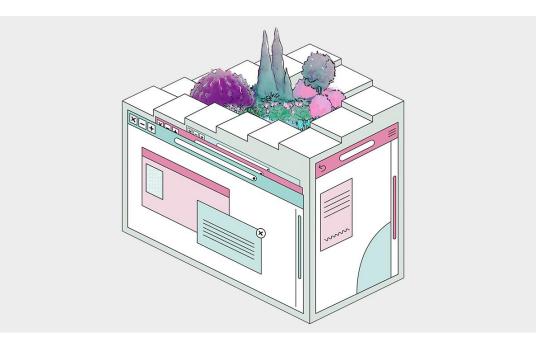
## Today's Topics

Walled Gardens Windows 10 22H2 Windows 11 22H2



## What are Walled Gardens?

A 'walled garden' describes a closed ecosystem in which a platform has a large, registered audience base, control over the content in that environment, and extensive first-party data that is used to help advertisers shape their campaigns.

Platforms such as Google, Facebook, and Amazon, are examples of 'walled gardens'.

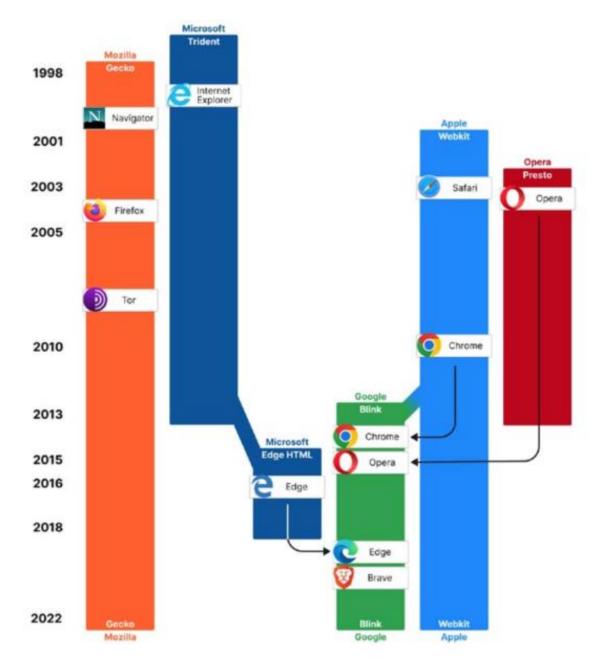
<u>Operating systems</u> (OS) are a basic necessity for the devices people use to access the internet. When the OS provider has a conflict of interest—promoting its own browser at the expense of alternatives—it negatively impacts customers who want to search or browse the internet freely.

<u>There are only three main browser engine providers left</u>: Google, Apple and Mozilla – but Apple's engine only runs on Apple devices. So, without Mozilla, the only cross-platform browser engine provided by Google. Putting the development of cross-platform web browsers in the hands of a single company creates not only a concentration of power, but also a single point of failure.

Netscape Navigator was the original consumer browser and one of the most popular startups of its time; it IPO'd in August 1995 with a market value of \$2.9 billion and millions of consumers willing to pay to browse the web. Netscape even had a competitor (Opera), but unfortunately both companies faced what would become a notorious competition problem for software apps: the powerful operating system rival.

Like any product that runs on a computer or smartphone, a browser needs an operating system to function and to reach consumers. When the dominant operating systems (Microsoft and Apple) decided to offer their own browsers bundled with every computer's operating system, the opportunities for independent browsers dwindled. The situation worsened with the development of mobile smartphones with proprietary and closed operating systems (Google and Apple), and with connected devices (Google, Apple, Amazon, Facebook) – with each operating system bundling its own browser. All of these platforms play a "dual role," being the largest operating systems alongside providing other technology

Beyond browsers, operating system bundling and self-preferencing has also extended to email clients, messaging, maps, video conferencing, music, document storage, photos and other common software.



The 3 remaining browser platforms: Mozilla, Google, Apple

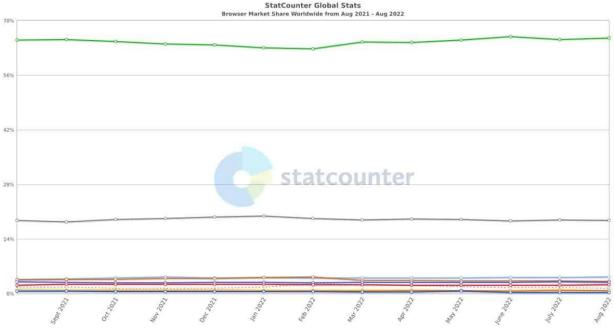
The word "browser" is a misnomer. Browsers don't just enable "browsing" the way televisions enable watching content. Browser engine technology is the most significant part of the web platform. It determines what is possible and is key for connectivity, productivity, creativity, commerce and entertainment over the internet. Millions of people spend significant portions of their working day and personal time using the internet, with the browser as the software agent helping them along the way.

Browsers and browser engines are deeply connected to internet protocols, standards and governance over key issues around cybersecurity, advertising, tracking, profiling and targeting, privacy and more. The companies behind each browser represent different viewpoints of the internet as it should be.

All five major platforms today (Google, Apple, Meta, Amazon, Microsoft) bundle their respective browsers with their operating systems and set them as the operating system default in the prime home screen or dock position. For many people, this placement is sufficient and they will not see or pursue extra steps to discover alternatives.

In the United States, 85% of adults own a smartphone. 15% of adults report being "smartphone-only" internet users, meaning they do not regularly have access to a desktop or laptop computer. Younger adults, lower income adults, and Black and Latino adults are more likely to rely on smartphones for online access. In many parts of the world, smartphone dependency for internet access is significantly higher.

Company	Browser	Operating System
Microsoft	Edge	Bundled on <b>Windows</b> computers, Xbox consoles
Apple	Safari	Bundled on Mac OS and iOS devices
Google	Chrome	Bundled on <b>Chrome OS</b> (used on Chromebook computers); <b>Android</b> (smartphones); and operating systems for other Google devices such as <b>Nest</b>
Amazon	Silk	Bundled on <b>Fire OS</b> (used on Fire TV, Echo, Fire tablet devices) <sup>73</sup>
Meta	Portal/Oculus Browser	Bundled on the operating systems for <b>Portal<sup>74</sup>,</b> <b>Oculus</b> <sup>75</sup> and other Meta products



📀 Chrome 🗢 Safari 💿 Edge 💿 Firefox 🗢 Samsung Internet 📀 Opera 🔅 UC Browser 📀 Android 📀 IE — Other (dotted)

All these numbers add up, says Mozilla, adding that Apple Safari has an 27% share in the iOS browser market, while 65% of people who have Android phones use Chrome. StatCounter's latest chart (August 2022) shows that Firefox has a measly 3.16% user base across platforms (desktop and mobile), only higher than Opera which was at 2.2%, while Edge was slightly higher with a 4.3% user base. The chart toppers were Chrome and Safari at 65.52% and 18.78% respectively. I'd suspect these numbers will change drastically after Google drops support for Manifest V2 extensions, effectively killing ad blockers, which will create a domino effect and drive users towards Firefox, Brave and Vivaldi.

Would this be any different if operating systems like Android and iOS didn't have Chrome and Safari as the default browsers? That's what Mozilla is trying to say with its report, that it is an unfair practice that harms other browser makers and the users. You can download the <u>report</u> from Mozilla's website, it's a bit of a long read, but provides some valuable insight about the issues discussed in this article.

## Supplemental Reading

The next Windows 10 feature update is coming in October (ghacks)

Windows 11 version 22H2: new and updated apps (ghacks)

What's new in iOS 16 (ghacks)