

# uBlock Origin works best on Firefox

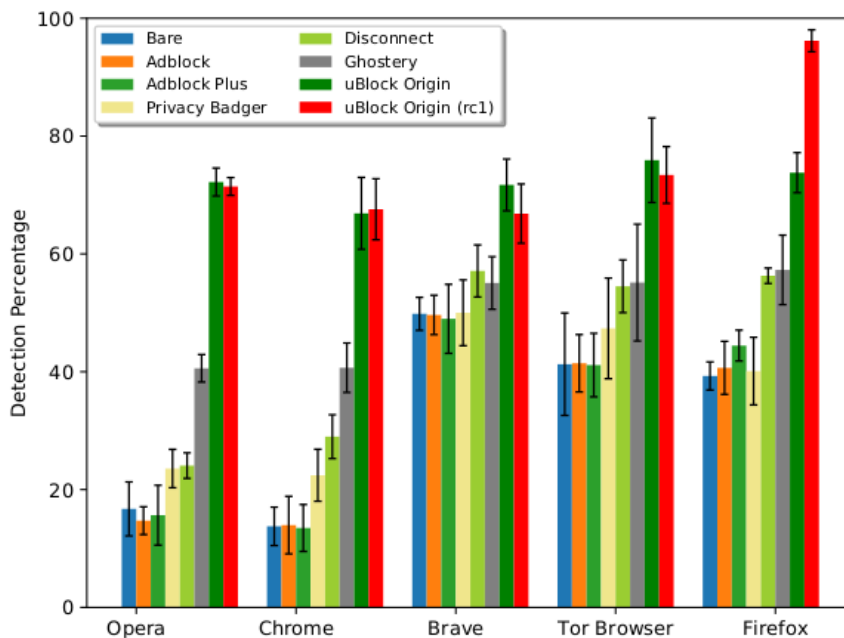
Raymond Hill edited this page on May 13 · 6 revisions

This document explains why uBO works best in Firefox.

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## CNAME-uncloaking

Ability to uncloak 3rd-party servers disguised as 1st-party through the use of [CNAME record](#). The effect of this is to make uBO on Firefox the most efficient at blocking 3rd-party trackers relative to other other browser/blocker pairs:



The dark green/red bars are uBO before/after it gained ability to uncloak CNAMEs on Firefox.

Source: *"Characterizing CNAME Cloaking-Based Tracking on the Web"* at Asia Pacific Network Information Centre, August 2020.

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## HTML filtering

[HTML filtering](#) is the ability to filter the response body of HTML documents *before* it is parsed by the browser.

For example, this allows the removal of specific tags in HTML documents before they are parsed and executed by the browser, something not possible in a reliable manner in other browsers. This feature requires the [`webRequest.filterResponseData\(\)`](#) API, currently only available in Firefox.

## Browser launch

At browser launch, Firefox will wait for uBO to be up and ready before network requests are fired from already opened tab(s).

This is not the case with Chromium-based browsers, i.e. tracker/advertisement payloads may find their way into already opened tabs before uBO is up and ready in Chromium-based browsers, while these are properly filtered in Firefox.

Reliably blocking at browser launch is especially important for whoever uses default-deny mode for 3rd-party resources and/or JavaScript.

There is an advanced setting available to tentatively mitigate this issue in Chromium-based browsers (disabled by default), see [`suspendTabsUntilReady`](#) (this setting should be left untouched in Firefox-based browsers).

## Pre-fetching

Pre-fetching, which is disabled by default in uBO, is reliably prevented in Firefox, while this is not the case in Chromium-based browsers.

Chromium-based browsers give precedence to websites over user settings when it comes to decide whether pre-fetching is disabled or not.

See [documentation for "Disable pre-fetching"](#) .

- [Filter lists](#) pane
  - [Filter lists from around the web](#)
- [My filters](#) pane
  - [Static filter syntax](#)

## WebAssembly

The Firefox version of uBO makes use of WebAssembly code for core filtering code paths. This is not the case with Chromium-based browsers because this would require an extra permission in the extension manifest which could cause friction when publishing the extension in the Chrome Web Store.

For more about this, see: <https://github.com/WebAssembly/content-security-policy/issues/7#issuecomment-441259729>.

## Storage compression

The Firefox version of uBO use LZ4 compression by default to store raw filter lists, compiled list data, and memory snapshots to disk storage.

LZ4 compression requires the use of [IndexedDB](#) , which is problematic with Chromium-based browsers in incognito mode -- where instances of [IndexedDB](#) are always reset, causing uBO to always launch inefficiently and with out of date filter lists (see [#399](#)). An [IndexedDB](#) instance is required because it supports storing [Blob](#) -based data, a capability not available to [browser.storage.local API](#).

uBlock Origin - An efficient blocker for Chromium and Firefox. Fast and lean.

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  - DOM inspector
- Element picker
- Element zapper
- Blocking mode
  - Very easy mode
  - Easy mode (default)
    - Easy mode + more privacy
    - Easy mode + enhanced security/privacy
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  - Hard

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- The removed element reappears when you reload the page
- Read carefully if using uBO/webext on legacy Firefox

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