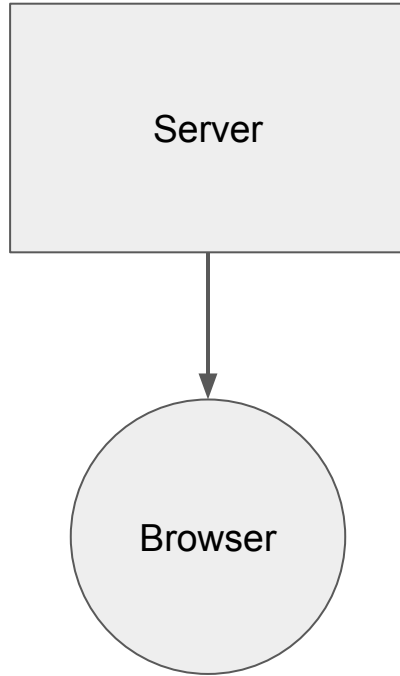


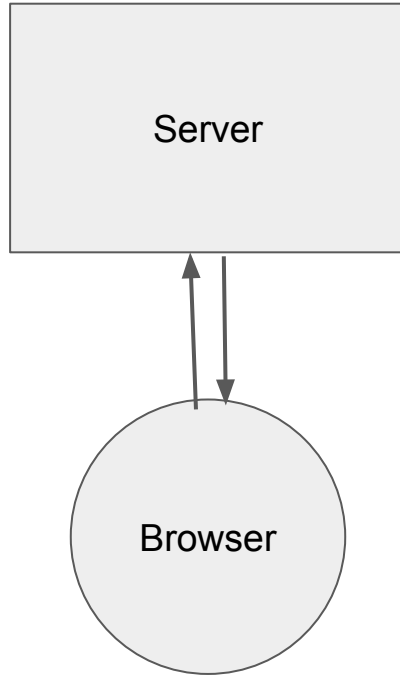
WebRTC

@EricLathrop

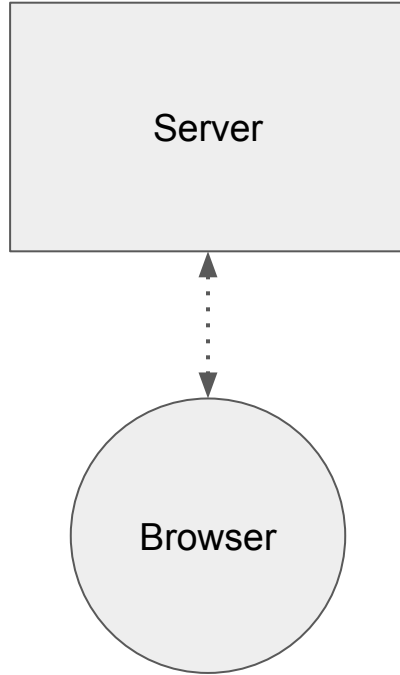
HTTP



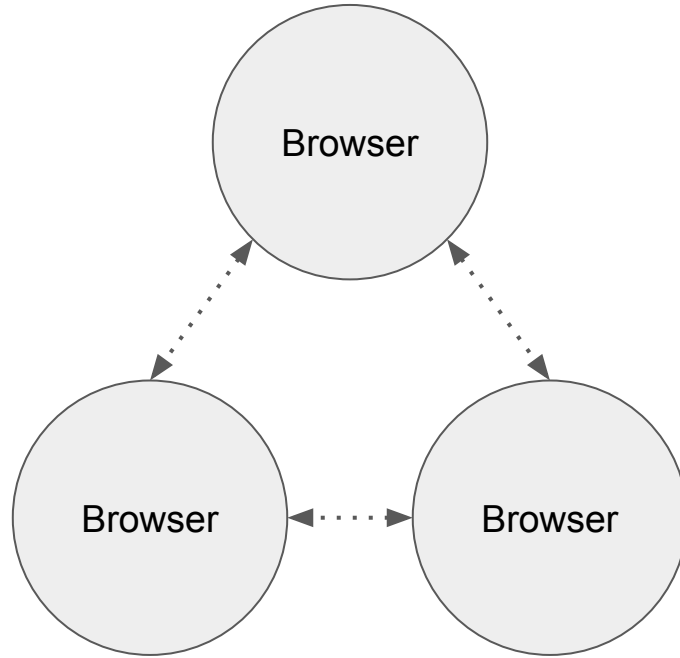
XmlHttpRequest (AJAX)



WebSockets



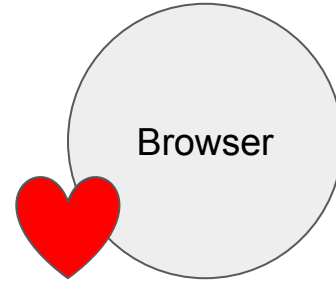
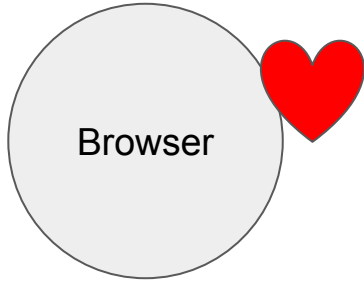
WebRTC



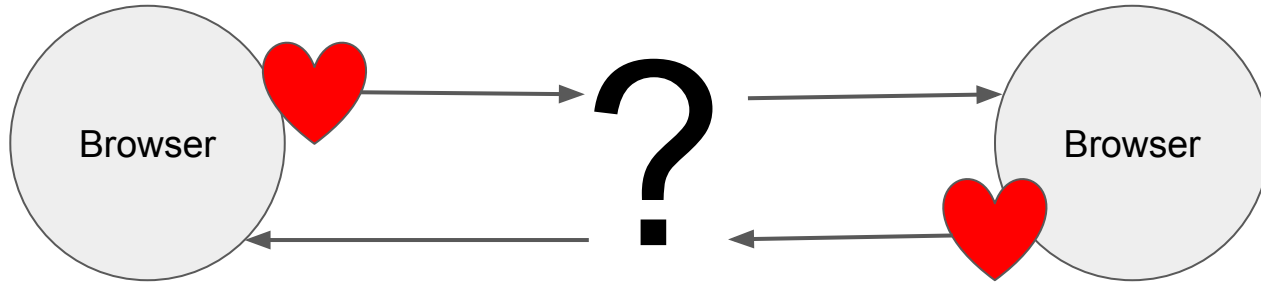
Features

- Video streaming
- Audio streaming
- Bidirectional data streaming
- No plugins or special servers
- Peer-to-peer (browser-to-browser)

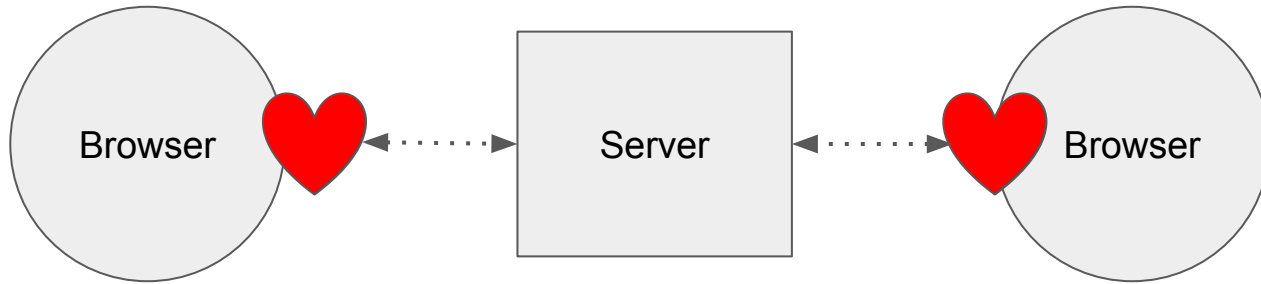
Starting a connection



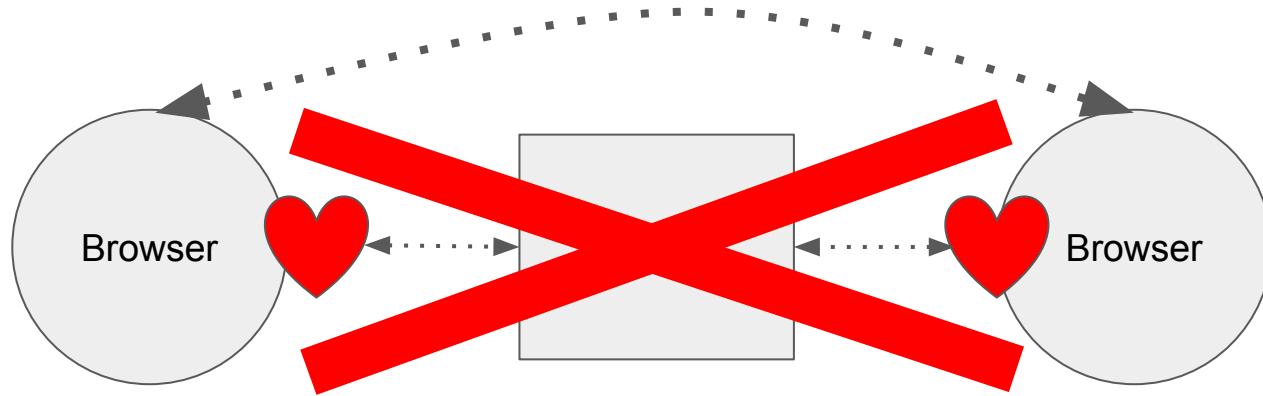
Exchanging signalling information



Exchanging signalling over WebSockets



Exchanging signalling over WebSockets



<https://github.com/feross/simple-peer>

```
var SimplePeer = require('simple-peer')

var peer1 = new SimplePeer({ initiator: true })
var peer2 = new SimplePeer()

peer1.on('signal', function (data) {
  // when peer1 has signaling data, give it to peer2 somehow
  peer2.signal(data)
})

peer2.on('signal', function (data) {
  // when peer2 has signaling data, give it to peer1 somehow
  peer1.signal(data)
})
```

```
peer1.on('connect', function () {
  // wait for 'connect' event before using the data channel
  peer1.send('hey peer2, how is it going?')
})

peer2.on('data', function (data) {
  // got a data channel message
  console.log('got a message from peer1: ' + data)
})
```

WebRTC Data Channels

	TCP	UDP	SCTP
Reliability	reliable	unreliable	configurable
Delivery	ordered	unordered	configurable
Transmission	byte-oriented	message-oriented	message-oriented
Flow control	yes	no	yes
Congestion control	yes	no	yes

Source: <https://www.html5rocks.com/en/tutorials/webrtc/datachannels/>

Browser support

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			49					4.3	
			54					4.4	
		50	55			9.3		4.4.4	
11	14	51	56	10	42	10.2	all	53	55
	15	52	57	10.1	43				
		53	58	TP	44				
		54	59						

Source: <http://caniuse.com/#feat=rtcpeerconnection>

DEMO