# nanoStream WebRTC.live



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Setup secure online meetings at a distance or stream live events to thousands of worldwide viewers: **nanoStream WebRTC.live** makes it very easy to create custom live video communication and interactive live streaming applications with low latency. In combination with the **nanoStream H5Live Player**, nanoStream WebRTC.live offers a seamless user experience for plugin-free live video broadcast on any device.

## What is nanoStream WebRTC.live?

nanoStream WebRTC.live is a product platform developed by nanocosmos based on WebRTC and other streaming technologies like RTMP and H5Live. It is used in a variety of low-latency interactive live streaming use cases. WebRTC.live video chat combined with RTMP broadcasting allows a unified communications strategy for companies - from 1-on-1 discussions with employees at a distance to sharing live events with 10.000 viewers.

In addition to secure peer-to-peer communication, the WebRTC.live encoding platform can be used to **broadcast live streams to large audiences**. The live video broadcast can be integrated into any live streaming infrastructure with the unique WebRTC-RTMP server bridge, or in an end-to-end development with the nanoStream Cloud.

#### What is WebRTC?

WebRTC is a technology standard for audio/video-based real time communication. WebRTC video chats and broadcasts function directly within the web browser, with no additional plugin or app download required. The standard is supported by most browser vendors (Google Chrome, Firefox) and currently available plugin-free on all platforms (Windows, MacOS, Android), except Apple iOS.

# How can you use WebRTC.live for your live streaming projects?

With WebRTC.live you get

- a web application and samples in HTML/JS and API
- a server API to manage audio/video connections
- a server API to send live streams to the nanoStream Cloud or any RTMP servers

**WebRTC.live** is very easy to use and customize for your own brand. While some of our customers use it to improve corporate communications with real-time video-based, other use cases of nanoStream WebRTC.live are e-learning or tele health applications.

Use WebRTC.live to build your own live streaming infrastructure or to replace your existing live encoding software or hardware with a browser-based, plugin-free solution.

See the complete WebRTC.live workflow:



Web page and API

nanoStream Cloud or custom CDN

Playback on any device

#### WebRTC.live features:

- Live broadcast to large audiences
- nanoStream Cloud with H5Live, CDN or custom RTMP server
- Low-latency / plugin-free / HTML/Javascript clients
- VP8 / VP9 and H.264 passthrough streaming, flexible bitrate configuration
- Transcoding/Transmux from VPx to H264/AAC/RTMP
- Encrypted by default
- Flexible deployment options: Cloud, AWS, custom servers

## What is nanoStream H5Live?

The nanoStream **H5Live Player** is a delivery and playback technology which enables seamless plugin-free playback of live video streams in low latency on any device and browser.

H5Live is HTML5-based and does not depend on WebRTC. This means that in can be used to play live streams on all existing browsers, including Chrome, Firefox, IE/Edge and even Safari on iOS.

## H5Live delivery and playback workflow



Plugin-free playback with low latency

#### **H5Live features:**

- Plugin-free, low-latency replacement for Flash (around 1s)
- Cross-platform playback on any device, including low-latency HLS on iOS
- Supported on all browsers, including Chrome, IE/Edge, Safari (HTML/JS)
- Easy Integration with your server or nanoStream Cloud (global CDN)
- Connects to any RTMP/H264/AAC Live Stream or to WebRTC.live / nanoStream Cloud

# **Examples for the WebRTC.live and H5Live set-up**

Simply embed WebRTC.live and H5Live on your web page.

**Example snippet** for HTML/JS to start a live broadcast to RTMP:

```
rtc.startBroadcast({
          transcodingTargets: {
          output: "rtmp://s1.nanostream.tv/live/Oau1" }
);
```

**Example snippet** for HTML/JS to start a live playback from RTMP:

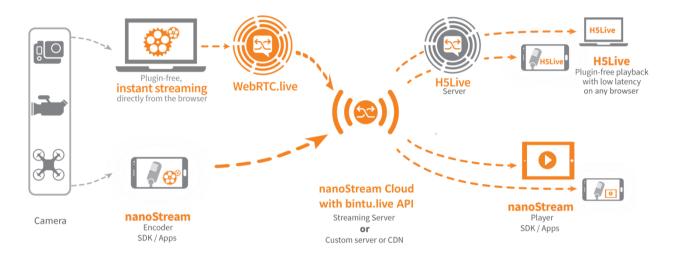
```
player.setup( {"source": {
     "h5live": {
     "rtmp": {
     "url": "rtmp://s1.nanostream.tv/live",
     "streamname": "12345"
```

}
} }};

## What is the nanoStream Cloud?

The **nanoStream Cloud** is a combination of server software, services and APIs which enable low-latency live video communication for your brand.

#### nanoStream Cloud workflow



## nanoStream Cloud features:

- WebRTC.live server (communication and transcoding)
- nanoStream RTMP server (live streaming)
- bintu.live API (stream management, grouping, tagging)
- H5Live server (low latency delivery)

## What is bintu.live?

Bintu.live is a stream management platform, that allows management, tagging and grouping of streams. It is included in the nanoStream Cloud and enables fast and easy management of incoming and outgoing live streams in real time.

## WebRTC.live Licensing and Availability

### WebRTC.live can be licensed

- as a complete platform (PAAS) including cloud connection (no server installation required)
- as an on-premise solution to install on your own server

#### WebRTC.live Broadcast and WebRTC.live communication platform includes:

- WebRTC.live HTML client including sample code and JS API
- WebRTC.live server including WebRTC-RTMP Server Bridge

Available for all WebRTC-enabled browsers: Chrome, Firefox on Windows, MacOS, Linux, and Android  $\square$  (not available for Safari on iOS).

## Live stream delivery and playback through:

- H5Live server
- H5Live HTML client player and JS API

WebRTC.live is vailable for all modern browsers on all devices (Chrome, Firefox, IE/Edge, Safari, including iOS).

## **Contact**

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