Harrisburg U - Cybersecurity Awareness Presentation

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Agenda

- Cyber Security and Does it Affect Me?

- Multi-Factor Authentication, DNS and Password Vaults

- General Best Practices

- Review

- Q&A

Introduction
Why should we talk about Cybersecurity

Cyber crime is impacting everyone

Companies, governments, individuals… no one is immune

Uber

September 2022

- Security breach due to Uber contractor account attacked
- Attacker accessed employee credentials
- Attacker reconfigured Uber's OpenDNS to display a graphic image on internal sites

Government of Costa Rica

April 2022

- State of emergency in Costa Rica due to ransomware attack
- Attackers exfiltrated 600 GB of data, taking down nearly 30 institutions
- Attackers demanded $10M to unlock the infected systems

Colonial Pipeline

May 2021

- Fuel shortages due to attack on Colonial Pipeline
- Caused airline schedule changes and soaring fuel prices
- 87% of gas stations in Washington DC out of fuel
- Took $4.4M in ransom and a week to restore operations

Florida Water Treatment Plant

February 2021

- Attack on water treatment plant in Oldsmar, Florida
- Attacker briefly increased the sodium hydroxide level by 111% - dangerous levels
- Could have badly sickened 15,000 residents and impacted local businesses

The need for a skilled workforce

85 million
jobs

97 million
new jobs

Displaced by a shift in labor
between humans and machines
by 2025[1]

Created by digital transformation
by 2025[1]

1. "Future of Jobs," World Economic Forum

Everyone is responsible for Security!

According to the World Economic Forum,

"95% of all cybersecurity issues can be traced to human error"

Personal Security Tools

- Multi-Factor Authentication

- DNS Security

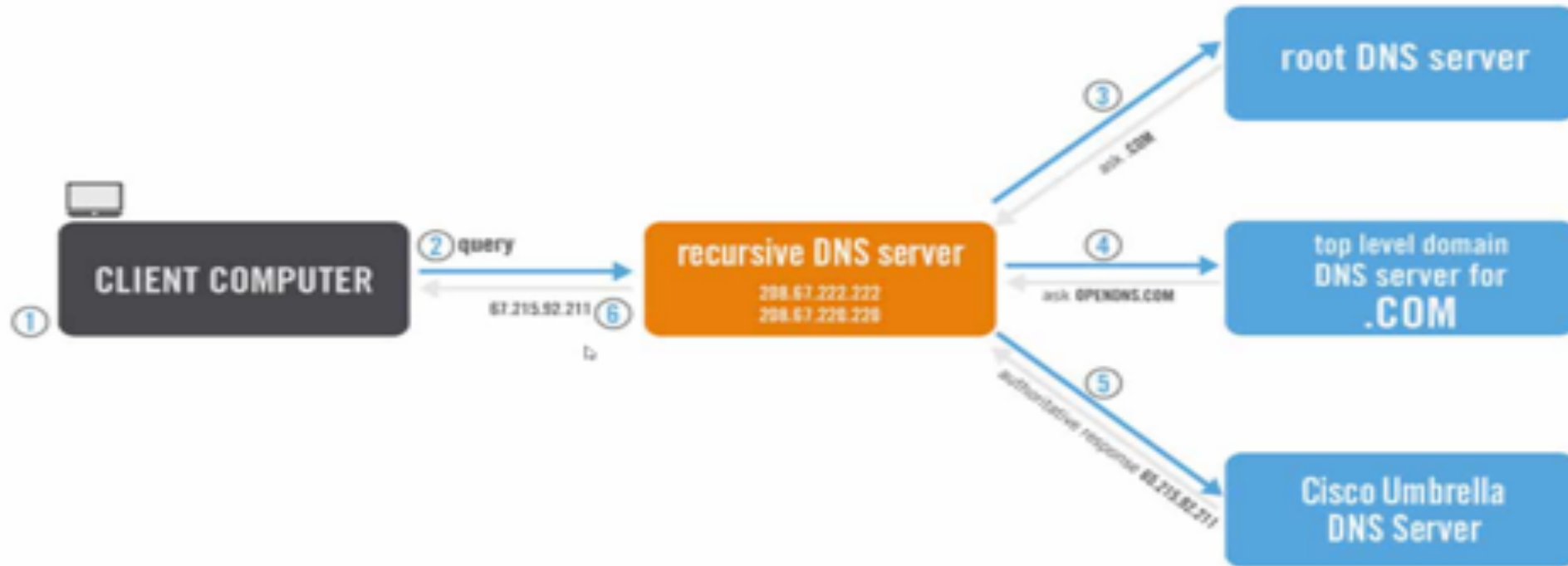- Password Vault

- General Best Practices

Multi-Factor Authentication

Multi-Factor options

- YubiKey

- Duo Free

- Google Authenticator

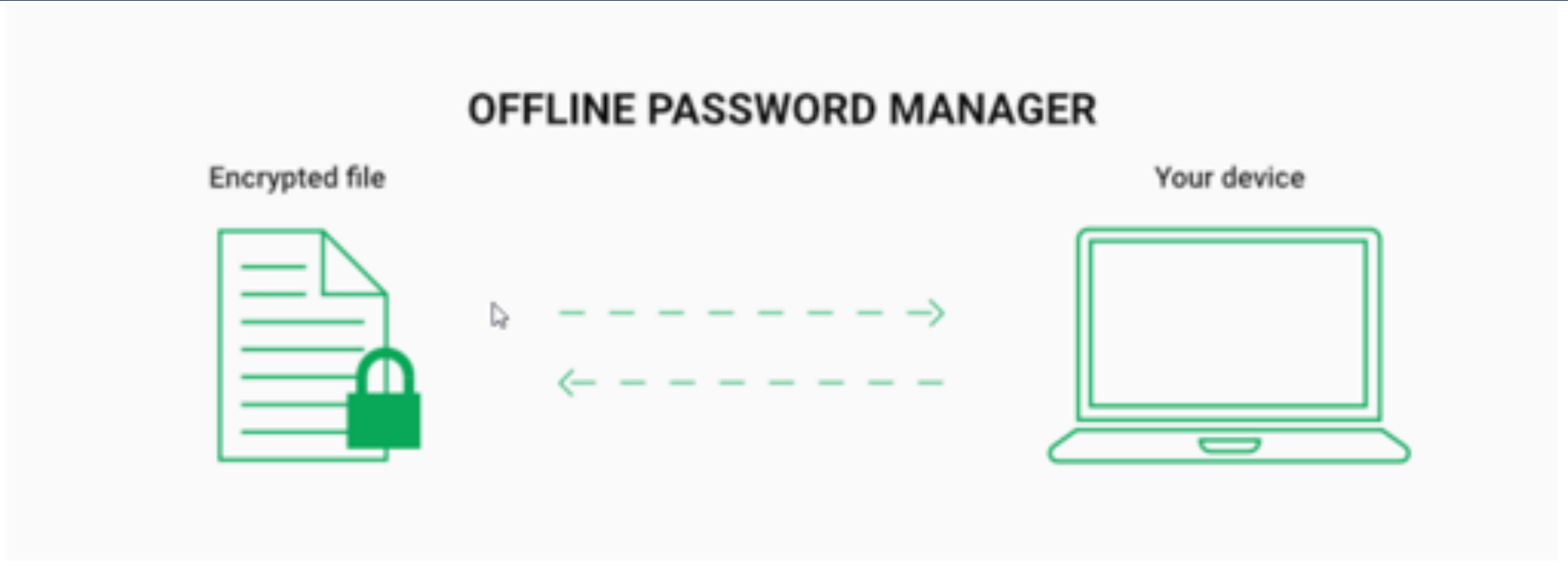- Microsoft Authenticator

DNS Filtering

DNS Filtering Options

- OpenDNS

- CleanBrowsing

- Google Public DNS

- Cloudflare

Password Manager

- How many passwords should we have?

- Strong Passwords

- Do I write it on paper and carry it around?

- Types of

Locally Stored or Offline

OFFLINE PASSWORD MANAGER

Encrypted file → ← Your device

Web-Based or Online

ONLINE PASSWORD MANAGER

Password Vault

Desktop

Tablet

Mobile

Stateless or Token-Based

Password Manager Options

- KeePassXC

- 1Password

- Bitwarden

- Keeper

Personal Security Practices

- Keep your software up to date

- Use anti-virus protection and firewall

- Use strong passwords for your logins and a password management tool

- Two-Factor or Multi-Factor authentication

- Be suspicious of communication you receive: Email, Phone calls, texts

- Protect your Personal identifiable information

- Backup your data

- Review your online accounts and credit reports

Review

- Two or more ways to prove "you are who you say you are", is called what?

- In order to easily remember how to navigate to a destination on the internet you use what system?

- To make it easier to have a complex password for each of your logins but also store them securely, what should you use?

Start your cyber journey today!

nupaTHS
Cofounded by Harrisburg University

Cyber threats affect us all and cybersecurity jobs continue to grow!

There will be a 3.5+ Million Global cybersecurity workforce gap by 2025. The need for cybersecurity professionals is growing at a rapid pace, and globally, jobs cannot be filled fast enough. **Participate in free cyber courses today,** to complete the 180 hours Cybersecurity pathway to earn your digital badges & an industry certification! **Students need to be 13 years or older to have an account, a parent or guardian(s) may also sign up!**

Typed URLs are case sensitive, please use all lower case.

Introduction to Cybersecurity   (6 hours)   Click to Enroll
URL: http://cs.co/intro2cybercourse

This course introductory course takes you inside the world of cybersecurity. You will learn cybersecurity basics to protect your personal digital life and gain insights into the biggest security challenges companies, governments, and educational institutions face today. Cybersecurity professionals who can protect and defend an organization's network are in high demand.

Networking Basics   (25 hours)   Click to Enroll
URL: http://cs.co/netbasicscourse

This course covers the foundation of networking and network devices, media, and protocols. You will observe data flowing through a network and configure devices to connect to networks. Finally, you will learn how to use different network applications and protocols to accomplish networking tasks. The knowledge and skills you gain can give you a starting point to find a rewarding career in tech.

Networking Devices & Initial Configuration   (25 hours)   Click to Enroll
URL: http://cs.co/netdevicescourse

This course covers the essentials of network devices and how to configure them. Learn the characteristics and benefits of Cloud and Virtualization technologies. Explore how to provide Internet Protocol (IP) addresses to devices both manually and automatically. Using this knowledge, you will calculate an IP addressing scheme to create a small network, and test for connectivity issues.

Endpoint Security   (40 hours)   Click to Enroll
URL: http://cs.co/endpointcourse

Build the skills to secure your network all the way to the edge, including hardware, software, and media. In this course you will learn how to assess the network, operating systems, and endpoints for vulnerabilities, and how to secure the network. You will also gain skills to maintain the integrity, confidentiality, and availability in your network and your data.

Network Defense   (40 hours)   Click to Enroll
URL: http://cs.co/netdefensecourse

This course covers ways to monitor your network and how to evaluate security alerts. Dive into the tools and techniques used to protect a network including, access control, firewalls, cloud security and cryptography. These monitoring and defense tools along with others work together to create a layered defense cybersecurity strategy.

Cyber Threat Management   (20 hours)   Click to Enroll
URL: http://cs.co/cyberthreatcourse

Learn to develop policies and ensure your organization complies with ethical standards and legal and regulatory frameworks. You will also gain skills for managing threats, such as how to assess a network for vulnerabilities, manage risks, and respond to security incidents.

Cybersecurity Pathway Exam   (50 questions)   Click to Signup!
URL: http://cs.co/cyberexam

Learn to develop policies and ensure your organization complies with ethical standards and legal and regulatory frameworks. You will also gain skills for managing threats, such as how to assess a network for vulnerabilities, manage risks, and respond to security incidents.

Students need to be 13 years or older to have an account, a parent or guardian(s) may also sign up! Please feel free to share this flyer with friends & family, anyone can sign up to take these courses! We look forward to seeing you online!

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25 Years

Networking Academy
http://cs.co/uscimpact

Questions

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