Protect Your Accounts: Creating Passphrases – notes

Materials: dice, laptops, projector, handout, pens

Maximum participants: 10

Notes:

Discussion: Have you heard or read about why it's important to create strong passwords? Has anyone had their password stolen? What happened?

We're going to go over a way to create really secure passwords today called Diceware. It might sound complicated, but it's something you can all do.

[Definitions slide]

[Why use a passphrase? slide]

Discussion: Have you tried either of those methods?

[Activity/worksheet – show example of dice rolling, then allow time for participants to roll dice and look up words in word list]

Discussion: What do you think of this method? Do you have any ideas for how to remember your passphrase?

[Keep your passphrase secure slide]

[Time for discussion/questions]

```
Sep 15:53
θ. Sep 2015 bin -> usr/bin
19. Sep 09:31 boot
21. Sep 15:50 dev
19. Sep 09:32 etc
21. Sep 15:52 home
30. Sep 2015
```

Protect Your Accounts: Creating Passphrases

```
4096 12. Sep 08:15 proc
560 21. Sep 15:37 root
730 Sep 15:50 run
4096 30 Sep 2015 sbin -> usr/bin
```

What We'll Cover

• What is a passphrase?

Why make a passphrase?

How to make a passphrase

More resources

Definitions

- A passphrase is a series of words used in place of a single password
 - Example: skirt important coastline zippy landowner chewy
- Dice are the kind you roll, either physical or virtual



 A word list is a collection of words assigned to strings of numbers

```
34536 impromptu
34541 improper
34542 improve
34543 improving
34544 improvise
34545 imprudent
34546 impulse
```

Why use a passphrase?

- Phrases or words that have meaning to you can be easier to guess (for instance, your pet's name or favorite song title), even when you substitute numbers for letters (like 0 for o) and add special characters and capital letters
 - Tr0ub4dor&3
- Random strings of letters are relatively easy for computer programs to figure out
 - 5n*6fjtTW&20jL
- Passphrases of six or more words are very hard for computers to crack
- They are easier to remember than random strings of letters and numbers

Keep your passphrase secure

<u>DO</u>

- Consider using a password manager (see resources)
- If you need to write your passphrases down, that's okay! Just make sure you keep the list somewhere safe.

DON'T

- Reuse a passphrase for multiple accounts
- Share your passphrase(s) with anyone

Protect Your Accounts: Creating Passphrases

How to create a passphrase with dice and a word list:

- Roll dice five real or five virtual at https://www.random.org/dice/
- Write down the numbers you've rolled in the Dice Roll column below. For instance, if you roll



- Repeat this process five more times for a total of six five-digit numbers
- Navigate to your wordlist at https://www.eff.org/files/2016/07/18/eff_large_wordlist.txt
- Press CTRL+F to open the Find tool
- Type in your first number in the Find box (for instance, 14116)
- Write down the word next to that number in the Word column (in this case, boxer)
- Repeat five more times for a total of six words

Congratulations, you've created your first passphrase! Repeat for as many accounts as you need. If you want to write them down, you can use the table on the next page. Remember to keep the list somewhere safe!

Dice Roll	Word

Protect Your Accounts: Creating Passphrases

Resources for more information:

Dice and words lists: https://www.eff.org/dice and https://ssd.eff.org/en/module/creating-strong-passwords

Passwords and password managers: https://securityinabox.org/en/guide/passwords/

Password managers: https://ssd.eff.org/en/module/animated-overview-using-password-managers-stay-safe-online

r, set up a MyLibrarian appointment!
cut here

Account	Passphrase