

# Gatsby Browser APIs

## Introduction

The file `gatsby-browser.js/gatsby-browser.tsx` lets you respond to Gatsby-specific events within the browser, and wrap your page components in additional global components. The Gatsby Browser API gives you many options for interacting with the client-side of Gatsby.

You can author the file in JavaScript or TypeScript.

## Usage

To use Browser APIs, create a file in the root of your site at `gatsby-browser.js/gatsby-browser.tsx`. Export each API you want to use from this file.

```
const React = require("react")
const Layout = require("./src/components/layout")

// Logs when the client route changes
exports.onRouteUpdate = ({ location, prevLocation }) => {
  console.log("new pathname", location.pathname)
  console.log("old pathname", prevLocation ? prevLocation.pathname : null)
}

// Wraps every page in a component
exports.wrapPageElement = ({ element, props }) => {
  return <Layout {...props}>{element}</Layout>
}
```

Note: The APIs `wrapPageElement` and `wrapRootElement` exist in both the browser and Server-Side Rendering (SSR) APIs. You generally should implement the same components in both `gatsby-ssr.js` and `gatsby-browser.js` so that pages generated through SSR are the same after being hydrated in the browser.