## Live Web Audio Input Enabled!



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I'm really excited by a new feature that went in to yesterday's Chrome Canary build (23.0.1270.0) - the ability to get low-latency access to live audio from a microphone or other audio input on OSX! (This has not yet been enabled on Windows - but don't worry, we're working on it!)

**Note:** As of Oct 8, 2012 live audio input is now enabled for Windows, as long as the input and output device are using the same sample rate!

To enable this, you need to go into <a href="mailto:chrome://flags/">chrome://flags/</a> and enable the "Web Audio Input" item near the bottom, and relaunch the browser; now you're ready to roll! Note: If you're using a microphone, you may need to use headphones for any output in order to avoid feedback. If you are using a different audio source, such as a guitar or external audio feed, or there's no audio output from the demo, this may not be a problem. You can test out live audio input by checking out the spectrum of your input using the <a href="live input visualizer">live input visualizer</a>.

For those Web Audio coders among you, here's how to request the audio input stream, and get a node to connect to any processing graph you like!

```
// success callback when requesting audio input stream
function gotStream(stream) {
    window.AudioContext = window.AudioContext || window.webkitAudioContext;
    var audioContext = new AudioContext();

    // Create an AudioNode from the stream.
    var mediaStreamSource = audioContext.createMediaStreamSource( stream );

    // Connect it to the destination to hear yourself (or any other node for proceediaStreamSource.connect( audioContext.destination );
}

navigator.getUserMedia = navigator.getUserMedia || navigator.webkitGetUserMedia;
navigator.getUserMedia( {audio:true}, gotStream );
```

There are many rich possibilities for low-latency audio input, particularly in the musical space. You can see a quick example of how to make use of this in a <u>simple pitch detector</u> I

threw together - try plugging in a guitar, or even just whistling into the microphone.

And, as promised, I've added live audio as an input source to the <u>Vocoder I wrote for Google IO</u> - just select "live input" under modulator. You may need to adjust the Modulator Gain and the Synth Level. There's a slight lag due to processing (not due to input latency). Now that I have live audio input, it's time for another round of tweaking!

Finally, you may want to take a look at the <u>collection of my web audio demos</u> - by the time you read this, I may have some more live audio demos up!

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