

# Project Fugu

Almost Three Years In...



**John Jansen**

Principal Software Engineering Manager at **Microsoft**  
@thejohnjansen



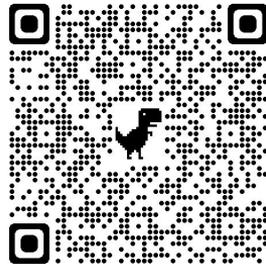
**Kenneth Rohde Christiansen**

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@kennethrohde



**Thomas Steiner**

Developer Relations Engineer, **Google**  
@tomayac



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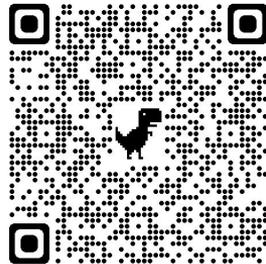
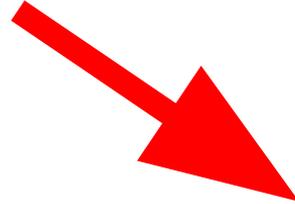
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# Chromium Blog

News and developments from the open source browser project

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## Our commitment to a more capable web

Monday, November 12, 2018

Since the [beginning of Chrome](#) we have worked to provide a solid foundation for modern web applications. Those capabilities have enabled new experiences on the web that were never thought possible. WASM is enabling new classes of games and productivity apps like Sketchup and AutoCAD, WebRTC enables new ways to communicate, and [service workers](#) allow developers to create reliably fast web experiences regardless of network conditions.





# Chromium Blog

News and developments from the open source browser project

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However, there are some capabilities, like file system access, idle detection, and more that are available to native but aren't available on the web. These missing capabilities mean some types of apps can't be delivered on the web, or are less useful. To cope, some developers build native apps, or use wrappers like Cordova or Electron to access the underlying capabilities of the device.





Arthur Stolyar

@nekrtemplar

I have no idea what Chrome's Project Fugu is, but it has some cool PWA APIs listed there and they are Priority 1 (meaning -- top priority).

To name a few:

- Notification badges
- Contacts Picker
- WakeLock API
- ... and others

Yay! 🎉🎉🎉👍

👉 [bugs.chromium.org/p/chromium/iss...](https://bugs.chromium.org/p/chromium/iss...)

4:26 AM · Oct 15, 2018 · Twitter Web App

35 Retweets 4 Quote Tweets 121 Likes



Tweet your reply

Reply



**KENNETH** 🌟 @kennethrohde · Oct 15, 2018

Replying to @nekrtemplar

Fugu is a dangerous, but delicious fish (or so I hear) - looks like a lot of nice powerful capabilities!



1

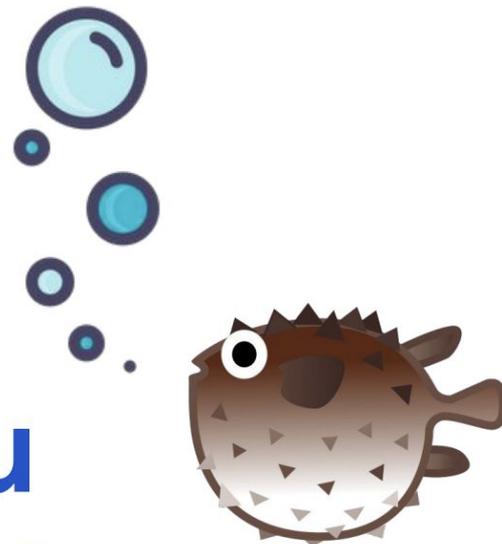


1



# PWA + Project Fugu

## Reaching parity with native



Kenneth Christiansen @kennethrohde

Web Platform Architect, Intel



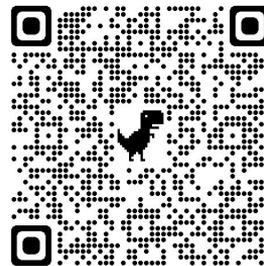
# For a More Capable Web: Project Fugu 🐡

 Thomas Steiner, Google

 Anssi Kostainen, Intel

 John Jansen, Microsoft

*TPAC 2019*  
*Fukuoka, Japan*





**THOMAS  
STEINER**

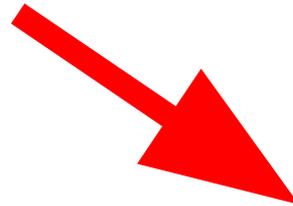
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**Developer Relations  
Engineer at Google**

@tomayac



Reset Badge



[Web technology for developers](#) > [Web APIs](#) > File System Access API► [Table of contents](#)

## Related Topics

### File System Access API

#### ▼ Interfaces

[FileSystemHandle](#)[FileSystemFileHandle](#)[FileSystemDirectoryHandle](#)[FileSystemWritableFileStream](#)

#### ▼ Methods

[window.showOpenFilePicker\(\)](#)

# File System Access API

**Secure context:** This feature is available only in [secure contexts](#) (HTTPS), in some or all [supporting browsers](#).

The File System Access API allows read, write and file management capabilities.

## Concepts and Usage

This API allows interaction with files on a user's local device, or on a user-accessible network file system. Core functionality of this API includes reading files, writing or saving files, and access to directory structure.

Most of the interaction with files and directories is accomplished through handles. A parent [FileSystemHandle](#) class helps define two child classes: [FileSystemFileHandle](#) and [FileSystemDirectoryHandle](#), for files and directories respectively.



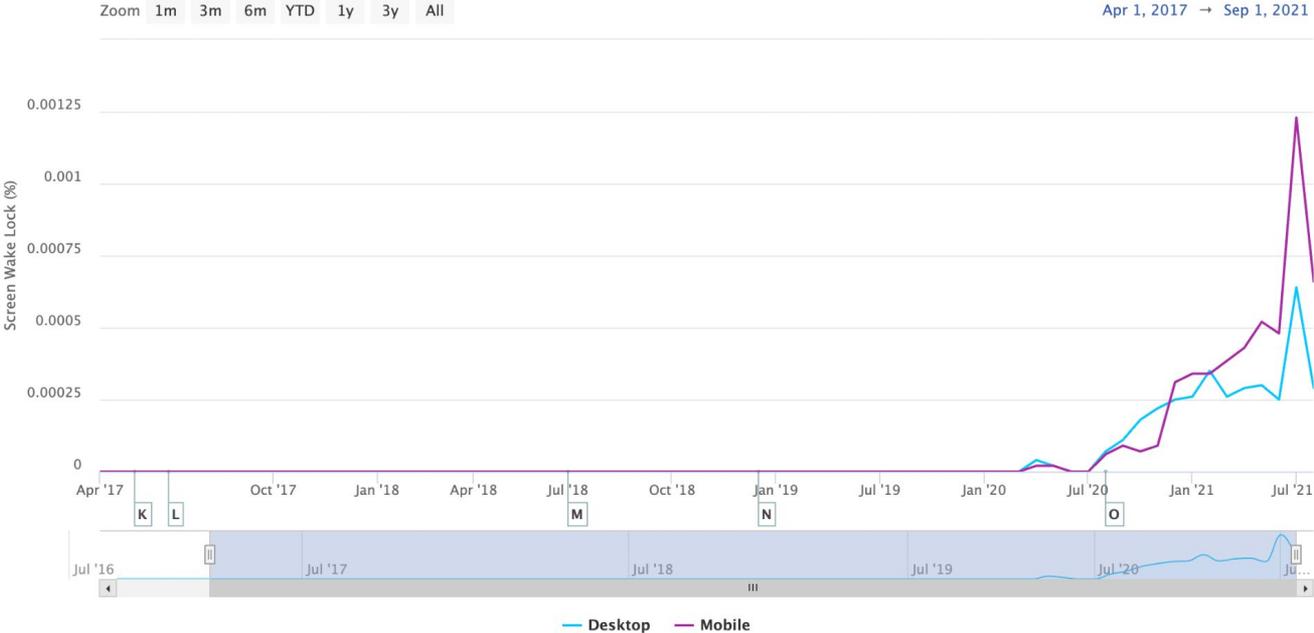
# Screen Wake Lock

This metric tracks the percentage of pages that acquire a screen wake lock via the [Screen Wake Lock API](#).

DESKTOP 0.0% MOBILE 0.0%

## Timeseries of Screen Wake Lock

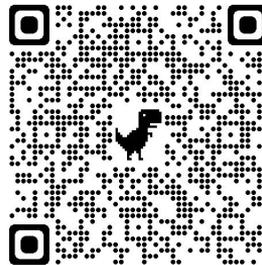
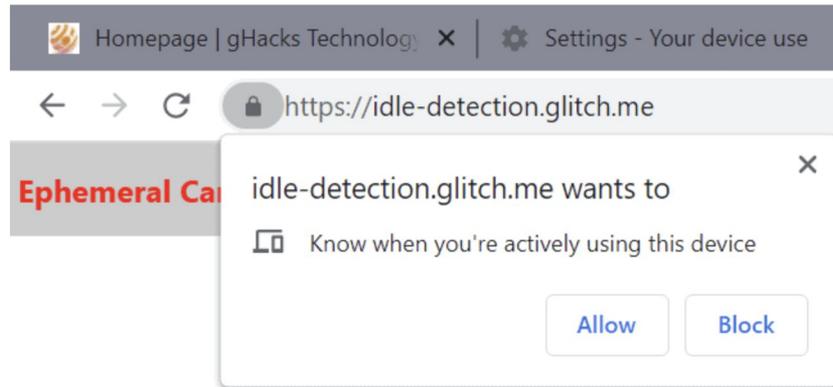
Source: <httparchive.org>



## How to block sites from requesting Idle Detection API permissions in Chrome

by Martin Brinkmann on September 27, 2021 in Google Chrome - 41 comments

Google introduced a controversial API in [Google Chrome 94](#) this month. [Called Idle Detection API](#), it allows sites to query the device to find out whether it is idle or in active use. A device enters idle state if it is not used actively for a period; the API can request the idle state of components or events, such as the keyboard, mouse or screensaver.



# Tracking Prevention in WebKit

WebKit has implemented tracking prevention technologies, spanning from 2003 with Safari 1.0 until today. Most of them are on by default. This document describes shipping behavior including Intelligent Tracking Prevention (ITP).

You can learn more about why we prevent cross-site tracking and how we handle the inherent tradeoffs by reading our [Tracking Prevention Policy](#).

## Terminology

Let's define what we mean by a few things first.

- A **registrable domain** is a website's eTLD+1 or effective top-level domain plus one label. Effective top-level domains are defined in the Public Suffix List.
- **Website or site**. A website is a registrable domain including all of its subdomains. Others define site to also include the scheme, making `http://news.example` and `https://news.example` be two different sites. For the purposes of this document, we consider `http` and `https` to be the same site, since cookies can (still) span schemes.

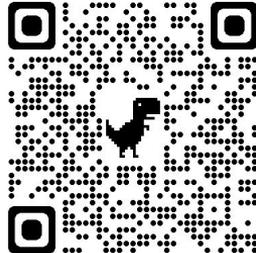
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## Contents

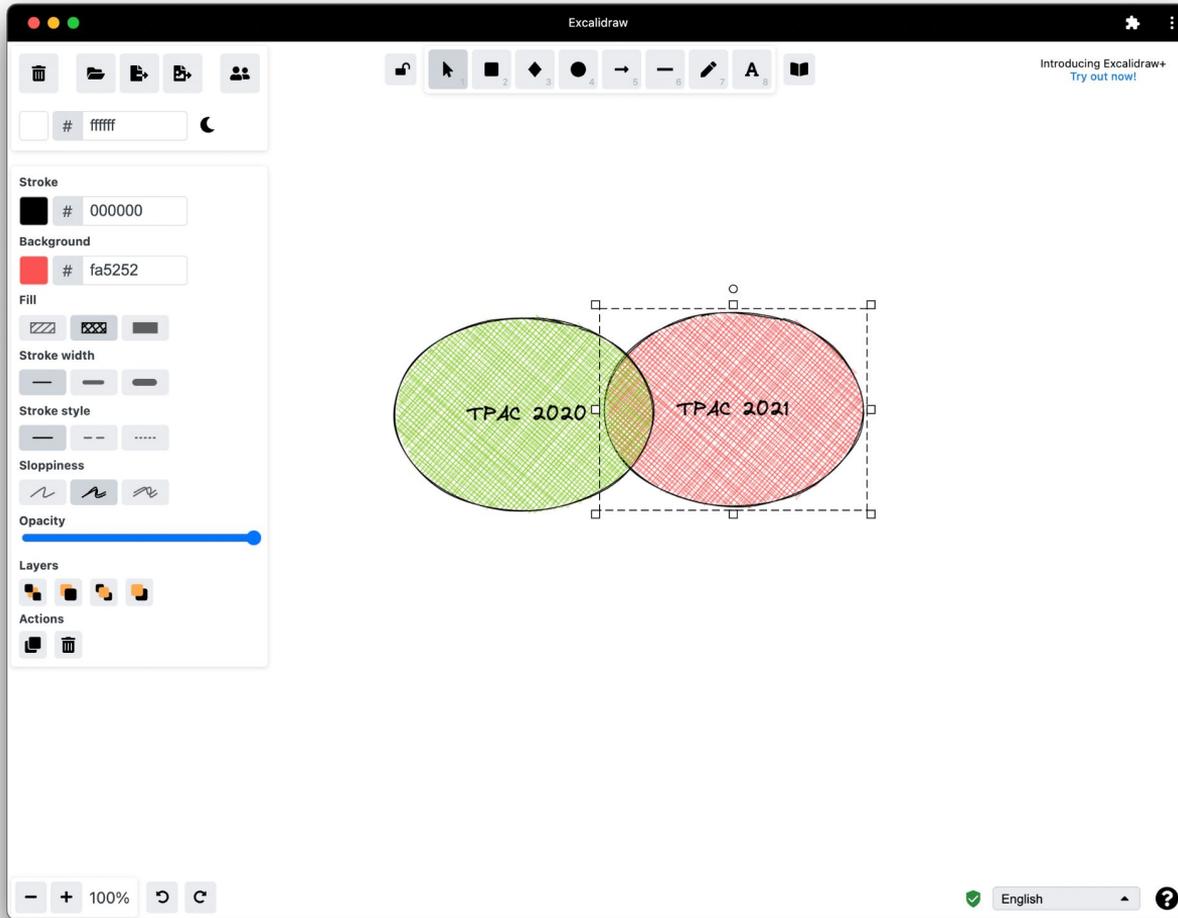
[Terminology](#)[The Default Cookie Policy](#)[Private Browsing Mode](#)[Partitioned Third-Party Storage](#)[Partitioned Service Workers](#)[Partitioned Third-Party HTTP Cache](#)[Anti Fingerprinting](#)[Intelligent Tracking Prevention \(ITP\)](#)

Finally, if we find that features and web APIs increase fingerprintability and offer no safe way to protect our users, we will not implement them until we or others have found a good way to reduce that fingerprintability. We continue to have open discussions with other browser makers through the web standards process, many of whom share these concerns. Here are some examples of features we have decided to not yet implement due to fingerprinting, security, and other concerns, and where we do not yet see a path to resolving those concerns:

- Web Bluetooth
- Web MIDI API
- Magnetometer API
- Web NFC API
- Device Memory API
- Network Information API
- Battery Status API
- Web Bluetooth Scanning
- Ambient Light Sensor
- HDCP Policy Check extension for EME
- Proximity Sensor
- WebHID
- Serial API
- Web USB
- Geolocation Sensor (background geolocation)
- User Idle Detection







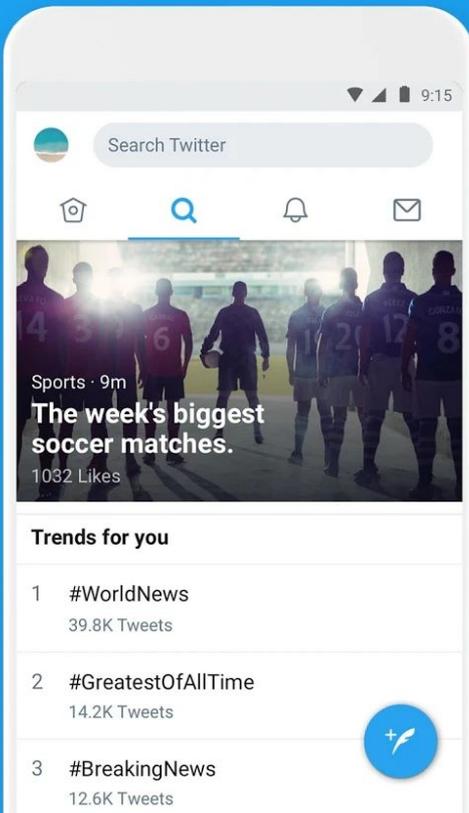
# Timeline

Stay in the know



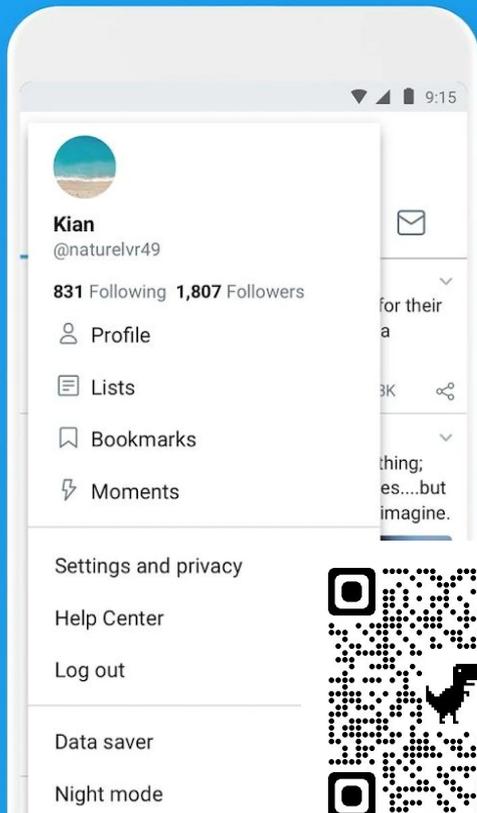
# Explore

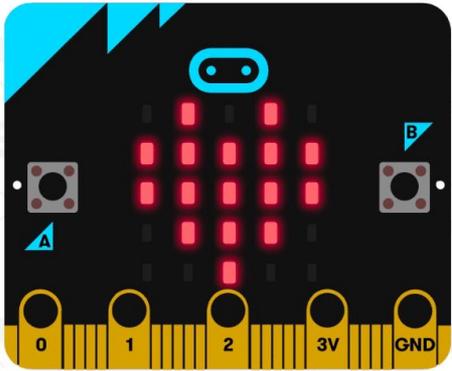
See what's happening



# Data Saver

Use less data





- Search...
- Basic
  - Input
  - Music
  - Led
  - Radio
  - Loops
  - Logic
  - Variables
  - Math
  - Advanced

on start

show icon 



 Download

heart  

Home

Premium <sup>DE</sup>

Search



Home



Explore



Subscriptions



Originals



YouTube Music



Library



History



Your videos



Your movies



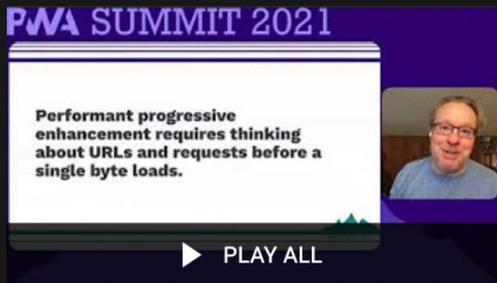
Watch later



Downloads

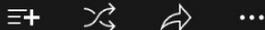


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