

Servo: A new web engine written in Rust

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servo 

servo 

ABOUT ME



- **Manuel Rego**
- Igalia Web Platform Team
- Web engines hacker
(Chromium & WebKit)
- CSS WG since 2017
- **Servo TSC chair since 2023**



- **Open Source Consultancy**
- 170 people, fully remote
- **Flat structure**
(cooperative-like model)
- **Top contributors** to
Chromium, WebKit, Gecko
and Servo





WHAT'S SERVO? ?



Web Browser vs Web Rendering Engine

GOSIM

- **Browser:** graphical chrome, application
(URL bar, tabs, bookmarks, history, etc.) 
- **Rendering Engine:** convert HTML + other resources
into a visual representation 



Servo is a **web rendering engine** written in **Rust**

Servo can be used to **develop a browser**



Web Browser vs Web Rendering Engine

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Chrome



Blink



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Safari



WebKit



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Firefox



Gecko

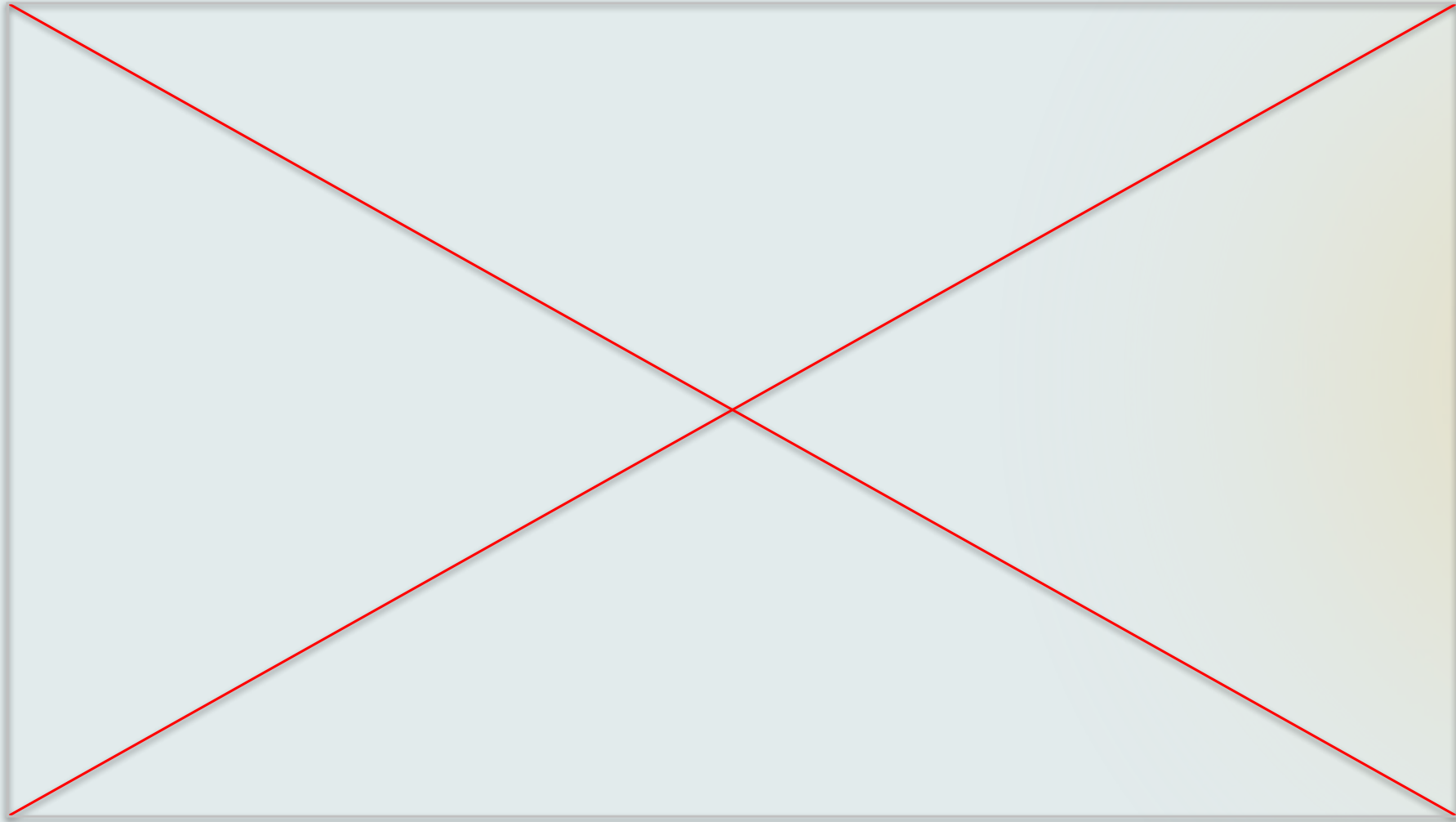
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See it in action!

GOSIM



GOSIM **HANGZHOU** 2025

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IS IT REALLY A “NEW” WEB ENGINE?



Servo's history 📜



- Started by **Mozilla** in **2012** (together with **Rust**)
- Transferred to **Linux Foundation** after layoffs in **2020**
 - **New layout engine** started in **2020**
- **Igalia** took over project maintenance in **2023**
- Joined **Linux Foundation Europe** in **2023**

Renewed project community

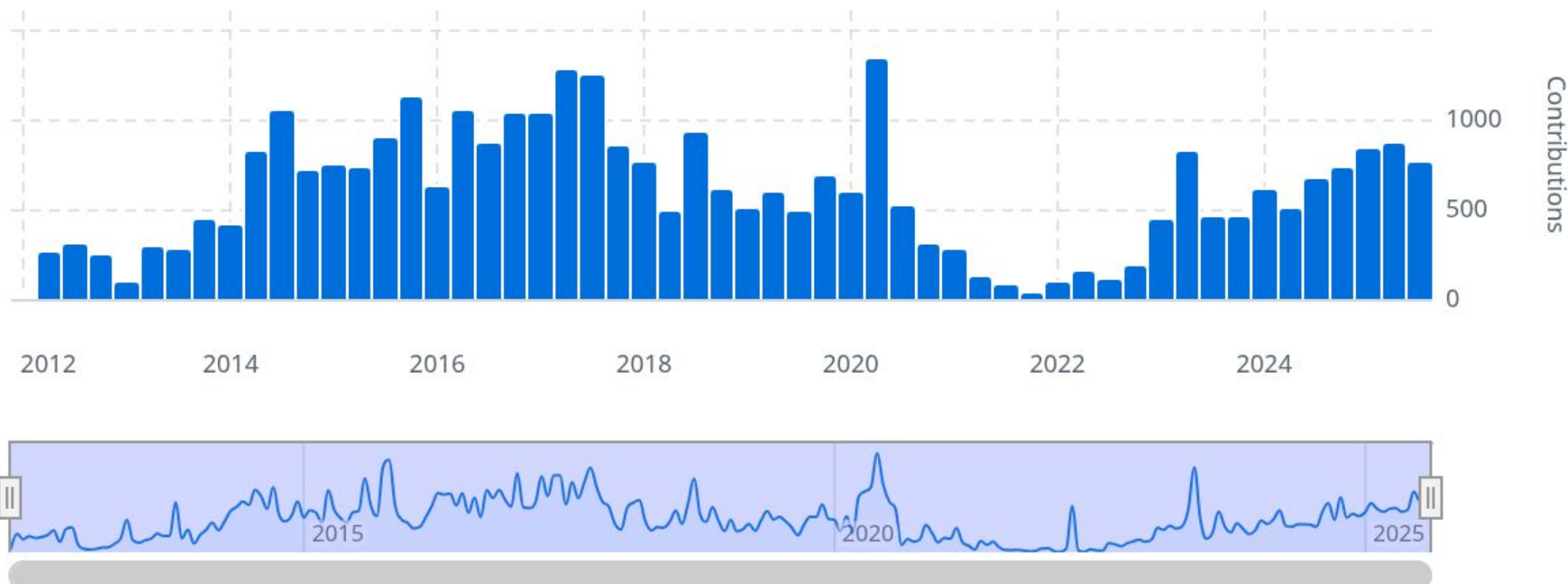


Commits stats

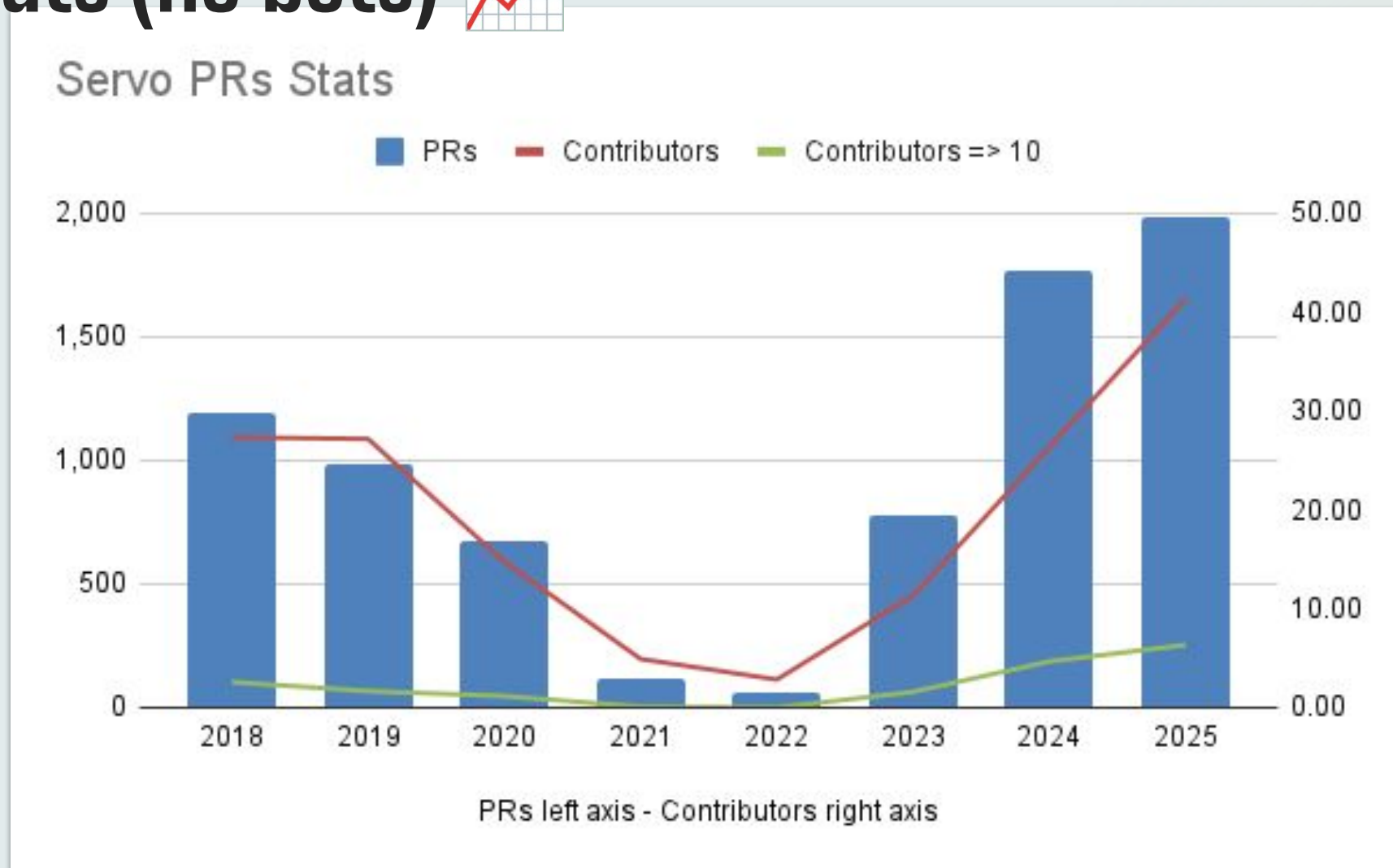


Commits over time

Weekly from 25 Mar 2012 to 31 Aug 2025



PRs stats (no bots)



WPT pass-rates

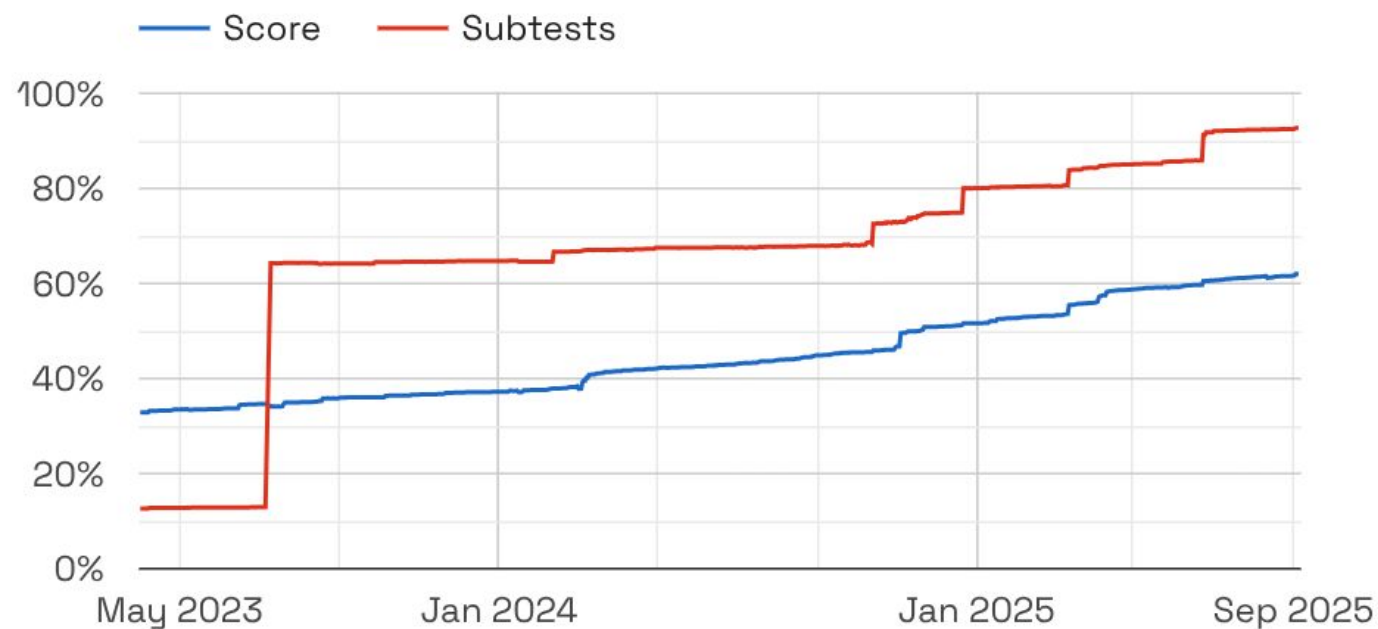
Test suite:

All WPT tests



period:

since April 2023



TEST SUITE

SCORE

SUBTESTS

All WPT tests

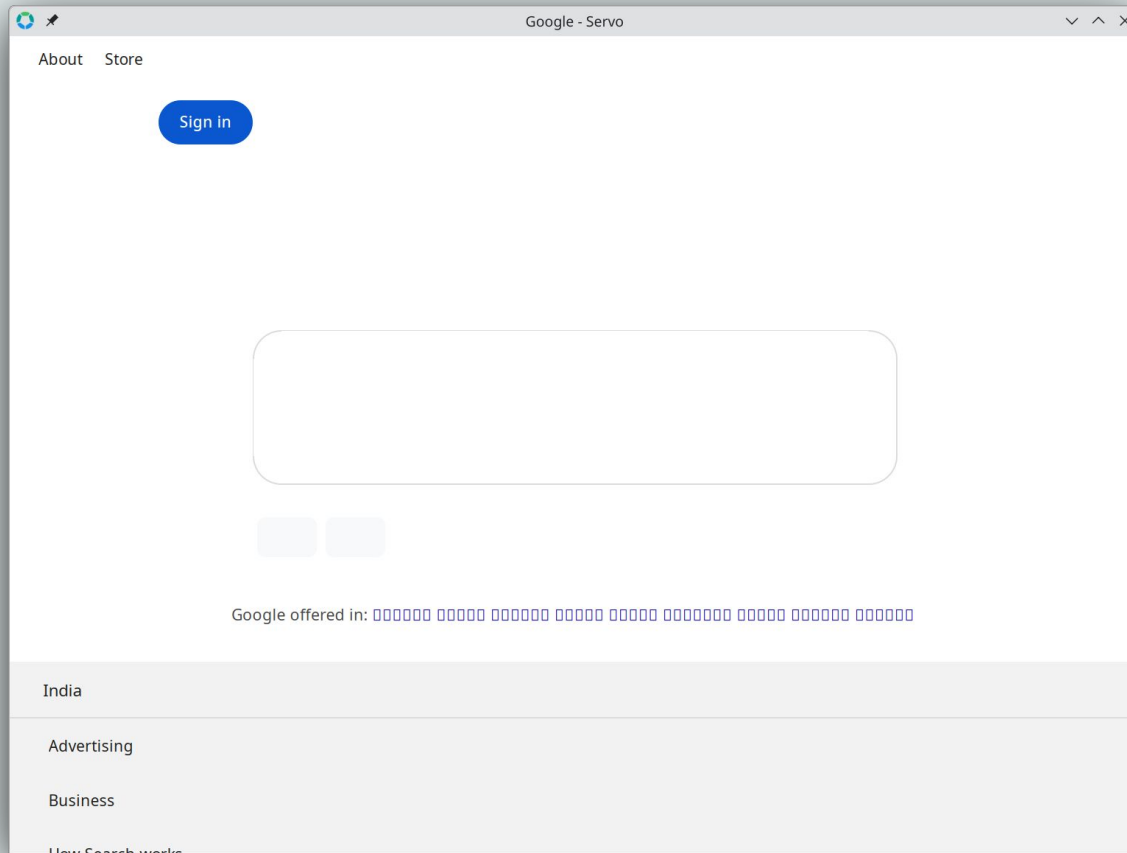
62.0%

(1,730,505/1,865,862) 92.7%

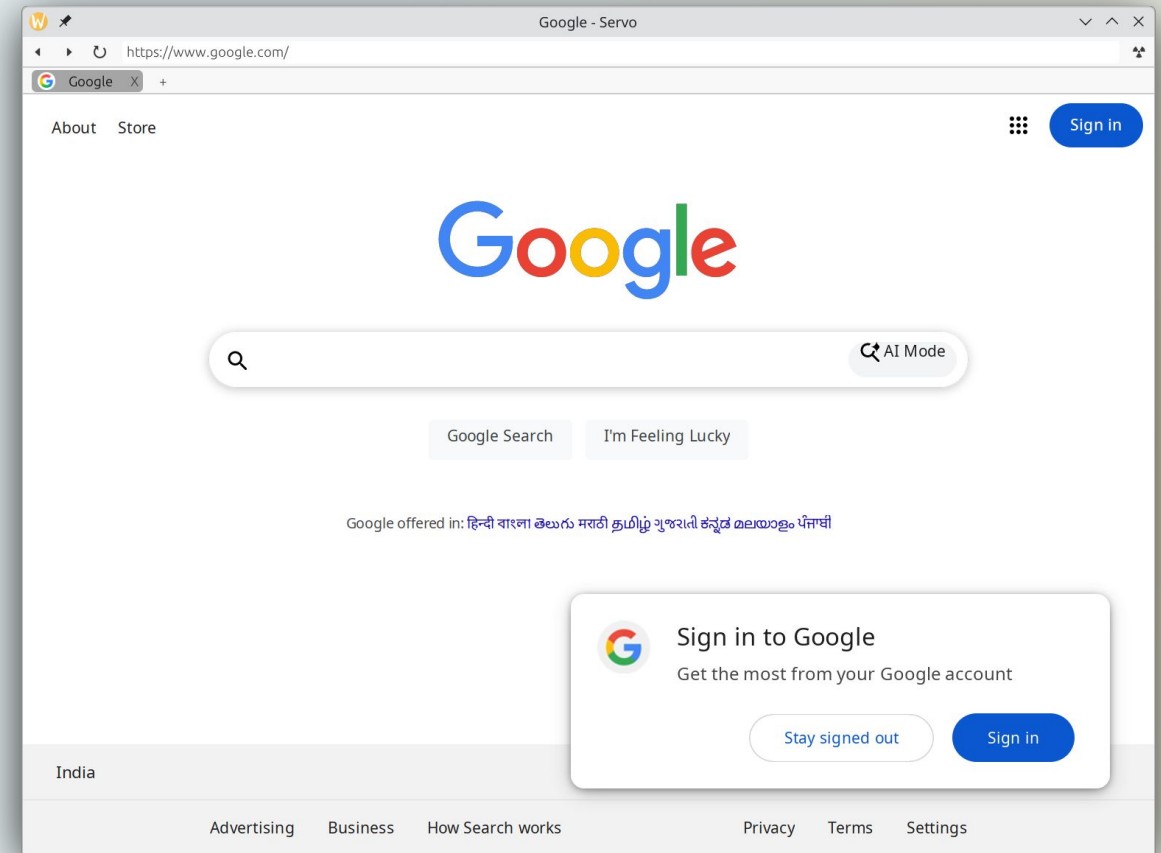


New layout engine

GOSIM



2023



2025



GOSIM HANGZHOU 2025

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WHAT MAKES SERVO SPECIAL?



- **Memory safety:** Fewer vulnerabilities (see [external audit](#))
- **Concurrency:** Faster & more energy-efficient

Only web engine written in **Rust** (vs C++)

Using **parallelism** all over the place (style, layout, etc.)

This makes Servo unique 



Independent

GOSIM

- Servo is hosted at **Linux Foundation Europe**
- Managed openly by the **TSC**
- Other engines are controlled by **big corporations**
 - **Single source of funding:** Google search deals & ads



Other features

GOSIM

- **Embeddable:** webview API (see [made with Servo](#))
- **Modular:** crates
- **Cross-platform:**
 - **Desktop:** Linux, MacOS, Windows
 - **Mobile:** Android, OpenHarmony

Android 

 OpenHarmony



WHAT'S THE PROJECT VISION?

What are we doing today?

- Transitioning from a R&D project to a **production-ready web rendering engine**
- Recent developments:
 - Incremental layout
 - WebDriver support
 - SVG support
 - DevTools improvements



Organizational updates

- **TSC limits:** Formalize Servo's status as an **independent** and **consensus-driven** project
- **Levels of collaboration:**
contributors, maintainers, TSC members, administrators

See:



<https://github.com/servo/project/tree/main/governance#readme>

Plans

- **Editability** and **interactivity** enhancements
- **CSS Grid Layout** support
- Improving **embedding API**
- Initial **accessibility** support
- More **performance improvements**

See: <https://github.com/servo/servo/wiki/Roadmap>



Long-term vision



- Leading **embeddable** web rendering engine ecosystem
- Powering **innovative applications** and frameworks
- Offering unparalleled **performance, stability** and modern **web standards compliance**



Moonshot goal: Web Browser based on Servo



HOW CAN YOU HELP? 🚒



Join the project

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- **GitHub:** github.com/servo
- **Chat:** servo.zulipchat.com
- **Email:** join@servo.org

**Looking into growing
a healthy ecosystem around the project **



Test Servo and report issues

GOSIM





- **Download:** <https://servo.org/download/>
- **Issues:** <https://github.com/servo/servo/issues>
- **Discussions:** <https://github.com/servo/servo/discussions>

**Play with Servo
and let us know your experience**



Follow us & spread the word

GOSIM

-  <https://servo.org>
-  <https://floss.social/@servo>
-  <https://bsky.app/profile/servo.org>
-  <https://www.linkedin.com/company/servo-project/>

Weekly updates, monthly blog posts, and more!



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- **Hosting costs:** self-hosted runners
- **Outreachy internships:** DevTools, CI, dialogs
- **Improve contribution experience:**
funding time from Josh Matthews



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Thank You

