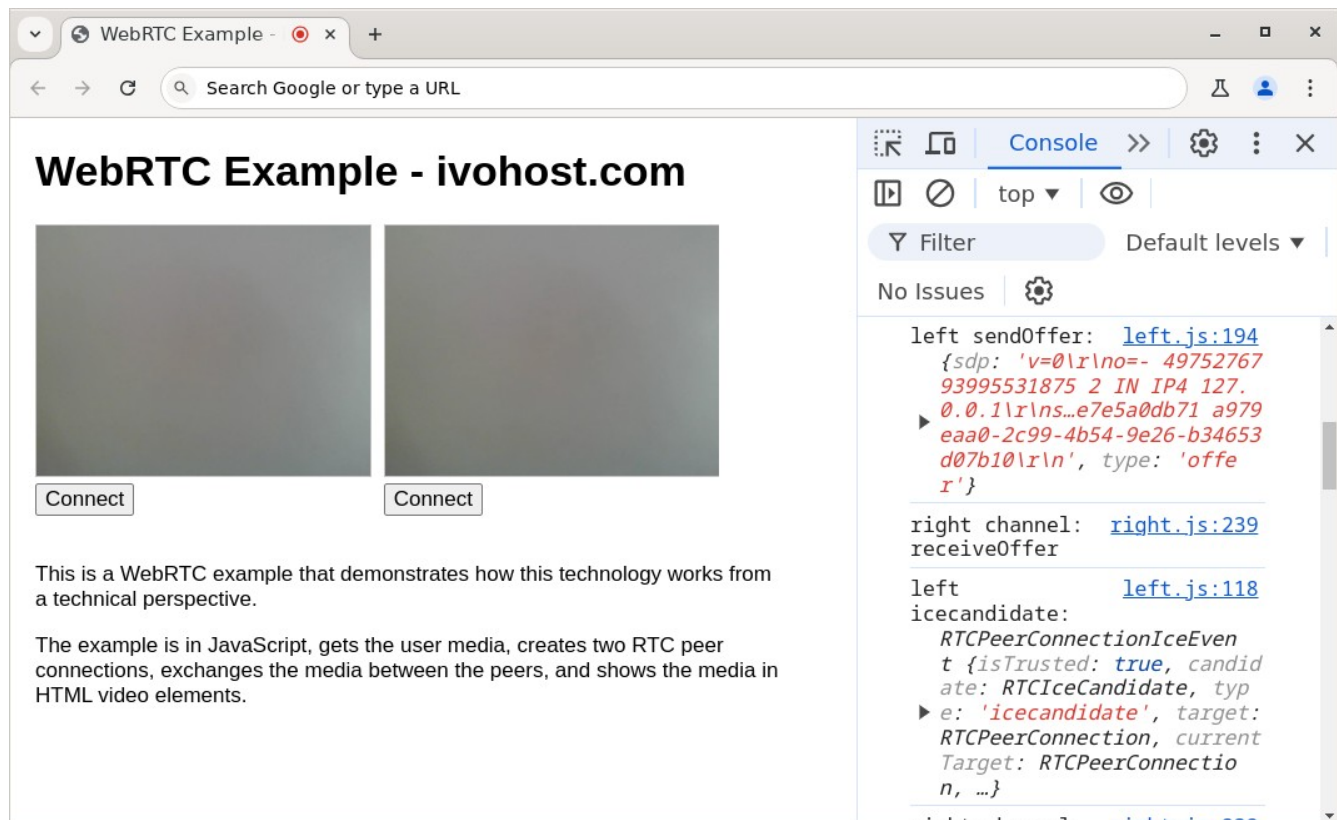


## WebRTC Example - ivohost.com

This is a WebRTC example that demonstrates how this technology works from a technical perspective.

The example is in JavaScript, gets the user media, creates two RTC peer connections, exchanges the media between the peers, and shows the media in HTML video elements.



## WebRTC Technology

WebRTC is a technology that allows online communication with video, audio and data.

The communication is direct between the peers and it is encrypted with end to end encryption.

WebRTC can be used for video and audio calls, video conferencing, chat, data exchange and more.

The process to use WebRTC is as follows:

- Create RTC peer connection.
- Get user media, video, audio.
- Add media to RTC peer.
- Exchange RTC offer and answer with other peer.
- Exchange RTC ice candidates with other peer.
- Receive media and add it to the HTML video element.

## The Example

The example has three files, index.html, left.js, right.js

The index.html file has the HTML video and button elements and connects the JavaScript files as modules.

The left.js file has functions for the left peer, and it is sending the RTC offer to the right peer.

The right.js file has functions for the right peer, it is requesting the RTC offer from the left peer and it is sending the RTC answer.

The two JavaScript files have a channel function that simulates the channel to exchange RTC messages.

## The Code

The code is in JavaScript, using modules and async/await.

```
// Send rtc offer to the other peer
async function sendOffer() {
  try {

    // Do not send offer while negotiating
    if (sending) { return; }
    sending = true;
    setTimeout(() => sending = false, 3000);

    // Create offer
    const offer = await peer.createOffer();
```

```
    await peer.setLocalDescription(offer);
    console.log("left sendOffer: ", offer);

    // Send offer to the other peer
    right.channel('receiveOffer', offer);

  } catch (err) {
    console.error("left sendOffer: ", err);
  }
}
```

## Source Code

The source code can be downloaded on GitHub on link:  
<https://github.com/ivohost/webrtc-example>

## WebRTC Documentation

- <https://webrtc.org/getting-started/overview>
- [https://developer.mozilla.org/en-US/docs/Web/API/WebRTC\\_API](https://developer.mozilla.org/en-US/docs/Web/API/WebRTC_API)