

# HLS VideoJS Player

- [Example of stream conversion to HLS and playing it in browser using VideoJS](#)
- [The code of the example](#)
- [Analyzing the code](#)

## Example of stream conversion to HLS and playing it in browser using VideoJS

The player shows how to convert stream published on WCS server to HLS and play it in browser. HLS stream cut starts automatically when stream is requested by HLS URL, for example <http://localhost:8082/test/test.m3u8> on the screenshot below

### HLS VideoJS Player Minimal

**WCS**

**Stream**

**Auth**

Key	Value



The code of the example

The source code can be accessed on server by the following path:

/usr/local/FlashphonerWebCallServer/client2/examples/demo/streaming/hls-player

hls-player.css - player page styles file  
video-js.css - HLS player styles file  
hls-player.html - player page  
hls-player.js - player launch script  
player-page.html - common player page elements for three HLS playback examples  
video.js - player script (<http://videojs.com/>, Apache License Version 2.0)  
videojs-hls.min.js - player script (minimized)

The example can be tested using the following URL:

https://host:8888/client2/examples/demo/streaming/hls-player/hls-player.html

Where host is WCS server address

## Analyzing the code

To analyze the code get hls-player.js file version with hash `ecbadc3`, which is available [here](#) and can be downloaded in build [2.0.212](#).

### 1. A server HLS URL detection

`getHLSUrl()` [code](#)

```
function initPage() {
    $("#header").text("HLS VideoJS Player Minimal");
    $("#urlServer").val(getHLSUrl());
    ...
}
```

### 2. Player initialization

`videojs()` [code](#)

A div element for stream playback is passed to player

```
function initPage() {
    ...
    var remoteVideo = document.getElementById('remoteVideo');
    remoteVideo.className = "video-js vjs-default-skin";
    player = videojs(remoteVideo);
}
```

### 3. Stream name detection (the stream should be published to server)

`encodeURIComponent()` [code](#)

```
function playBtnClick() {
    if (validateForm()) {
        var streamName = $('#playStream').val();
        streamName = encodeURIComponent(streamName);
        ...
    }
}
```

### 4. HLS stream URL forming and player launching

`player.play()` [code](#)

If authentication key and token are set, they will be included to stream URL

```

function playBtnClick() {
  if (validateForm()) {
    ...
    var videoSrc = $("#urlServer").val() + '/' + streamName + '/' + streamName + '.m3u8';
    var key = $('#key').val();
    var token = ($("#token").val());
    if (key.length > 0 && token.length > 0) {
      videoSrc += "?" + key + "=" + token;
    }
    player.src({
      src: videoSrc,
      type: "application/vnd.apple.mpegurl"
    });
    console.log("Play with VideoJS");
    player.play();
    onStarted();
  }
}

```

#### 5. Playback stopping

`player.dispose()` [code](#)

This method removes the div container tag where player was initialized from the page

```

function stopBtnClick() {
  if (player != null) {
    console.log("Stop VideoJS player");
    player.pause();
  }
  onStopped();
}

```

#### 6. New div container tag creation after previous player was removed

[code](#)

```

function createRemoteVideo(parent) {
  remoteVideo = document.createElement("video");
  remoteVideo.id = "remoteVideo";
  remoteVideo.width=852;
  remoteVideo.height=480;
  remoteVideo.controls="controls";
  remoteVideo.autoplay="autoplay";
  remoteVideo.type="application/vnd.apple.mpegurl";
  remoteVideo.className = "video-js vjs-default-skin";
  parent.appendChild(remoteVideo);
  player = videojs(remoteVideo);
}

```