Welcome to the Internet SIG

Password Management

Discussion Topics

- Brief History of Passwords

- How Passwords Work

- Problems with Passwords

- Choosing a Password

- Password Safety

- Password Manager Features

- Some Popular Password Managers

- Demonstration of KeePass (if time permits)

What's a Password?

A password, sometimes called a passcode, is a memorized secret, typically a string of characters, usually used to confirm the identity of a user.

Nuggets of Password History

- First used in ancient times
- Examples found in the Bible – Shibboleth
- Julius Caesar used substitution ciphers
- Ali Baba and the Forty Thieves – Open Sesame
- Fernando Corbato – Maybe

Fernando Corbato

- Worked at MIT in 1960

- All workers shared files on the main frame computer

- He invented a password algorithm to keep individual files private from other workers

- Called the "Godfather of the Modern Computer Password"

How Passwords Work

1) The Army guard says, "Halt! Who goes there?"

2) The visitor replies, "It is Superman."

3) The guard asks, "What is the password?"

4) Superman says, "monkey123"

5) The guard replies, "Fly right in"

All modern secure computer systems store users' passwords in an encrypted format. Whenever a user logs in, the password entered is encrypted initially, then compared to the stored encryption of the password associated with the user's login name. A match succeeds and a mismatch fails.
Isn't that simple?

Password Problems

- Site might not use strong encryption
- Password might be exposed prior to encryption
- System support techs might not be trustworthy
- Could be logging into the wrong site
- Different sites have different rules

Tips For Choosing A Password

- Use stronger passwords for important things
- Longer passwords are usually better
- Include uppercase, numbers, special characters, etc.
- Avoid using personal information
- Decide when to change your passwords

THREE

RULES

TO KEEP

YOUR

PASSWORDS

SAFE

Storing Your Passwords

- Post It Notes

- Loose Leaf Notebook

- Rolodex File

- Spread Sheet

- Notepad File

  All of these methods could be effective if

  1) you don't have many passwords

  2) you only use one computer

  3) you aren't as smart as a dog

  USE A PASSWORD MANAGER!

Password Manager

- A software application that is used to store and manage passwords

- Several types of password managers

  1) browser

  2) cloud

  3) desktop

  4) portable

Password Manager Features to Compare

Not all Password Managers have all features

1) Encryption

2) Usability

3) Password Generator

4) Sync Across Devices

5) Browser Plug-ins

6) Password Sharing

7) Automatic Form Fill

8) Keep Notes

Password Manager Notes

- Encryption – don't believe all the advertising

- Ease of Use

  In my opinion, these are the only real important items

  1- if anyone can read the password file, why use one?

  2- if the program isn't easy to use, you will end up not using it.

  Decide for yourself what other features are important to you.

Free vs. Paid

- I'm not going to compare Password Managers. An internet search will yield thousands of sites that can do it better than me.

- Many paid managers have a limited free users option.

- Some paid managers have a test period.

- Some free managers make money by selling your info – e-mail, name, address, phone, etc.

  Research and Test

Some Popular Managers

- Dashlane

1) Easy syncing between devices

2) Includes VPN

- LastPass

1) Multi-factor authentication

2) Mobile app logins

3) Easy to use

- Bitwarden

1) Open source

2) Great free tier

3) No desktop app

- **LogMeOnce**
1) Cross-platform support
2) Biometric options

- **1Password**
1) Family sharing
2) Business options

- **RoboForm**
1) Stores data online or locally
2) Multi-factor authentication

- **Keeper**
1) Exceptionally strong security
2) Seamless exprience across platforms
3) Easy-to-use web interface

Do we want a demonstration of the freeware KeePass Password Manager??

KeyPass Demonstration

Why KeePass?

1) Only one installed on my computer

2) I've used for more than 10 years

3) Available for all platforms

4) It's free

KeePass Features

- Totally Free – just download and install
- Open Source – code can be downloaded and tested by anyone
- Strong Security – several algorithms supported
- Secure Clipboard – clears after set time
- Strong Password Generator – defined by user
- Supports Plug-ins – increases functionality
- Many More
- A Demostration
- Keepass Comparison Chart

Keepass Tutorial

Add New Entry for Cajun Clickers

Future Topics

May 13   How Web Browsers Work

May 20   Microsoft Edge Browser

May 27   Google Chrome Browser

June 3   Firefox Browser

THANKS FOR LISTENING ☺

Presentation Video & PDF Available for Dowload

Toxitman Website

Suggest a SIG Topic

Have you got a topic idea? Want to learn about something special? Tell me anytime you see me or contact me online.

clickers@tinys-bs.com
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