

Output Device Selection

Justin Uberti
October 2014

Why is this important?

#1 API-related bug in Chrome WebRTC bug tracker:

<https://code.google.com/p/webrtc/issues/detail?id=2243>

(yes, even more than screensharing)

Usage scenario

Settings

 HD Pro Webcam C920 (046d:08... ▾

 Default ▾

 Default ▾

[Play test sound](#)

- Turn on media heads-up display. (internal only)
- Report usage data to help improve Hangouts.

Save

Cancel

Problem statement

No API for setting output device:

enumerateDevices() returns output devices, but no way to apply them

Need to ACL any such API:

For user using headset, a web page should not be able to blare ads through speakers

Proposal

- Add **HTMLMediaElement.sinkId**, indicating device to use
- Unset or empty string triggers use of system default (always authorized)
- Specific devices can be set (using info from **enumerateDevices**) *if application is authorized to use them*

Authorization

- Opening an audio input device via gUM authorizes access to any output devices with the same **.groupId** (e.g. headset mic/speaker); this covers all typical cases
- Access to output devices by themselves, for advanced audio apps, can be gated by a door hanger