Spec status

W3C		IETF	
WebRTC 1.0	**CR**	JSEP	**→ RFC**
Media Capture and Streams	**CR**	Data Channel	**~RFC**
Identifiers for WebRTC's Statistics	**WD**	RTP Usage	**~RFC**
		Transports	**~RFC**
		Audio/Video codecs	**RFC**
		Requirements	**RFC**

JavaScript APIs - 2 generations

https://blog.mozilla.org/webrtc/the-evolution-of-webrtc/   (June 2017)

The three **main stages** in the design were:

1. `addStream` **and** `removeStream` *(Chrome today)*
2. `addTrack`, `removeTrack`, **and** `sender.replaceTrack` *(Firefox today)*
3. `addTransceiver` **and early media** *(No-one today)*

2nd gen. JavaScript WebRTC APIs - Chrome

Challenging for application developers without consistent compliance, native path chosen instead

- **Available:**
  - getStats,
  - Track constraints,
  - Receiver
- **Experimental:**
  - Sender,
  - addTrack,
  - ontrack
- **Under development:**
  - Unified Plan

ETA: mostly completed end of Q1 2018

2nd gen. JavaScript WebRTC APIs - Firefox

- **Available:**
  - Spec-compliant getStats,
  - MediaStreamTrack constraints,
  - RTCRtpReceiver,
  - RTCRtpSender,
  - addTrack,
  - ontrack,
  - Unified Plan

ETA: (transceiver) mostly completed next week

2nd gen. JavaScript WebRTC APIs - Safari

- **Available:**
  - Spec-compliant getStats,
  - MediaStreamTrack constraints,
  - RTCRtpReceiver,
  - RTCRtpSender,
  - addTrack,
  - ontrack,
- **Under development:**
  - Unified Plan

ETA: mostly completed when chrome gets it

2nd gen. JavaScript WebRTC APIs - Edge

- **IE: no, and will not happen**

- **Edge:**
  - **ORTC: yes + webrtc shim**
  - **Webrtc: yes, but 1st generation only**

- **UWP: Webrtc yes**

Codec: H264UC (skype), H264, VP8, VP9 (SVC) … depending on the version above.

ETA: not clear

Web Platform Tests Progress

- May 2017: 293 tests
- Nov 2017: 1296 tests (+1003)

web-platform-tests dashboard

Root   About   GitHub

Search test files, like cors/allow-headers.htm

WPT /

Spec	chrome 63.0 linux 3.16 @7a0cf8ade7 Nov 02 2017	edge 15 windows 10 @053e5361f2 Nov 02 2017	firefox 57.0 linux * @1dfa574650 Nov 02 2017	safari 11.0 macos 10.12 @15cb61b5a7 Nov 03 2017
/webrtc	523 / 1296	121 / 574	539 / 1296	639 / 1296

https://wpt.fyi/webrtc

Coverage Status

From 10% to 70% in less than a year, proudly made in Singapore by a SPR ;-)

```
$ cd webrtc/tools
$ node scripts/overview.js
Overall Coverage
====================
todo         |     248
tested       |     315
trivial      |     173
untestable   |      79
====================
total        |     815
coverage     | 69.57%
====================
```

4. Peer-to-peer connections	67.83%
5. RTP Media API	67.01%
6. Peer-to-peer Data API	71.87%
7. Peer-to-peer DTMF	93.54%
8. Statistics Model	100.00%
9. Identity	86.04%
10. Media Stream API Extensions for Network Use	35.71%

Most compliant Browser (june 2017)

	Passed	Failed	Timeouts	Errors	Not Run
	393	396	3	1	0
Display:	☑	☑	☑	☑	☑

chromium

	Passed	Failed	Timeouts	Errors	Not Run
	397	388	7	0	2
Display:	☑	☑	☑	☑	☑

firefox

|	Passed	Failed	Timeouts	Errors	Not Run
	438	321	30	1	10
Display:	☑	☑	☑	☑	☑

STP 33

Safari Tech preview 33, when it went out, was the most compliant browser, by a very small margin.

They did not have to pay any technical debt as chrome and firefox have.

In 2018, those results will be computed every day for all browsers here in Singapore, and made available to the entire community.

Tests tracks: WPT and Interop testing

Web Platform Tests

javascript

HTTP

javascript

javascript

SRTP/SCTP

STUN/TURN
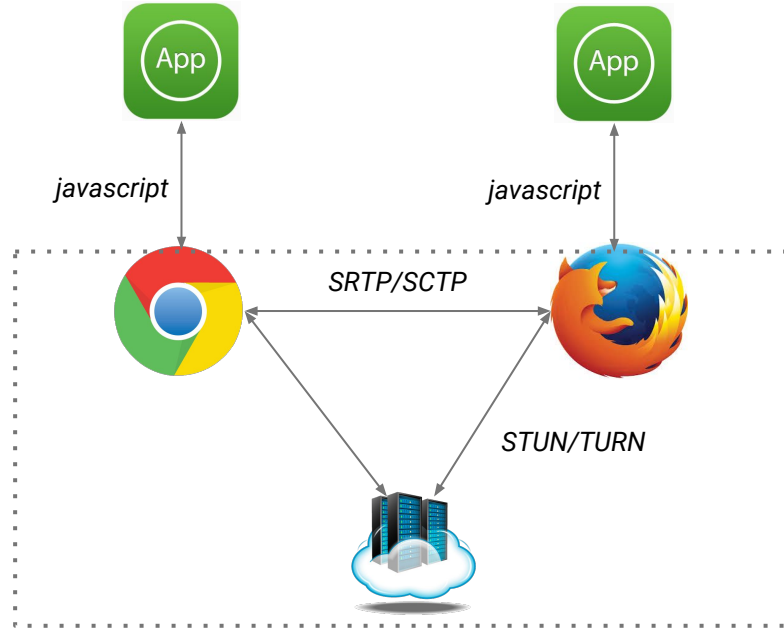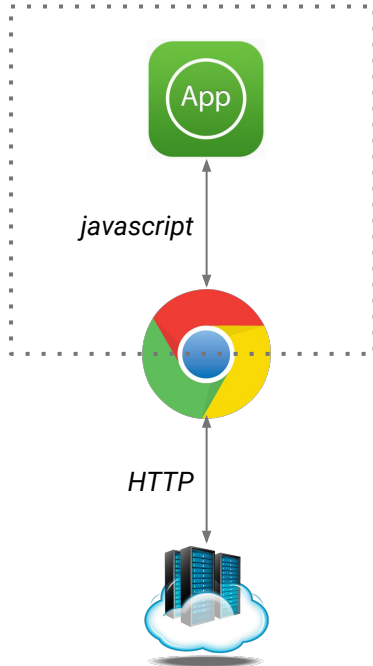
KITE
Proudly made in Singapore as a Master Graduation project.

We would love your feedback on this tutorial!

https://www.surveymonkey.com/r/100webrtc