NCSA CSND Office Hours

Welcome! The presentation will begin shortly.



About NCSA & CSND

The National Center for Supercomputing Applications (NCSA) is a hub of transdisciplinary research and digital scholarship where University of Illinois faculty, staff, and students, and collaborators from around the globe, unite to address research grand challenges for the benefit of science and society. Current research focus areas include digital agriculture, bio and health sciences, earth and environment, astronomy, plus many more.

The CyberSecurity & Networking Division at NCSA is composed of researchers, developers, and specialists who work to advance the state of the art of cybersecurity and networking, apply those advances to key science and engineering user communities, and provide for the high-performance and security of NCSA's networks and substantial computing resources.



Disclaimer

The information being shared is for educational purposes. It is not meant to overrule your school district's policies. When in doubt, discuss with your IT department.



Account and Password Hygiene

James Eyrich

Manager NCSA IRST



Account and Password Hygiene

- Random real random, use a generator
- Long the max allowed by the site, although no real need for more than 31.
- No Reuse

Do not let people watch you type a password



Safe Passwords

- Use different passwords for EVERYTHING
 - Use 14 char or more random passwords
 - Multiple character sets
 - Upper, Lower, Numbers, Symbols
 - The longer the fewer char sets needed

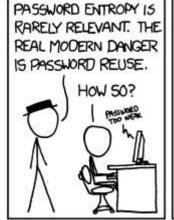


Safe Passwords - Exceptions

- Only use memorable ones for a few important things
 - District email/Apps account
 - Personal Email
 - Desktop/Laptop account
 - Amazon -
 - password manager

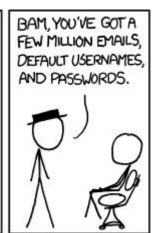


Why Not Reuse









- Bad websites
- Hacked websites
- Exposed account details





Why Not Reuse cont...

haveibeenpwned.com

- Put in email
- See if your account info was leaked





Password Managers

Paper

- Better than reuse.
- Effective if you generate truly random passwords
- Must keep on person, must protect.
- In general protecting from Internet not a mugger/thief.

Browser Built-in

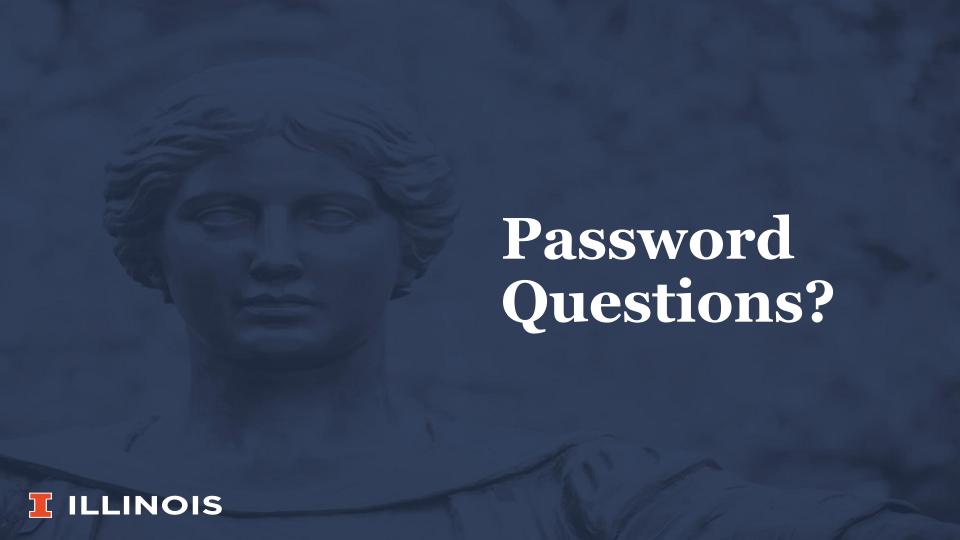
- New features for creating random passwords
- Better than password reuse
- Getting better Sync / Local protection

Password Managers Cont

- LastPass
 - Personal free vs paid, many features now in free
 - Family Accounts
 - 2 factor some in free, Yubikey requires premium.
 - Allows Sharing to groups
 - Enterprise push out policies
- Others cloud
 - Dashlane
 - 1Password
- Others local
 - Keepass
 - 1Password Free
 - Enpass

Do this at least

Strong, separate passwords for your Email, Bank and mobile phone company accounts.



Multi-Factor Authentication

When possible enable multi-factor authentication. aka MFA or 2FA

Two factor Auth Org - https://twofactorauth.org/



MFA examples

- SMS code
- Email code
- Token \$20 <u>U2F on Amazon</u>
- Extra questions sort of
- Google Authenticator make sure you backup
- Duo
- RSA SecurID





E-Mail Phishing and Scams

Leandro Avila

Senior Security Engineer

NCSA IRST

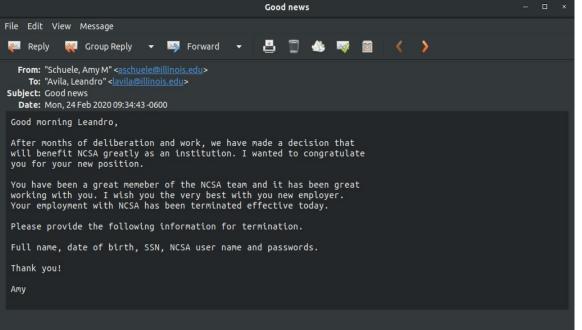


Phishing

- E-mail most common point of entry for malware
- Most clicks shifting to mobile devices
- Be aware of SMS based phishing
- Always be skeptical (ABS)



Phishing



Always be skeptical.

If in doubt ask tech support.

Do not click or reply



Phishing

- Never send private information over email
 - Passwords, SSN, ePHI, Financial
- If you are not expecting the message be suspicious
- Look carefully at the details of the message
 - From address, spelling, etc
- If in doubt call or send a message via Skype/Slack



COVID-19 Scams

- Criminals always looking for opportunities
- Initially focused on fear/panic now shifting towards stimulus money.
- Find the information from the most authoritative source. For example CDC,NIH,WHO,Red Cross or IRS.
- Seek the information you need. (Pull vs. Push)



COVID-19 Scams

- Remote work provides another attack vector
- Phishing related to the tools you are using to work from home
- Always go to your official technical support channel if you have questions.



Gift Card Scams

You are contacted by someone impersonating your boss/coworker/family/etc. They ask you to buy gift cards and send them the information because they need it **quickly**



Gift Card Scams

- Gift Cards are like cash
 - If you do not do it with cash, do not do it with gift cards
- Urgency of the request is usually an indicator that something is wrong
- A variation of this will be to wire money



Remote work

Remote work makes it easier for some of these scams to occur.

Any purchases during remote work should be processed through some sort of authenticated system or verified by voice/video chat.



Always Be Skeptical







Thank you for attending!

Open Q&A Session:

Let's talk about security issues impacting you

- Password security / Password managers
- Phishing scams
- Two-Factor Authentication
- Other security topics?



About CSND

Blog post with slides and video:

https://wiki.ncsa.illinois.edu/x/LRDqBg

Website: <u>security.ncsa.illinois.edu</u>

Twitter: one-witter



Welcome to CSND office hours

The presentation has concluded. We have shifted to the office hours portion of today's event.

We are monitoring the chat. Ask a question by clicking on the chat icon in the Zoom application.

