



webRTC
Wildcard

NEWS - CODE - EXPERIMENTATIONS - INTERVIEWS



LIVE ON TWITCH
EVERY THURSDAY
12PM CET
@WEBRTCWILDCARD

Romain Vailleux

DevRel at ApiRTC

@rvailleux



NEWS - CODE - EXPERIMENTATIONS - INTERVIEWS



**LIVE ON TWITCH
EVERY THURSDAY
12PM CET
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26.01 12PM-1PM CET

AGENDA

REAL-TIME COMMUNICATION NEWS
BRIEF

LIVECODING A FACE TRACKING
FEATURE OVER A WEBRTC VIDEO CHAT

- <https://docs.unrealengine.com/5.1/en-US/pixel-streaming-in-unreal-engine/>
- <https://www.youtube.com/watch?v=bLQM6VigTZg>

The screenshot shows the Unreal Engine 5.1 documentation website. The top navigation bar includes the Epic Games logo, 'UNREAL ENGINE', and links for 'PRODUCTS', 'SOLUTIONS', 'LEARN', and 'MORE'. A search bar and a 'DOWNLOAD' button are also present. The breadcrumb trail indicates the current location: 'Unreal Engine 5.1 Documentation > Sharing and Releasing Projects > Pixel Streaming'. The left sidebar contains a 'Filter pages...' section with expandable categories: 'Android', 'XR Development', and 'Pixel Streaming' (which is currently selected). Below the sidebar, the main content area features a large header with the Unreal Engine 5 logo and the title 'Pixel Streaming'. The header text describes the technology: 'Run your Unreal Engine application on a server in the cloud, and stream its rendered frames and audio to browsers and mobile devices over WebRTC.' Below this, there is a paragraph of text and a note about image courtesy. A 'ON THIS PAGE' sidebar on the right lists links to 'Getting Started', 'Guides', 'Reference', and 'Sample Content'.

UNREAL ENGINE

PRODUCTS SOLUTIONS LEARN MORE

Unreal Engine 5.1 Documentation > Sharing and Releasing Projects > Pixel Streaming

Search Documentation...

Filter pages...

- + Android
- + XR Development
- Pixel Streaming

Pixel Streaming Overview

Getting Started with Pixel ...

Hosting and Networking G...

Customizing the Player We...

Pixel Streaming in Editor

Experimental Pixel Streami...

Pixel Streaming Infrastruct...

Stream Tuning Guide

Interacting with the Pixel S...

Pixel Streaming Reference

Pixel Streaming

Run your Unreal Engine application on a server in the cloud, and stream its rendered frames and audio to browsers and mobile devices over WebRTC.

Images courtesy of McLaren

With Pixel Streaming, you run a packaged Unreal Engine application on a desktop PC or a server in the cloud, along with a small stack of web services that are included with the Unreal Engine. People connect using any modern Web browser on their platform of choice, whether desktop or mobile, and stream the rendered frames and audio from the Unreal Engine application. There's no need for users to install or download anything. It's just like streaming a video from YouTube or Netflix — except that users can

ON THIS PAGE

- Getting Started
- Guides
- Reference
- Sample Content

- <https://jgrulich.cz/2022/11/21/webrtc-chromium-year-end-report/>

Jan Grulich



Jan Grulich

Fedora, KDE, Qt, C++, QML

[HOME](#)[FLATPAK](#)[FEDORA](#)[KDE](#)[QT](#)[WAYLAND](#)

WebRTC (Chromium): Year End Report

21.11.2022 - jgrulich

Although Wayland screen sharing is still not yet enabled by default in Chromium, which is what I hoped to achieve this year, I think I can say we are almost there and you can expect it sooner than later. Let's summarize what we have accomplished this year to make this change happen:

Stream restoration support

You probably remember that you had to go through two portal (xdg-desktop-portal) dialogs all the time you wanted to share your screen. We had first portal dialog to have your selected screen visible in Chromium preview dialog and yet another portal dialog to make your screen shared with the web page itself. This was quite annoying as users had to make the same selection twice. Thanks to a new addition into portal API I was able to [implement stream restoration support in WebRTC](#) to bypass the second portal dialog and have your selection instantly shared with the web page itself once you confirm it in the Chromium dialog. This was released in Chromium 105.

Tests for PipeWire (streaming) code

This is not a feature that is visible to users, but it makes an important part of the whole process. It was a long effort to make this happen as it's something that is not trivial to test and needs some de-




RECENT POSTS

- [WebRTC \(Chromium\): Year end report](#)
- [WebRTC: journey to make wayland screen sharing enabled by default](#)
- [How to use libportal/libportal-qt](#)
- [DMA-BUF support in WebRTC](#)
- [HighContrast variants for Adwaita-qt](#)




ARCHIVES


- [November 2022](#)
- [February 2022](#)
- [October 2021](#)
- [August 2021](#)
- [December 2020](#)
- [November 2020](#)




- <https://github.com/Sh3B0/realtime-web>






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 main  1 branch  1 tag

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 **Sh3B0** Update README.md 1f83c92 on Nov 21, 2022 🕒 27 commits

client	Remove direct-sockets	2 months ago
videos	Mute videos	2 months ago
webrtc	WebRTC fix	2 months ago
websocket	Bug fixes	3 months ago
webtransport	Fix unreliable modes	2 months ago
.gitignore	Refactors	3 months ago
CITATION.cff	Add CITATION.cff	2 months ago
LICENSE	Create LICENSE	2 months ago
README.md	Update README.md	2 months ago
run.sh	Update run script	2 months ago


 **README.md**


realtime-web


About


Comparing WebSocket, WebRTC, and WebTransport under packet loss


[websocket](#) [webrtc](#) [webtransport](#)


 Readme

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Releases

 **v1.0.0** Latest
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Languages


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- <https://github.com/ripenaar/free-for-dev>






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[Code](#) [Pull requests](#) 4 [Security](#) [Insights](#)

 master  1 branch  0 tags

[Go to file](#) [Add file](#) [Code](#)

 ripenaar Merge pull request [#2780](#) from mark-rafter/master ✓ c46d3ff 2 days ago 🕒 4,802 commits

 .github	Revert bullet point change	last month
 CNAME	Create CNAME	4 years ago
 README.md	Merge pull request #2780 from mark-rafter/master	2 days ago
 index.html	Remove unneeded code	last month
 logo.webp	Add files via upload	last year

 **README.md**

free-for.dev

Developers and Open Source authors now have a massive amount of services offering free tiers, but it can be hard to find them all to make informed decisions.

This is a list of software (SaaS, PaaS, IaaS, etc.) and other offerings that have free tiers for developers.


The scope of this particular list is limited to things that infrastructure developers (System Administrator, DevOps Practitioners, etc.) are likely to find useful. We love all the free services out there, but it would be good to keep it on


About


A list of SaaS, PaaS and IaaS offerings that have free tiers of interest to devops and infradev


[free-for.dev/](#)

[awesome-list](#) [free-for-developers](#)

 Readme








 **65.5k** stars





 **1.6k** watching

 **7.1k** forks

Contributors

1,320

[+ 1,309 contributors](#)

Languages

https://developer.apple.com/documentation/avfoundation/capture_setup/accessing_the_camera_while_multitasking

Developer

NewsDiscoverDesignDevelopDistributeSupportAccount

Documentation / AVFoundation / Capture Setup / Accessing the camera while multitasking

Language: Swift API Changes: None

AVFoundation

Common

- Media Assets
- Media Reading and Writing
- Media Types and Utilities
- Video Settings
- Audio Settings

Playback

- Media Playback
- Streaming and AirPlay
- Offline Playback and Storage
- Sample Buffer Playback

Capture

- Capture Setup**
 - Privacy Protection
 - Requesting Authorization for Media Capture on iOS
 - Requesting Authorization for Media Capture on macOS
 - Capture Sessions
 - Setting Up a Capture Session
 - Accessing the camera while multitasking
 - AVCam: Building a Camera App
 - AVMultiCamPiP: Capturing from Multiple Cameras
 - AVCamBarcode: Detecting barcodes and faces
- AVCaptureSession

Filter

Article

Accessing the camera while multitasking

Operate the camera in Split View, Slide Over, or Picture in Picture mode.

Overview

Camera access is usually limited to apps running in full-screen mode. If your app enters a multitasking mode like Split View, the system disables the camera. Starting in iOS 16, your app can use the camera while multitasking by setting the `isMultitaskingCameraAccessEnabled` property to `true` on supported systems. Enabling this behavior also extends to Picture in Picture mode using AVKit. See [Adopting Picture in Picture for video calls](#) to learn more.

Important

Apps that have a deployment target earlier than iOS 16 require the `com.apple.developer.avfoundation.multitasking-camera-access` entitlement to use the camera in multitasking modes.

Familiarize yourself with multitasking modes

The multitasking feature provides users with the ability to work with multiple apps at the same time. Slide Over mode lets you work on an app that slides in front of any open apps. Split View mode accommodates two different apps, or two windows from the same app, by splitting the screen into resizable views. Picture in Picture mode displays a draggable window over an app. Slide Over and Split View apply to iPad only, but Picture in Picture behavior isn't exclusive to iPad.

For information about interacting with the multitasking modes, see [Use multitasking on your iPad](#).

Enable camera access while multitasking

Find these resources on

<https://apirtc.com/blog/webrtc-wildcard-episodes/face-tracking-video-chat-app/>

Livecoding

- [] Get a video app boilerplate (git clone <https://github.com/ApiRTC/webrtc-wildcard-livecoding>)
- [] Understand trackingjs lib --> <https://trackingjs.com>
- [] Track faces and display a rectangle around the face --> See the demo here: <https://github.com/ApiRTC/webrtc-wildcard-livecoding/tree/master/apirtc-js-trackingjs-demo>