

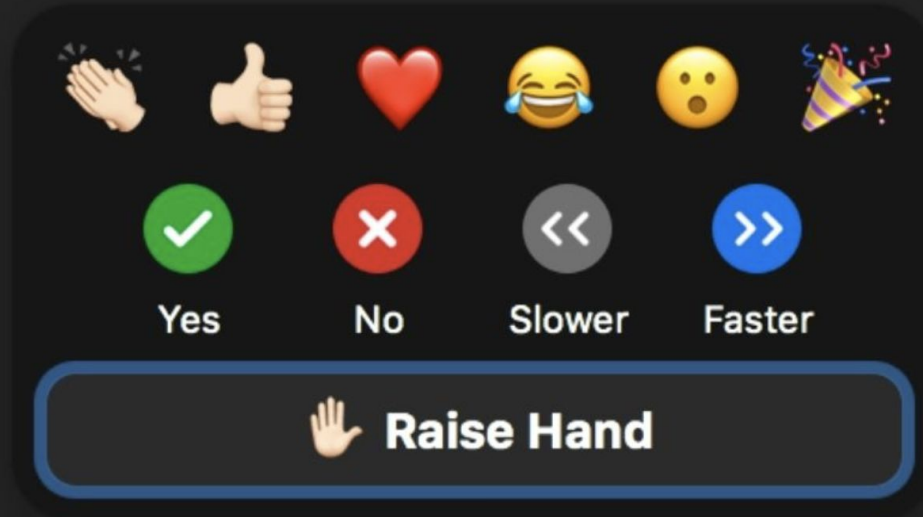
The state of browser storage partitioning

TPAC 2021 Breakout

Logistics

- Please sign-in [in the breakout doc](#)
- Queuing will be done in Zoom (next slide for instructions)
- Agenda
- Volunteer scribe(s)

Queuing to speak



A set of reaction and control icons for a meeting interface. The top row contains six icons: clapping hands, thumbs up, red heart, laughing face with tears, surprised face, and party horn. The second row contains four icons: a green circle with a white checkmark, a red circle with a white 'X', a grey circle with two white left-pointing arrows, and a blue circle with two white right-pointing arrows. Below these icons are the labels 'Yes', 'No', 'Slower', and 'Faster'. At the bottom of this section is a large, rounded rectangular button with a blue border, containing a hand-raising emoji and the text 'Raise Hand'.


Breakout Rooms


Reactions


More

W3C Code of Ethics and Professional Conduct

<https://www.w3.org/Consortium/cepc/>

3.1 Expected Behavior

Treat each other with *respect, professionalism, fairness, and sensitivity* to our many differences and strengths, including in situations of high pressure and urgency.

3.2 Unacceptable Behavior

W3C strictly prohibits *discrimination, intimidation, harassment, and bullying* of any kind and on any basis.

Group Agreements for this Workshop

- One Mic
- Take Space & Make Space
- Anything else?

Agenda

- **Overview of the Session, Introductions (5m)**
- The state of partitioning in browsers today (in alphabetical order, 20m)
 - Chrome (5 minutes)
 - Edge (5 minutes)
 - Firefox (5 minutes)
 - Safari (5 minutes)
 - (other browsers not on the agenda?)
- Discussion Items (20m)
- Wrap-up and next steps (5m)

Session today

In scope

We're here to talk about Client Side Storage Partitioning, aka “storage and communications APIs above the network stack.”

Out of scope

Literally *anything else*.

Chrome



CHROME STATUS UPDATE

miketaylr@google.com

“WORKING” PARTITIONED APIS

- ServiceWorker

"ALMOST WORKING" / IN PROGRESS APIS

- SharedWorker
- Web Storage
- IndexedDB
- CacheStorage
- FileSystem API(s)
- BroadcastChannel

TODO

- Web Locks API
- Storage Buckets

WEB PLATFORM TESTS

- ServiceWorker: passes in Chromium (when feature is enabled), passes in Safari
- localStorage: passes in Safari, passes in Firefox, currently fails in Chromium

ASPIRATIONAL MILESTONE

- Would like to have most-used cross-browser storage APIs (IndexedDB, Web Storage, ServiceWorker, CacheStorage) functional behind a flag... soon.

Edge



Firefox



State Partitioning in Firefox

Current State

- Network caches are partitioned (by top-level site)
- Cookies and most storage APIs are partitioned
 - Rolled out to Private Browsing + Strict Mode
 - Working on enabling by default
- Storage Access API + Heuristics can “unpartition” cookies and storage
- [Documentation on MDN](#)

State Partitioning in Firefox

Goals:

- Partition Remaining APIs
 - Service Workers WIP, targeting Fx96
 - Blob URLs (WIP, behind a flag)
- Ensure cross-browser compatibility
- Upstream some of our internal tests to WPT
- Always keep storage partitioned
 - (Align with Safari's current behavior)
- Longer term: more keys

Safari





thdwb

**the hotdog
web browser**

????
??

Discussion Items

1. “Storage” access + unpartitioning (non-cookie) storage
2. BroadcastChannel partitioning ([link](#))
3. Blob URLs ([link](#))
4. Cross-site ancestor chain bit ([link](#))
5. Web Extensions + Storage Partitioning

Ad hoc discussion

Please queue via Zoom.

(If we have time, we can see if we can close out any open issues).

Thanks!