

What is a Headless Content Management System (CMS)?

Learn what a headless CMS is, how it differs from traditional content management systems, and why you might choose a headless CMS for your project.

What is a Headless CMS?

A *headless content management system* or *headless CMS*, is a CMS in which the data (content) layer is separated from its presentation (frontend) layer.

Content management systems, such as WordPress and Drupal store content in a database, and use a collection of HTML-based template files to manage how that content gets presented to visitors. Many of these content management systems deliver content via server-side rendering, which can hurt load times and slow down a site visitor's experience.

Headless content management systems, on the other hand, return structured data via an API. When your content is available as structured data, it's available to any client or application that can consume that data whether a Jamstack application, or a mobile device. Rather than merging templates (the presentation layer) and content (the data layer) to create HTML, a headless CMS returns JSON or unstyled XML which can be compiled and optimized by frontend frameworks like Gatsby for faster performance.

With a headless CMS, marketers and content creators still use an WYSIWYG-like editing interface to add content to a headless CMS - it looks very similar or exactly the same as a backend like WordPress. But when the backend management of the site's content is *decoupled* from the frontend that displays it, developers can use the tools they love to create flexible, beautiful interfaces. They are free to use tools like React and GraphQL and a Git workflow to create fast, secure, scalable sites.

Benefits Of Headless Architecture

Speed

Decoupled frontends offer superior speed to monolithic systems by combining deep performance optimizations with a smaller server-side footprint.

Security

Headless systems present a smaller attack surface to malicious attacks since they have fewer open connections to open servers or databases.

Scalability

Traditional CMS's are prone to getting knocked-off line with too much traffic. Decoupled frontends can be served statically on a CDN, which can handle millions of requests per second with little to no problem.

Flexibility

Create powerful digital experiences by combining content from several different data sources or use a central CMS to send content to several different websites.

Headless Content Management Systems & Gatsby

With plugins, Gatsby supports several headless CMS services, including Contentful, Ghost and Prismic. If you use WordPress, there's no need to switch. You can use WordPress' REST API as a headless CMS, so that your content team can continue to use the editing tools with which they're familiar.

Learn More

- What is a Headless CMS and How to Source Content from One, from the Gatsby docs
- 3 Free Headless CMS's for Your Next Project, from the Gatsby blog
- Building Sites with Headless CMSs, also from Gatsby blog