

A

FIRST

LOOK

AT

DIGITAL

SECURITY

AS OF MARCH 2019

Privacy enhancing browser extensions
 up-to-date software
 Security mindsets
 Two-Factor authentication
 Strong Passwords
 Word's Email Encryption
 Full-disk encryption
 Encrypted instant messaging
 Virtual private network (VPN) circumvention tools
 Anonymity
 Unique strong passwords
 Protection against phishing
 Digital Anonymity
 Data Protection
 Chat Security
 & voice client

This Access Now booklet was created by Kim Burton and Sage Cheng. Current authors include Michael Carbone and Floriana Pagano.



Access Now defends and extends the digital rights of users at risk around the world. By combining direct technical support, comprehensive policy engagement, global advocacy, grassroots grantmaking, and convenings such as RightsCon, we fight for human rights in the digital age.



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. To access the full legal text of this licence, please visit <https://creativecommons.org/licenses/by-nc/4.0/> You can contribute directly to the content at <https://github.com/AccessNow/A-First-Look-at-Digital-Security/>

This booklet is made to help identify what you might have to protect in your digital world. You will find each persona has characteristics and experiences you may share, threats you may face, and strategies that may be relevant to your work.

You will find this booklet useful as a gateway to examine and map out your threats online. If you want to learn more about best practices based on your own context and challenges, tools of protection and their implementation, or other advice to stay safe and secure online, learn more about the **Access Now Digital Security Helpline** at <https://www.accessnow.org/help> and contact us at help@accessnow.org, or visit the resources listed on the back of the book.

For the meanings of terms used in this booklet, you can find an explanation in this online glossary: <https://www.accessnow.org/first-look-digital-security-glossary/>



SAVANT, THE JOURNALIST

*Savant's preferred gender pronoun is she/her/hers.

WHAT NEEDS PROTECTING?

Savant is a journalist communicating with survivors of puppy mills. Savant's sources have secret information about a mill that has the chance to shut it down. Shady characters have already attempted to find out what information that is, so now Savant takes care that all of her **communications are encrypted**, and when she collaborates on an article, she uses **encrypted file sharing** options as well.

1

Sources: names, communications, and contact

2

Communication with editors

3

Time-sensitive research

4

Draft documents and articles, sometimes involving collaborators



Savant relies heavily on her phone for on-the-go communication. She constantly collaborates with others on future articles and documents. Savant is known for taking on stories that question the status quo, and she has no shortage of powerful people interested in that work.

To mitigate these risks:

Savant **encrypts emails** to sources from her laptop ensuring the confidentiality of the messages.

For chatting on a laptop or desktop, Savant uses an **encrypted instant messenger and voice client**.

She uses **encrypted texting and voice apps** on her phone to connect with sources.

Her collaboration work is done through **encrypted file sharing**.

When on shared or **untrusted wifi** (like a cafe), Savant uses a **Virtual Private Network (VPN)** to securely access the internet.

When moving through security checkpoints, she turns off her computer to ensure **full-disk encryption** is active.



WHAT NEEDS PROTECTING?

Maya is an activist and blogger who calls attention to the effect of rising ocean temperatures on coast-dwelling penguins. Not everyone agrees with Maya's work, and their **online accounts are often at risk** of hacking and **defacement**.

Recently, tensions have increased and Maya is concerned about someone stealing their devices. They have decided to **encrypt all hard drives** to better ensure the safety of their information.

1

Research and data, contained on hard drives

2

Online accounts

3

Communications with other activists



MAYA,
THE ACTIVIST

* Maya's preferred gender pronoun is they/them/their.

Carefully cultivated over years of work, Maya's online social media accounts and blog are their life. Their integrity is of the utmost importance to them, their readers, and their contacts. Important research, data, and plans are kept on Maya's hard drives, and they fear that they could fall into unfriendly hands.

To mitigate these risks:

All of their online accounts are guarded by **two-factor authentication**.

Maya keeps track of what computers have accessed their accounts, and from where, with the **security checkups** offered by Google and Facebook.

They use **privacy enhancing browser extensions** to avoid **website visitor tracking**, which may reveal some of their interests.

Maya **expands short urls** they find on social media in order to know in advance where links are going to take them.

Strong passwords are employed on all accounts: over 20 characters, all unique, with numbers and special characters. To remember and manage all these passwords, Maya uses a **Password Manager**, which they access through a passphrase generated with the **Diceware method**.

Maya ensures all of their devices have **full-disk encryption** enabled.

They **encrypt all sensitive files**, also in external media like flash drives and hard drives.

They employ **encrypted chat** to organize events and gatherings.

JULIO, THE CIVIL RIGHTS LAWYER



Julio works at a civil rights NGO. Though he does not work directly with clients, he knows his personal habits protect his co-workers and thus, the clients as well. Julio works very hard to ensure his **security hygiene** is quite good to responsibly care for his organization.



*Julio's preferred gender pronoun is he/him/his.

WHAT NEEDS PROTECTING?

1

Legal and Financial information about the organization, donors, and employees

2

Contact lists of partners and clients

3

Integrity and trust the organization has built

4

Private documents, like client statements and advocacy strategies

Julio is vulnerable during his frequent travels due to the unprotected wi-fi, connections, border checks, and multiple hotels he stays in. He has an open and helpful nature, which may make him trust too quickly. His organization is widely known for its work, and he is their public face, often being contacted by strangers for assistance or advice.

To mitigate these risks:

Julio **keeps software up-to-date**.

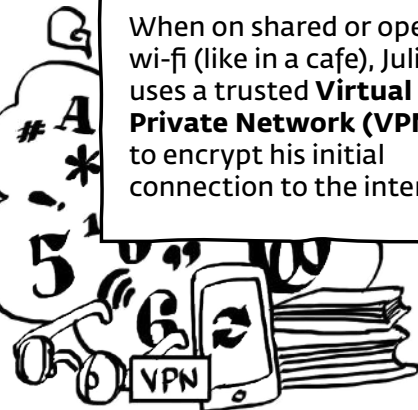
He has a **password manager** where he generates **unique, strong passwords**. To secure his password manager, he created a passphrase that is both strong and easy to remember using the **Diceware method**.

When on shared or open wi-fi (like in a cafe), Julio uses a trusted **Virtual Private Network (VPN)** to encrypt his initial connection to the internet.

When reading email, Julio **uses caution in opening unexpected links or attachments**, unless he has verified the senders' identity by calling or messaging them.

When crossing country borders, Julio turns off his computer to ensure his **full-disk encryption** is active to prevent unauthorized access to his information.

He remembers what is posted outside of work can impact the NGO's work as well. He is mindful when posting to ensure what he publishes on his personal accounts cannot be used against him or his work (he is wary of posting locations, images from private events, addresses, etc.).





JAHA, THE STUDENT

*Jaha's preferred gender pronoun is she/her/hers.

Jaha is a student in her final year of college. She is interested in being part of a movement that accepts a fly-free lifestyle, a taboo in froggy culture. Many resources on such topics are blocked by the university, and she'd face stigma and suspicion if it was a known interest of hers. Jaha needs to **stay anonymous and keep her browsing private while online.**

WHAT NEEDS PROTECTING?

1

Personal **privacy**

2

Personal control over **identity**

3

Access to free flow of information

4

Separation of **online personas**

Jaha does not want her family, or many of her social circle, to know her interests yet. She wants the freedom to explore this possible new side of herself without feeling watched and judged by others. Jaha has created a separate self online and does not want to risk public exposure until she is ready, but she still wants to access some material the university has censored.

To mitigate these risks:

Jaha employs **circumvention and anonymity tools** to obscure her identity and avoid censorship.

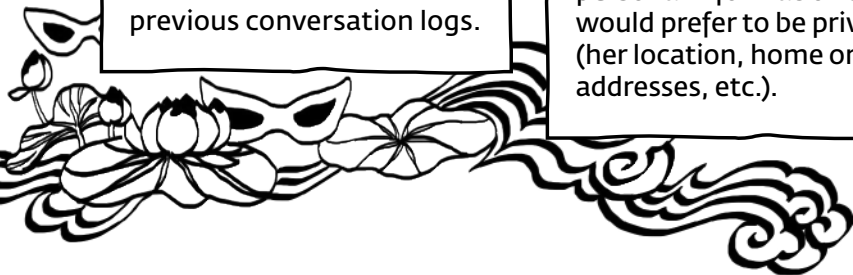
Encrypted chat lets Jaha connect with others like her.

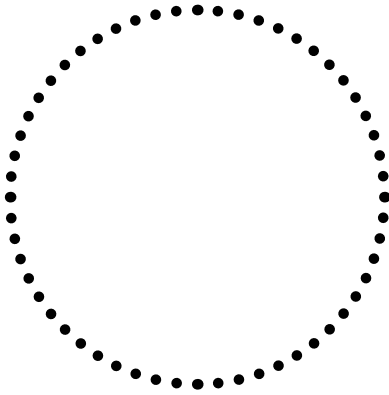
She uses a browser extension that **secures her connections** to the websites she visits.

She maintains **separate online personas** to divide her personal life from her academic life, taking special care to avoid being identifiable.

Jaha configures her chat clients and online services so that they keep **no logs of her chat history**. If this isn't possible, she **clears out her chat history** to avoid malicious access to previous conversation logs.

Jaha is particularly mindful when posting content online, to ensure that she doesn't accidentally share sensitive personal information she would prefer to be private (her location, home or work addresses, etc.).





WHAT ABOUT YOU?

Answer the questions to map out your concerns and priorities to stay safe and secure online.

Write your story...

- What do you do?
- Who do you work with?
- Would anyone want to stop you in your activities? If so, who?
- Does anyone want to know what you do? If so, who?
- Have you had any reasons to worry about your online activities or your devices?

WHAT NEEDS PROTECTING?

List your most important information and activities. Need ideas? See previous pages for inspiration.

1

2

3

4

Now consider the risks in your activities, communications, and information:

- Who has access to them?
- Who should not have access to them?
- Did you reconsider some of your risks after reading this booklet? Which risks? And in which way?

PLAN OF ACTION

List strategies and solutions you've found in this booklet or elsewhere that you want to explore more.

USEFUL LINKS

GLOSSARY

The complete and up-to-date glossary for this booklet

<https://www.accessnow.org/first-look-digital-security-glossary/>

RESOURCES TO HELP YOU IMPLEMENT PRACTICES LISTED IN THIS BOOK:

Tips, Tools and How-tos for Safer Online Communications

EFF

<https://ssd EFF.org>

Security In A Box - Digital Security Tools And Tactics

Front Line Defenders and Tactical Technology Collective

<https://securityinabox.org>

Security Planner

Citizen Lab

<https://securityplanner.org>

Current Digital Security Resources - an up-to-date list

Martin Shelton

<https://medium.com/@mshelton/current-digital-security-resources-5c88ba40ce5c#.fzk67wu3z>

WANT MORE PERSONALIZED ASSISTANCE?

The **Digital Security Helpline** is a free of charge resource for civil society around the world. It is run by the international human rights organization **Access Now** (accessnow.org).

The Helpline offers real-time, direct technical assistance and advice to activists, independent media, and civil society organizations.

Supported languages include English, Spanish, Arabic, French, Russian, German, Italian, Filipino, and Portuguese.

OUR SERVICES

- Rapid response for digital security incidents
- Personalized recommendations, instruction, and follow-up support for digital security issues
- Help assessing risks and creating organizational or community security strategies
- Guidance and educational materials on security practices and tools for organizations, communities, groups, and individuals
- Support for securing technical infrastructure, websites, and social media against attacks
- Referrals, capacity-building, in-person consultations, and training

HOW TO REACH US

 help@accessnow.org

Download our GPG public key: [hkps.pool.sks-keyservers.net](https://hkp.pool.sks-keyservers.net)
Our GPG public key ID: **0x32E8A2BC**
GPG public key fingerprint: **6CE6 221C 98EC F399 A04C**
41B8 C46B ED33 32E8 A2BC

 accessnow.org/help



**DIGITAL
SECURITY
HELPLINE**
 **accessnow**