

# Web Updates (2018)

Speed is now a landing page factor for Google Search and Ads

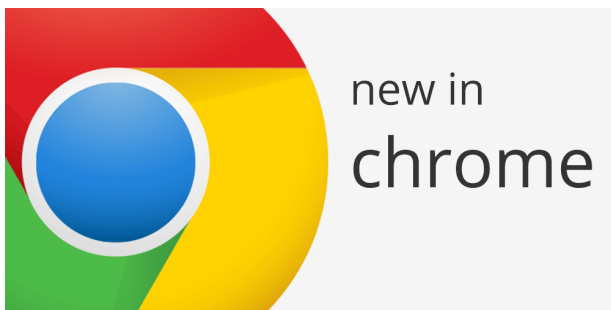


Speed is now a landing page factor for Google Search and Ads.

[Read more](#)

Tags: [performance](#)

## New in Chrome 68

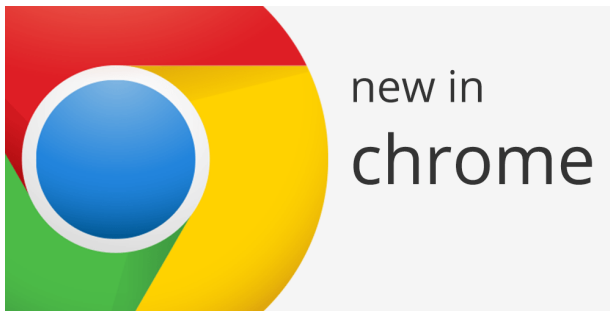


Chrome 68 brings changes to the Add to Home Screen behavior on Android, giving you more control. The page lifecycle API tells you when your tab has been suspended or restored. And the Payment Handler API makes it possible for web-based payment apps to support the Payment Request experience. Let's dive in and see what's new for developers in Chrome 68!

[Read more](#)

Tags: [chrome68](#) [new-in-chrome](#)

## Page Lifecycle API

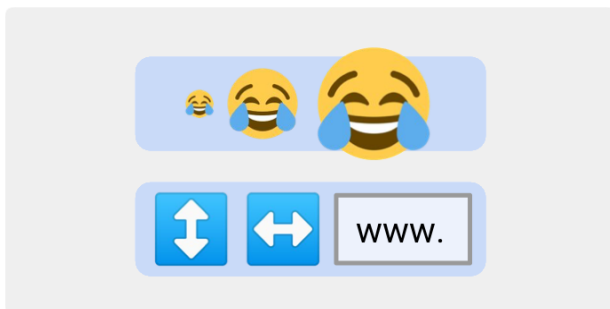


The Page Lifecycle API brings app lifecycle features common on mobile operating systems to the web. Browsers are now able to safely freeze and discard background pages to conserve resources, and developers can safely handle these interventions without affecting the user experience.

[Read more](#)

Tags: [performance](#)

## PWACompat: the Web App Manifest for all browsers

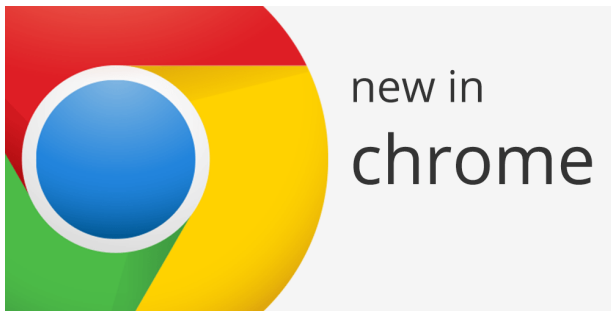


Use the PWACompat library to bring your Web App Manifest to all browsers. By simply dropping in the library, many of the `link` and `meta` meta tags required to support older browsers for icons, home screen behavior, theming etc, will be added automatically- no more steps required!

[Read more](#)

Tags: [manifest](#) [mobile](#)

## Site Isolation for web developers



Chrome 67 on desktop has a new feature called Site Isolation enabled by default. This article explains what Site Isolation is all about, why it's necessary, and why web developers should be aware of it.

[Read more](#)

Tags: [security](#).

## Experimenting with First Input Delay in the Chrome UX Report

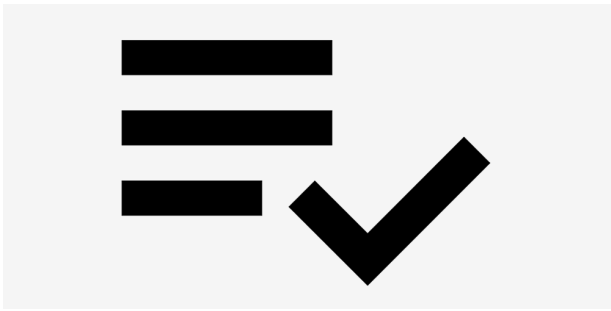


Announcing the addition of the First Input Delay (FID) experimental metric to the Chrome User Experience Report.

[Read more](#)

Tags: [ux performance](#)

## Introduction to Feature Policy

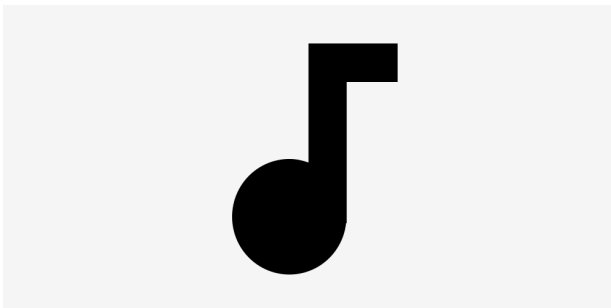


Feature Policy allows developers to selectively enable, disable, and modify the behavior of certain APIs and features in the browser. It's like CSP, but for features! Shipped in Chrome 60.

[Read more](#)

Tags: [ux](#) [chrome60](#) [feature-policy](#).

## More native echo cancellation!

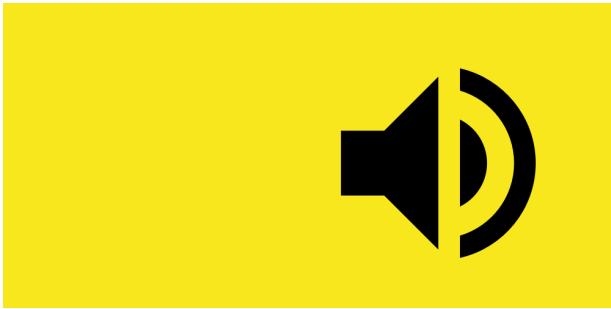


A new Origin Trial is run in Chrome M68, which adds support for more native echo cancellers, as well as a constraint to control them.

[Read more](#)

Tags: [chrome68](#) [webrtc](#) [getusermedia](#)

## AudioWorklet Design Pattern

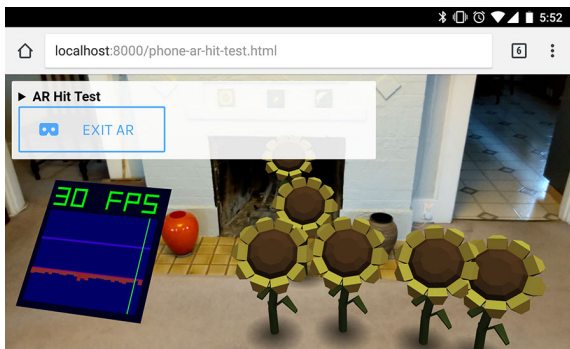


Advanced design patterns to unlock AudioWorklet's fullest power with WebAssembly and SharedArrayBuffer.

[Read more](#)

Tags: [chrome68](#) [webaudio](#) [worklet](#)

## Augmented reality for the web



Augmented reality allows placement and tracking of virtual objects in a real-world view.

[Read more](#)

Tags: [immersive-web](#) [webar](#)

## Chacmool: Augmented reality in Chrome Canary

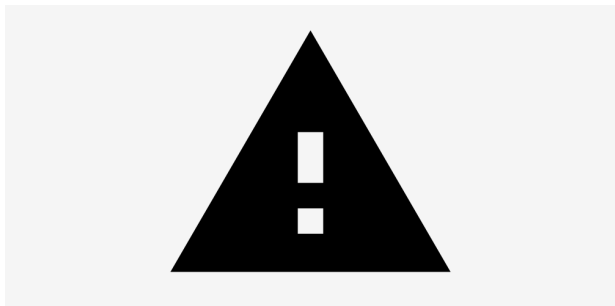


Chacmool, an educational web demo, shows how easily web based AR can build an engaging experience.

[Read more](#)

Tags: [immersive-web](#) [webar](#) [webxr](#)

## Deprecations and removals in Chrome 68

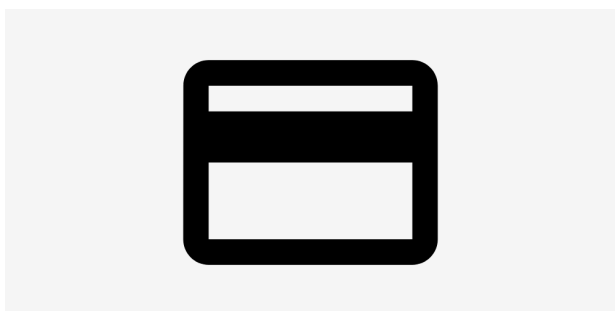


A round up of the deprecations and removals in Chrome 68 to help you plan.

[Read more](#)

Tags: [deprecations](#) [removals](#) [chrome68](#)

## Bring your payment method to the web with the Payment Handler API

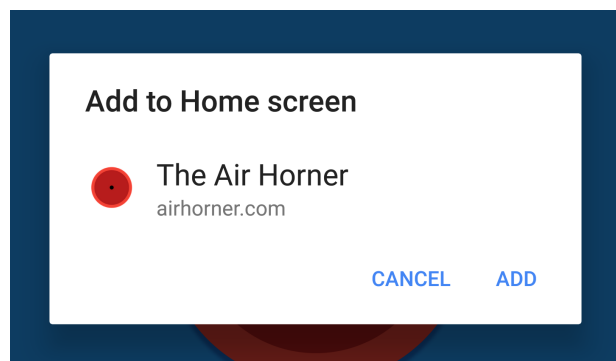


Chrome beta 68 ships with the Payment Handler API – the new, open, and standard way for web-based payment applications to be offered as a payment option during checkout. It enables merchants to accept a wide variety of payment options within a native-browser experience.

[Read more](#)

Tags: [javascript](#) [payment](#) [chrome68](#)

## Changes to Add to Home Screen Behavior

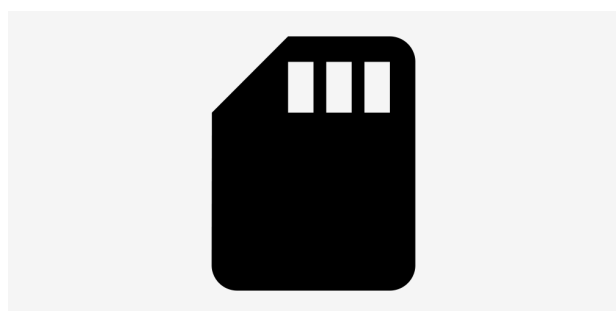


Starting in Chrome 68 on Android, the Add to Home Screen behavior is changing to give you more control over when and how to prompt the user. If your site meets the add to home screen criteria, Chrome will no longer automatically show the add to home screen banner. Instead, you'll need to call `prompt()` on the saved `beforeinstallprompt` event to show the add to home screen dialog prompt to your users

[Read more](#)

Tags: [progressive-web-apps](#) [desktop](#) [chrome68](#) [addtohomescreen](#)

## Fresher service workers, by default

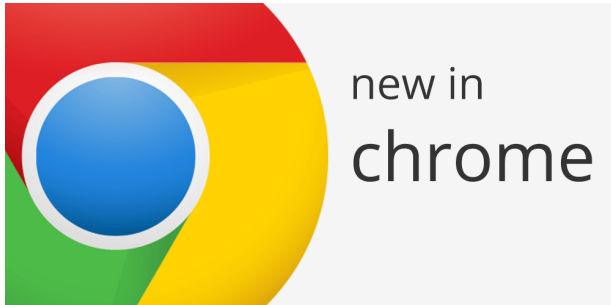


Starting in Chrome 68, HTTP requests that check for updates to the service worker script will no longer be fulfilled by the [HTTP cache](#) by default. This works around a [common developer pain point](#), in which setting an inadvertent `Cache-Control`: header on your service worker script could lead to delayed updates.

[Read more](#)

Tags: [progressive-web-apps](#) [serviceworker](#) [chrome68](#)

## New in Chrome 67



Chrome 67 brings Progressive Web Apps to the desktop. Adds support for the generic sensor API, which makes it way easier to get access to device sensors like the accelerometer, gyroscope and more. And adds support for BigInts making dealing with big integers way easier. Let's dive in and see what's new for developers in Chrome 67!

[Read more](#)

Tags: [chrome67](#) [new-in-chrome](#)

## Beyond SPAs: alternative architectures for your PWA



Building a Progressive Web App doesn't mean building a single page app! Read about alternative architectures for content-focused PWAs, and help you make the right decision for your specific use case.

[Read more](#)

Tags: [streams](#) [progressive-web-apps](#) [serviceworker](#) [app-shell](#)



## What's New In DevTools (Chrome 68)



Eager evaluation, argument hints, function autocompletion, Lighthouse 3.0, and more.

[Read more](#)

Tags: [chrome68](#) [devtools](#) [devtools-whatsnew](#)

## Enabling Strong Authentication with WebAuthn

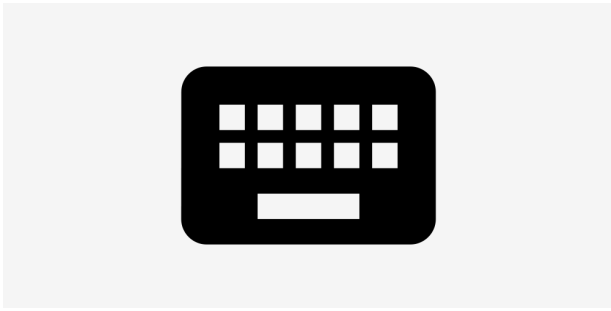


Chrome 67 beta introduces the Web Authentication (WebAuthn) API, which allows browsers to interact with and manage public-key based credentials. This enables strong authentication using removable security keys and built-in platform authenticators such as fingerprint scanners.

[Read more](#)

Tags: [webauthn](#) [credentials](#) [sign-in](#) [chrome67](#)

## First Input Delay

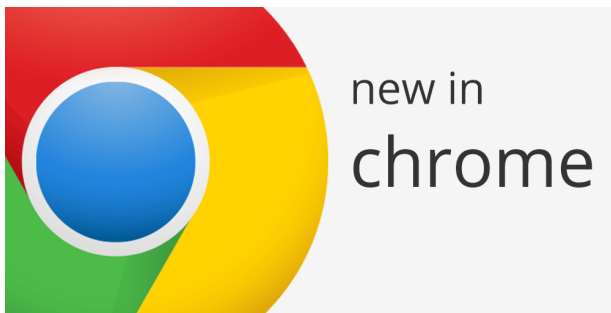


First Input Delay (FID) is a new performance metric for measuring page responsiveness for real users in the wild.

[Read more](#)

Tags: [performance](#)

## Progressive Web Apps on the Desktop



Desktop progressive web apps can be 'installed' on the users device much like native apps. They're **fast**. Feel **integrated** because they launched in the same way as other apps, and run in an **app window**, without an address bar or tabs. They're **reliable** because service workers can cache all of the assets they need to run. And they create an **engaging** experience for users.

[Read more](#)

Tags: [progressive-web-apps](#) [desktop](#) [responsive](#) [chrome67](#)

## Welcome to the immersive web



The immersive web means virtual world experiences hosted through the browser. This entire virtual reality experiences surfaced in the browser or in VR enabled headsets.

[Read more](#)

Tags: [immersive-web](#) [webvr](#) [webxr](#)

## Using Lighthouse To Improve Page Load Performance



New perf audits for preload, preconnect, GIFs, and more.

[Read more](#)

Tags: [lighthouse](#)

## Announcing Lighthouse 3.0

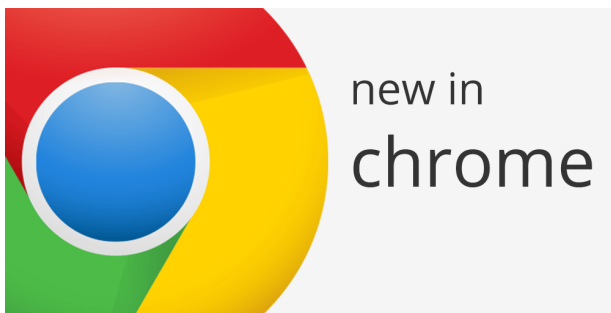


Faster audits, less variance, a new report UI, new audits, and more.

[Read more](#)

Tags: [lighthouse](#)

## BigInt: arbitrary-precision integers in JavaScript

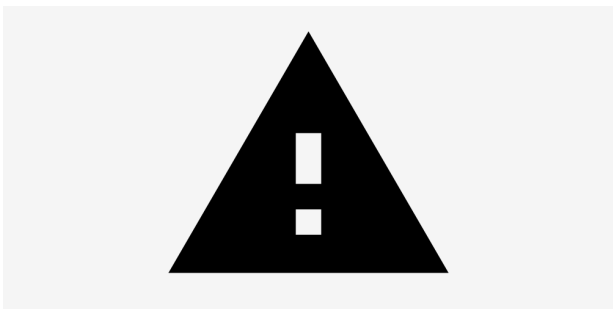


BigInts are a new numeric primitive in JavaScript that can represent integers with arbitrary precision. This article walks through some use cases and explains the new functionality in Chrome 67 by comparing BigInts to Numbers in JavaScript.

[Read more](#)

Tags: [javascript](#)

## Deprecations and removals in Chrome 67

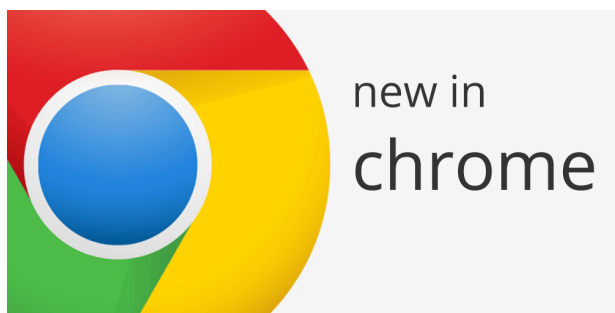


A round up of the deprecations and removals in Chrome 67 to help you plan. In this version, deprecation of public key pinning, removal of AppCache on unsecure contexts, and more prefix removals.

[Read more](#)

Tags: [deprecations](#) [removals](#) [chrome67](#)

## New in Chrome 66

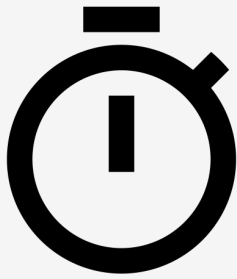


Chrome 66 makes CSS manipulation easier with the new CSS Typed Model Object, access to the clipboard is now asynchronous, there's a new rendering context for canvas elements, and a better way to process Audio using JavaScript. Let's dive in and see what's new for developers in Chrome 66!

[Read more](#)

Tags: [chrome66](#) [new-in-chrome](#) [cssom](#)

## Loading WebAssembly modules efficiently



When working with WebAssembly, you often want to download a module, compile it, instantiate it, and then use whatever it exports in JavaScript. This post explains our recommended approach for optimal efficiency.

[Read more](#)

Tags: [javascript](#) [webassembly](#)

## What's New In DevTools (Chrome 67)



Search across network headers, copy requests as fetch, audit pages using desktop conditions, and much more.

[Read more](#)

Tags: [chrome67](#) [devtools](#) [devtools-whatsnew](#)

## Present web pages to secondary attached displays



Chrome 66 allows web pages to use a secondary attached display through the Presentation API and to control its contents through the Presentation Receiver API.

[Read more](#)

Tags: [news](#) [media](#) [presentation](#)

## Working with the new CSS Typed Object Model

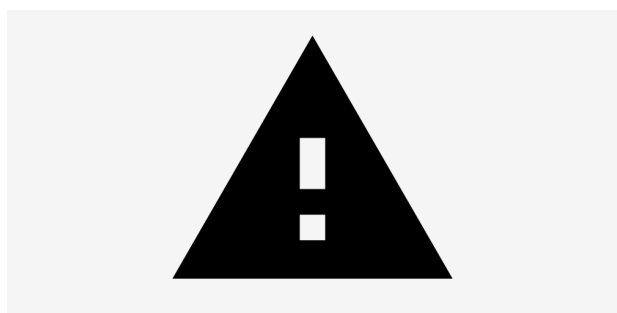


CSS Typed Object Model (Typed OM) brings types, methods, and a flexible object model to working with CSS values. Shipped in Chrome 66.

[Read more](#)

Tags: [css](#) [style](#) [cssom](#) [houdini](#) [chrome66](#)

## Deprecations and removals in Chrome 66

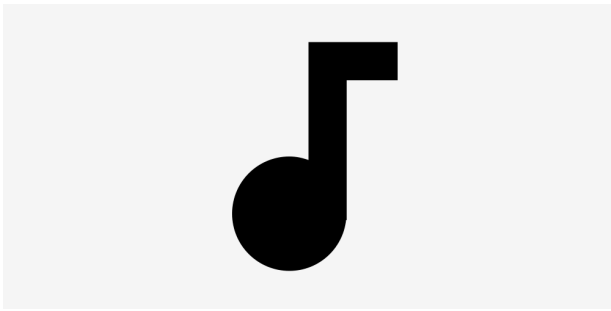


A round up of the deprecations and removals in Chrome 66 to help you plan. In this version, improved service worker security, changes to CSS position values, and more.

[Read more](#)

Tags: [deprecations](#) [removals](#) [chrome66](#)

## macOS native echo cancellation

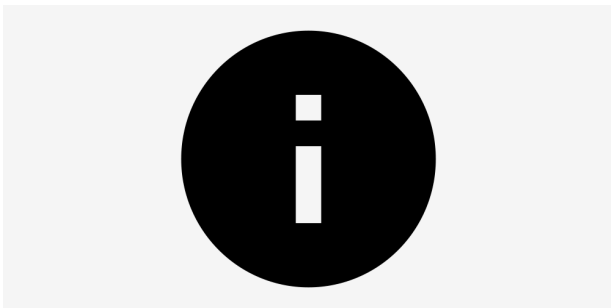


Since version 10.12 (Sierra), macOS includes a native echo canceller. Here's how you can try it out in Chrome!

[Read more](#)

Tags: [chrome66](#) [webrtc](#) [getusermedia](#)

## #SmooshGate FAQ



What can #SmooshGate teach us about standards development and the Web Platform? This write-up gives an overview.

[Read more](#)

Tags: [javascript](#)

## Credential Management API Feature Detection Check-up



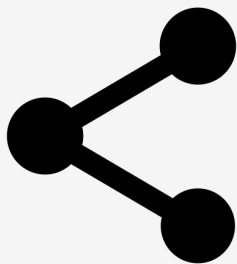


## Credential Management API Feature Detection Check-up

[Read more](#)

Tags: [credentials](#) [webauthn](#) [sign-in](#)

## Unblocking Clipboard Access

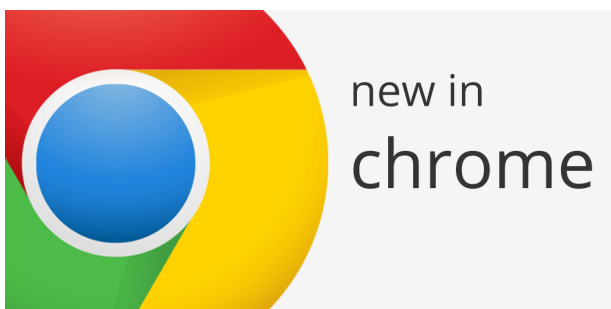


Async Clipboard API simplifies permissions-friendly copy & paste.

[Read more](#)

Tags: [cutandcopy](#) [execcommand](#) [input](#) [chrome66](#)

## New in Chrome 65



Chrome 65 adds support for the new CSS Paint API, which allows you to programmatically generate an image. You can use the Server Timing API to provide server performance timing information via HTTP headers, and the new CSS display: contents property can make boxes disappear! Let's dive in and see what's new for developers in Chrome 65!

[Read more](#)

Tags: [chrome65](#) [new-in-chrome](#) [css](#) [layout](#) [performance](#)

## Emscripten a C library to Wasm

```
int result[2];
EMSCRIPTEN_KEEPALIVE
void encode(uint8_t* img_in, int width, int height, float quality) {
    uint8_t* img_out;
    size_t size;

    size = WebPEncodeRGBA(img_in, width, height, width * 4, quality,
&img_out);

    result[0] = (int)img_out;
    result[1] = size;
}

EMSCRIPTEN_KEEPALIVE
void free_result(uint8_t* result) {
    WebPFree(result);
}
```

Wasm allows you to run C code on the web.

[Read more](#)

Tags: [webassembly](#)

## What's New In DevTools (Chrome 66)



Blackboxing in the Network panel, auto-adjust zooming in Device Mode, and more.

[Read more](#)

Tags: [chrome66](#) [devtools](#) [devtools-whatsnew](#)

## Lighthouse 2.8 Updates

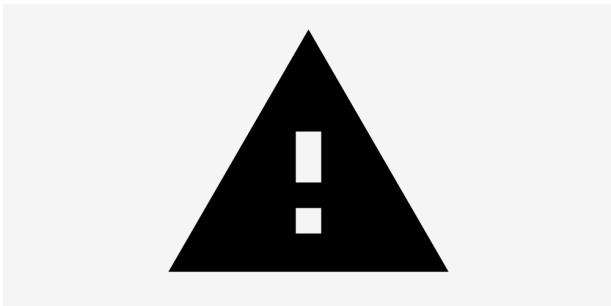


New perf and SEO audits, perf as the first section in reports, and more.

[Read more](#)

Tags: [lighthouse](#)

## Deprecations and removals in Chrome 65

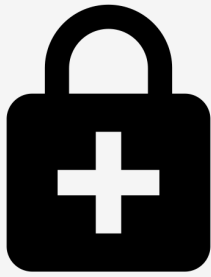


A round up of the deprecations and removals in Chrome 65 to help you plan. In this version, a reminder about Symantec certificates, cross-origin downloads are blocked, and `document.all` is now read only.

[Read more](#)

Tags: [deprecations](#) [removals](#) [chrome65](#)

## Meltdown/Spectre

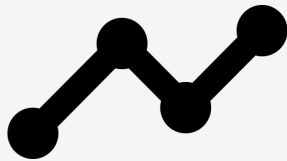


Implications for Web Developers and Chrome's mitigations.

[Read more](#)

Tags: [security](#)

## Chrome User Experience Report: New country dimension



Announcing the release of a new country dimension in the Chrome User Experience Report.

[Read more](#)

Tags: [ux](#)

## New in Chrome 64



Chrome 64 adds support for ResizeObservers, which will notify you when an element's content rectangle has changed its size. Modules can now access to host specific metadata with import.metadata The pop-up blocker gets strong and plenty more. Let's dive in and see what's new for developers in Chrome 64!

[Read more](#)

Tags: [chrome64](#) [new-in-chrome](#) [observers](#) [ux](#) [regex](#) [media](#) [modules](#) [responsive](#)

## Using DevTools Features Without Opening DevTools



Use Puppeteer to launch Chromium with DevTools features enabled.

[Read more](#)

Tags: [devtools](#)

## CSS Paint API



Houdini's CSS Paint API allows you to programmatically draw CSS images.

[Read more](#)

Tags: [css](#) [style](#) [houdini](#) [javascript](#) [chrome65](#)

## What's New In DevTools (Chrome 65)



Local Overrides, accessibility tools, performance and SEO audits, and more.

[Read more](#)

Tags: [chrome65](#) [devtools](#) [devtools-whatsnew](#)

## Lighthouse 2.7 Updates



New SEO audits and manual accessibility audits, and updates to the WebP audit.

[Read more](#)

Tags: [lighthouse](#) [accessibility](#) [images](#)



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