sudden rush to work remotely have found these core, critical items cobbled together, with numerous versions and individual with logins and control that are unknown to the organization at large. How do we fix this? Our expert, who troubleshoots thousands of digital resources shares quick, “keep it safe’ steps to return you and your organization to a digital strong structure.

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The first web cartoon:

"On the internet, nobody knows you're a dog"

They also will not know if you are a viable business partner or vendor if you don't tell them and show them in a competent manner.

https://en.wikipedia.org/wiki/On_the_Internet,_nobody_knows_you%27re_a_dog

THE LT. DAN RULE

Heed Lt. Dan in Forrest Gump:

“We have one rule here. Don’t do anything stupid like getting yourself killed.”

Marco Ciavolino * www.enktesis.com * 410.838.8264

Are Your Digital Assets Compromised?

The Big Issues

- Passwords/Authentication
- Digital Fingerprinting
- Pwnage
- Phishing

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Digital Resources Compromised

This is a dangerous thing.

Everyday Attacks

Home » Security Bloggers Network » Lockphish phishing attack: Capturing Android PINs & iPhone passcodes over https

Lockphish phishing attack: Capturing Android PINs & iPhone passcodes over https

by Howard Poston on September 30, 2020

ZDNet 5G IOT CLOUD AI SECURITY

MUST READ: What is phishing? Everything you need to know to protect yourself from

This worm phishing campaign is a game-changer in password theft, account takeovers

The security incident highlights the need for multi-factor authentication in the enterprise.

THREAT INTELLIGENCE

9/30/2020
01:50 PM

DARK Reading

Phishing Attack Targets Microsoft 365 Users With Netflix & Amazon Lures

Cyberattacker TA2552 primarily targets Spanish speakers with messages that leverage a narrow range of themes and popular brands.

TechRepublic. More Newsletters Forums Resource Library PREMIUM Search Join / Log In

Organizations facing nearly 1,200 phishing attacks each month

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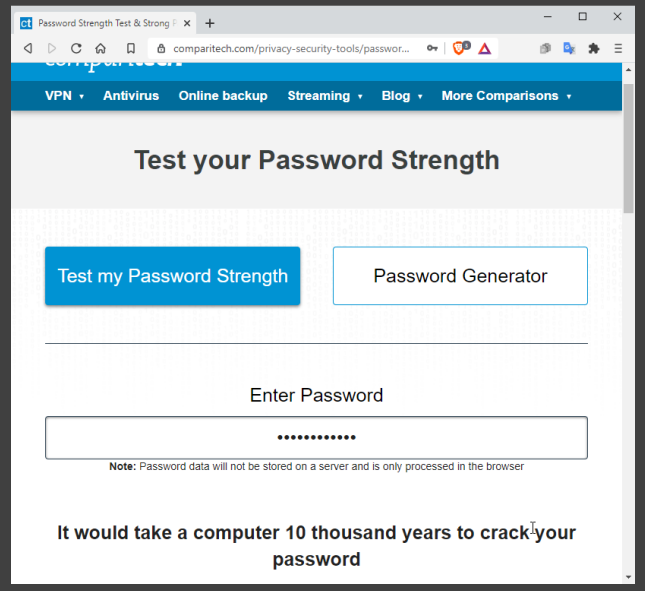
Digital Resources Compromised

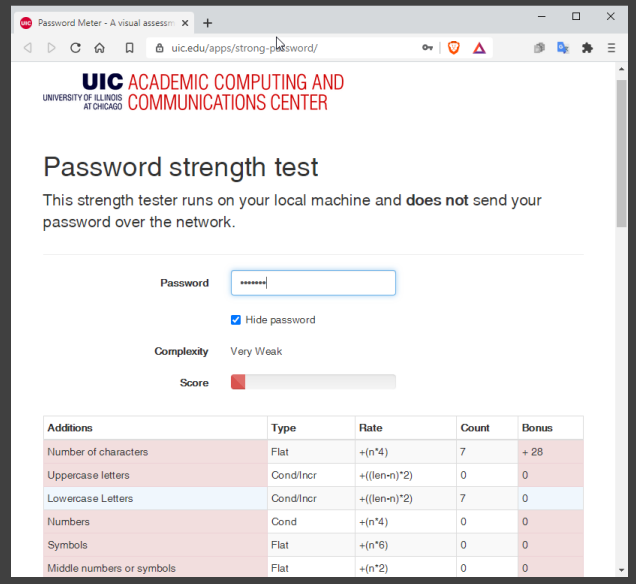
This is a dangerous thing.

Password Strength

- Employees balk at password changes.
- Testing Passwords.

https://www.uic.edu/apps/strong-password
https://www.comparitech.com/privacy-security-tools/password-strength-test





Marco Ciavolino * www.enktesis.com * 410.838.8264

This is a dangerous thing.

Password Strength

- dec271969

  It would take a computer 3 hours to crack your password

- Dec#27!1969

  It would take a computer 2 thousand years to crack your password

- N33XCMewxbw3

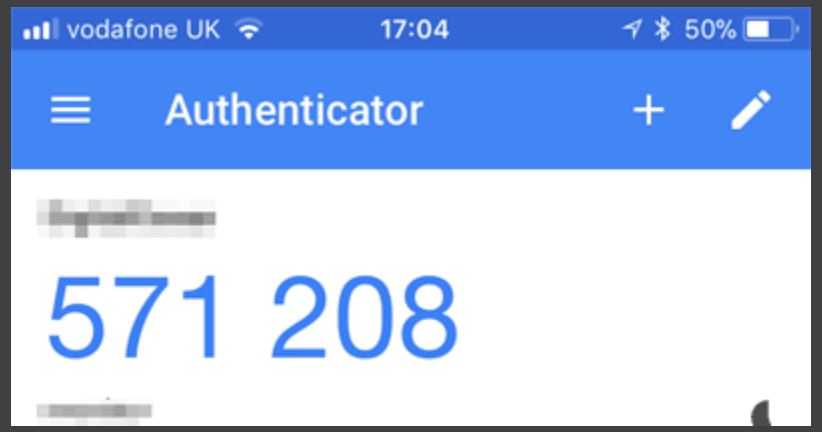
  It would take a computer 10 thousand years to crack your password

IMPORTANT: Hackers now routinely run through millions of known passwords from compromised databases (see Have I Been Pwned below.)

This is a dangerous thing.

Username/Passwords: What can you do?

- Identify Key Username / Password accounts.
- Test them for distribution.
- Update as necessary.
- Add third-party authentication.
- See being Pwned below.



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This is a dangerous thing.

Fingerprinting

https://www.amiunique.org

Device fingerprinting or browser fingerprinting is the systematic collection of information about a remote device, for identification purposes. Client-side scripting languages allow the development of procedures to collect very rich fingerprints: browser and operating system type and version, screen resolution, architecture type, lists of fonts, plugins, microphone, camera, etc.

More info:

https://www.amiunique.org/faq

Even more scary data:

http://browserspy.dk

This is a dangerous thing.

Fingerprinting v. Cookies

Cookies

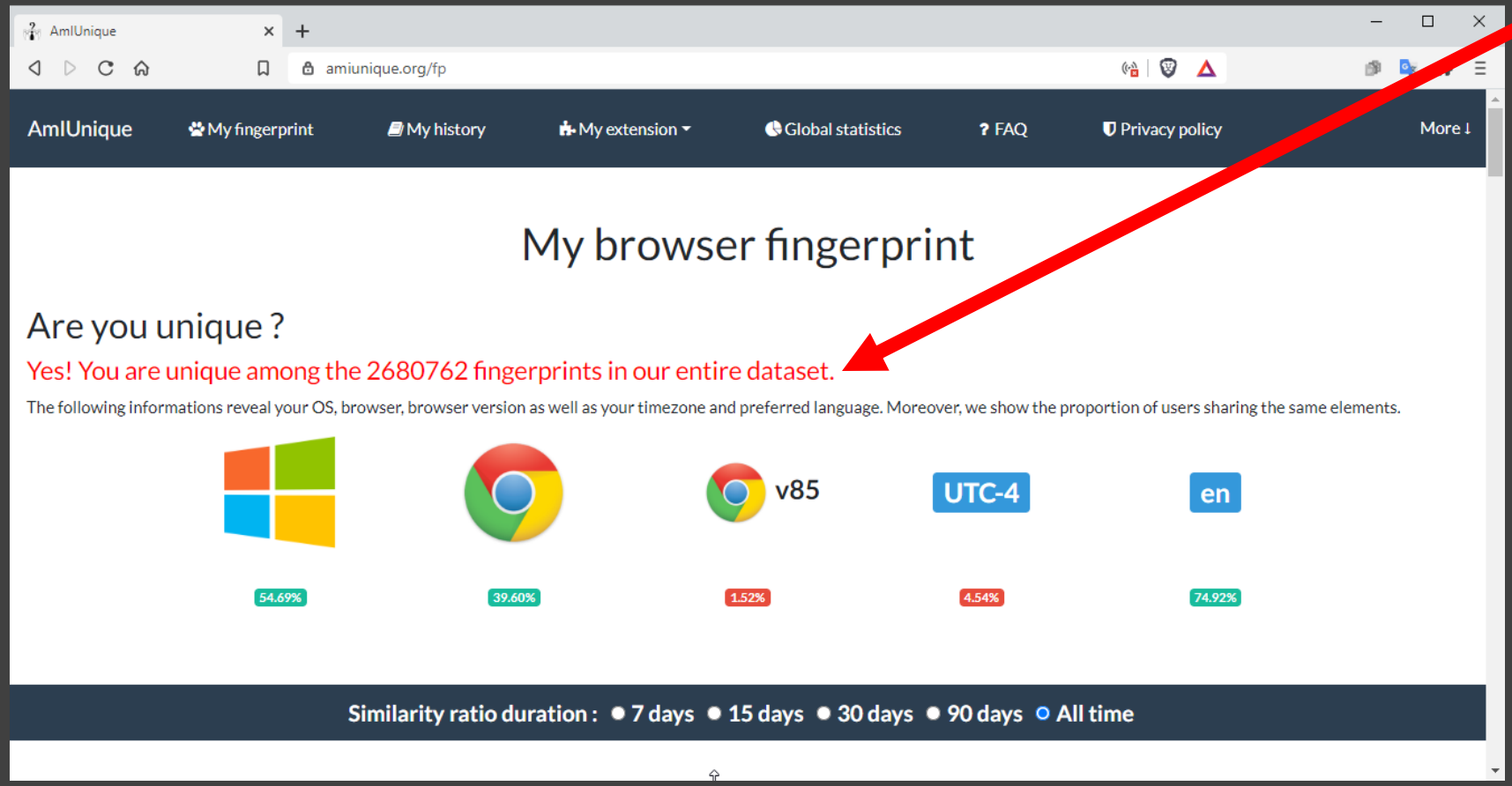
- Stores Settings
- No login required
- Can be blocked/deleted

Finger Printing

- Records settings
- Any device, any level of security
- Behavioral analysis
- Live forever

This is a dangerous thing.

Fingerprinting



This is a dangerous thing.

Fingerprinting

More than 70 parameters and 1400 sub parameters.

user-agent
accept
accept-encoding
accept-language
upgrade-insecure-requests
referer
userAgent-js
platform
cookies
timezone
languages-js
canvas
font-js
ad
doNotTrack
navigator_properties
buildID
product
productSub
vendor
vendorSub
hardwareConcurrency

javaEnabled
deviceMemory
plugins
screen_width
screen_height
screen_depth
screen_availTop
screen_availLeft
screen_availHeight
screen_availWidth
screen_left
screen_top
permissions
webGLVendor
webGLRenderer
webGLData
webGLParameters
storage_local
storage_session
storage_indexedDB
audioFormats
audioContext

analyserNode
audioData
videoFormats
mediaDevices
accelerometer
gyroscope
proximity_sensor
keyboard
battery
connection-js
key
locationbar
menubar
personalbar
statusbar
toolbar
result_state
font-flash
resolution-flash
language-flash
platform-flash

This is a dangerous thing.

Fingerprinting: What can you do?

- Read this Article: Browser Fingerprinting [2020 Update] – What Is It & How to avoid It https://blokt.com/guides/browser-fingerprinting
- In the end, not much.
- Just be aware of the issue.

And educate your employees that they can always be uniquely tracked by everyone in the world. That is all.

This is a dangerous thing.

Been Pwned?

Pronounced ‘powned.’

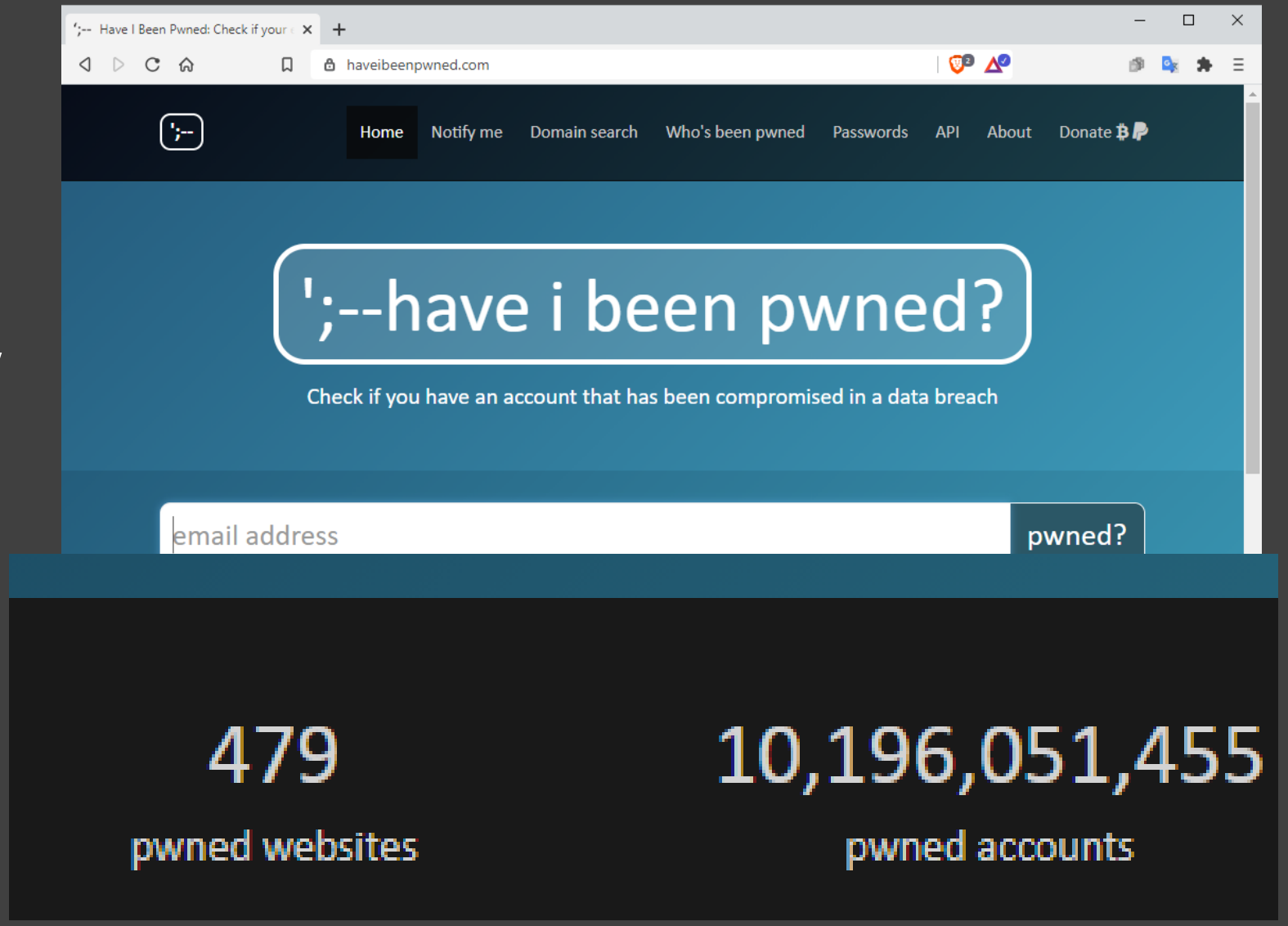
https://haveibeenpwned.com/

'Pwn' is a lot like the sense of 'own' that means "to have power or mastery over (someone)." It has also been used to describe the act of gaining illegal access to something.

Google Password Checker

http://passwords.google.com

(requires a gmail account)



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Digital Resources Compromised

This is a dangerous thing.

Been Pwned?

Testing My Own Email
marco@enktesis.com

13 pwned sites.

Breaches you were pwned in

A "breach" is an incident where data has been unintentionally exposed to the public. Using the 1Password password manager helps you ensure all your passwords are strong and unique such that a breach of one service doesn't put your other services at risk.

500px

500px: In mid-2018, the online photography community 500px suffered a data breach. The incident exposed almost 15 million unique email addresses alongside names, usernames, genders, dates of birth and either an MD5 or bcrypt password hash. In 2019, the data appeared listed for sale on a dark web marketplace (along with several other large breaches) and subsequently began circulating more broadly. The data was provided to HIBP by a source who requested it to be attributed to "BenjaminBlue@exploit.im".

Compromised data: Dates of birth, Email addresses, Genders, Geographic locations, Names, Passwords, Usernames

APOLLO

Apollo: In July 2018, the sales engagement startup Apollo left a database containing billions of data points publicly exposed without a password. The data was discovered by security researcher Vinny Troia who subsequently sent a subset of the data containing 126 million unique email addresses to Have I Been Pwned. The data left exposed by Apollo was used in their "revenue acceleration platform" and included personal information such as names and email addresses as well as professional information including places of employment, the roles people hold and where they're located. Apollo stressed that the exposed data did not include sensitive information such as passwords, social security numbers or financial data. The Apollo website has a contact form for those looking to get in touch with the organisation.

Compromised data: Email addresses, Employers, Geographic locations, Job titles, Names, Phone numbers, Salutations, Social media profiles

B2B USA Businesses (spam list): In mid-2017, a spam list of over 105 million individuals in corporate America was discovered online. Referred to as "B2B USA Businesses", the list categorised email addresses by employer, providing information on individuals' job titles plus their work phone numbers and physical addresses. Read more about spam lists in HIBP.

Compromised data: Email addresses, Employers, Job titles, Names, Phone numbers, Physical addresses

Data & Leads: In November 2018, security researcher Bob Diachenko identified an unprotected database believed to be hosted by a data aggregator. Upon further investigation, the data was linked to marketing company Data & Leads. The exposed Elasticsearch instance contained over 44M unique email addresses along with names, IP and physical addresses, phone numbers and employment information. No response was received from Data & Leads when contacted by Bob and their site subsequently went offline.

Compromised data: Email addresses, Employers, IP addresses, Job titles, Names, Phone numbers, Physical addresses

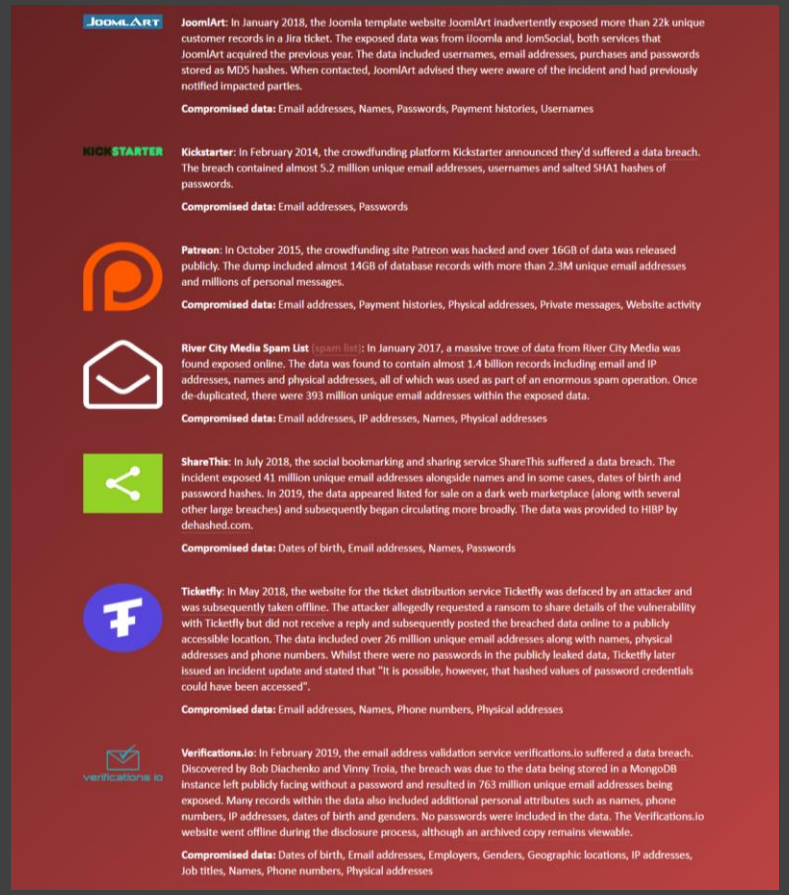
Dropbox: In mid-2012, Dropbox suffered a data breach which exposed the stored credentials of tens of millions of their customers. In August 2016, they forced password resets for customers they believed may be at risk. A large volume of data totalling over 68 million records was subsequently traded online and included email addresses and salted hashes of passwords (half of them SHA1, half of them bcrypt).

Compromised data: Email addresses, Passwords

EXACTIS

Exactis: In June 2018, the marketing firm Exactis inadvertently publicly leaked 340 million records of personal data. Security researcher Vinny Troia of Night Lion Security discovered the leak contained multiple terabytes of personal information spread across hundreds of separate fields including addresses, phone numbers, family structures and extensive profiling data. The data was collected as part of Exactis' service as a "compiler and aggregator of premium business & consumer data" which they then sell for profiling and marketing purposes. A small subset of the exposed fields were provided to Have I Been Pwned and contained 132 million unique email addresses.

Compromised data: Credit status information, Dates of birth, Education levels, Email addresses, Ethnicities, Family structure, Financial investments, Genders, Home ownership statuses, Income levels, IP addresses, Marital statuses, Names, Net worths, Occupations, Personal interests, Phone numbers, Physical addresses, Religions, Spoken languages



JOOMLART

JoomlArt: In January 2018, the Joomla template website JoomlArt inadvertently exposed more than 22k unique customer records in a Jira ticket. The exposed data was from iJoomla and JomSocial, both services that JoomlArt acquired the previous year. The data included usernames, email addresses, purchases and passwords stored as MD5 hashes. When contacted, JoomlArt advised they were aware of the incident and had previously notified impacted parties.

Compromised data: Email addresses, Names, Passwords, Payment histories, Usernames

KICKSTARTER

Kickstarter: In February 2014, the crowdfunding platform Kickstarter announced they'd suffered a data breach. The breach contained almost 5.2 million unique email addresses, usernames and salted SHA1 hashes of passwords.

Compromised data: Email addresses, Passwords

Patreon: In October 2015, the crowdfunding site Patreon was hacked and over 16GB of data was released publicly. The dump included almost 14GB of database records with more than 2.3M unique email addresses and millions of personal messages.

Compromised data: Email addresses, Payment histories, Physical addresses, Private messages, Website activity

River City Media Spam List (spam list): In January 2017, a massive trove of data from River City Media was found exposed online. The data was found to contain almost 1.4 billion records including email and IP addresses, names and physical addresses, all of which was used as part of an enormous spam operation. Once de-duplicated, there were 393 million unique email addresses within the exposed data.

Compromised data: Email addresses, IP addresses, Names, Physical addresses

ShareThis: In July 2018, the social bookmarking and sharing service ShareThis suffered a data breach. The incident exposed 41 million unique email addresses alongside names and in some cases, dates of birth and password hashes. In 2019, the data appeared listed for sale on a dark web marketplace (along with several other large breaches) and subsequently began circulating more broadly. The data was provided to HIBP by dehashed.com.

Compromised data: Dates of birth, Email addresses, Names, Passwords

Ticketfly: In May 2018, the website for the ticket distribution service Ticketfly was defaced by an attacker and was subsequently taken offline. The attacker allegedly requested a ransom to share details of the vulnerability with Ticketfly but did not receive a reply and subsequently posted the breached data online to a publicly accessible location. The data included over 26 million unique email addresses along with names, physical addresses and phone numbers. Whilst there were no passwords in the publicly leaked data, Ticketfly later issued an incident update and stated that "It is possible, however, that hashed values of password credentials could have been accessed".

Compromised data: Email addresses, Names, Phone numbers, Physical addresses

verifications.io

Verifications.io: In February 2019, the email address validation service verifications.io suffered a data breach. Discovered by Bob Diachenko and Vinny Troia, the breach was due to the data being stored in a MongoDB instance left publicly facing without a password and resulted in 763 million unique email addresses being exposed. Many records within the data also included additional personal attributes such as names, phone numbers, IP addresses, dates of birth and genders. No passwords were included in the data. The Verifications.io website went offline during the disclosure process, although an archived copy remains viewable.

Compromised data: Dates of birth, Email addresses, Employers, Genders, Geographic locations, IP addresses, Job titles, Names, Phone numbers, Physical addresses

Digital Resources Compromised

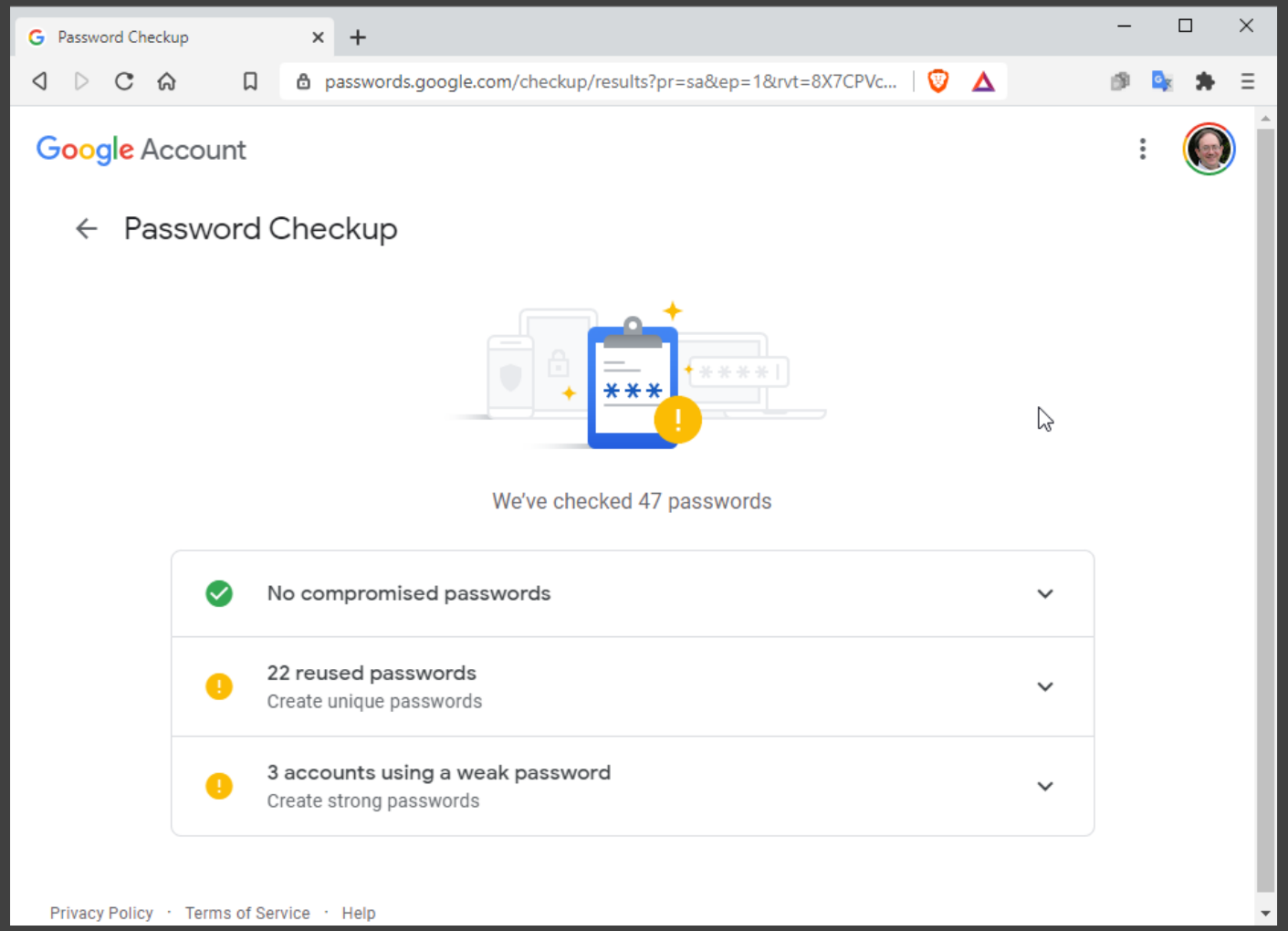
This is a dangerous thing.

Been Pwned?

Using Google Password Checker

https://passwords.google.com/

Looks at your stored passwords and gives you guidance.



This is a dangerous thing.

Been Pwned? What can you do?

- Test all key emails.
- Remove unused emails.
- Update all passwords.
- Add third-party authentication.

Ignore pwnage at your own risk.

The hackers will be happy.

This is a dangerous thing.

Phishing

https://www.phishing.org/what-is-phishing

Phishing is a cybercrime in which a target or targets are contacted by email, telephone or text message by someone posing as a legitimate institution to lure individuals into providing sensitive data such as personally identifiable information, banking and credit card details, and passwords.

Nearly every major compromise has been used social hacking and phishing as the gateway to the final action.

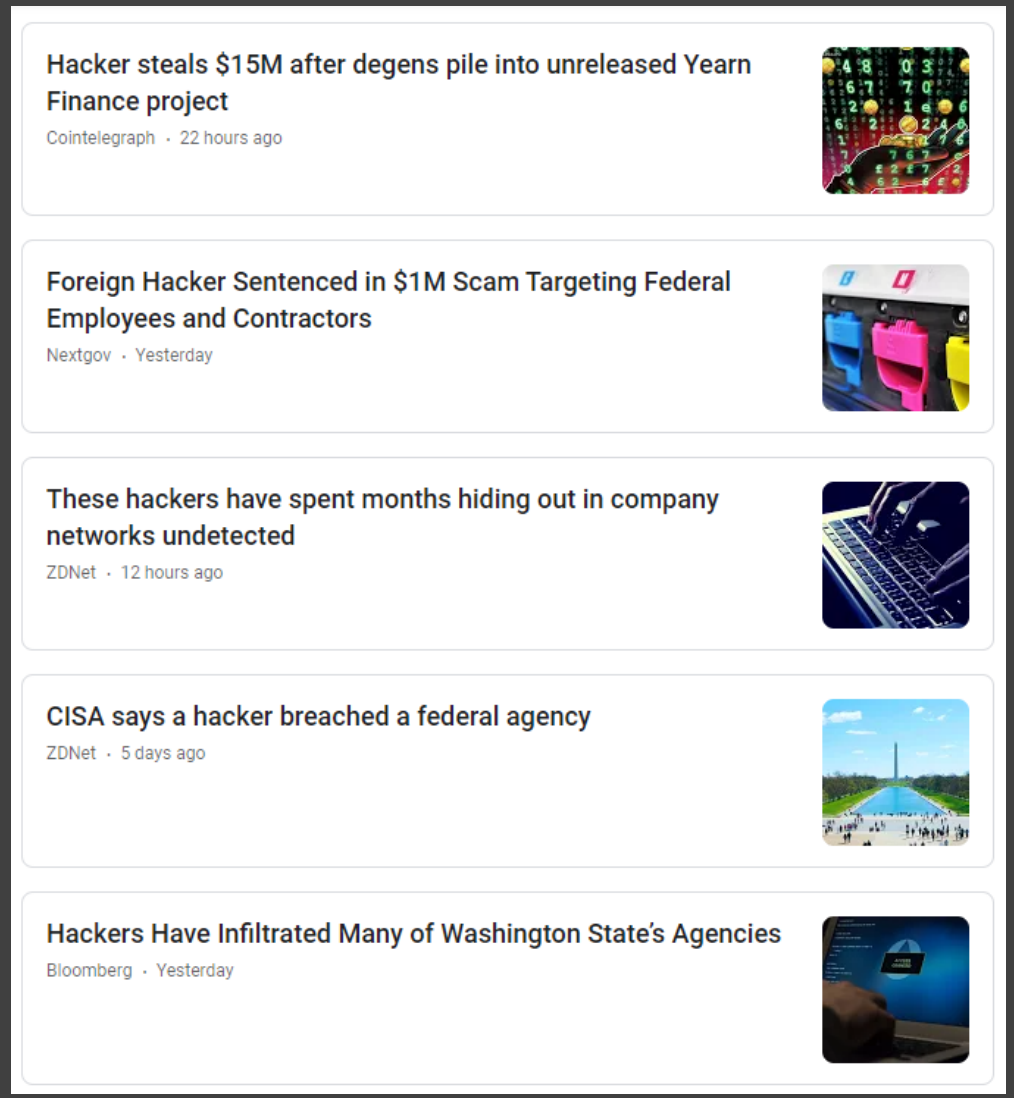
Digital Resources Compromised

This is a dangerous thing.

Phishing

In the news everyday.

One click can destroy your company.



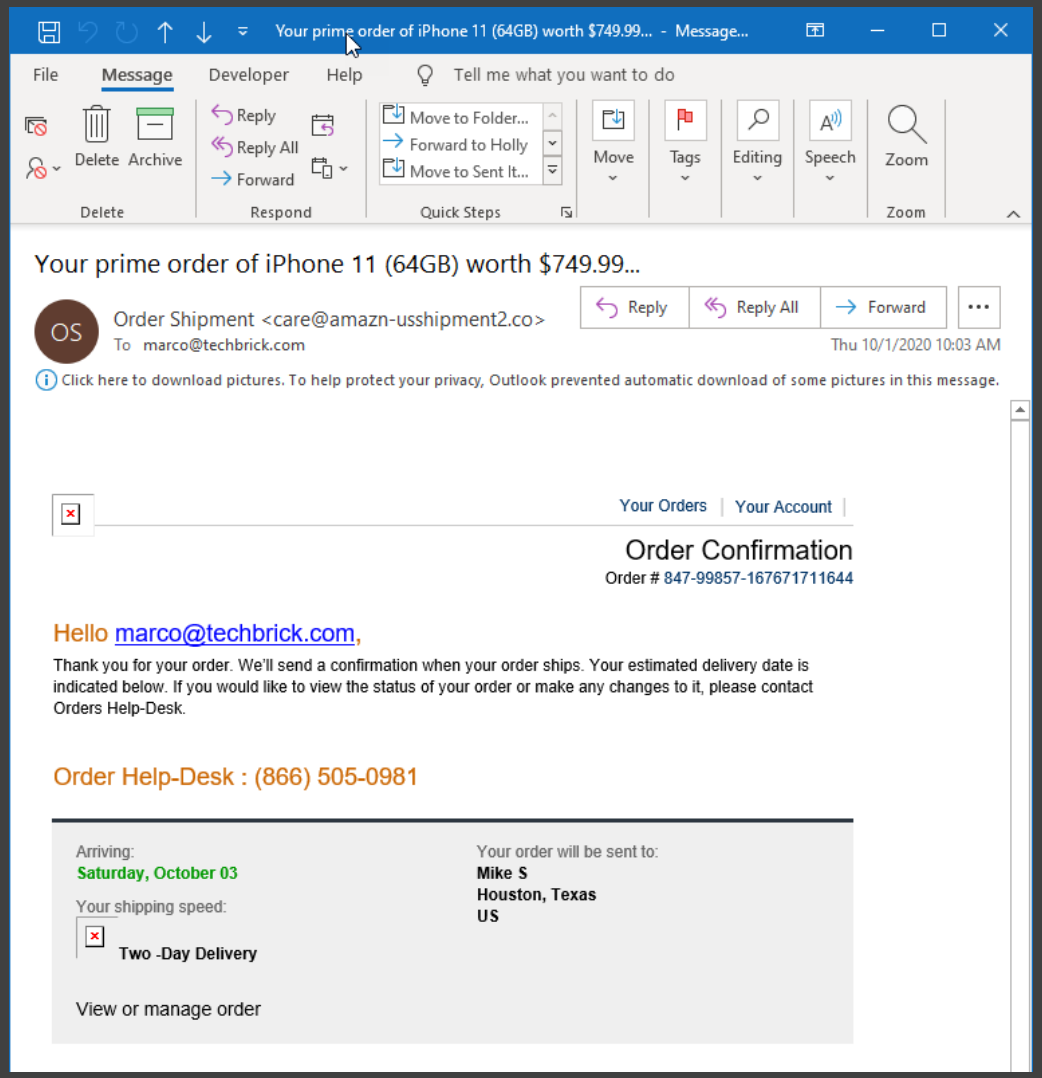
This is a dangerous thing.

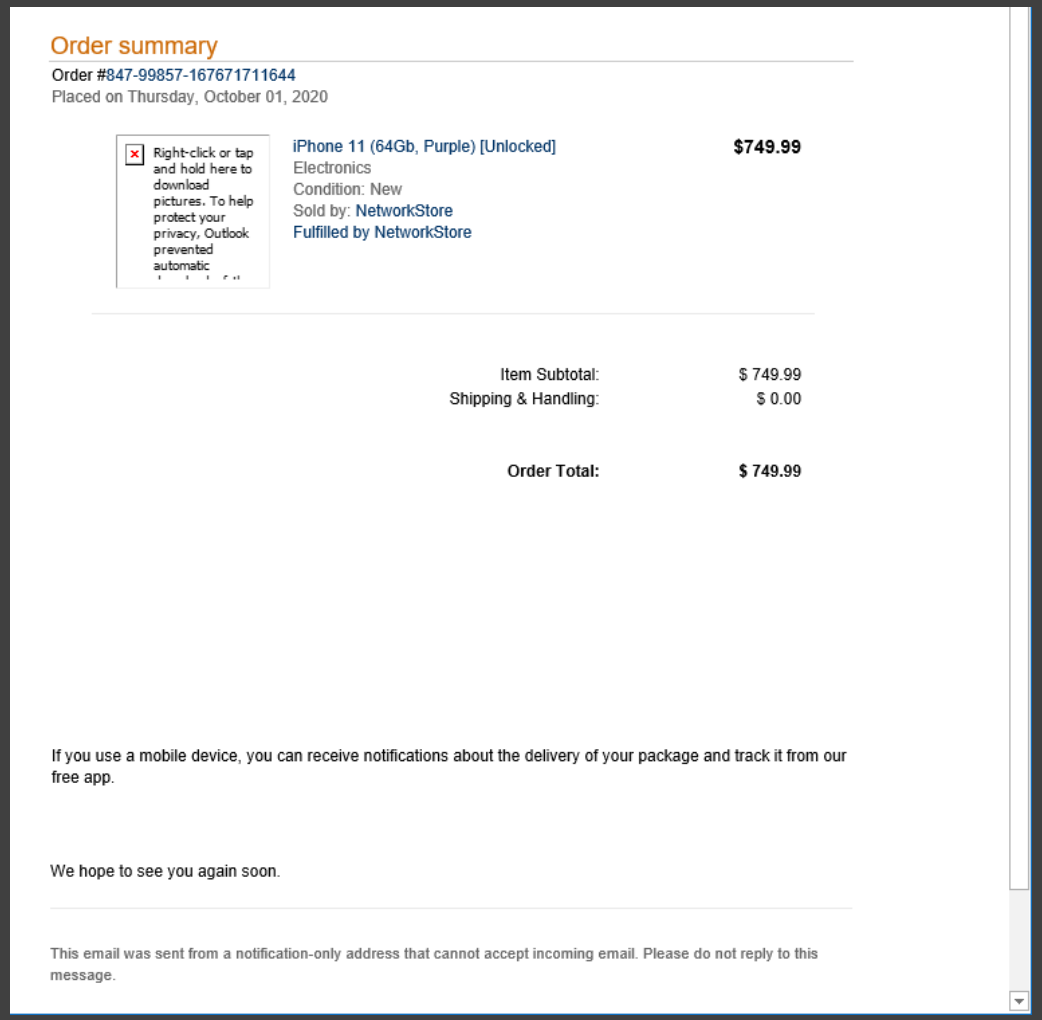
Phishing: Vectors

- Email itself.
- Email links.
- Phone calls.
- Scripts embedded in:
  - ✓ Word Documents
  - ✓ PDFs
  - ✓ Excel documents
  - ✓ Power Point Files
  - ✓ Some graphic formats (JPG headers)

They just need one entry point to infiltrate.

Digital Resources Compromised





This is a dangerous thing.

Phishing: What can you do?

- Use an effective email firewall.
  - ✓ Included with Microsoft Live365, Google Business, Rackspace and others.
  - ✓ Be sure it is configured correctly.
- Use hardware firewalls.
- Use effective machine and device level software.
- Provide training to all staff and anyone with access to your systems to help them identify suspicious email.

One click can destroy your company.

This is a dangerous thing.

Phishing: What can you do ‘the sequel’?

- Setup and or confirm that you have rigorous and complete backups of all data and systems both local and remote
- Demand IT staff or consultants demonstrate a full recovery.
- Make sure someone in-house is aware of the process.
- Keep up-to-date lists of hardware and software requirements and active sources for equipment.

How long could you afford to be out of business?

Are Your Digital Assets Compromised?

Three other key areas.

- Corporate ID Elements and Resources
- General Information Gathering
- Training, Training, Training.

Digital Resources Compromised

Corporate ID

ITEM	COMMENTS
Logos	Must have key formats: * Illustrator, * eps, * Various raster forms
Colors	Established and defined in RGB/CMYK/PMS/HEX
Usage Guidelines	Where and how. Above below. Space around. Background. Sizes.
Phrases and punctuation.	Capitalization. Commas. Apostrophes.
Purging old versions of digital files	DOC, XLS, PDF, Images, Videos.
Publication Standards	Format, Size, Color, Binding, Distribution.
Reviewing publications	All print and digital.
Purging old versions of publications	Good luck.
Checking Digital Assets	Where is it stored. Is it accessible.

Digital Resources Compromised

IT Assets

ITEM	COMMENTS
Do a username/account sweep.	Require a full test of UN/PW, Make Changes, Require Updates, Add Third-Party Authentication if Required.
Functional Email v Personal Emails	Review emails for receipt. Functional v. Personal.
Confirm a list of all online accounts	You will be surprised at how many there are.
Login to every account and check settings.	Update or delete.
Access to Critical Accounts	Corporate Email, Online backups, Domains and Domain registrars, Network Logins, Who, how, where.
Social Media Logins	Facebook (many users), Google Assets, Twitter, Linked In, etc.
Get confirmation on all software patches.	The primary vector for hacks is outdated software.

Digital Resources Compromised

Training

ITEM	COMMENTS
Username/Passwords	Management, Updates, Protection.
Phishing	Awareness, Process for Reporting.
Security Protocols	Secure VPN, Secure workstations.
Use of Company Assets	Where, how, who to ask.

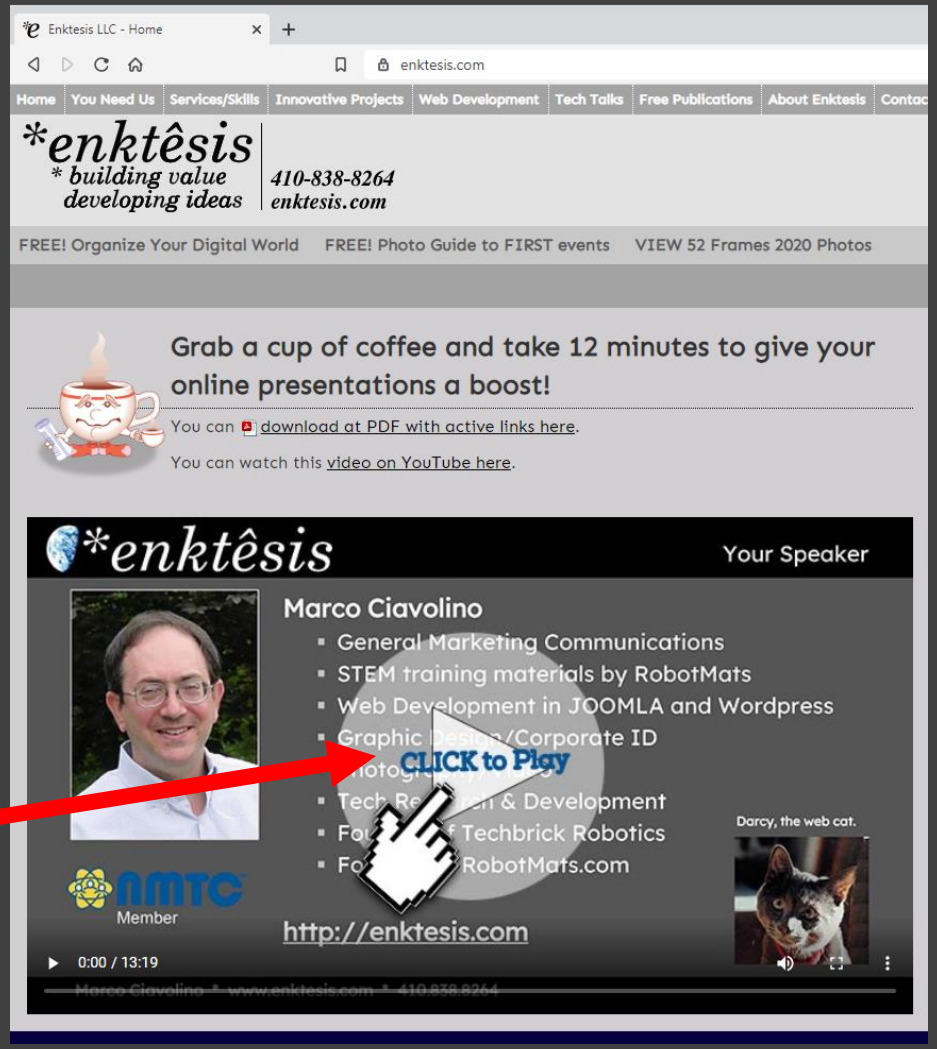
Digital Resources Compromised

Resources

Meetings…

http://enktesis.com

Improve Online Meetings



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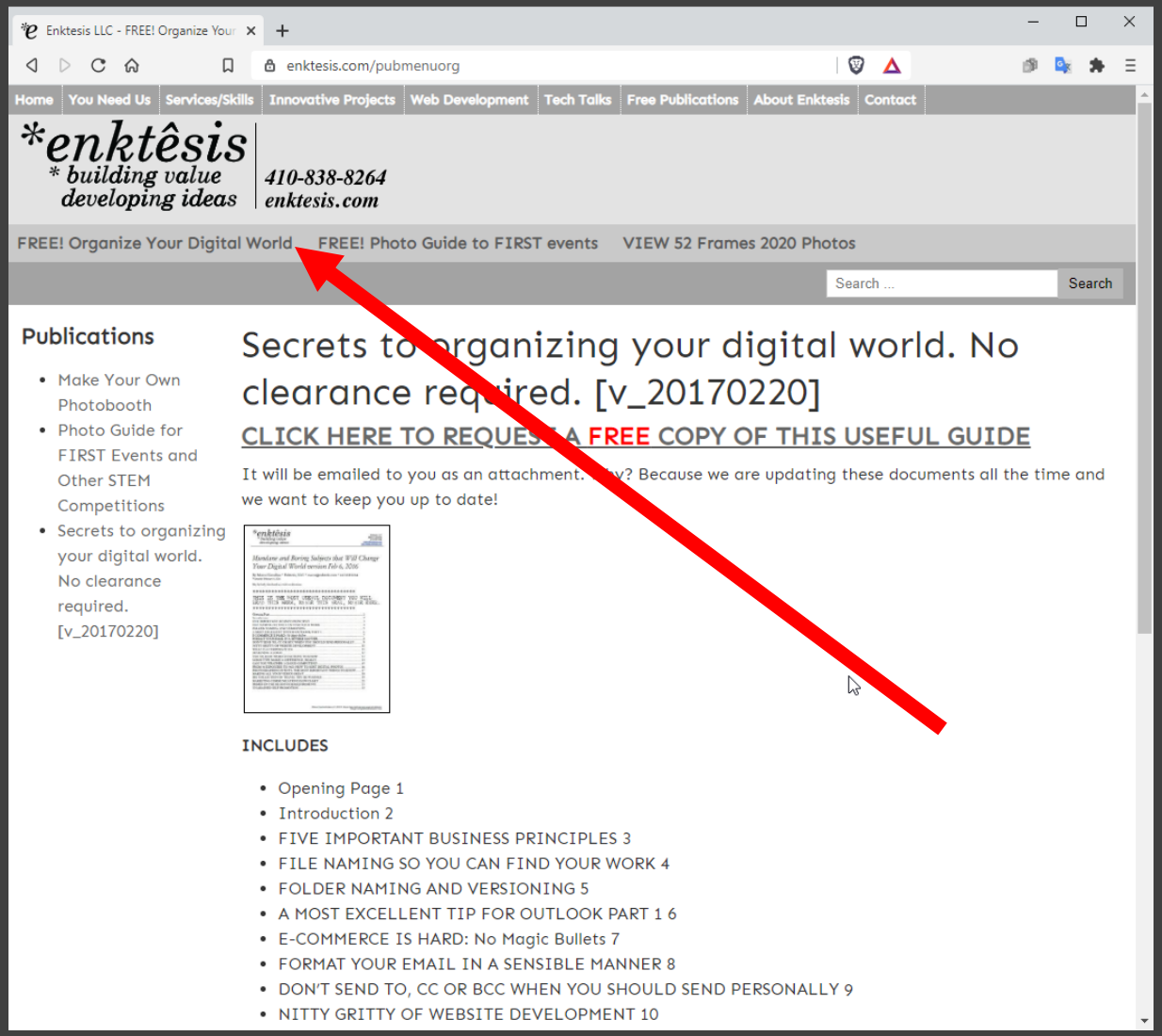
Digital Resources Compromised

Resources

…A Lifetime of Ideas

http://enktesis.com

Organize Your Digital World



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Your Speaker

Marco Ciavolino

- General Marketing Communications
- STEM training materials by RobotMats
- Web Development in JOOMLA and Wordpress
- Graphic Design/Corporate ID
- Photography/Video
- Tech Research & Development
- Founder of Techbrick Robotics
- Founder of RobotMats.com

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Darcy, the web cat.

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Driving Technology

NMTC℠

Northeastern Maryland Technology Council

http://nmtc.org

The NMTC (Northeastern Maryland Technology Council is the technology and innovation advocacy platform providing expert opinions, on disruptive technologies, affecting Revenue, Talent and Technology Pipelines of our members in Northeastern Maryland, the Greater Baltimore area and beyond.

Join Today!