Digital Privacy and Security for Patrons and Staff

Tess Wilson

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LIBRARY FREEDOM PROJECT

https://libraryfreedom.org

Objectives

1 To make engaging in privacy conversations a little less overwhelming

2 To offer an introductory approach to teaching privacy and using privacy tools in the library

3 To provide attendees with some tangible skills for raising privacy awareness in their library

4 To share resources for future research and reference

Agenda

- Introduction
- The Law and the Library
- Privacy Policies
- Resources and Tools
- Q&A

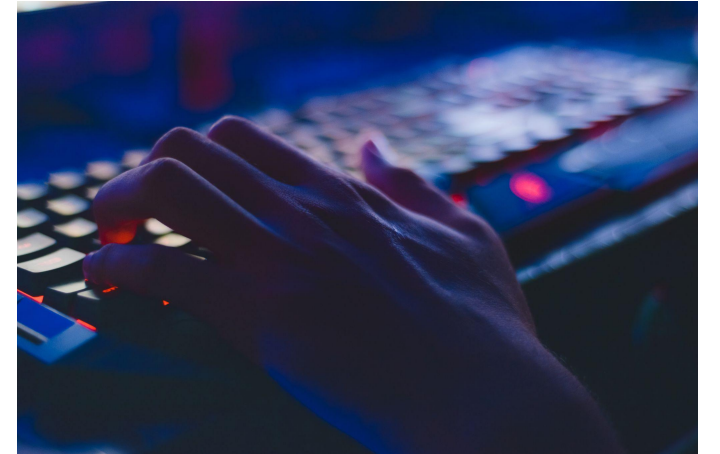# Introduction

Nice to meet you!

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Activity: Practical Privacy

What are some privacy concerns
you face in your libraries?

Library Freedom Project

A Community of Practice

LFP Fights Surveillance

Privacy is essential for democracy. Librarians can resist the surveillance state and help bring privacy back to local communities. Library Freedom Project can help.

We provide librarians and their communities with the skills necessary to turn ideals into action.

LFP Teaching Philosophy

- We believe it's possible for people and our community to change
- We affirm that people are the experts of their own lives
- Everyone brings something to the table
- We recognize power dynamics - in the world and in the room
- We are ready to take risks and willing to be vulnerable
- We challenge and confront dominant ideologies and systems of oppression
- We recognize trauma and how it plays a role in privacy issues

SHAMELESS PLUG

http://libraryfreedom.org/crashcourse

The Law and the Library

Ethics and the Law

IFLA Code of Ethics for Librarians & Info Workers

UN Declaration of Human Rights

US Constitution: 4th Amendment

ALA Code of Ethics: Article 3

Ethics and the Law

What could happen?

How do we protect our patrons?

What's your privacy policy?

Privacy Policies

Privacy Policy Audit

When was our privacy policy last reviewed?

Who are the stakeholders impacted?

What considerations are made for staff? For patrons?

Revising Policy

How many years has it been?
- What technology does it cover?
- What materials does it cover?
- What services does it cover?

Is it inclusive?
- Is it accessible? Straightforward?
- Is it logically written?
- Does it use inclusive language?

Youth in Your Policy

- Consult CIPA and COPPA
- Avoid technical language or jargon
- Include practical applications
- Provide resources for parents and youth

Example (NYPL)

- "Never give out identifying information such as home address, school name, or telephone number.
- Let parents or guardians decide whether personal information such as age, marital status, or financial information should be revealed.
- Never arrange a face-to-face meeting with someone via the computer without parents' or guardians' approval.
- Never respond to messages that are suggestive, obscene, threatening, or make one uncomfortable.
- Have parents or guardians report an incident to the National Center for Missing and Exploited Children at 1-800-843-5678 if one becomes aware of the transmission of child pornography.
- Remember that people online may not be who they say they are.
- Remember that everything one reads may not be true."

Example (Madison Public Library)

"Parents, guardians, and caregivers are expected to instruct minors to safely share personal information (name, address, password, telephone number, school, credit card number, etc.) on the Internet. This includes but is not limited to email, instant messaging, online purchasing, social media sites, and commercial sites. Before giving out any personal information via email, minors need to be confident that they are dealing with someone who is known and trusted by them and their parents or guardians."

Example (San Antonio Public Library)

"The San Antonio Public Library's goal is for children to have safe online experiences and prevent their exposure to harmful or inappropriate material. Library Board Policy on Public Use of the Internet San Antonio Public Library. Towards this goal, the San Antonio Public Library has taken the following initiatives:

- Filtering Internet access for images and videos containing adult content that would generally be considered obscene or pornographic in nature.
- Encouraging parents to monitor and supervise their own children's use of the Library's computers and networks.
- Providing specially designed web pages for children and teens.
- Providing child-friendly search engines on the children's page.
- Providing links to sites that help children learn Internet safety.
- Providing staff who are trained to help children and parents find appropriate sites.
- Enforcement of this policy."

Activity: Perusing Policy

Locate your library's privacy policy and answer the following questions:

1. Was it easy to find?
2. Is it written in straightforward language? How long is it?
3. Are youth specifically mentioned?
4. Given our discussion, does anything stand out to you?

Advocating for Privacy

Stakeholders

Admin/Boards	IT Departments	Staff/Faculty	Patrons
• Reputation • Regulatory compliance • Policy compliance • Strategic plan • Professional accolades • Power • Financial responsibility • Liability • Risk aversion	• Security • Things "just working" • Liability • Compliance • Not having to teach staff something new • Not having to learn something new • Not adding to their existing workload	• Professional accolades • Professional development or credit • Personal or professional curiosity • Personal stake • Ethics, library values, DEI • Fear of change	• Personal curiosity • Personal stake • Technology fears/digital literacy issues • Not enough time/other priorities • Money concerns • Not sure it's "for them" • Not looking for it until they need it

How to prepare your argument

- What's the influence level of your audience?
- How important is it to convince them in order to get what you want?
- Think about the reasons they might say no
- When/where will you start the conversation?
- Who are your supporters?
- What personal stories are you bringing with you? What threat models are you considering?

What do you want to accomplish?

- Programs? Policy change? New infrastructure?
- What is your (realistic) action plan?
- What commitments do you need from others?
- Are your supporters already on board?
- What's your organizational culture like?

Activity: Privacy Arguments

What will you say when stakeholders say...

(Join me on the Jamboard!)

https://tinyurl.com/privacyLLNJ2022

Teaching Privacy

Activity: The Privacy Spectrum

Privacy Nihilism

Privacy Veganism

Teaching Privacy

- **Be trusting:** Youth are the experts of their own lives
- **Value learners:** Everyone brings something to the table
- **Stay humble:** Be ready to have your assumptions challenged
- **Think practically:** Use real-life examples
- **Lead with empathy:** Meet youth where they are
- **Take small steps:** This is a learning process
- **Remain optimistic:** Working towards the possibility of change

Some positive talking points!

Privacy is a core value of librarianship.

Privacy is a human right.

Privacy is an equity issue.

Privacy takes time.

Data is powerful, and so is privacy.

Terms of Service

LIBRARY FREEDOM PROJECT

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- Contact you about public policy matters, or other current events, related to your ability to use our Services. This could include an invitation to join a petition, letter writing, call or other sort of public policy related campaigns

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- Measure the performance of our email marketing campaigns (e.g. by analyzing open and click rates)

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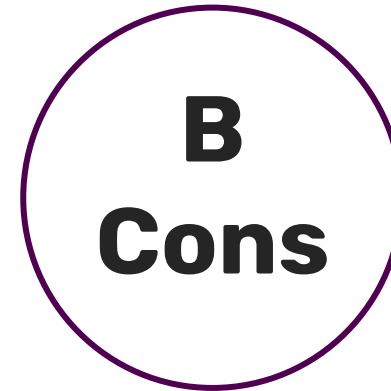
Activity: What have we agreed to?

1. Write down the sites and services you use that have Terms of Service.
   a. Social media
   b. Email
   c. Work tools
   d. What else?
2. Go to **www.myshadow.org/lost-in-small-print** or **www.tosdr.org**
3. Search for the sites you use and note any red flags.

Resources and Tools

Activity: Reward and Risk

A Pros

B Cons

- The ability to tag other people in photographs
- Facial recognition technology that automatically scans photographs and suggests people in them
- Ability to remotely turn on or off items in a home and check their usage
- Map or GPS software/apps that store common travel patterns
- Advertising customized to your interests, based on search and purchase history
- Single sign-on to multiple websites or services (for example, linked to a social media account)
- The ability to remotely turn on apps that can locate a device
- Facial recognition-enabled, internet-linked CCTV cameras in high crime areas
- The ability to sign on to devices or access locations with biometrics (like fingerprints)

Software and Tools

What is Open-Source?

Open-Source Software is computer software released under a license that allows people other than the copyright holder or creator to use, modify, and distribute the code for any purpose and to anyone.
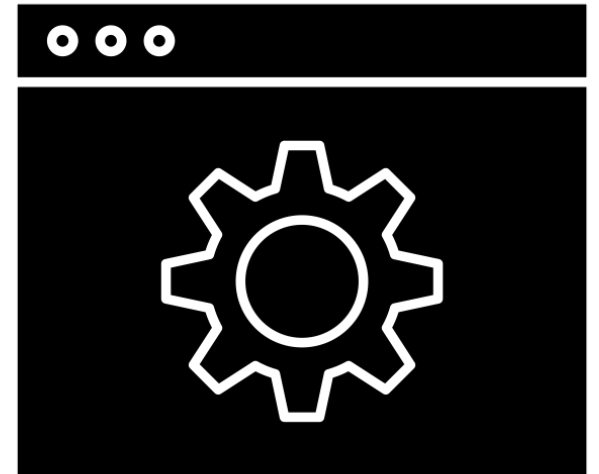
Created by Siipkan Creative
from Noun Project

Benefits

Free*	Customizable	Ethical*	Flexibility
OSS is almost always free. Some companies offered tiered subscriptions where you can pay for a modified service.	If you have developer skills, you can modify the source code yourself and host it on your own server with your specifications.	Many OSS tools are privacy conscious or are intended to be alternatives to Big Tech. Not all of them are though!	You aren't locked into any big contracts and you can move between tools as needed.

Drawbacks

| Tech Support*	Longevity*	Not Accessible*	Convenience
Since OSS often relies on a user community to make updates or debug an initial program, there is no 24/7 tech support to call.	Always uncertainty about how long a software will exist, unless you are maintaining it yourself!	Sometimes have a high-learning curve, require technical knowledge, or are not as easy to use as other tools.	Some privacy-centric and open-source tools are not as commonly used as mainstream ones, which limits buy-in.

Ad-Blockers

uBlock Origin

PRIVACY BADGER
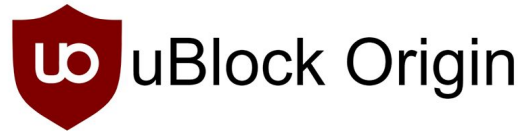
HTTPS EVERYWHERE

uBlock Origin

- Created by Raymond Hill
- Blocks ads through a browser extension

PRIVACY BADGER

- Created by EFF
- Blocks ads and tracking cookies

HTTPS EVERYWHERE

- Created by EFF
- Encrypts your communications with major websites

Communication

ELEMENT

- Created by Matrix
- End-to-end encrypted messaging service that allows you to make calls, set up group chats, and text other users

JITSI / JITSI MEET

- Currently controlled by 8X8
- Encrypted video messaging tool that allows you to use the code on your own server for a class, conference, or other needs.

https://libraryfreedom.org

Task-Oriented

LIBRE OFFICE

- A project of the Document Foundation
- 6 comprehensive programs
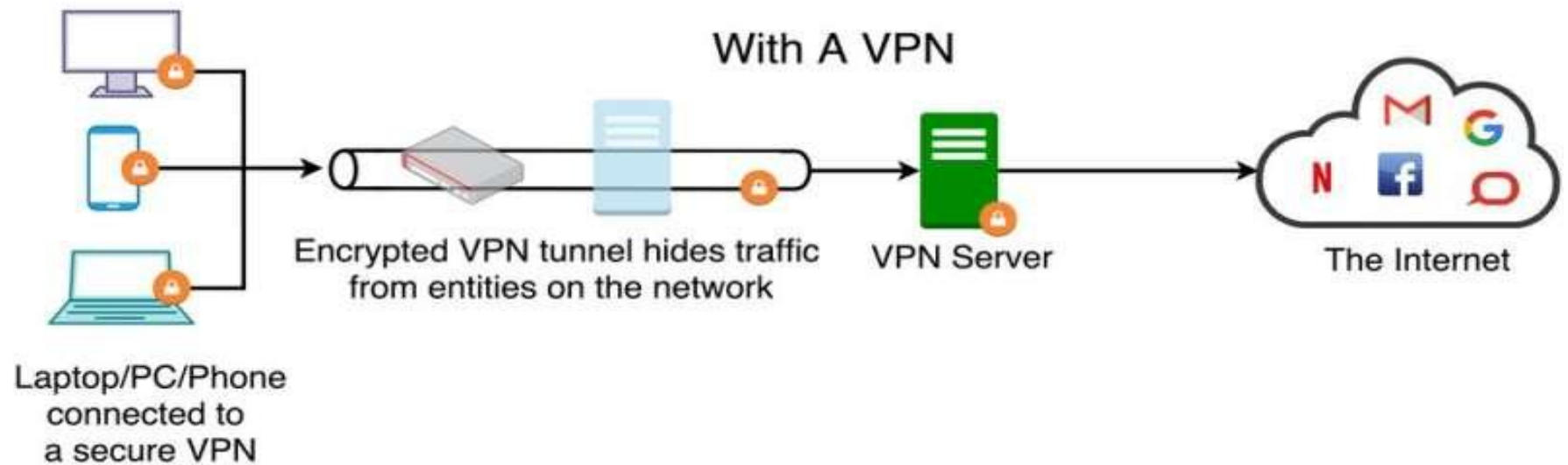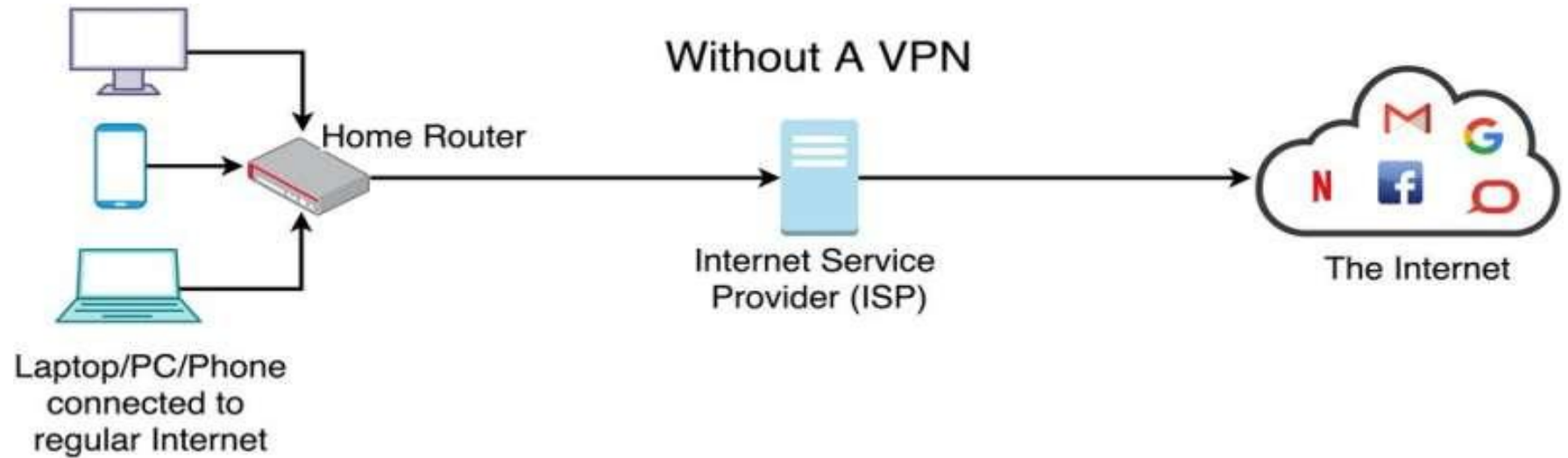- An alternative to Microsoft Office

ETHERPAD

- Created by the Etherpad Foundation
- Privacy-centric collaboration tool
- Host your own pad or use a public one

ONION SHARE

- Created by OnionShare, run through the Tor network
- A multifunction collaboration tool

VPNs

Without A VPN

Home Router

Internet Service Provider (ISP)

The Internet

Laptop/PC/Phone connected to regular Internet

With A VPN

Encrypted VPN tunnel hides traffic from entities on the network

VPN Server

The Internet

Laptop/PC/Phone connected to a secure VPN

VPNs

Private Internet Access

- Unrestricted access to worldwide servers
- Streaming + file sharing
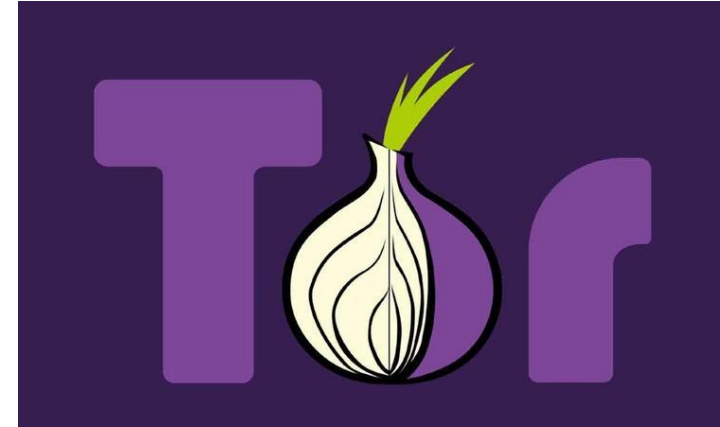- Technical experts on call for 24/7 support

Riseup VPN

- Personal VPN service for censorship circumvention, location anonymization and traffic encryption
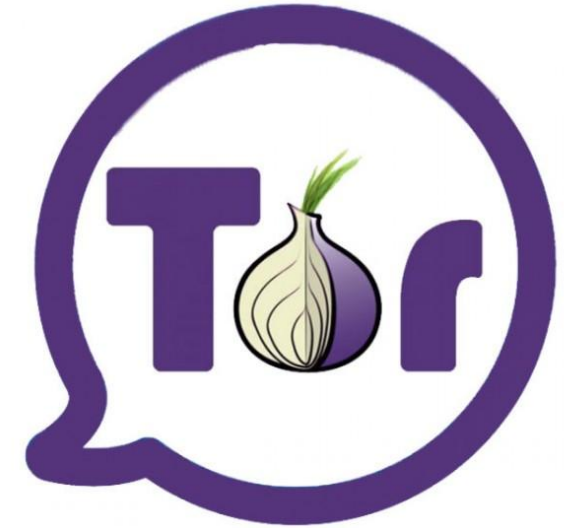- Unlike most other VPN providers, Riseup does not log your IP address

Browsers

FIREFOX

- Created by the Mozilla Foundation
- Privacy-centric web browser
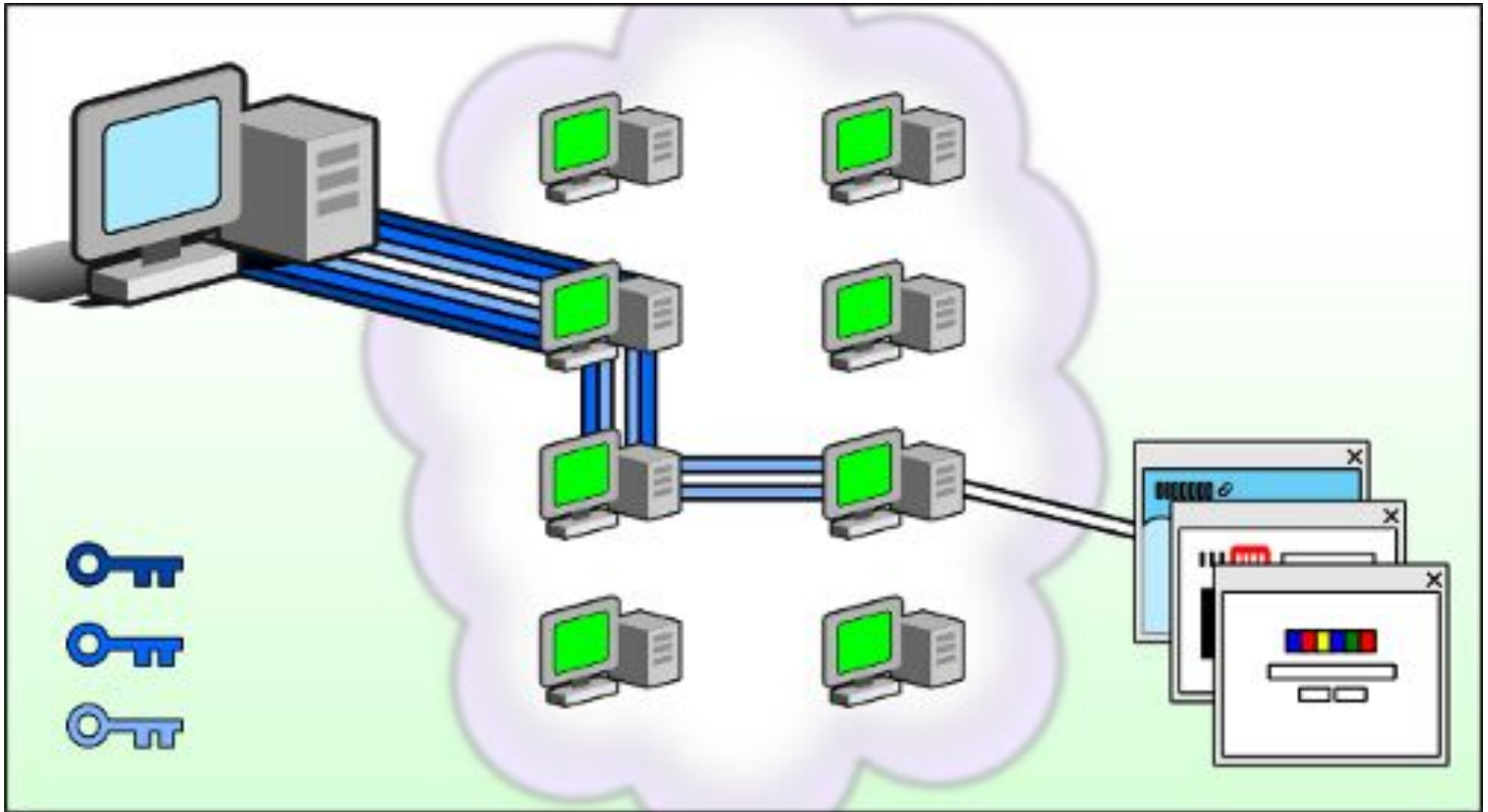- More privacy settings and doesn't track

TOR

- Created by the TOR Project
- "The Onion Router" uses multi-layered encryption to conceal user identity and activity online

The Tor Project

- Free software and an open network

- Mitigates against surveillance and censorship

- Run by US non-profit and worldwide volunteers

Why Tor?

Obscures your Real IP Address

Prevents Network Observation

Prevents Location Determination

Blocks Fingerprinting

Prevents Cross-Site Correlation
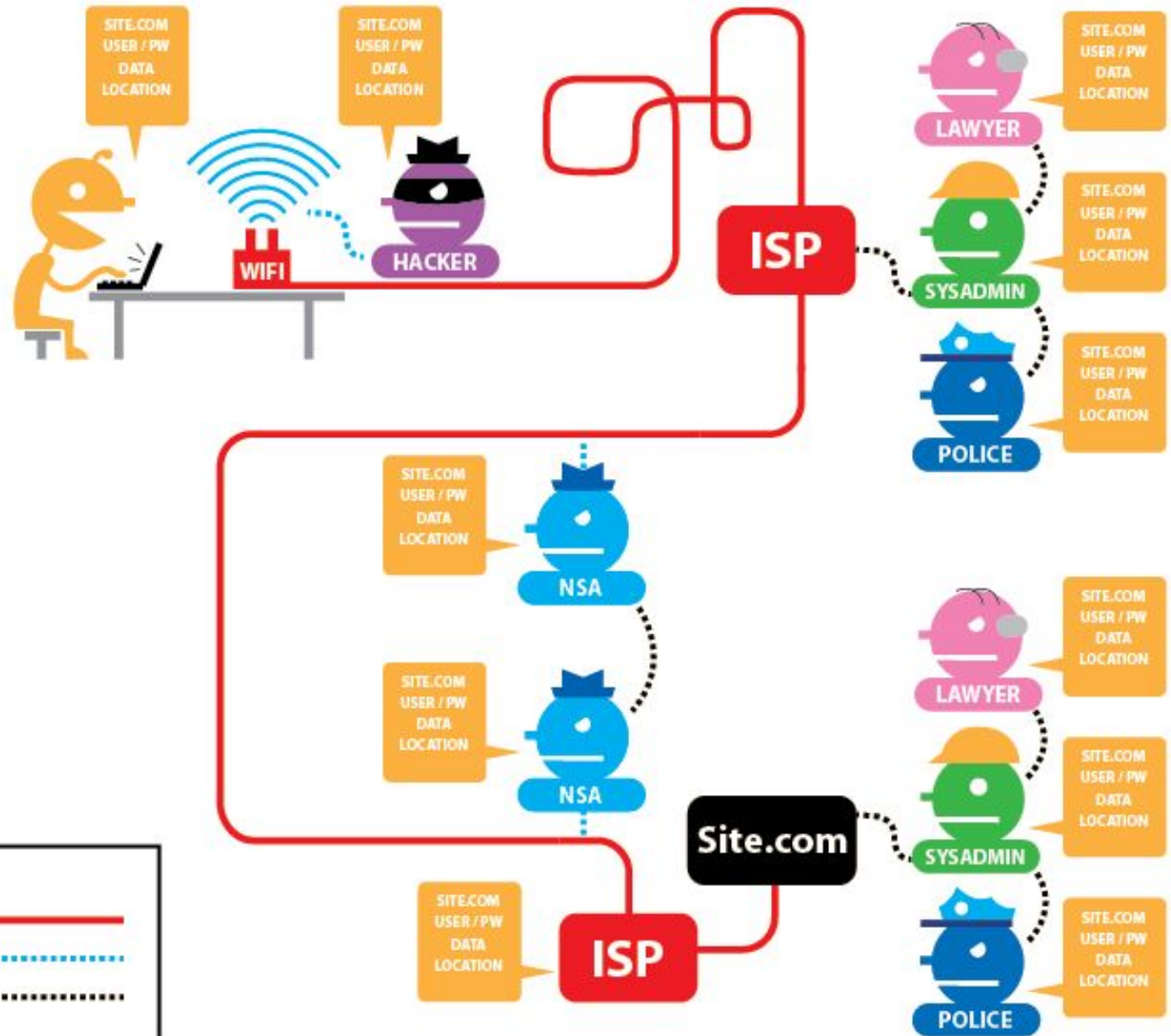
Blocks Cookies & Scripts

Writes Nothing to Disk

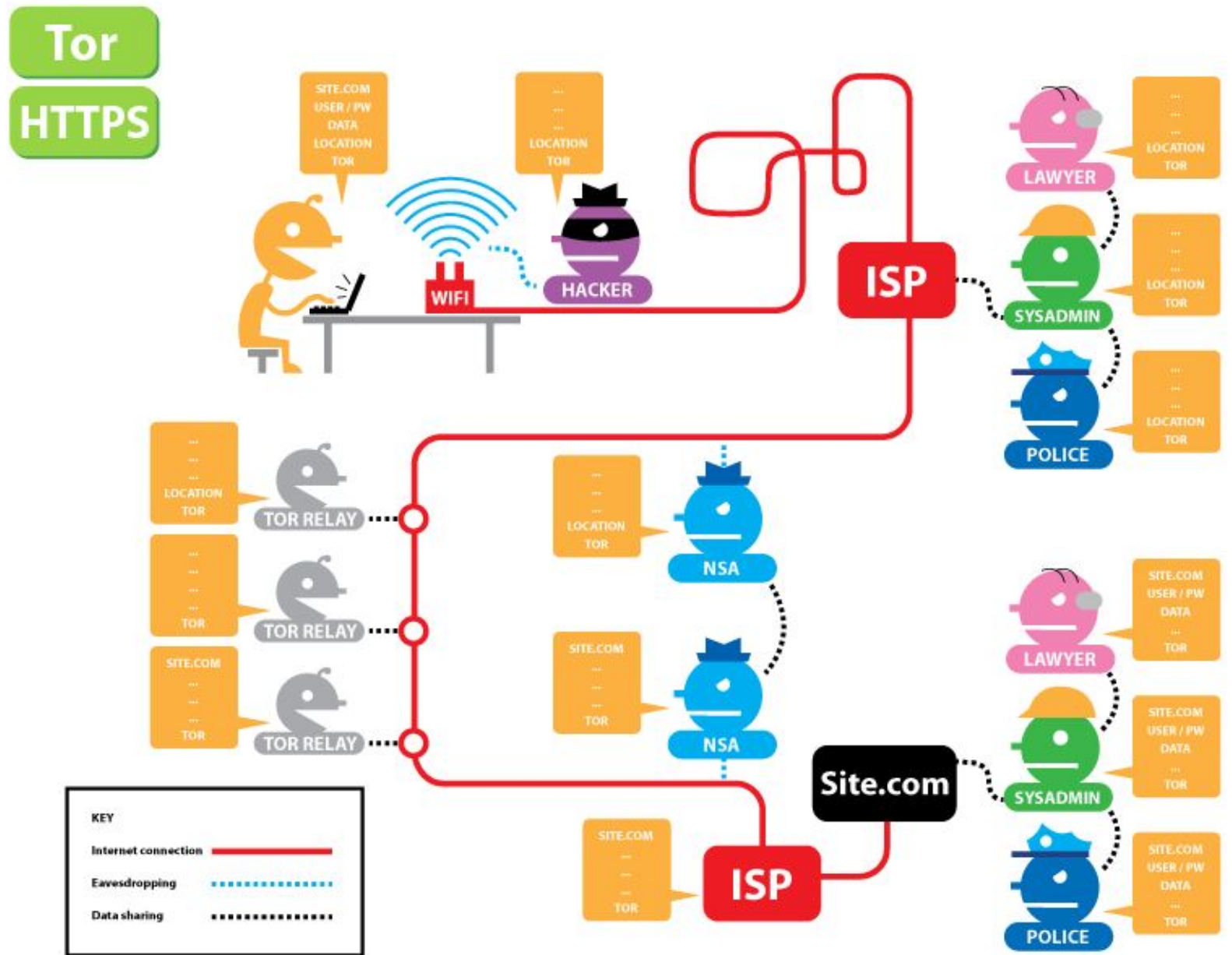**No Browser History**

Without Tor or HTTPS

With Tor or HTTPS

Help Using Tor

- Tor Browser Manual: tb-manual.torproject.org

- tor.stackexchange.com

- Mailing lists (topic specific): lists.torproject.org

- OFTC network, channel #tor

- Easy access through webchat.oftc.net

- Coming soon: support.torproject.org

Mobile Privacy

Consider...

- Why do I want a secure messenger?
- What features are important to me?
- Is there someone specific who I want to keep from seeing your messages?
- What messaging apps do my friends and contacts use?
- Do I want to avoid giving our my phone number to people with whom I would like to exchange messages?
- Does the messaging app have access to my photos, camera, contact list, or other information/tools on my device?
- Are my messages encrypted?

Mobile Tools

F-Droid

- Free Android app repository
- Warns you when permissions are not necessary

Signal

- Cross-platform
- End-to-end encrypted messaging
- Free
- Desktop app, calls, video chat, texting

Firefox Focus

- Created by the Mozilla Foundation
- Designed for use on Apple and Android smartphones

Mobile Tools

WhatsApp

- End-to-end encryption
- Owned by Facebook

Orbot (Android)
Orfox (Android)

- Routes apps through Tor
- Connects to your phone through the Tor Network
- Orfox is like a Tor Browser for Android

Onion Browser (iOS)

- Tor Browser for iOS
- Do not need Orbot
- Encrypted traffic through the Tor network
- Every search is new

App/Service	Encrypted?	Other info
Facebook Messenger	In transit only. Facebook can read your messages.	-Links your mobile device to your Facebook account and phone number -Recipients have your Facebook name instead of your phone number (*note*: check your privacy settings within Facebook to make sure your phone number isn't publicly visible)
Google Hangouts	In transit only. Google can read your messages.	-Links your mobile device to your Google account -Recipients have your Google username instead of your phone number
iMessage	Yes – if recipient also has iMessage	-Gives Apple access to phone number and contact list -If backed up to iCloud, at risk for hacking
Signal	Yes – end-to-end	-Gives Open Whisper Systems access to phone number and contacts -Can only use if recipient also has Signal on their device
SMS/text message	No	-Other info varies widely depending on device, carrier, and more
Snapchat	No	-Gives Snapchat access to phone number and contacts -Messages and photos "expire" (disappear from your and the recipient's device) after a set amount of time -Can only use if recipient also has Snapchat on their device
Whatsapp	Yes – end-to-end	-Owned by Facebook, so gives Facebook access to phone number and contacts -Can only use if recipient also has Whatsapp on their device

Password Managers

People often pick some phrase from pop culture — favorite lyrics from a song or a favorite line from a movie or book — and slightly mangle it by changing some capitalization or adding some punctuation or using the first letter of each word from this phrase. Some of these passphrases might seem good and entirely unguessable, but it's easy to underestimate the capabilities of those invested in guessing passphrases.

Imagine your adversary has taken the lyrics from every song ever written, the scripts from every movie and TV show, the text from every book ever digitized and every page on Wikipedia, in every language, and used that as a basis for their guess list. Will your passphrase still survive?

If you created your passphrase by just trying to think of a good one, there's a pretty high chance that it's not good enough to stand up against the might of a spy agency.

-The Intercept, 2015

Activity: How Secure is my Password?

How Secure Is My Password?

✅ The #1 Password Strength Tool. Trusted and used by millions.

••••••••

Your password would be cracked

Instantly

www.security.org/how-secure-is-my-password/

Password Managers

LastPass

- Tiered pricing
- Very easy to use

KeePassXC

- Open-source
- You can run KeePassXC on Windows, macOS, and Linux systems
- Free

https://libraryfreedom.org

Why passphrases?

- 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!

DO:

- Consider using a password manager (we'll talk about this!)
- 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

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
```

Activity: Diceware!

- Easy activity to create strong passwords
- Analog and digital versions available
- Practical and fun!
- (LFP alum Kelly McElroy made a zine!)

Print/Web Resources

EFF's Surveillance Self Defense

- Resources for learners and teachers
- Lots of guides available
- Applies to mobile use, computer access, and other risky scenarios

SURVEILLANCE SELF-DEFENSE

TIPS, TOOLS AND HOW-TOS FOR SAFER ONLINE COMMUNICATIONS

A PROJECT OF THE ELECTRONIC FRONTIER FOUNDATION

Tactical Tech's Data Detox Kit

- Everyday privacy tips
- Straightforward
- Step-by step approach
- Youth-focused version available

DATA DETOX KIT

Social Smarts: Nothing Personal!

- Created by The Office of the Privacy Commissioner of Canada
- 12-page graphic novel for kids aged 8-10
- Freely downloadable book and discussion guides

Library Freedom Project

- Flyers, zines, resource guides
- All freely available
- Created by LFP advocates

Safe Data Safe Families

Programming Resources

We have created four types of interactive learning materials to help children learn more about privacy and security concepts. For each option, we've created a set of downloadable materials and instructions on how to use it. We encourage you to customize the content and create programs using these materials that meet the needs of families in your community.

PASSWORD MANIA, A CARD GAME THAT HELPS YOU BUILD STRONG PASSWORDS (15 MINUTES) >

BUILD A BETTER PASSWORD WITH THESE WORKSHEETS (5 MINUTES) >

VIRTUAL ESCAPE ROOM FOR ELEMENTARY SCHOOL AGED CHILDREN (10 MINUTES) >

CHOOSE YOUR OWN ADVENTURE INTERACTIVE STORY FOR TWEENS AND YOUNG TEENS (15 MINUTES) >

COLORING PAGES WITH CONVERSATIONAL PROMPTS FOR PARENTS >

Thank you!

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