

Temasys WebRTC Plugin

Solving the Internet Explorer and Safari Problem

Temasys Communication Pte Ltd

Dr. Alex Gouillard (CTO)

Jacques-Olivier Haché (Solution Architect and Plugin Lead)

Where is the problem?



So what are my options?

- Wait for the browsers to implement WebRTC on their own, if they do at all.
- Work with the browser vendors to encourage faster implementation
- Use a plugin to add the needed functionality
- Use a native solution that bypasses the browser.

The Temasys Solution for Desktop Browsers

- A browser plugin based on libWebRTC.
- Painless nearly drop-in integration.
- Transparent end-user experience.

The Temasys Solution for Desktop Browsers

- Existing applications designed to work with Chrome or Firefox work with little to no modifications.
- Implements the complete WebRTC API to current spec
- Completely vendor independent
- Available at no cost (Free as in Free Beer)

What does the Free Plugin Offer

- Implementation of the WebRTC Spec
- Temasys branding, CDN distribution, and installer
- Dialog based Security prompt
- Automatic Update
- Best effort support

What does our commercial plugin licensing program offer?

- Features beyond the core spec
 - Screen Sharing
 - H.264 support
- Custom branding of plugin, CDN or customer provided distribution , and installer
- HTML based security prompt & white listing
- Automatic Update Toggle
- Dedicated Support

Compatibility



9+

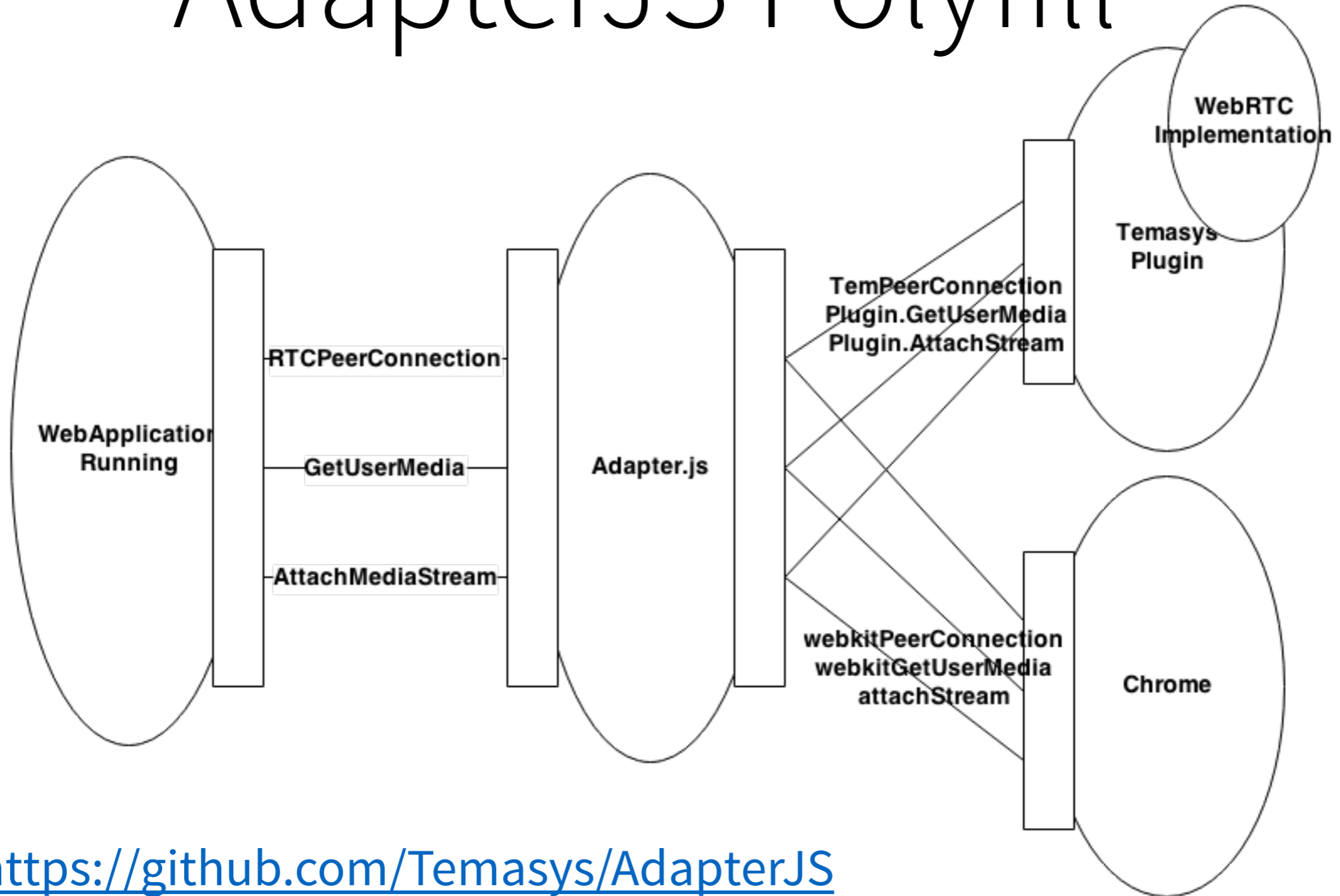


7+

Compatibility Matrix

	Win7 IE9	Win7 IE10	Win 7 IE 11	Win 8.1 IE 11	OSX 10.9 Safari 7.x	OSX 10.10 Safari 8.0
	Components					
getUserMedia	OK	OK	OK	OK	OK	OK
MediaStream	OK	OK	OK	OK	OK	OK
PeerConnection	OK	OK	OK	OK	OK	OK
IceServers	OK	OK	OK	OK	OK	OK
SessionDescription	OK	OK	OK	OK	OK	OK
Stream Rendering	OK	OK	OK	OK	OK	OK
DataChannel	Strings only		Strings, Int8Array, Uint8Array, Int16Array, Uint16Array, Int32Array, Uint32Array			
	Options					
Multi-Tab	One camera can only be used by ONE tab at the time				OK	OK
Verbose mode	OK	OK	OK	OK	OK	OK
	Applications					
AppRTC	OK	OK	OK	OK	OK	OK
Skylink	OK	OK	OK	OK	OK	OK

AdapterJS Polyfill

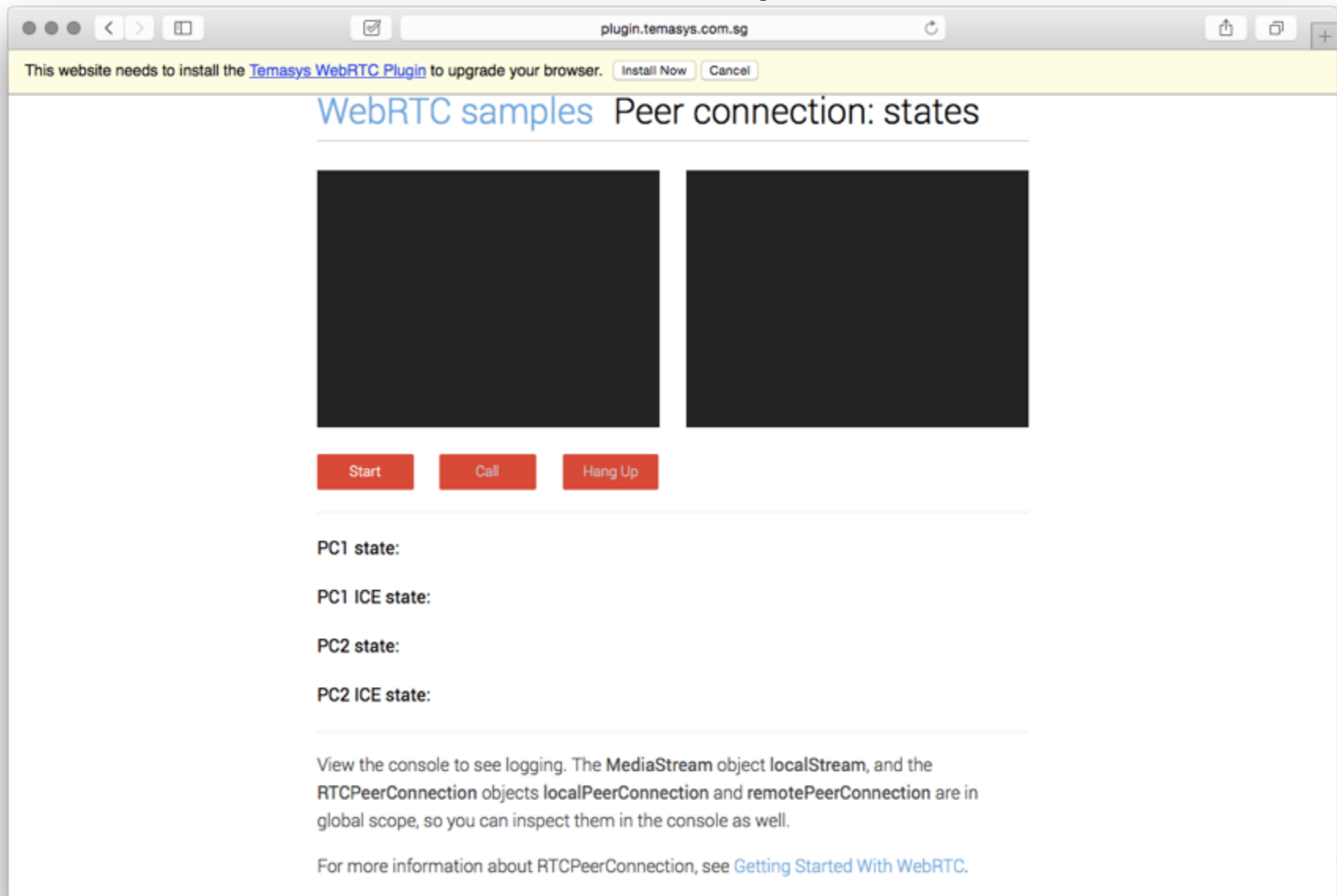


- <https://github.com/Temasys/AdapterJS>

Getting started

- Public Documentation:
<https://temasys.atlassian.net/wiki/display/TWPP/WebRTC+Plugins>
- Online Demos and Sample Code:
<https://plugin.temasys.com.sg/demo/index.html>
- Support Mailing List:
<https://groups.google.com/forum/#!forum/temasys-discuss-webrtcplugin>

End-user experience



The screenshot shows a web browser window with the address bar displaying `plugin.temasys.com.sg`. A yellow notification bar at the top states: "This website needs to install the [Temasys WebRTC Plugin](#) to upgrade your browser." with "Install Now" and "Cancel" buttons.

The main content area is titled "WebRTC samples Peer connection: states". It features two large black rectangular video placeholders. Below these are three red buttons labeled "Start", "Call", and "Hang Up".

Below the buttons, the page lists the following states:

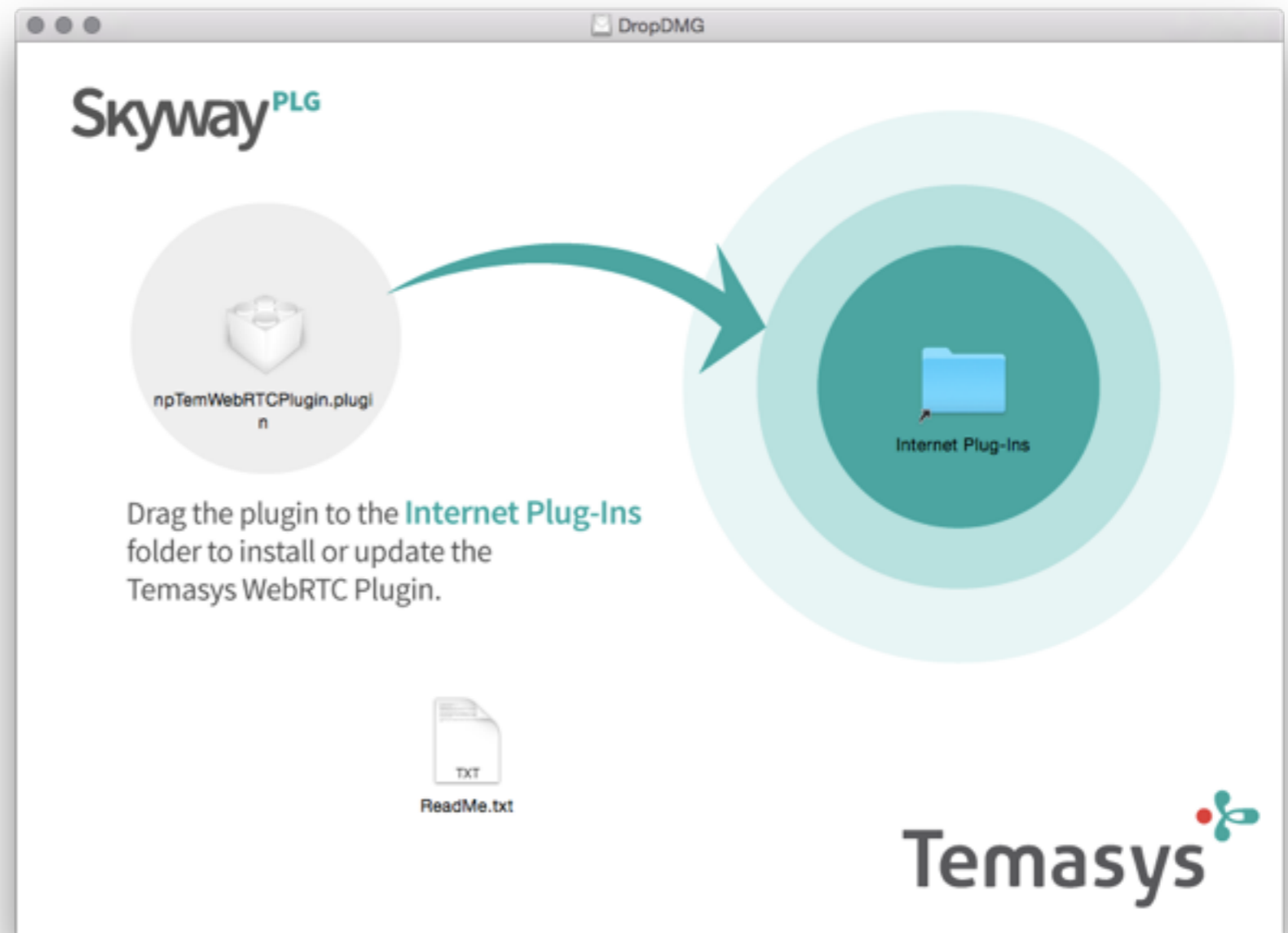
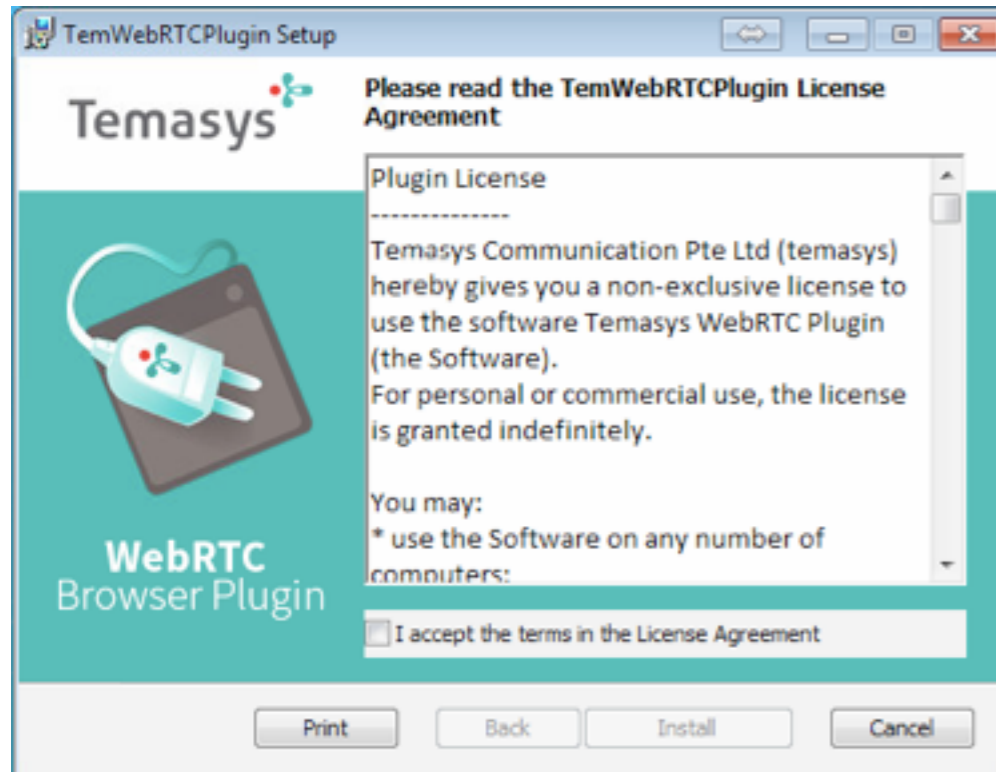
- PC1 state:
- PC1 ICE state:
- PC2 state:
- PC2 ICE state:

At the bottom, there is a paragraph of text: "View the console to see logging. The `MediaStream` object `localStream`, and the `RTCPeerConnection` objects `localPeerConnection` and `remotePeerConnection` are in global scope, so you can inspect them in the console as well."

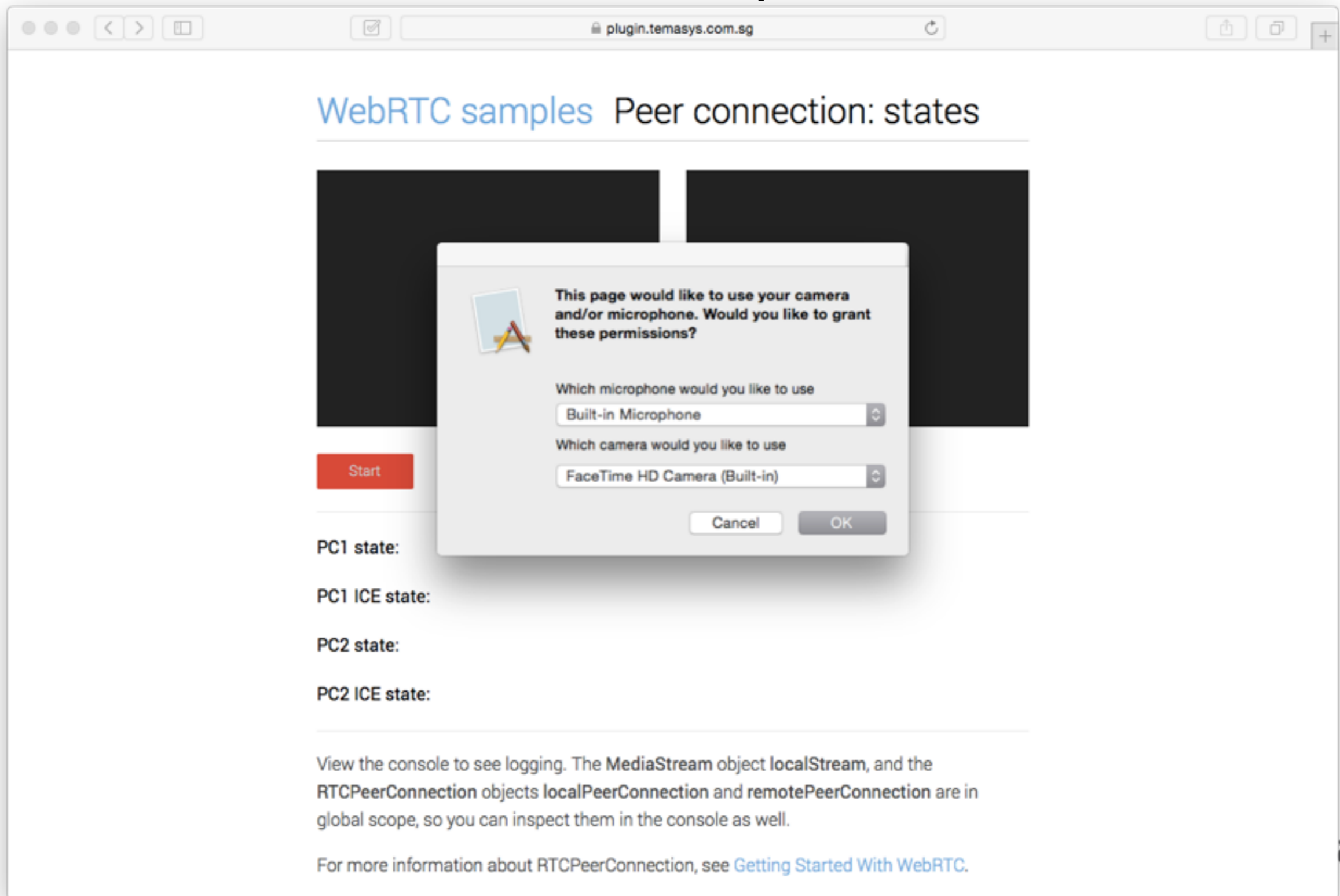
Below the text is a link: "For more information about `RTCPeerConnection`, see [Getting Started With WebRTC](#)."

The Temasys logo is visible in the bottom right corner of the browser window.

End-user experience



End-user experience



The screenshot shows a web browser window with the address bar displaying `plugin.temasys.com.sg`. The page title is "WebRTC samples Peer connection: states". The main content area features two black video placeholders and a red "Start" button. A modal dialog box is open in the center, asking for camera and microphone permissions. The dialog includes a title, a question, two dropdown menus for selecting devices, and "Cancel" and "OK" buttons. Below the dialog, the page lists labels for "PC1 state:", "PC1 ICE state:", "PC2 state:", and "PC2 ICE state:". At the bottom, there is explanatory text about the console and a link to "Getting Started With WebRTC".

WebRTC samples Peer connection: states

Start

PC1 state:

PC1 ICE state:

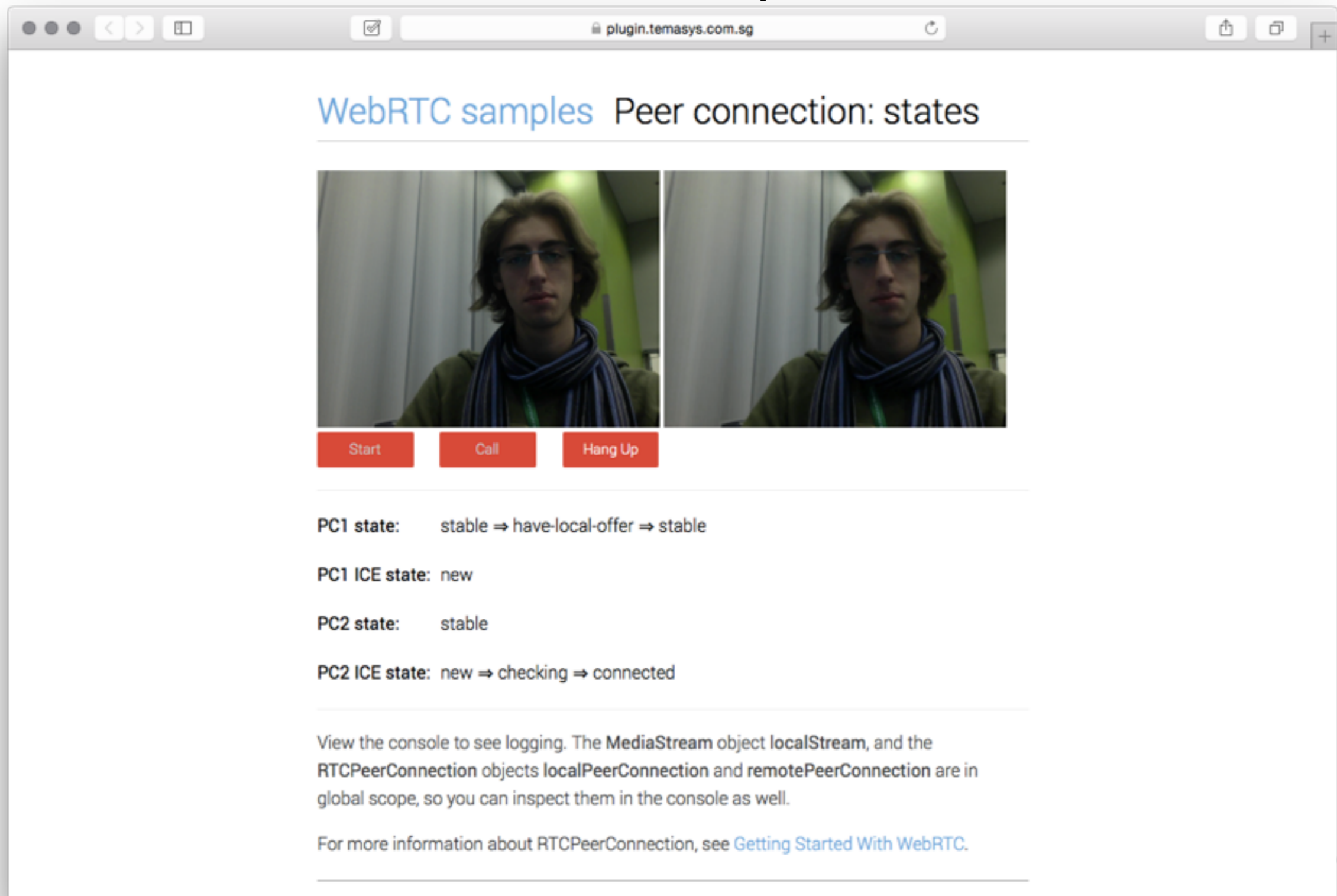
PC2 state:

PC2 ICE state:

View the console to see logging. The `MediaStream` object `localStream`, and the `RTCPeerConnection` objects `localPeerConnection` and `remotePeerConnection` are in global scope, so you can inspect them in the console as well.


For more information about `RTCPeerConnection`, see [Getting Started With WebRTC](#).

End-user experience



plugin.temasys.com.sg

WebRTC samples Peer connection: states



Start Call Hang Up

PC1 state: stable ⇒ have-local-offer ⇒ stable


PC1 ICE state: new

PC2 state: stable

PC2 ICE state: new ⇒ checking ⇒ connected

View the console to see logging. The `MediaStream` object `localStream`, and the `RTCPeerConnection` objects `localPeerConnection` and `remotePeerConnection` are in global scope, so you can inspect them in the console as well.

For more information about `RTCPeerConnection`, see [Getting Started With WebRTC](#).



What's next?

- We hate plugins! (yes, we DO hate plugins #@&%!)
- Working with Ericsson, Apple and others to bring WebRTC to Webkit (as announced in June)

WebRTC in Safari/iOS browsers



WebRTC in Safari/iOS browsers



Step 2: Ericsson and Temasys

- you can help by contributing code
- you can help by financing (indiegogo)

WebRTC in Safari/iOS browsers



Step 3: Only Apple controls the timeline

- Let them know you want it: get a dev account, open a bug
- explain in the bug description why you need it
 - **vendors:** explain use case, business and market impact
 - **users:** just mention you would use this, that and that if Safari/iOS was supporting WebRTC
- VOLUME COUNTS FOR DECISION TO BE MADE

WebRTC in Safari/iOS browsers



- **Step 2:** 6 to 8 months (ETA, Aug 2015)
- **Step 3:** only apple can decide, and won't comment
- However, according to statistics on previous releases, new version of safari get shipped with new OS, around once a year.

WebRTC in Safari/iOS browsers: Apologies

- I lost my bet with Kevin Glass @ cokeandcode to deliver it Q1 2015.
- I will put my money where my mouth is and send a nice bottle of french wine

:-)