



# Central Florida Computer Society Internet Browser Settings & Security November 14, 2021

# Today's Focus

We all use one or more browsers to access the Internet. My presentation today will review the browsers that I am aware of and discuss their relative security and privacy features. Then we will focus on the Brave browser to show the many features and settings for security and privacy including the selection of Duck Duck Go as its search application and their Privacy Essentials extension.

Although designed as a presentation, this session is always available for questions as we proceed. Please use the Zoom “Raise Hand” function to be recognized. Notes are also appreciated in the Chat box. As a courtesy to others, please mute your microphone when not speaking.

# Browsers' History (Courtesy of Wikipedia)

- The first web browser, called WorldWideWeb was created in 1990 by Sir Tim Berners-Lee
- The second was Line Mode Browser for terminals in 1990.
- The oldest, still maintained browser is Lynx, started in 1992. Also designed for terminals.
- The first graphical user interface browser was Mosaic in 1993.
- Most of us will recall Netscape Navigator from 1994.
- Let's look at a full historical timeline:  
[https://en.wikipedia.org/wiki/Timeline\\_of\\_web\\_browsers](https://en.wikipedia.org/wiki/Timeline_of_web_browsers)

# Current Browsers -1

- Windows Default Browsers
  - Internet Explorer: Recommended not to use by Microsoft
  - Edge: Replacement for IE. Chromium based
- Apple Default Browser: Safari (No longer available for Windows)
- AOL Browser: Based on Internet Explorer; last updated 2006
- Chromium Based Browsers
  - Chromium: Open source browser. Not a Google product.
    - “Un-Googled” Chromium: Stripped of all features/options that might connect to Google
  - Chrome: Google’s version of Chromium
  - Edge: Microsoft changed to a Chromium based browser in 2020
  - Others: Brave, Opera, Avast Secure Browser, Vivaldi

# Current Browsers -2

- Mozilla Based Browsers
  - Firefox: Developed as free & open source browser by the Mozilla foundation. Available for Windows, Mac & Linux
  - Waterfox: Waterfox promotes greater security with removal of telemetry, data collection, & startup profiling. Available for Windows, Mac & Linux
  - LibreWolf: Primary goals are increased privacy, security and user freedom.
  - TOR Browser: Developed in support of the TOR Project; block trackers, defend against surveillance, resist browser fingerprinting.

# Privacy & Security Issues - 1

- As our “window on the Internet”, many vulnerabilities enter our computers via our browsers. All browsers can have these issues, especially when it’s the human factor involved in what we use a browser for, where we browse, and what we click on.
- Inherent in browsers published by “Big Tech” is the collection of data. Many independent publishers’ browsers promote privacy and increased security to counter this data collection.
- Once again, Wikipedia has a good summary page on such vulnerabilities: [https://en.wikipedia.org/wiki/Browser\\_security](https://en.wikipedia.org/wiki/Browser_security)

# Privacy & Security Issues - 2

- Browser Fingerprinting: A list of characteristics unique to a single user. Tracking sites can stitch all the pieces together to form a unique picture or fingerprint of your device.
- Many current browsers promote fingerprint blocking or disguise. We will demonstrate some of their settings today.
- The Electronic Frontier Foundation has a good site which describes fingerprinting (<https://coveryourtracks.eff.org/learn> ), and publishes a “Cover Your Tracks” testing online app. We will test out several browsers in our demonstrations.

# Configuring for Privacy & Security

- Let's use Brave as an example and review its settings.
  - First a little about Brave
  - Brave's settings - Demo
- Let's also focus on the search engine chosen.
  - Why not Google or Bing? Data tracking is Big \$\$\$
  - Duckduckgo & their extension
  - Start Page: A private search engine with no tracking , storing, or selling users' search history. Actually delivers Google search results anonymously.
- Test of EFF's "Cover Your Tracks" vs Brave - Demo



# Live Demos

- Time permitting, the following browsers are installed on this computer and available for a demonstration:
- Mozilla Browsers: FireFox, WaterFox, Libre Wolf, TOR
- Chromium Browsers: Ungoogled Chromium, Opera, Vivaldi, Avast Secure Browser, (Brave was demonstrated during the Settings portion of the presentation)
- Microsoft Edge
- Follow-on demonstrations may be conducted at the CFCS TechSIG meetings (4<sup>th</sup> Tuesday of the month at 7 pm EST)

# Open Q&A

A subject as large as Internet Security and Browsers can't be covered in just one presentation like this one. Lots of issues do come up. But I hope that by presenting this initial program, you'll be thinking more about what you use to access the Internet, and how you configure it.

Now it's your turn, what questions do you have for anyone attending today to respond to? Please use the Zoom function "Raise Hand" to be recognized.



Thanks for attending today!

A recording was made of today's presentation and will be available on the CFCS YouTube Channel. A link will be sent out to all who registered for today's session, along with a copy of today's presentation and a sheet with of all the links plus recommend links for further research .