

What is Headless WordPress?

Learn what headless WordPress means, how it differs from other ways of using WordPress or other types of Content Management Systems, and how you can use headless WordPress with Gatsby.

First, what is a Headless CMS?

A headless CMS is a Content Management System that uses a decoupled architecture to allow it to act as a backend service accessed via an API or SDK. Traditionally, CMS have acted as both the frontend (presentation layer) and backend (content database) for content editing. With a headless implementation, the CMS only acts in the capacity of content editing and the frontend is served by another solution - like Gatsby.

Headless WordPress

A *headless WordPress* site is one that uses WordPress for managing content and some other custom frontend stack to actually display that content to a site visitor. While a site built with headless WordPress has many benefits, one of the primary advantages of this approach is decoupling content editing teams and developers.

With Headless WordPress, a marketing team and content team can continue to use their familiar WordPress interface and the development team can use the tools they love like React, GraphQL, in a Git workflow they are comfortable with.

The Drawbacks of a Monolithic WordPress

Most WordPress installations use *themes*, which are a collection of template files, to display content. A WordPress template file mixes HTML with PHP template tags, and controls the layout of a particular page or page type — e.g. `single.php` for individual blog posts; `home.php` for the home page. The downside of this template-based system is that the content is only available as HTML, using the document structure defined by each template.

Traditional WordPress also renders content to the site visitor via server-side rendering, since it's PHP, which can hurt performance when compared to other

methods of page generation, such as static site generation. Each time a visitor visits a new page, the browser reaches out to the web server and grabs all the content needed - slow processes that ultimately hurt the experience of a website.

The WordPress REST API, on the other hand, returns JSON instead of HTML. Using a content API gives you more flexibility around what kind of frontend you use: vanilla JavaScript, a native mobile application, your Gatsby site, or all of the above.

The Benefits of Headless WordPress

Faster Performance

WordPress websites that are powered by frontends like Gatsby are incredibly smooth and responsive, with millisecond load times and prefetched delivery on the edge.

Improved Security

Static-Site Generators, like Gatsby, acting as a frontend for WordPress have no active web servers and no reachable database, thus presenting a smaller attack surface. This approach prevents malicious requests, DDoS attacks, and accidental exposure.

Greater Flexibility

Frontends such as Gatsby can integrate WordPress content into complex, organization-wide websites which may combine WordPress content with content from other CMSs and web services.

Getting Started

Gatsby supports WordPress as a content source with the `gatsby-source-wordpress` plugin. As with Gatsby, you can install the `gatsby-source-wordpress` plugin using npm:

```
npm install gatsby-source-wordpress
```

The `gatsby-source-wordpress` plugin works with self-hosted WordPress sites and those hosted by WordPress.com. Be aware, however, that the WordPress.com API supports a smaller set of features than that of self-hosted WordPress sites.

Headless WordPress enables content writers to use a familiar interface while giving web developers the flexibility to use any frontend technology stack.

Learn More

- [Gatsby's WordPress integration for headless WordPress projects](#)
- [GraphQL for WordPress open-source plugin](#)

- Why Gatsby chose WordPress - a case study