

Multi-touch browser issues

We are often asked if gestures on the Mac can be used to scroll web pages.

We are also aware that UPDD Gestures cannot be used to control touch-enabled web pages. The problem here is that OS X doesn't pass its system-level touch events to web browsers as HTML5 / javascript touches. So while these pages will work with an iPad (and similar) it can't work in OS X, even when using Apple's magic trackpad. There is a [partial solution](#) utilising the TUIO interface but this only really supports one browser and only caters for multi-touch web apps written in javascript that are programmed to receive and respond to touch events.

There are a number of possible scenarios when dealing with multi-touch and browsers on the Mac and the advice or potential development to cater for them differs significantly as briefly summarized here:

1. If you want touches in a web browser to basically work like it does on mobile, don't need to use touches in other Mac applications, and don't need to run any touch enabled web apps in a browser, then this is already possible using UPDD Gestures. You would need to reconfigure drag gestures to "scroll" rather than "click and drag", and make a few other adjustments that we can outline if required.
2. If you need the above but **also** need to use other Mac applications with gestures, then we need to modify Gestures such that it can change gesture settings based on the current application - this is planned for a future release. However, we may have an interim solution shortly in that you will be able to define if a application is a drawing or browser application and when these have focus automatically change the gesture setting profile to better cater for these application types.
3. If you need to be able to use one or more touch-enabled web apps, but don't care about other web pages working the same as on mobile, then you need the TUIO -> javascript browser extension we could develop as a browser extension.

We believe that we can develop a javascript library that receives TUIO touches and translates them into native javascript touches. The library could be packaged as an extension for Safari, Firefox, and Chrome that enables any webpage to receive TUIO touches as though they were native javascript touches.

You may also need a way to force a desktop browser to deliver the mobile version of a website instead of the desktop version, depending on which site you're working on and how

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much control you have over it, though this may already be possible without requiring any additional work from us.

4. If you want all the above this would need the browser extension plus a planned future update to Gestures that allows gesture setting profiles to be associated at an application level rather than a system level as currently implemented.

With both the browser extension and the gesture application level control in place there should be the ability to browse the web on a Mac as though it were on mobile. Currently, using UPDD Gestures with Safari or other web browsers we deliver something kind of half way between desktop web browsing and mobile web browsing, where single touches control the mouse but you can still scroll and zoom pages with two finger gestures. With the proposed development you could seamlessly switch between using a web browser just like on a mobile device and interact with other Mac applications that require regular mouse input.

Unfortunately there is a significant amount of work to implement the above and this will only be delivered if and when our current workload decreases or a significantly large project warrants the development effort involved.

Touch-Base Support

<http://support.touch-base.com/Documentation/50345/Multitouch-browser-issues>