**Updated**: February 21, 2023

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### **Internet privacy and protection**

Secure and protected use of the Internet has become an important concern. Before looking at the various 'tips and tricks' I've learned, visit the following websites to see how private and secure your 'Net browsing has been. You may be surprised to see how vulnerable you have been –

- <u>Privacy Test & Analyzer</u> See what information is exposed from your browser. Privacy.net
- <u>Test your browser</u> See how trackers view your browser. Cover Your Tracks.
- What is my IP? Quickly see your IP address and other identifying information. WhatIsMyIP.com
- <u>Look up IP Address Location</u>. Find out the location of any IP address of interest. WhatIsMyIP.com
- <u>Dynamic vs Static IP Address</u>. An explanation of the important differences between these two different types of IP addresses. WhatIsMyIP.com
- The ProtonMail guide to taking control of your online privacy. Tips on protecting your online privacy.

### **General articles**

- Are password managers safe to use in 2023? Mindaugis Jancis. CyberNews. Updated February 9, 2023.
- A 2023 Guide to Personal Digital Security & Online Safety. Aliza Vigderman. Security.Org. Updated January 23, 2023.
- 14 ways to protect your online privacy (in 2023 and beyond). Rob Githinji. PrivacySavvy. Updated January 15, 2023.
- How the West Was Won: Counterinsurgency, PSYOPS, and the Military Origins of the Internet. Dustin Broadbery. Global Research. April 10, 2022.
- <u>The Quiet Way Advertisers Are Tracking Your Browsing</u>. Matt Burgess. WIRED. February 26, 2022.
- <u>A Beginner Guide to End Big Tech Brainwashing</u>. Rain Trozzi. Dr. Trozzi. January 26, 2022.
- Securing your digital life, part one: the basics. Sean Gallagher. ArsTECHNICA. October 25, 2021.
- <u>Securing your digital life, part two</u>: The bigger picture and special circumstances. Sean Gallagher. ArsTECHNICA. October 27, 2021.
- <u>Securing your digital life, the finale</u>: <u>Debunking worthless</u> "<u>security</u>" <u>practices</u>. Sean Gallagher. ArsTECHNICA. November 17, 2021.
- Windows 11: Ars Technica review. Andrew Cunningham. Ars TECHNICA. October 5, 2021.

### **Browser privacy protection**

Browsers can track your searching history, record what you've clicked on and how long you've searched, and much more. Some of the most popular browsers do a poor job of privacy protection, and a few of the less-popular browsers do a really good job.

For 2023, Proton recommends a variety of 'best browsers for your privacy', particularly the following 'open source' browsers whose code can be publicly examined by anyone to confirm security measures –

- Mozilla Firefox
- Chromium
- Brave
- Tor Browser
- Firefox Focus
- LibreWolf

I have chosen Brave because it seems to me to offer the best privacy protection 'right out of the box'. My second choice is <u>Vivaldi</u> due to its extraordinary customization, but it suffers from relatively poor privacy protection at the present. I no longer use Firefox as I have never successfully tweaked its privacy settings to my satisfaction.

I like <u>Brave</u> particularly because it permits tweaking privacy and security settings when visiting particular websites. Rather than providing only global privacy settings for all web browsing, Brave allows you to tweak your privacy/security settings when you are visiting a particular site. Being able to block 'scripts' can allow you to see webpages that would normally be blocked by 'paywalls' or subscription requirements. This is extremely handy.

The Tor browser (based on Firefox) offers the most extraordinary privacy protection, yet it unfortunately does so with an excruciatingly slow browsing speed. I have never used Google Chrome or Microsoft Edge due to privacy concerns.

- <u>Top 10 Secure Browsers That Protect Your Privacy in 2023</u>. Sven Taylor. Restore Privacy. January 8, 2023.
- <u>Top 13 most secure browsers for your privacy in 2023</u>. Paulius Illevicius. NordVPN. January 2, 2023.
- Stop Trackers Dead: The Best Private Browsers for 2023. Michael Muchmore. PC Magazine. January 9, 2023.
- <u>The best browsers for privacy: Secure web browsing</u>. Liam Tung. ZDNet. January 3, 2023.

### **Email privacy & protection**

<u>ProtonMail</u> is widely recommended, and considered to be the 'best of the best' for email privacy and protection –

- 'end-to-end' email encryption
- does not allow third-party service providers to scan your emails for targeted advertising purposes
- blocks government and law enforcement agencies trying to subpoena access to emails
- offers tiered access levels, including a free entry-level subscription to try out the service
- updated integrated apps calendars, an encrypted 'cloud' drive, and a robust VPN service
- tools for migrating email addresses/contacts from other email services
- a prompt, friendly, and efficient Customer Service
- web-based for easy access anywhere / on any computer

There are other runners-up to ProtonMail you might consider as secondary backup email providers. There will be times when you will not want to use your main email address. Check these resources for alternatives to ProtonMail –

- Mailfence
- Tutanota

- <u>20 Most Secure Email Providers In 2023 [Private & Encrypted]</u>. Software Testing Help. Updated February 18, 2023.
- <u>Secure email providers to protect your privacy in 2023</u>. Mindaugas Jancis. Cybernews. Updated January 19, 2023.
- <u>20 most secure email providers to use in 2023</u>. Ali Qamar. PrivacySavvy. Updated January 9, 2023.

### **Sending large files securely**

Sharing large digital files privately has become a serious issue – safeguarding intellectual property and trade secrets, protecting marketing strategies, sharing highly sensitive personal and financial information.

Because most Internet service providers limit the size of files that can be sent as email attachments, many file-sharing and file-transferring services have been developed, but how do you ensure that sending that information maintains confidentiality?

ProtonDrive is the latest edition to the Proton encrypted 'ecosystem' that now includes email, calendars, contact lists, and a VPN. It allows Proton subscribers to upload digital files (in a wide variety of media formats) into a private and encrypted storage space, and then email password-protected links that permit downloading those files. This is encrypted 'cloud storage' for sharing large data and media.

### The advantages of ProtonDrive -

- comes bundled with ProtonMail paid subscriptions
- quick and easy to use
- highly secure due to encrypted data storage and passwordprotected download links
- can be used as convenient backup storage for your important computer files

There are alternatives to <u>ProtonDrive</u> for sending, sharing, or transferring large files. Check these resources –

- The Best Cloud Storage and File-Sharing Services for 2023. Michael Muchmore and Jill Duffy. PC Magazine. Updated February 3, 2023.
- <u>2023 File Transfer Best Practices: 10+ Tips to Succeed</u>. Yilmaz Dogukan Ozlu. AI Multiple. Updated January 28, 2023.
- The Best Ways to Transfer, Share or Send Large Files in 2023. Tim Keary. CompariTech. Updated January 9, 2023.
- <u>14 Best WeTransfer Alternatives to Share Large Files in 2023</u>. Bipasha Nath. GeekFlare. Updated January 2, 2023.

### **VPNs - disguise identify & location**

Like all good VPNs (Virtual Private Networks), <u>ProtonVPN</u> protects your web activity from snoops ready to steal or monetize personal information. It hides your true IP address, thus masking your identity and location, and –

- sends all Internet activity through encrypted secure tunnels and multiple servers to protect passwords and other personal data passing through their network
- masks your real location, thereby permitting access to websites that might otherwise be blocked by copyright or other reasons
- does not log or record online activity thereby making it totally impossible to share any personal information with third-parties
- allows users to pick any of its many country servers for access into its encrypted tunnel networks
- routes traffic through 1,248 encrypted servers in 55 countries

A caution: VPNs can create situations that may be of concern -

some websites will not allow access from a VPN

- VPNs can slow browsing speed, particularly if your point-ofentry into the VPN network is in a faraway country
- some of your computer software may not update fully or properly if the software provider discovers a VPN in operation
- retail websites can be troubled if your computer IP address shows in multiple country locations (Amazon.ca security algorithms often trigger to a potential security breach when shown major IP address changes (Canada one day, Russia the next)

There are lots of VPN services available, quite affordable.

Everyone should have a VPN service in their backpocket to use as needed or wished – either full time, or for selected private activities.

- The Best VPNs for Canada in 2023. Max Eddy. PC Magazine.
  Updated January 9, 2023.
- <u>5 Best VPNs for Canada in 2023 Streaming, Speed & Safety</u>. Husain Parvez. vpnMentor.
- <u>The best Canada VPN in 2023</u>. Mo Harber-Lamond. Tom's Guide. Updated January 16, 2023.