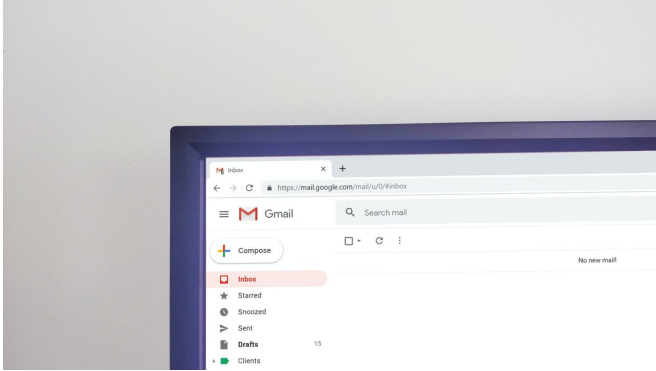


Chrome tweak stems battery drain

7 July 2020, by Peter Grad



Credit: Unsplash/CC0 Public Domain

Google's Chromium browser team has come up with a simple fix to address heavy battery drain.

The browser has long been recognized as a powerful, stable utility, but one that tends to hog resources. The impact is felt particularly by laptop users.

The Windows Club web site, devoted to Windows-related tips and tricks, was the first to detect a new feature in the recently released Chrome 86 browser that addresses the memory issue. Google is testing an option that restricts the number of Javascript 'wake-up' calls to web pages residing in the background.

Current Chrome settings allow up to one wake-up call per second.

Google researchers ran tests in which they throttled the timers so they could be accessed only once a minute.

In an experiment, they opened 36 [web pages](#) on individual tabs and tested how long it would take to drain the battery. With Chrome browsers, the batteries operated for 7 hours, while Safari browsers lasted 9.4 hours. But with throttling, Chrome browsers eked out an additional 28

percent of battery usage—1.8 additional hours of life, for a total of 8.8 hours.

In a second test, Google opened 36 browser tabs while a YouTube video played on the active tab. Limiting Javascript wake-up calls provided an additional half hour of battery life, or a 13 percent boost.

The way Chrome currently operates, constant, wasteful, memory-consuming wake-up calls would be sent to each of those 36 background tabs.

Until Google makes the upgraded feature official, users can download Chrome from the canary channel, and enter code into the address bar to test the memory saving feature. Users should type "chrome://flags" (without the quotes) and then type "[chrome://flags/#intensive-wake-up-throttling](#)". This will reschedule Javascript timers running in the background.

The feature will soon be available for all devices including mobile and desktop devices. It will work with all platforms including Windows, Android, Chrome OS, Mac and Linux.

The feature can be disabled if a user prefers the frequent timer function.

The Chromium team published a paper called "Throttling JavaScript Timers to Reduce Battery Usage in Background Tabs," in which they explained that web site developers access the timers for various analytical functions.

"We used Devtools to inspect the work done by popular sites in the background," the report states. "We found that a lot of work was done from JavaScript timers. Furthermore, we found that the work done from these JavaScript timers was often not valuable to the user when the page was backgrounded (eg checking if scroll position changed, reporting logs, analyzing interactions with ads)."

Introduced in 2008, Google Chrome now boasts a 68 percent market share of all [browser](#) users, leaving Firefox, Safari, Edge, Internet Explorer and Opera in the dust.

More information:

[docs.google.com/document/d/1sd ...
DbjiyfMkaKWEYk/edit#](https://docs.google.com/document/d/1sd...DbjiyfMkaKWEYk/edit#)

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