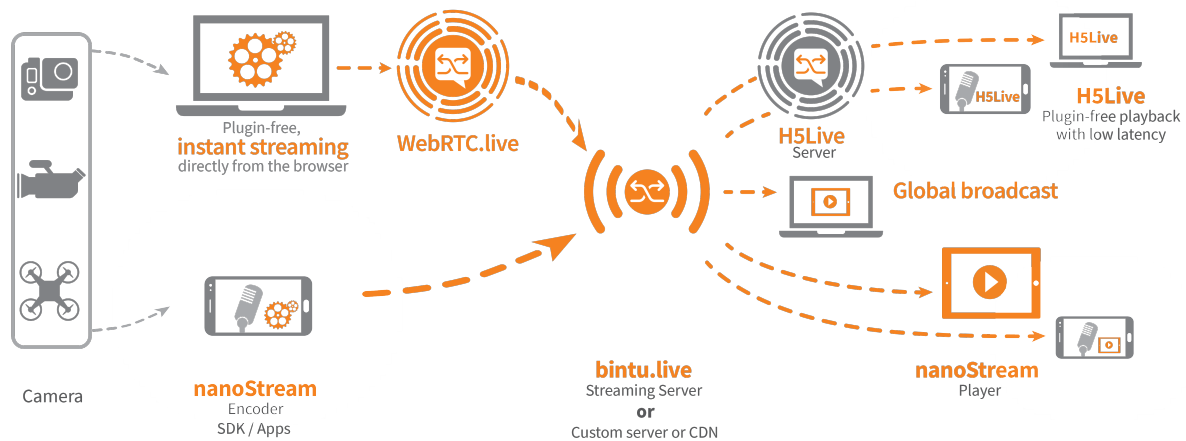


Setting up nanoStream WebRTC for Live Video Broadcast

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WebRTC enables plugin-free video broadcast and video chat communication through the browser. Based on an HTML/Javascript client running in WebRTC compatible browsers (e.g. Google Chrome), you can connect plugin-free video technology to WebRTC or RTMP streaming server. Low latency and adaptive bitrate improvements have been incorporated. It is currently available for Google Chrome, Firefox and Opera. H264 support for transcoding and passthrough streaming is starting with Google Chrome and Mozilla Firefox.



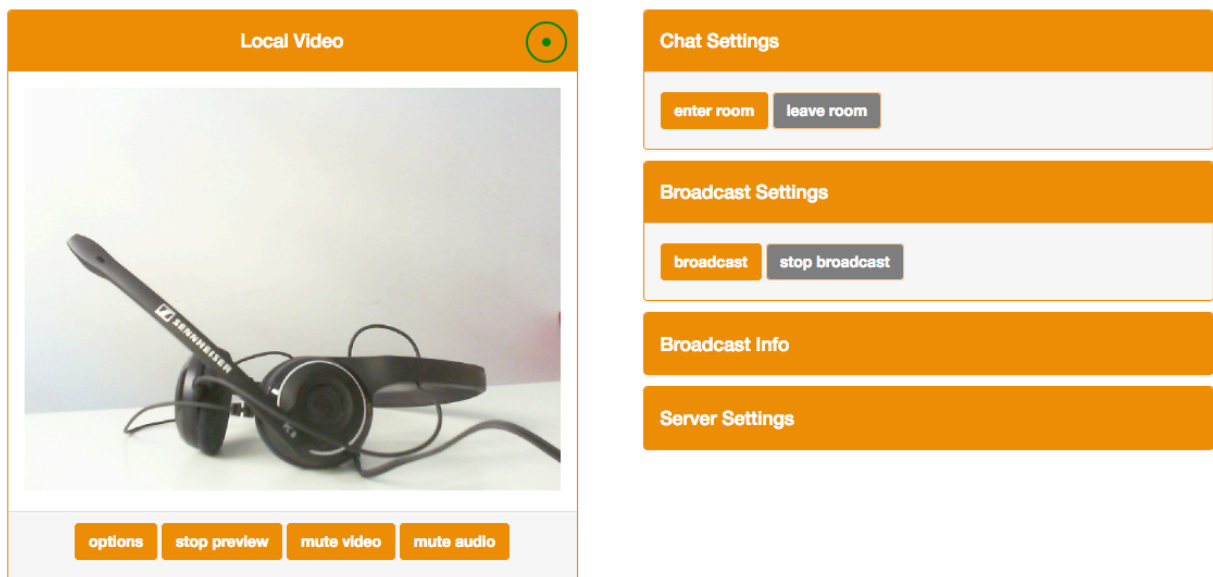
Contact

support@nanocosmos.de

1 WebRTC Demo Web Page

To start WebRTC you need to open your browser with a specific web page. The WebRTC demo page is usually already preconfigured for your requirements. You can change the configuration based on your needs.

Open the provided URL with a WebRTC-compatible browser (Chrome/Firefox):

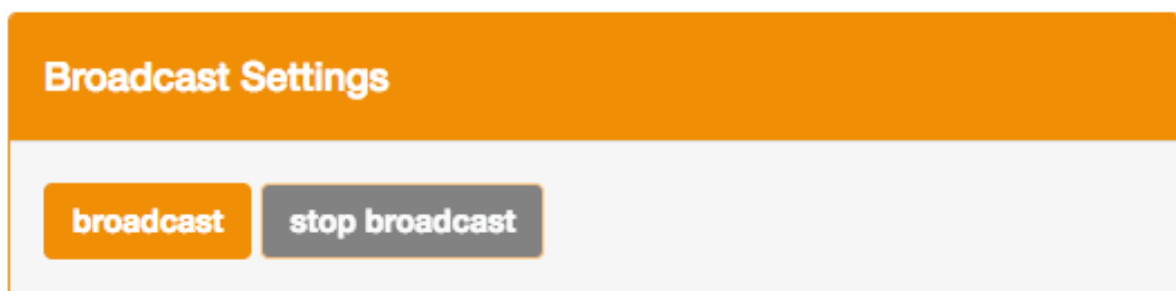


You should see a preview of your camera in the „Local Video“ window.

If you want to choose another camera or microphone, select the „options“ button.

2.1 Start Broadcast

If you have a preconfigured URL then it is very simple: just click on „broadcast“.



2.2 Start live playback with H5Live player

To start playback just click on „play h5live stream“ button below the Broadcast Settings

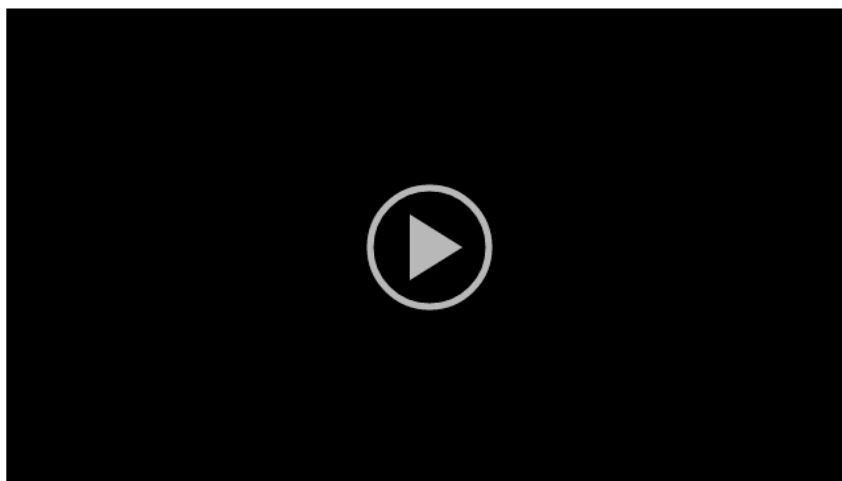
```
http://demo.nanocosmos.de/nanoplayer/release/nanoplayer.html?
bintu.apiurl=https://bintu.nanocosmos.de&bintu.streamid=4e496ff9-01d0-40a1
4a904baad5a2&force=h5live&token=%7B%22type%22%3A%22token1%22%2
```

play h5live stream

A new player web page should open similar like this:

nanoStream H5Live Player Demo

version 1.5.4



RTMP Broadcast configuration

The WebRTC broadcaster sends the live stream to our RTMP servers for further delivery to player applications.

With our nanoStream cloud, the bintu API is called to obtain unique RTMP URLs.

You can create new URLs by calling the bintu API with a valid API key.

Broadcast Settings

Use Bintu

Bintu Apiurl

Bintu Apikey

Bintu Tags (sep. by comma)

Bintu StreamId

[create bintu.live stream](#)

RTMP Broadcast Url

Stream Name

Video Codec

Video Bitrate

Audio Bitrate

[broadcast](#) [stop broadcast](#)

Custom servers

You can send live streams to your own RTMP server.

For this option, disable „use bintu“ in the broadcast settings and enter your own RTMP URL.

Note: this feature might require an additional license option.

WebRTC API / Custom Integration

See our inline documentation

<https://www.nanocosmos.de/doc>

Please contact us for further info: support@nanocosmos.de

H5Live Player API Integration / Code Snippet: code snippet

```
<div id="playerDiv"></div>
<script type="text/JavaScript" src="//demo.nanocosmos.de/nanoplayer/lib/require.js"></script>
<script type="text/JavaScript">
var player;
requirejs.config({
  paths: {
    nanoplayer: "//demo.nanocosmos.de/nanoplayer/api/nanoplayer.min.js?20161102"
  },
  waitSeconds: 20, // timeout for loading modules
});
var config = {
  "source": {
    "bintu": {
      "apiurl": "https://bintu.nanocosmos.de",
      "streamid": "55745631-1960-4a69-bbfb-d40b99c8a7a3"
    }
  },
  "playback": {
    "autoplay": true,
    "muted": false,
    "forceTech": "h5live"
  }
};
require(["nanoplayer"], function (NanoPlayer) {
  player = new NanoPlayer("playerDiv");
  player.setup(config).then(function (config) {
    console.log("setup success");
    console.log("config: " + JSON.stringify(config, undefined, 4));
  }, function (error) {
    alert(error.message);
  });
});
</script>
```

documentation: [open api documentation](#)

Further documentation related to h5live are available at the following link:

<https://www.nanocosmos.de/v4/documentation/nanoplayer-h5live>

View live and recorded files with Bintu.live

You can use the bintu.live dashboard or API to view existing and recorded streams.

Dashboard and API entry points: <https://bintu.nanocosmos.de/>

For further information we would like to refer to our bintu.live how to document:

<https://www.nanocosmos.de/blog/2016/07/live-streaming-with-bintu-live>

<https://bintu.nanocosmos.de/doc/>

Example:

List of existing streams:

Streams

ID	State	Created at	RTMP Ingest URL
5bf085e2-db2	created	2016-11-14 - 03:22 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/n39W
1fc1634d-69a1	created	2016-11-14 - 03:22 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/nVYr
9e560e52-4e6	created	2016-11-14 - 03:22 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/NNAC
86c578d9-c82	created	2016-11-14 - 01:39 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/UUN€
1dec3bbc-75€	ended	2016-11-11 - 06:11 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/CGIC
f9252115-52a1	ended	2016-11-11 - 04:59 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/dwfA
febabbdd-72e	ended	2016-11-11 - 04:56 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/0iwnF
61c4f5be-54f€	ended	2016-11-11 - 04:03 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/JbJHl
f36a62a9-5a81	created	2016-11-11 - 04:03 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/OTJL
320a3f9e-fb8f	ended	2016-11-11 - 12:27 PM	rtmp://bintu-stream.nanocosmos.de:80/rec/Sj5fVl

Live recording for VOD playback:

Web Playback

vod

URL: <http://bintu-vod.nanocosmos.de:8080/vod/CGICOBYPKO-1478884530.mp4>