

Real-time стриминг IP-камер в разных форматах средствами open source

github.com/AlexxIT

 **go2rtc** Public 

Ultimate camera streaming application with support RTSP, RTMP, HTTP-FLV, WebRTC, MSE, HLS, MP4, MJPEG, HomeKit, FFmpeg, etc.

 Go  2.3k  224

 **SonoffLAN** Public 


Control Sonoff Devices with eWeLink (original) firmware over LAN and/or Cloud from Home Assistant

 Python  2.3k  374

 **XiaomiGateway3** Public 

Control Zigbee, BLE and Mesh devices from Home Assistant with Xiaomi Gateway 3 on original firmware

 Python  2.1k  310

 **WebRTC** Public 

Home Assistant custom component for real-time viewing of almost any camera stream using WebRTC and other technologies.

 JavaScript  1.1k  127

 **YandexStation** Public 

Управление Яндекс.Станцией и другими колонками с Алисой из Home Assistant

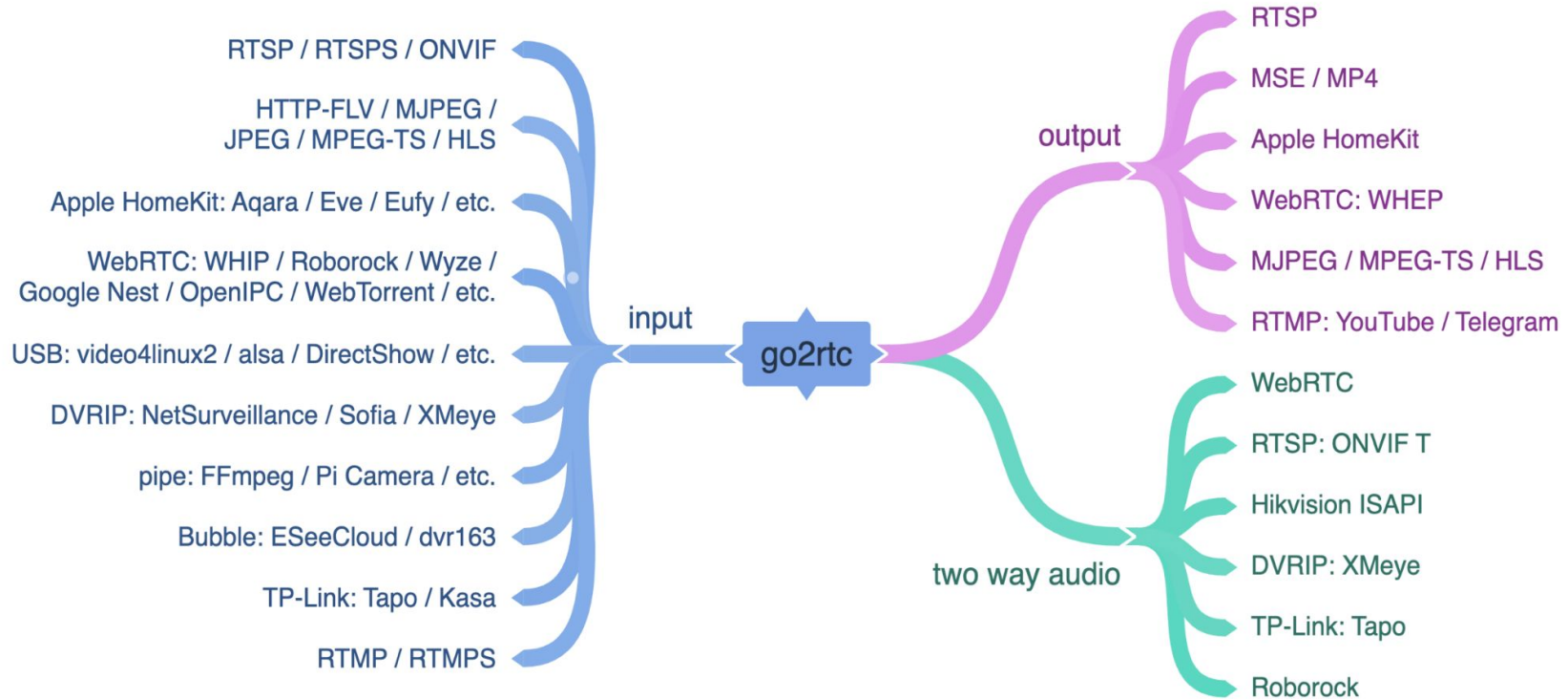
 Python  1.1k  109

 **HassWP** Public 

Portable version of Home Assistant for Windows (no need to install)

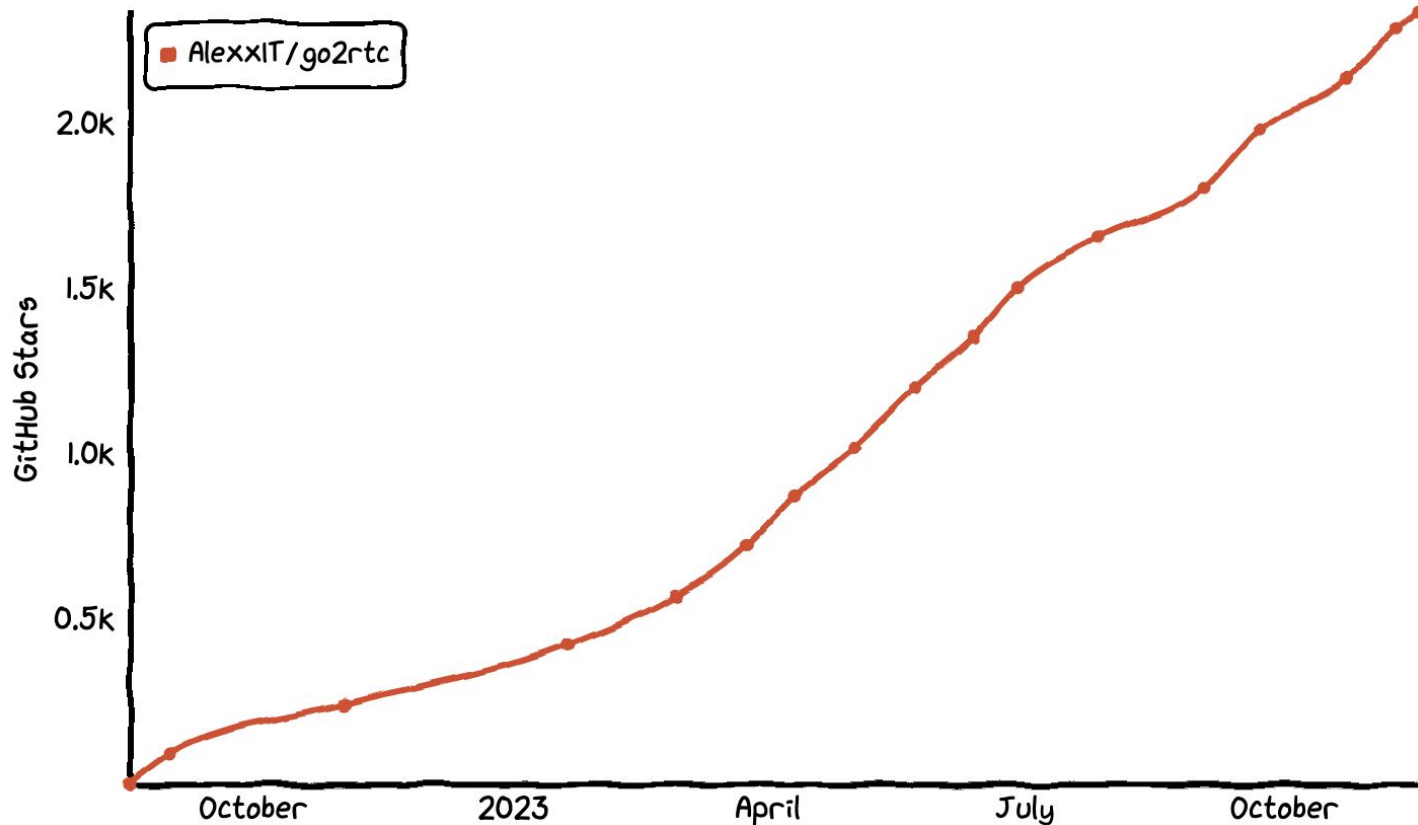
 Python  459  65

github.com/AlexxIT/go2rtc



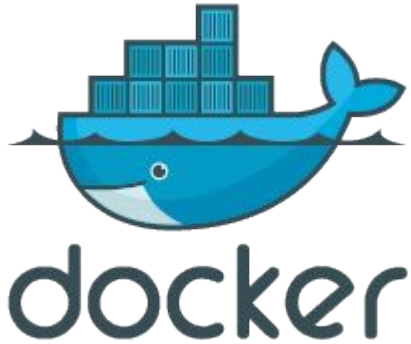
Windows Linux macOS zero-dependency zero-delay zero-cost camera streaming app

star-history.com



Количество скачиваний

340 000+



250 000+



Камеры в Home Assistant

github.com/AlexxIT/SonoffLAN

AlexxIT/SonoffLAN

Control Sonoff Devices with eWeLink (original) firmware over LAN and/or Cloud from Home Assistant



40

Contributors

66

Issues

2k

Stars

367

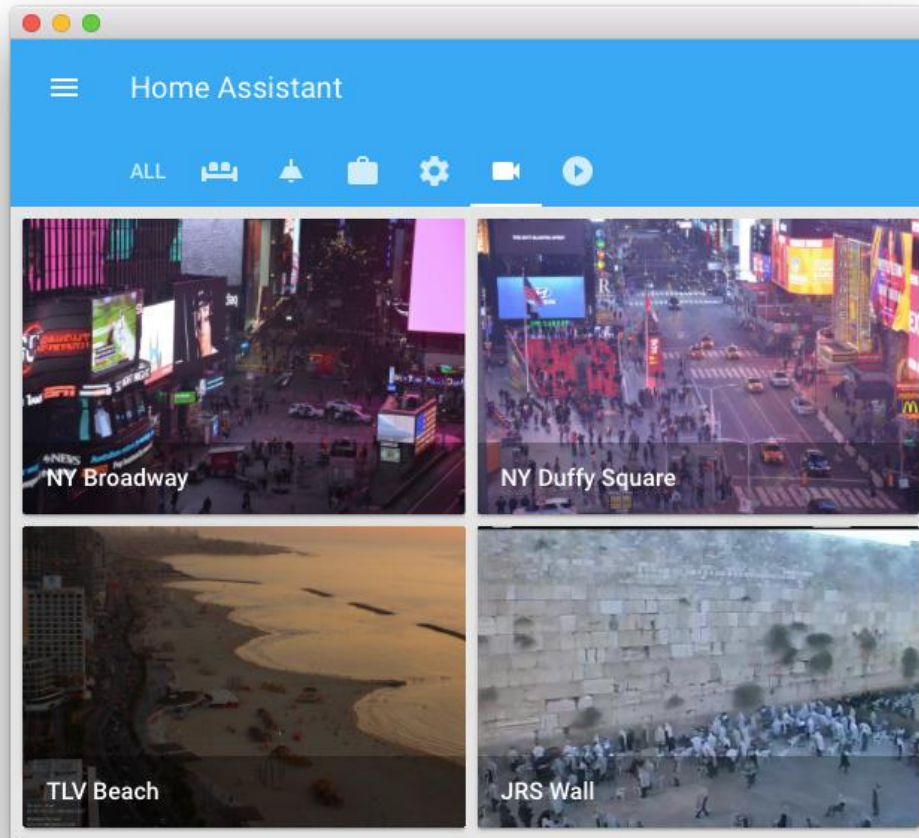
Forks



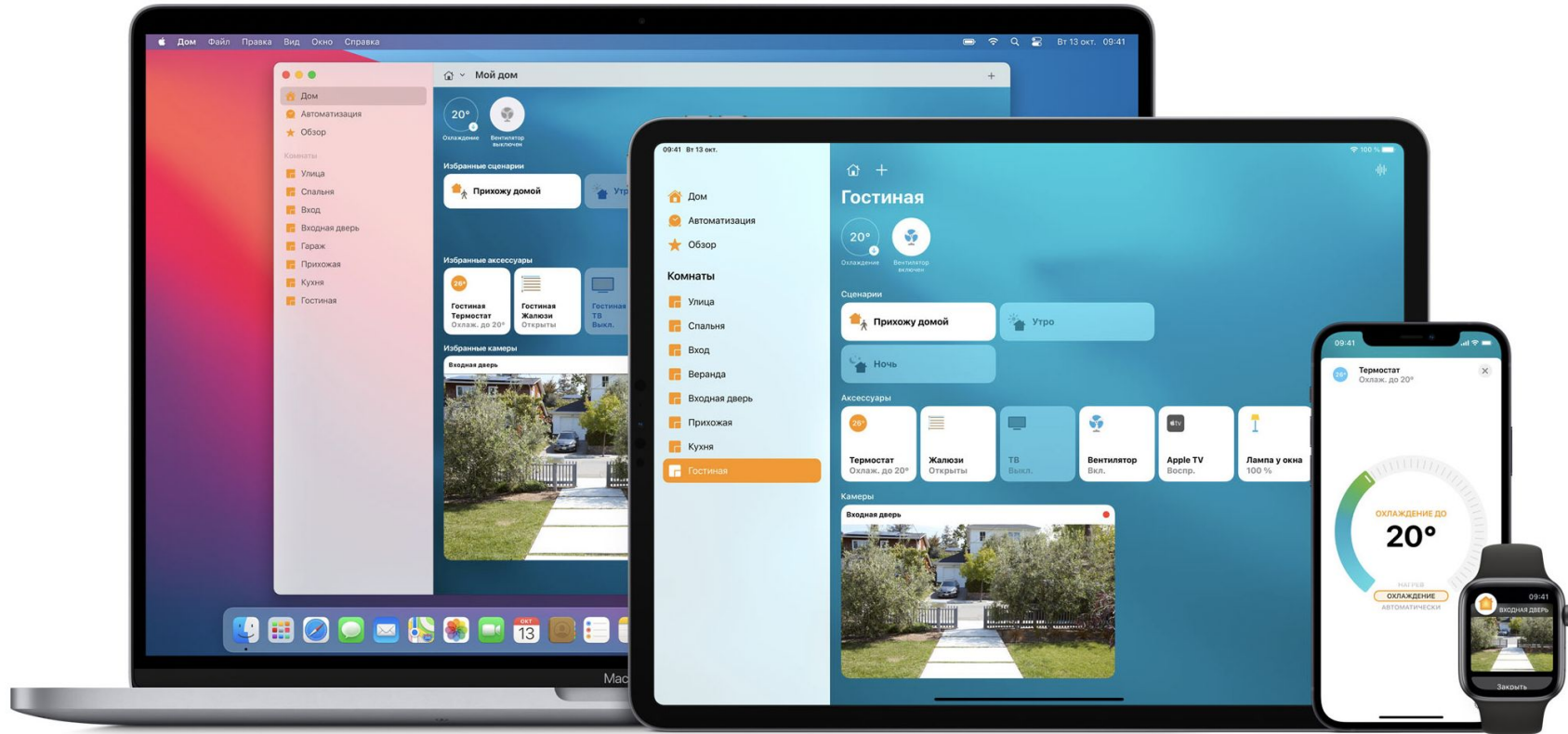
Sonoff GK-200MP2-B



www.home-assistant.io

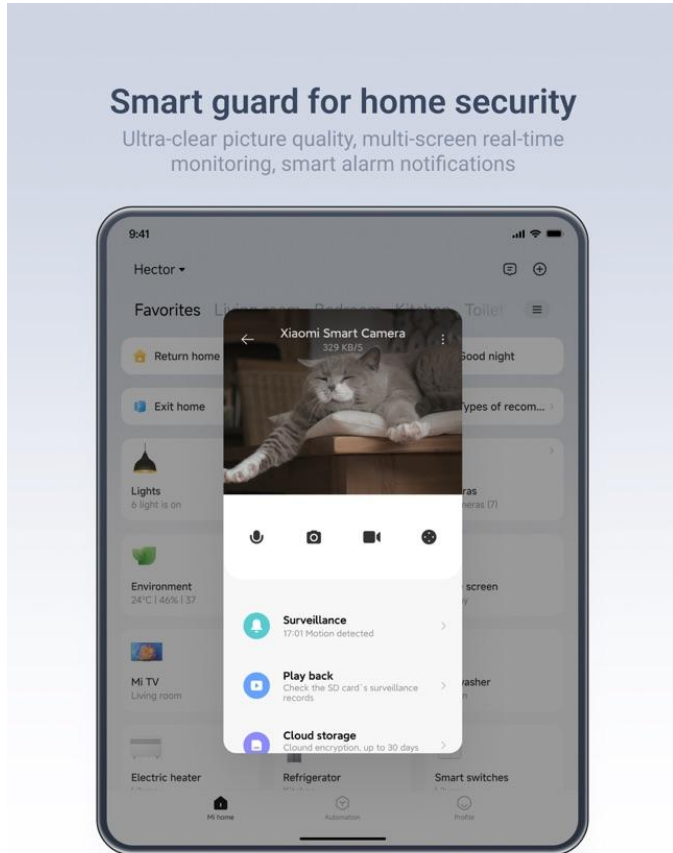


Home Assistant => Apple HomeKit



Камеры в Xiaomi Mi Home

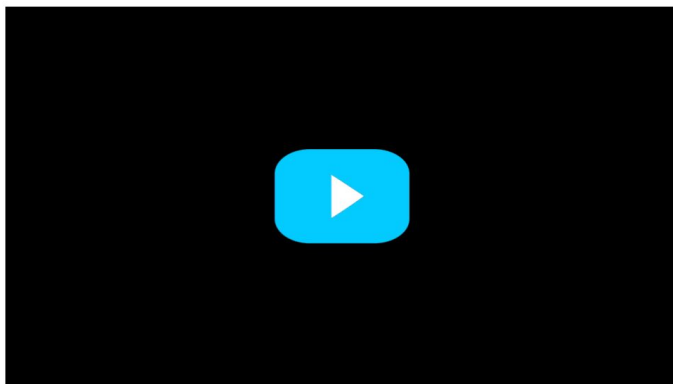
Xiaomi Mi Home / Xiaomi Dafang



Знакомство с WebRTC

flashphoner.com/webrtc-ip-camera-rtsp-demo/

Embed player



Server



Stream



Tech

⌄ WebRTC

Знакомство с RTSPtoWebRTC

github.com/deepch/RTSPtoWebRTC

deepch/ RTSPtoWebRTC



RTSP to WebRTC use Pion WebRTC

14

Contributors



1

Used by



6

Discussions



1k

Stars



376

Forks



Интеграция с Home Assistant WebRTC Camera

github.com/AlexxIT/WebRTC

AlexxIT/WebRTC

Home Assistant custom component for viewing almost any camera stream in real time using WebRTC and other technologies.



 38

Contributors

 91

Issues

 973

Stars

 121

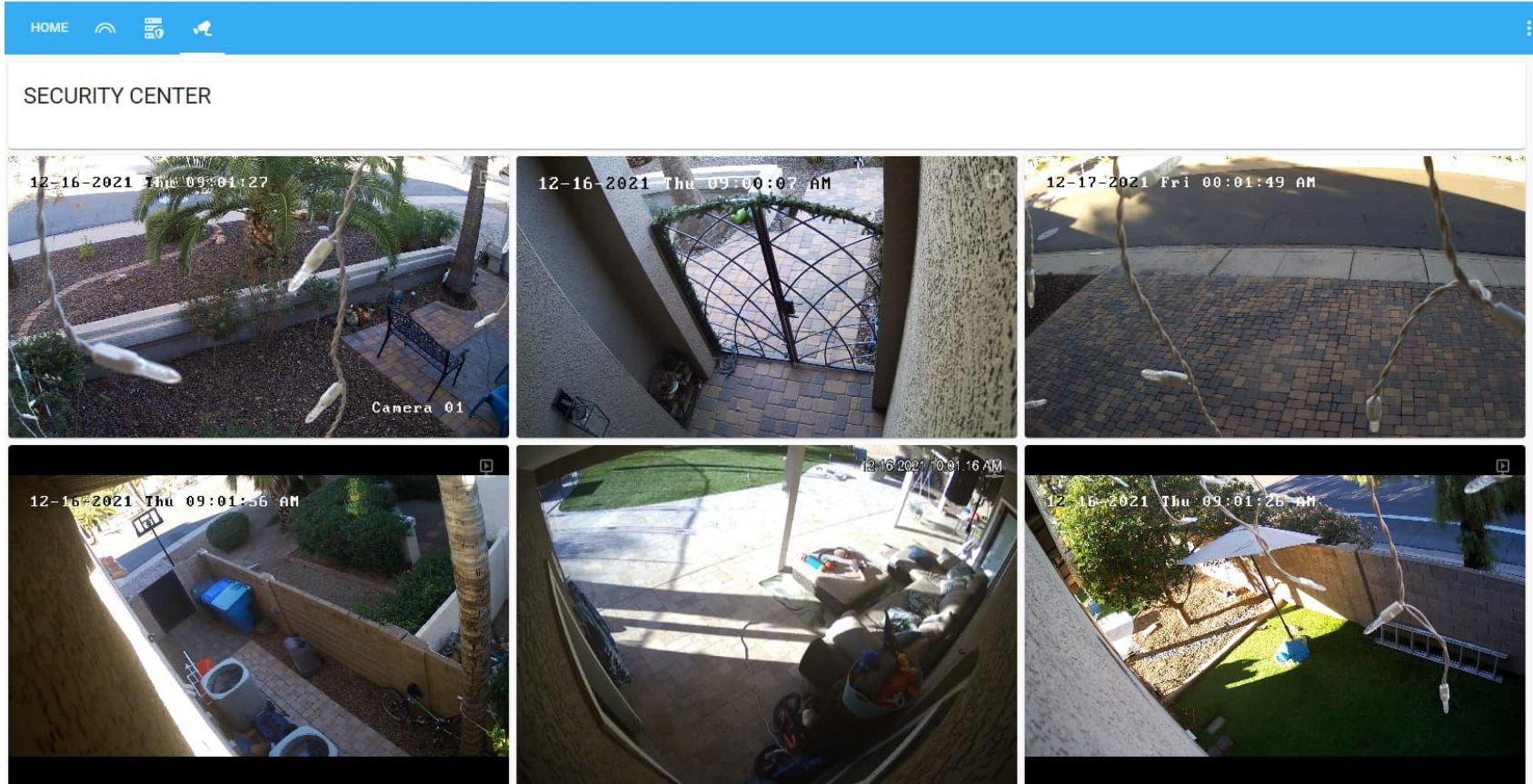
Forks



Home Assistant WebRTC Card



Home Assistant Dashboard



WebRTC Camera vs RTSPtoWebRTC

Pros, Cons and Browsers	WebRTC	MSE
Pros	best delay	good delay
Cons	complicated external access	jumps over frames
Chrome, Firefox, Chromecast	video: H264 audio: PCMA, PCMU	video: H264 audio: AAC
Safari PC, iPadOS 13+	video: H264 audio: PCMA, PCMU	video: H264, H265 audio: AAC
Safari iOS	video: H264 audio: PCMA, PCMU	doesn't supported
Opera PC	doesn't supported	video: H264 audio: AAC
macOS app	doesn't supported	doesn't supported

Разработка go2rtc

github.com/deepch

RTSPtoWebRTC

Public

RTSP to WebRTC use Pion WebRTC

 JavaScript  1.3k  373

RTSPtoWeb

Public

RTSP Stream to WebBrowser

 JavaScript  828  227

vdk

Public

A set of libraries for building streaming services. RTSP RTMP MP4 WS TS DASH WEBRTC MP4f

 Go  338  140

RTSPtoWSMP4f

Public

RTSP Stream to WebBrowser MSE over WebSocket based MP4f segments

 JavaScript  198  63

RTSPtoHLS

Public

RTSP Stream to WebBrowser HLS over HTTP based TS segments

 JavaScript  58  13

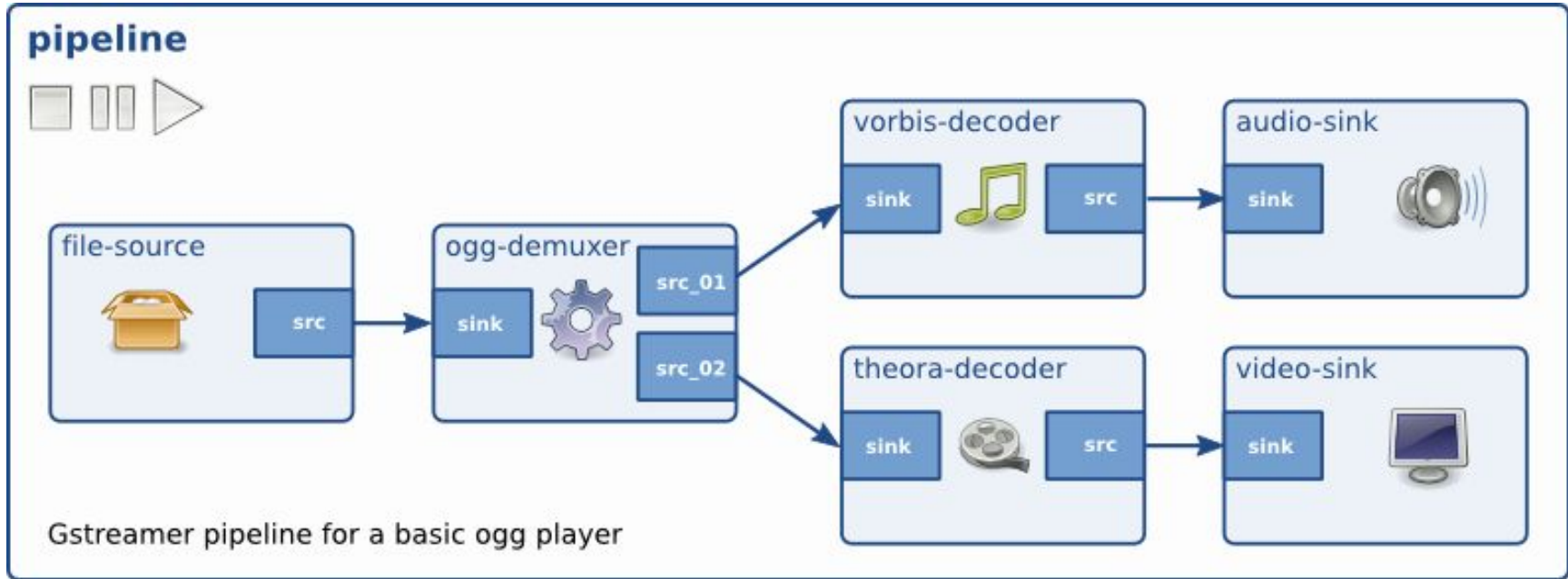
RTSPtoImage

Public

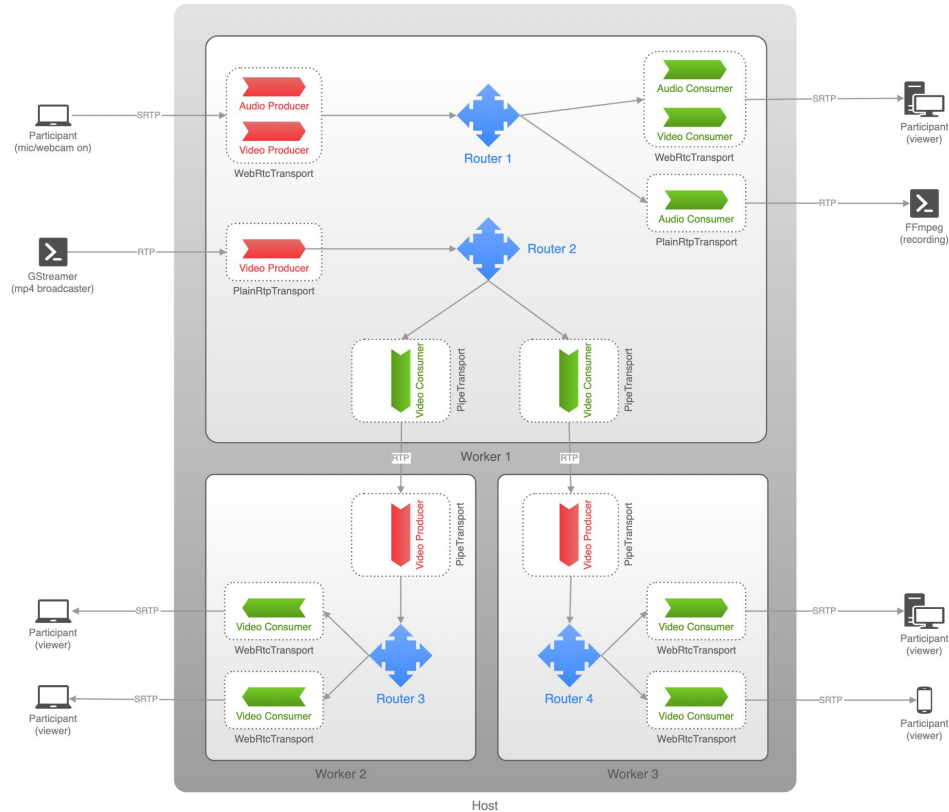
RTSP to Image Poster JPEG or MJpeg Stream

 JavaScript  35  14

gststreamer.freedesktop.org



mediasoup.org



github.com/AlexxIT/WebRTC/issues

AlexxIT / WebRTC

Type to search

Code Issues 82 Pull requests 1 Actions Wiki Security Insights Settings

External access with WebRTC doesn't work
#378 opened on Jan 9 by AlexxIT
Open

Custom element doesn't exist: webrtc-camera
#260 opened on Feb 14, 2022 by Dim3333
Open 73

Two way audio
#243 by pergolafabio was closed on Feb 28
Closed 71

Filters is:issue label:go2rtc is:closed

Labels 11 Milestones 1 New issue

Clear current search query, filters, and sorts

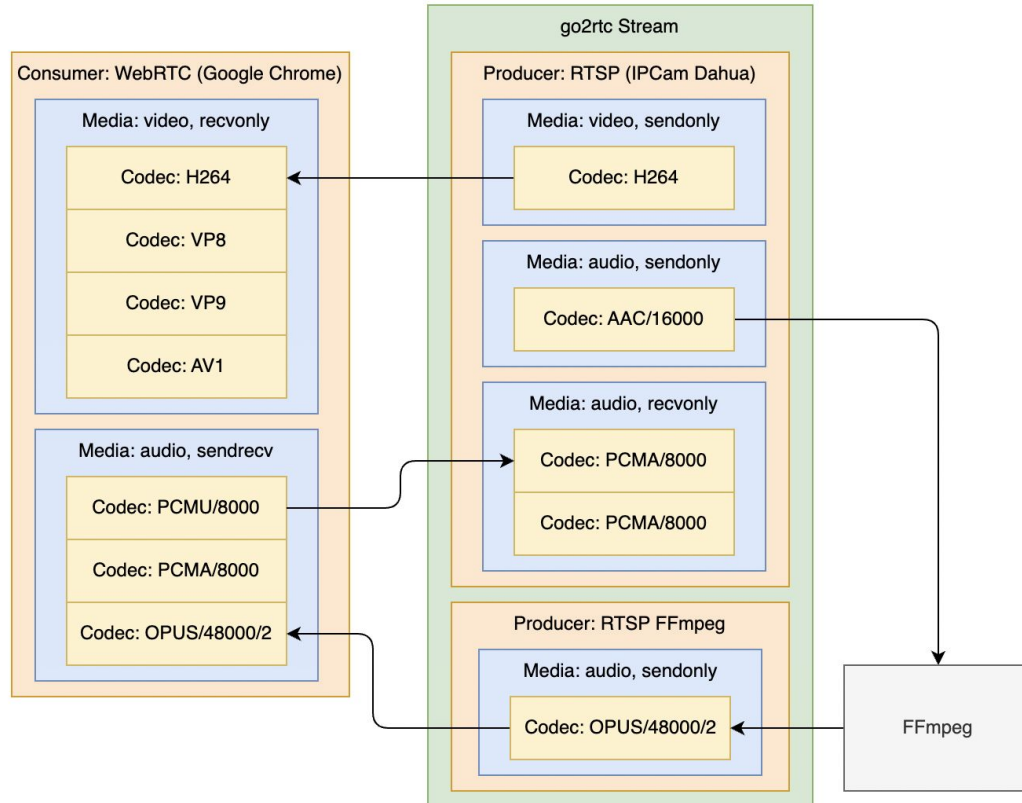
<input type="checkbox"/>	1 Open	✓ 45 Closed	Author	Label	Projects	Milestones	Assignee	Sort
<input type="checkbox"/>	<input checked="" type="checkbox"/>			go2rtc				5
#350 by morpheus8888 was closed on Jan 20 v3.0								
<input type="checkbox"/>	<input checked="" type="checkbox"/>			go2rtc question				2
#349 by ItsJamesMurray was closed on Sep 2, 2022								
<input type="checkbox"/>	<input checked="" type="checkbox"/>			enhancement go2rtc				5
#343 by RomchikL was closed on Aug 22, 2022								
<input type="checkbox"/>	<input checked="" type="checkbox"/>			enhancement go2rtc				11
#342 by Xitro01 was closed on Jan 20 v3.0								
<input type="checkbox"/>	<input checked="" type="checkbox"/>			go2rtc question				13
#333 by Betacart was closed on Jan 20 v3.0								

multi-source 2-way codecs negotiation

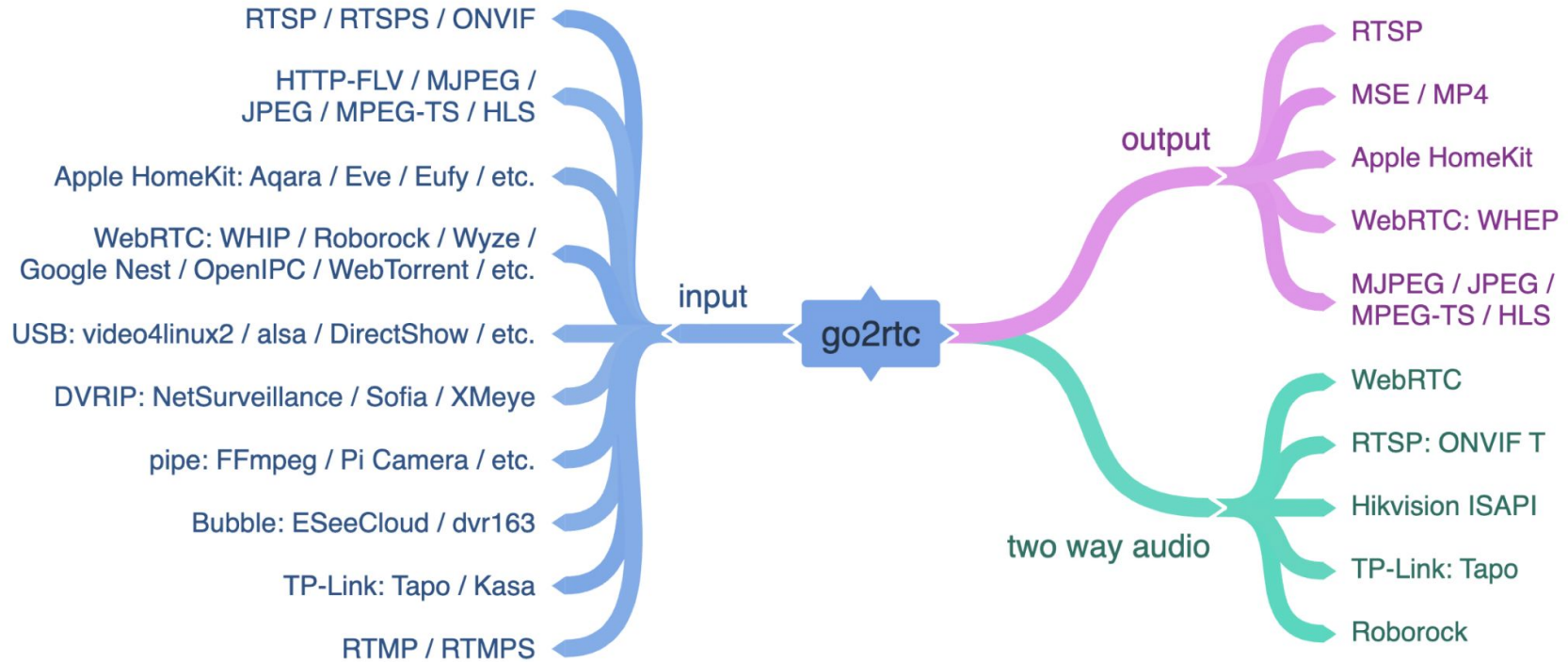
Codecs madness

Device	WebRTC	MSE	HTTP	HLS
<i>latency</i>	best	medium	bad	bad
Desktop Chrome 107+	H264, OPUS, PCMU, PCMA	H264, H265*, AAC, FLAC*, OPUS	H264, H265*, AAC, FLAC*, OPUS, MP3	no
Desktop Edge	H264, OPUS, PCMU, PCMA	H264, H265*, AAC, FLAC*, OPUS	H264, H265*, AAC, FLAC*, OPUS, MP3	no
Android Chrome 107+	H264, OPUS, PCMU, PCMA	H264, H265*, AAC, FLAC*, OPUS	H264, H265*, AAC, FLAC*, OPUS, MP3	no
Desktop Firefox	H264, OPUS, PCMU, PCMA	H264, AAC, FLAC*, OPUS	H264, AAC, FLAC*, OPUS	no
Desktop Safari 14+	H264, H265*, OPUS, PCMU, PCMA	H264, H265, AAC, FLAC*	no!	H264, H265, AAC, FLAC*
iPad Safari 14+	H264, H265*, OPUS, PCMU, PCMA	H264, H265, AAC, FLAC*	no!	H264, H265, AAC, FLAC*
iPhone Safari 14+	H264, H265*, OPUS, PCMU, PCMA	no!	no!	H264, H265, AAC, FLAC*

multi-source 2-way codecs negotiation



github.com/AlexxIT/go2rtc



Windows Linux macOS zero-dependency zero-delay zero-cost camera streaming app

RTSP / ONVIF backchannel

Dahua DH-IPC-K42P



- RTSP
- SDP
- ONVIF
- H264
- H265
- MJPEG
- PCMU
- PCMA
- AAC

RTSP SDP

```
m=video 0 RTP/AVP 96
a=rtpmap:96 H264/90000
a=fmtp:96 packetization-mode=1;profile-level-id=4D4032;sprop-parameter-sets= ...
a=recvonly
```

```
m=audio 0 RTP/AVP 97
a=rtpmap:97 MPEG4-GENERIC/16000
a=fmtp:97 streamtype=5;profile-level-id=1;mode=AAC-hbr;sizelength= ...
a=recvonly
```

```
m=application 0 RTP/AVP 107
a=rtpmap:107 vnd.onvif.metadata/90000
a=recvonly
```

```
m=audio 0 RTP/AVP 111 110 109 108 107 0 106 105 8 104 103 102 101 100 97
a=rtpmap:104 L16/48000
a=rtpmap:101 MPEG4-GENERIC/8000
a=sendonly
```

RTSP SDP - video / audio

```
m=video 0 RTP/AVP 96
a=rtpmap:96 H264/90000
a=fmtp:96 packetization-mode=1;profile-level-id=4D4032;sprop-parameter-sets= ...
a=recvonly
```

```
m=audio 0 RTP/AVP 97
a=rtpmap:97 MPEG4-GENERIC/16000
a=fmtp:97 streamtype=5;profile-level-id=1;mode=AAC-hbr;sizelength= ...
a=recvonly
```

```
m=application 0 RTP/AVP 107
a=rtpmap:107 vnd.onvif.metadata/90000
a=recvonly
```

```
m=audio 0 RTP/AVP 111 110 109 108 107 0 106 105 8 104 103 102 101 100 97
a=rtpmap:104 L16/48000
a=rtpmap:101 MPEG4-GENERIC/8000
a=sendonly
```

RTSP SDP - video / audio profiles

```
m=video 0 RTP/AVP 96  
a=rtpmap:96 H264/90000  
a=fmtp:96 packetization-mode=1;profile-level-id=4D4032;sprop-parameter-sets= ...  
a=recvonly
```

```
m=audio 0 RTP/AVP 97  
a=rtpmap:97 MPEG4-GENERIC/16000  
a=fmtp:97 streamtype=5;profile-level-id=1;mode=AAC-hbr;sizelength= ...  
a=recvonly
```

```
m=application 0 RTP/AVP 107  
a=rtpmap:107 vnd.onvif.metadata/90000  
a=recvonly
```

```
m=audio 0 RTP/AVP 111 110 109 108 107 0 106 105 8 104 103 102 101 100 97  
a=rtpmap:104 L16/48000  
a=rtpmap:101 MPEG4-GENERIC/8000  
a=sendonly
```

RTSP SDP - ONVIF metadata

```
m=video 0 RTP/AVP 96  
a=rtpmap:96 H264/90000  
a=fmtp:96 packetization-mode=1;profile-level-id=4D4032;sprop-parameter-sets= ...  
a=recvonly
```

```
m=audio 0 RTP/AVP 97  
a=rtpmap:97 MPEG4-GENERIC/16000  
a=fmtp:97 streamtype=5;profile-level-id=1;mode=AAC-hbr;size-length= ...  
a=recvonly
```

```
m=application 0 RTP/AVP 107  
a=rtpmap:107 vnd.onvif.metadata/90000  
a=recvonly
```

```
m=audio 0 RTP/AVP 111 110 109 108 107 0 106 105 8 104 103 102 101 100 97  
a=rtpmap:104 L16/48000  
a=rtpmap:101 MPEG4-GENERIC/8000  
a=sendonly
```

RTSP SDP - backchannel

```
m=video 0 RTP/AVP 96
a=rtpmap:96 H264/90000
a=fmtp:96 packetization-mode=1;profile-level-id=4D4032;sprop-parameter-sets= ...
a=recvonly
```

```
m=audio 0 RTP/AVP 97
a=rtpmap:97 MPEG4-GENERIC/16000
a=fmtp:97 streamtype=5;profile-level-id=1;mode=AAC-hbr;sizelength= ...
a=recvonly
```

```
m=application 0 RTP/AVP 107
a=rtpmap:107 vnd.onvif.metadata/90000
a=recvonly
```

```
m=audio 0 RTP/AVP 111 110 109 108 107 0 106 105 8 104 103 102 101 100 97
a=rtpmap:104 L16/48000
a=rtpmap:101 MPEG4-GENERIC/8000
a=sendonly
```

RTSP SDP - direction and codecs

```
m=video 0 RTP/AVP 96  
a=rtpmap:96 H264/90000  
a=fmtp:96 packetization-mode=1;profile-level-id=4D4032;sprop-parameter-sets= ...  
a=recvonly
```

```
m=audio 0 RTP/AVP 97  
a=rtpmap:97 MPEG4-GENERIC/16000  
a=fmtp:97 streamtype=5;profile-level-id=1;mode=AAC-hbr;sizelength= ...  
a=recvonly
```

```
m=application 0 RTP/AVP 107  
a=rtpmap:107 vnd.onvif.metadata/90000  
a=recvonly
```

```
m=audio 0 RTP/AVP 111 110 109 108 107 0 106 105 8 104 103 102 101 100 97  
a=rtpmap:104 L16/48000  
a=rtpmap:101 MPEG4-GENERIC/8000  
a=sendonly
```

go2rtc source: FFmpeg

streams:

[FILE] all tracks will be copied without transcoding codecs
file1: ffmpeg:/media/BigBuckBunny.mp4

[FILE] video will be transcoded to H264, audio will be skipped
file2: ffmpeg:/media/BigBuckBunny.mp4#video=h264#hardware

[FILE] video will be copied, audio will be transcoded to pcmu
file3: ffmpeg:/media/BigBuckBunny.mp4#video=copy#audio=pcmu

[HLS] video will be copied, audio will be skipped
hls: ffmpeg:https://devstreaming-cdn.apple.com/.../prog_index.m3u8#video=copy

[MJPEG] video will be transcoded to H264
mjpeg: ffmpeg:http://185.97.122.128/cgi-bin/faststream.jpg#video=h264

[RTSP] video with rotation, should be transcoded, so select H264
rotate: ffmpeg:rtsp://192.168.1.123/av_stream/ch0#video=h264#rotate=90

FFmpeg Hardware Transcoding

Intel Nuc i3 gen 10 (Linux Docker)

Name	Source
OK	ffmpeg:...#video=h264#hardware=vaapi
OK	ffmpeg:...#video=h265#hardware=vaapi
OK	ffmpeg:...#video=mjpeg#hardware=vaapi
ERROR	ffmpeg:...#video=h264#hardware=cuda
ERROR	ffmpeg:...#video=h265#hardware=cuda

ASUS ROG Notebook (Windows)

Name	Source
OK	ffmpeg:...#video=h264#hardware=dxva2
OK	ffmpeg:...#video=h265#hardware=dxva2
OK	ffmpeg:...#video=mjpeg#hardware=dxva2
OK	ffmpeg:...#video=h264#hardware=cuda
OK	ffmpeg:...#video=h265#hardware=cuda

Raspberry Pi 3 (HassIO)

Name	Source
OK	ffmpeg:...#video=h264#hardware=v4l2m2m
ERROR	ffmpeg:...#video=h265#hardware=v4l2m2m

Apple MacBook M1 (macOS)

Name	Source
OK	ffmpeg:...#video=h264#hardware=videotoolbox
OK	ffmpeg:...#video=h265#hardware=videotoolbox

Apple HomeKit: Aqara



КАМЕРЫ

Камера и Центр
умного дома | Aqara
Camera Hub G3



КАМЕРЫ

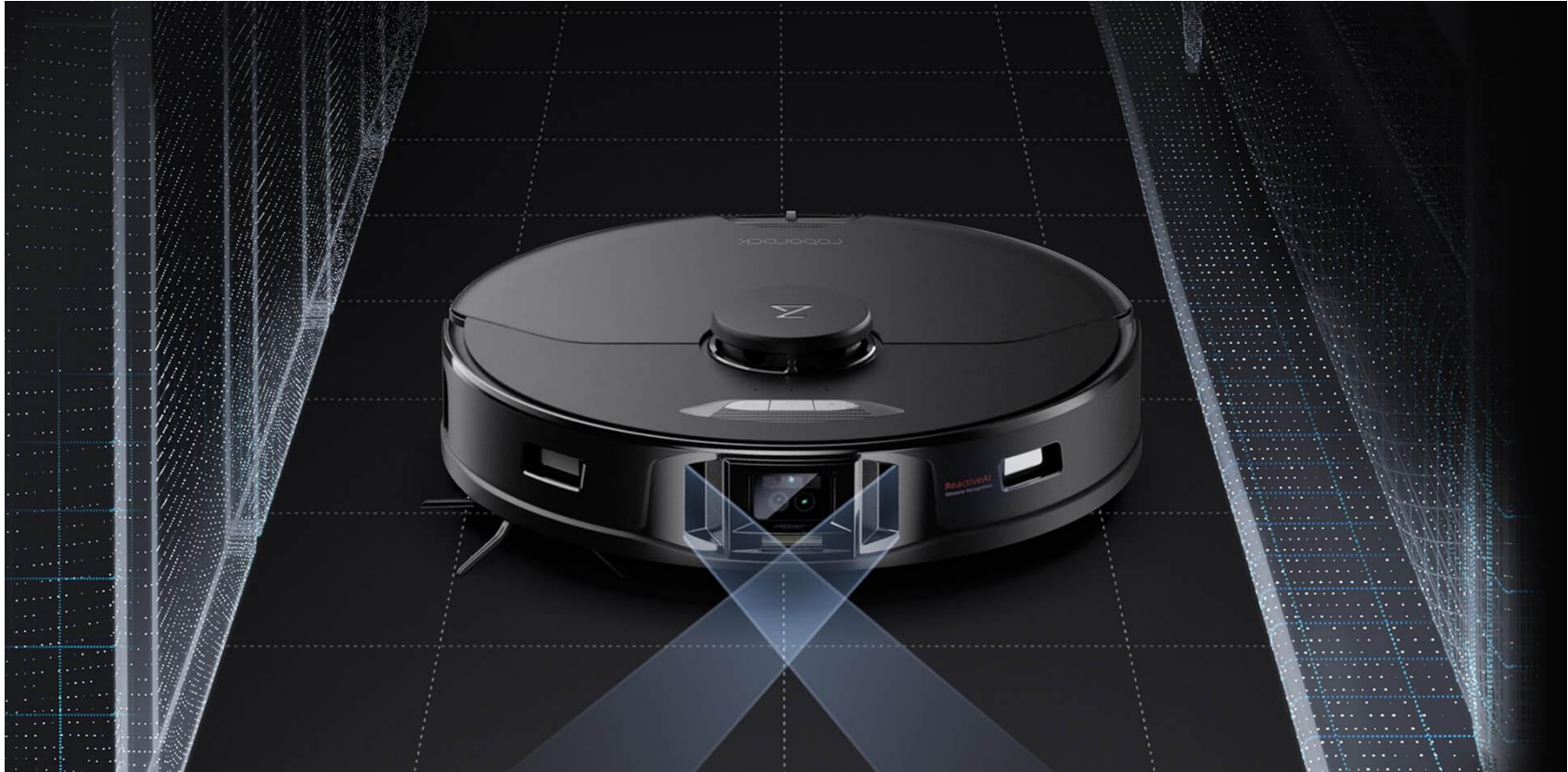
Камера хаб | Aqara
Camera Hub G2H Pro



КАМЕРЫ

Умный видеозвонок
G4 | Aqara Smart Video
Doorbell G4

WebRTC: Roborock S7 MaxV



Projects using go2rtc

- Frigate 12+
- Frigate Lovelace Card
- ring-mqtt
- EufyP2PStream
- ioBroker.euSec
- wz_mini_hacks
- MMM-go2rtc
- Alpine Linux
- Gentoo
- NixOS
- Proxmox Helper Scripts
- QNAP
- Synology NAS
- Unraid

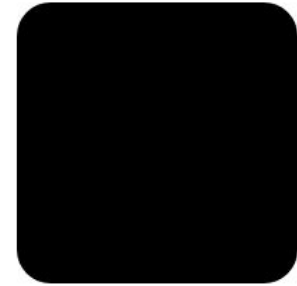
frigate.video

The screenshot displays the 'frigate.video' web interface. On the left is a dark sidebar with navigation options: Overview, Map, Logbook, History, Media Browser (highlighted), Developer Tools, and Configuration. The main content area is titled '← Frigate Clips (820)'. It features a grid of ten video thumbnails, each showing a person walking on a path. Each thumbnail includes a bounding box, a person ID (e.g., 'person: 97% 29988'), a timestamp, and a confidence percentage (e.g., 'Person 91%').

Thumbnail	Person ID	Timestamp	Confidence
1	person: 97% 29988	12/05/2020 14:36:47	Person 91%
2		12/05/2020 14:27:35	Person 98%
3		12/05/2020 14:26:48	Person 98%
4		12/05/2020 14:26:07	Person 99%
5	person: 96% 32154	12/05/2020 14:36:47	Person 92%
6		12/05/2020 14:01:14	Person 98%
7	person: 90% 25432	12/05/2020 14:00:52	Person 98%
8		12/05/2020 13:56:49	Person 98%
9		12/05/2020 13:56:30	Person 98%
10		12/05/2020 13:56:17	Person 91%

github.com/gtxaspec/wz_mini_hacks

gtxaspec/ wz_mini_hacks



wz camera mods... make your camera better.

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Contributors

 52

Issues

 246

Discussions

 907

Stars

 82

Forks



Преимущества языка Golang

Скорость работы














go2rtc: Binary

Download binary for your OS from [latest release](#):

- `go2rtc_win64.zip` - Windows 64-bit
- `go2rtc_win32.zip` - Windows 32-bit
- `go2rtc_win_arm64.zip` - Windows ARM 64-bit
- `go2rtc_linux_amd64` - Linux 64-bit
- `go2rtc_linux_i386` - Linux 32-bit
- `go2rtc_linux_arm64` - Linux ARM 64-bit (ex. Raspberry 64-bit OS)
- `go2rtc_linux_arm` - Linux ARM 32-bit (ex. Raspberry 32-bit OS)
- `go2rtc_linux_armv6` - Linux ARMv6 (for old Raspberry 1 and Zero)
- `go2rtc_linux_mipsel` - Linux MIPS (ex. [Xiaomi Gateway 3](#), [Wyze cameras](#))
- `go2rtc_mac_amd64.zip` - Mac Intel 64-bit
- `go2rtc_mac_arm64.zip` - Mac ARM 64-bit

▼ Assets

13

 go2rtc_linux_amd64	5.17 MB	Jul 20
 go2rtc_linux_arm	4.45 MB	Jul 20
 go2rtc_linux_arm64	4.54 MB	Jul 20
 go2rtc_linux_armv6	4.45 MB	Jul 20
 go2rtc_linux_i386	4.83 MB	Jul 20
 go2rtc_linux_mipsel	4.43 MB	Jul 20
 go2rtc_mac_amd64.zip	5.64 MB	Jul 20
 go2rtc_mac_arm64.zip	5.36 MB	Jul 20
 go2rtc_win32.zip	5.32 MB	Jul 20
 go2rtc_win64.zip	5.5 MB	Jul 20
 go2rtc_win_arm64.zip	4.95 MB	Jul 20

All releases

After downloading a binary release suitable for your system, please follow the [installation instructions](#).

If you are building from source, follow the [source installation instructions](#).

See the [release history](#) for more information about Go releases.

As of Go 1.13, the `go` command by default downloads and authenticates modules using the Go module mirror and Go checksum database run by Google. See <https://proxy.golang.org/privacy> for privacy information about these services and the [go command documentation](#) for configuration details including how to disable the use of these servers or use different ones.

Featured downloads

Microsoft Windows

Windows 10 or later, Intel 64-bit processor

 [go1.21.0.windows-amd64.msi](#)

Apple macOS (ARM64)

macOS 11 or later, Apple 64-bit processor

 [go1.21.0.darwin-arm64.pkg](#)

Apple macOS (x86-64)

macOS 10.15 or later, Intel 64-bit processor

 [go1.21.0.darwin-amd64.pkg](#)

Linux

Linux 2.6.32 or later, Intel 64-bit processor

 [go1.21.0.linux-amd64.tar.gz](#)

github.com/AlexxIT

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 Python  1.1k  109

 **HassWP** Public 

Portable version of Home Assistant for Windows (no need to install)

 Python  459  65