

Web Audio

@teropa

webaudio.github.io/web-audio-api

W3C Editor's Draft

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Web Audio API
W3C Editor's Draft 15 August 2016

ReSpec 1

W3C

This version: <https://webaudio.github.io/web-audio-api/>

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Latest editor's draft: <https://webaudio.github.io/web-audio-api/>

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Repository: <https://github.com/WebAudio/web-audio-api>

Bug tracker: <https://github.com/WebAudio/web-audio-api/issues?state=open>

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Abstract

This specification describes a high-level JavaScript API for processing and synthesizing audio in web

Uses for Web Audio

Games

Apps

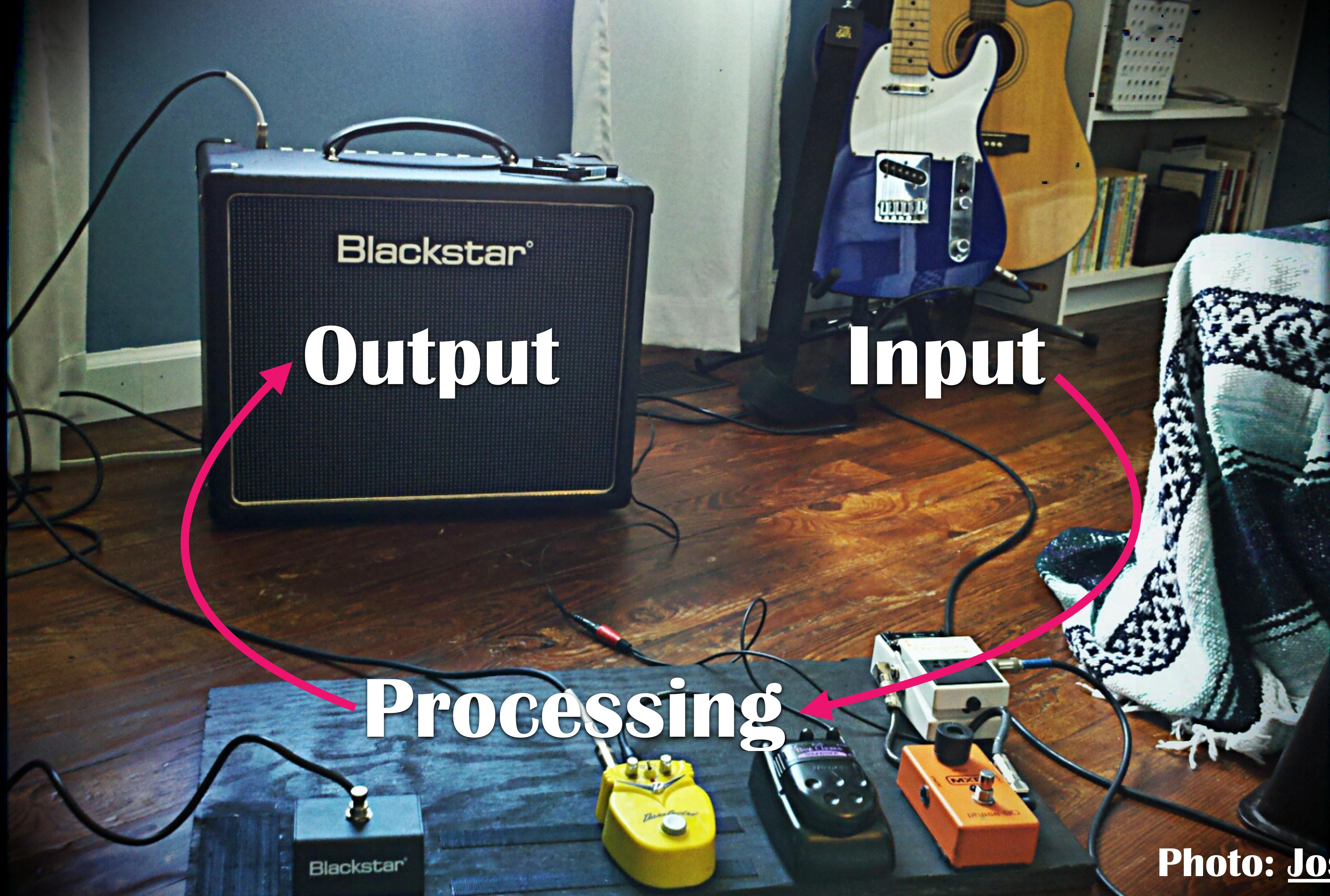
Music

Audiovisual art

Video/audio chat. Audio broadcast. Kids' apps. VR.

Playback. Creation.

with Canvas, WebGL, SVG.



Blackstar®

Output

Input

Processing

Blackstar®

Photo: Josh Self

Input

Buffer Sources

Media Element Sources

Media Stream Sources

Oscillators

Processing

Gains

Filters

Delays

Stereo Panning

3D Spatialization

Convolution Reverb

Distortion

Compression

AudioWorklets

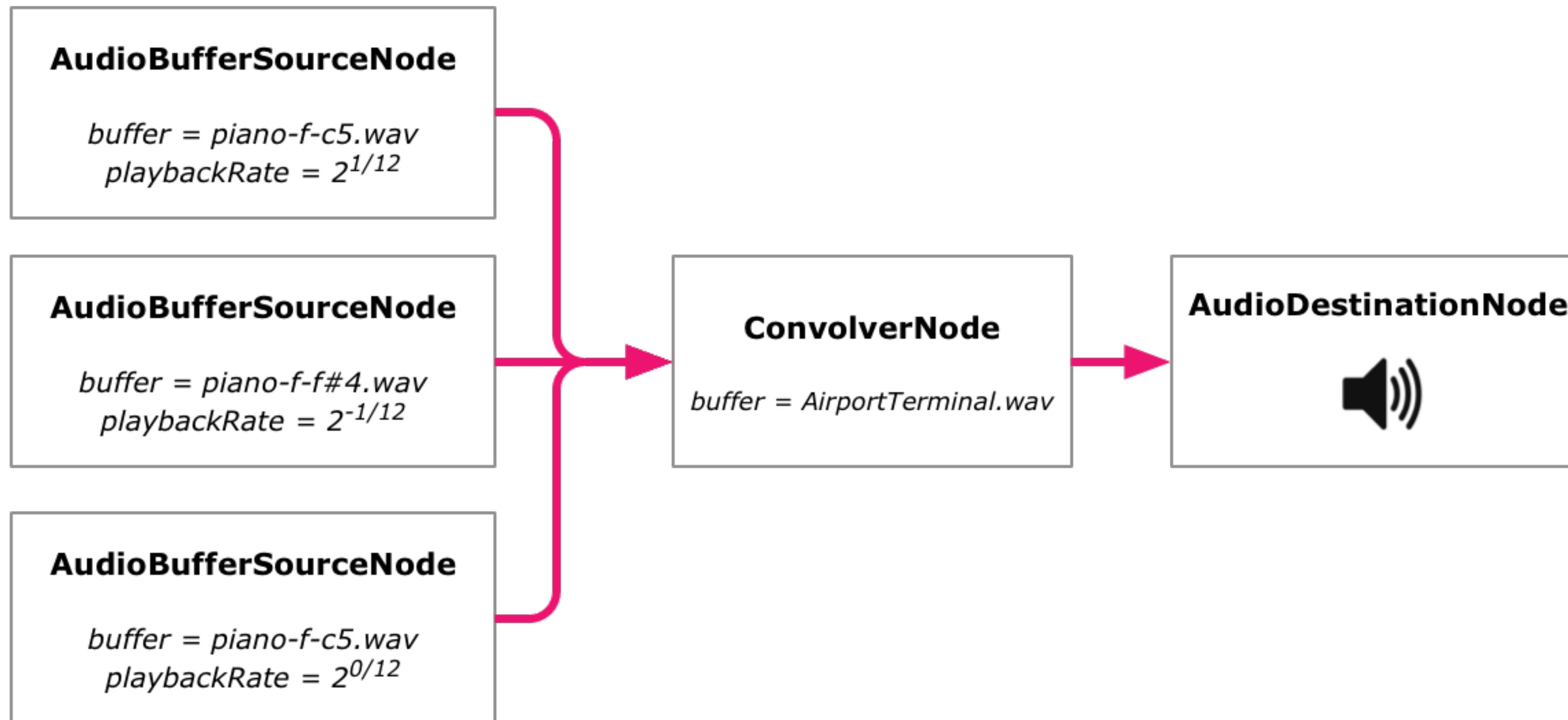
Output

Speakers

Stream Destinations

Buffer Destinations

Signal Graphs

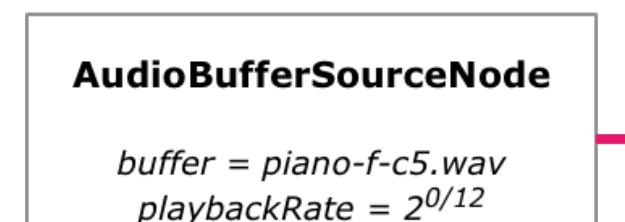
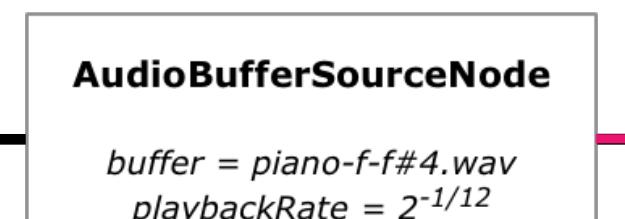
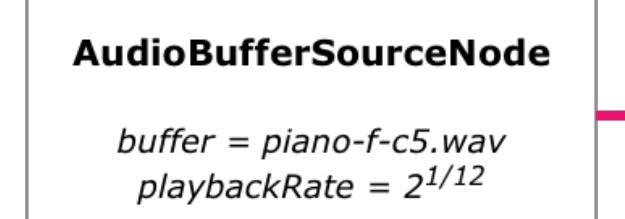


JavaScript on Main Thread

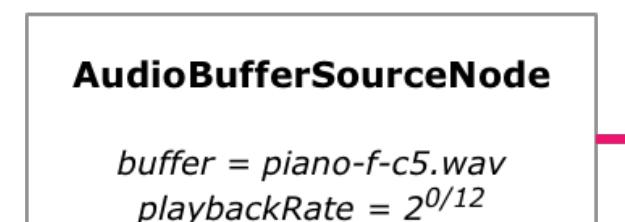
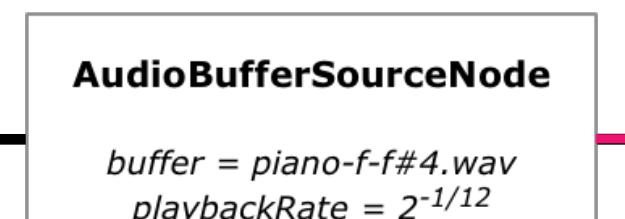
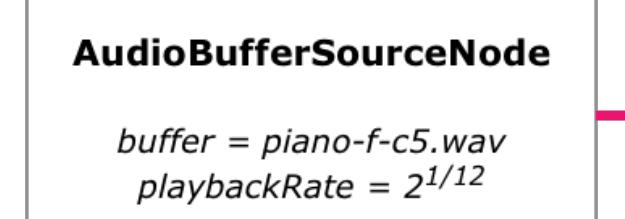
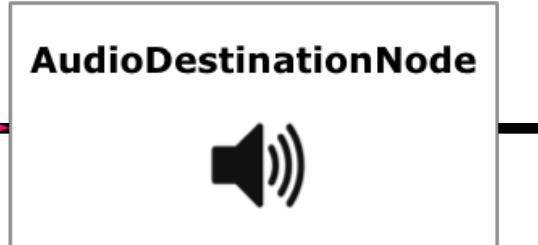
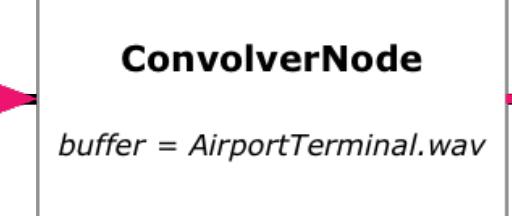
“create” “start”

“stop”

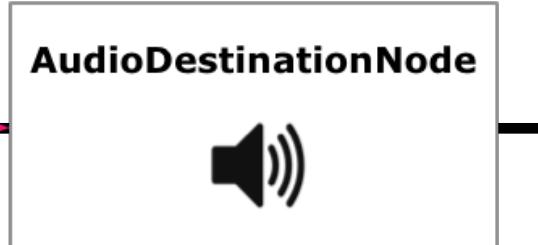
C++ / Assembly on Audio Thread



ConvolverNode



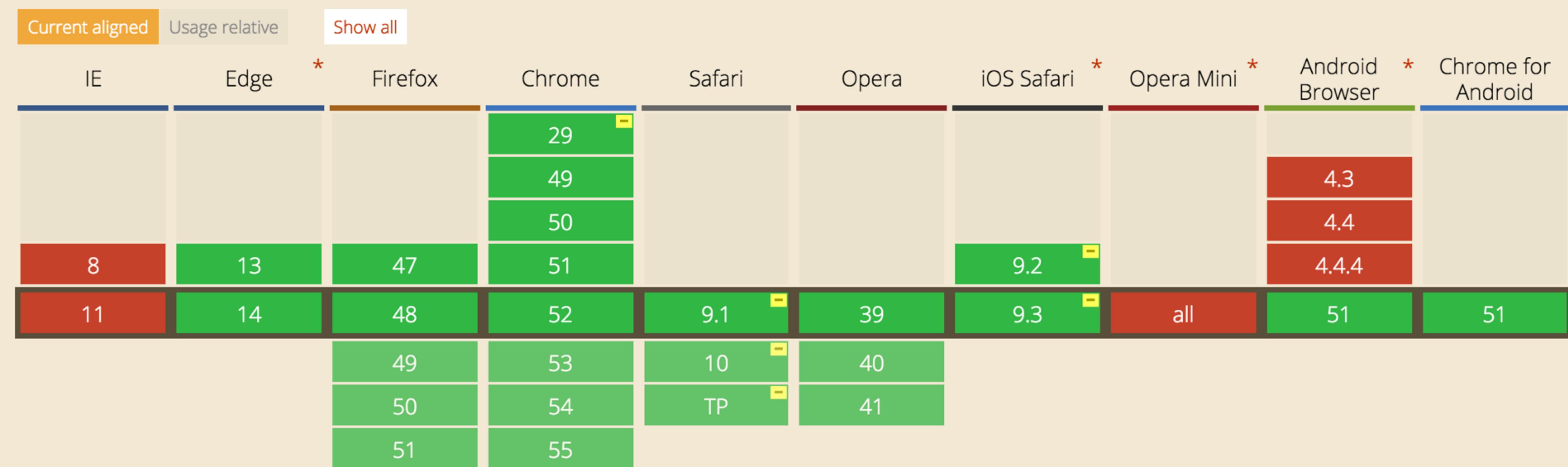
ConvolverNode



Web Audio API - WD

Global **74.84%**
unprefixed: **62.29%**

High-level JavaScript API for processing and synthesizing audio



Demos

<http://teropa.info/blog/2016/07/28/javascript-systems-music.html>

<https://codepen.io/jakealbaugh/full/qNrZyw/>

<http://smus.com/copresence-webvr/>

Spec

webaudio.github.io/web-audio-api

MDN

My Stuff

teropa.info/blog/tags/webaudio.html

Web Audio Weekly

blog.chrislowis.co.uk/waw.html

Cool Shit

musiclab.chromeexperiments.com

codepen.io/jakealbaugh