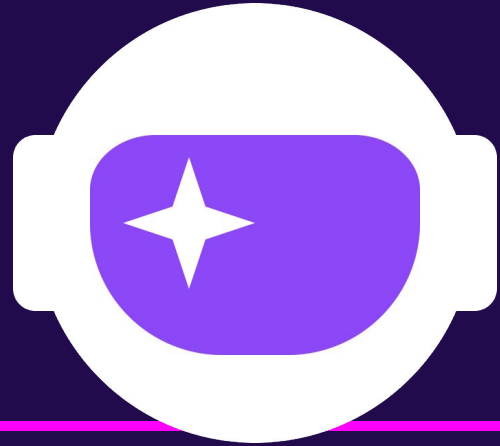


WordPress in a Headless World



@colbyfayock

Colby Fayock

Lead UX & Front End Engineer

Element	84
---------	----

@colbyfayock

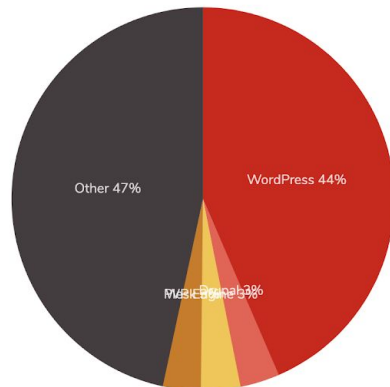




WORDPRESS

CMS Usage Distribution in the Top 1 Million Sites

Distribution for websites using CMS technologies



[Explain Chart](#)

Top In CMS Usage Distribution in the Top 1 Million Sites

Technology	Websites	%
 WordPress	380,026	38
 Drupal	29,059	2.91

872,206 Detections

of Content Management System in the Top 1 Million Sites.

 **WordPress** is currently the most popular technology in this category.

Top 1m 872,206

Top 1,000,000 sites by traffic

Top 100k 137,029

Top 100,000 sites by traffic

Top 10k 19,401

Top 10,000 sites by traffic

Entire Internet 55,709,673

Bangladesh 23,297

United States 23,556,766

Germany 1,937,541

United Kingdom 1,562,063



number of sites using wordpress



All

Images

Videos

News

Shopping

More

Settings

Tools

About 612,000,000 results (0.38 seconds)

455,000,000

Considering that the number of total active websites is estimated at over **1.3 billion** according to a survey published by Netcraft, that means that around **455,000,000** websites are using WordPress right now, which means that around 20% of all self-hosted websites use WordPress, which is still huge. Feb 28, 2020

www.whoishostingthis.com › [compare](#) › [wordpress](#) › [stats](#) ▼

[2020's Most Surprising WordPress Statistics ...](#)



About Featured Snippets



Feedback

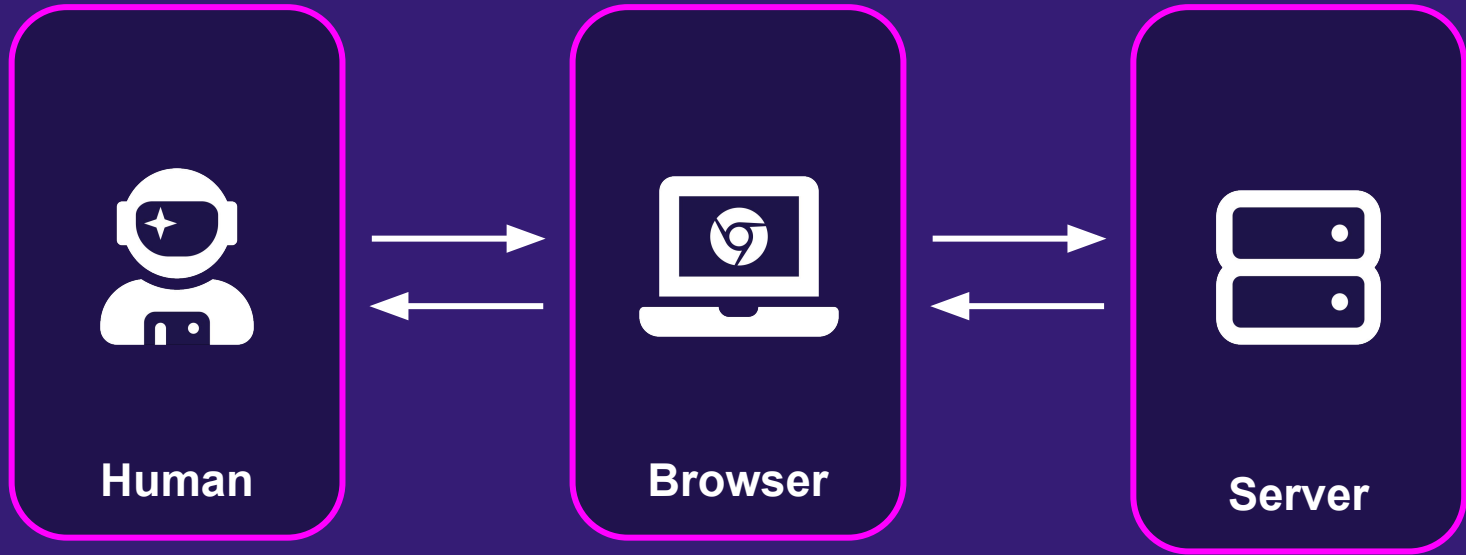
People also ask



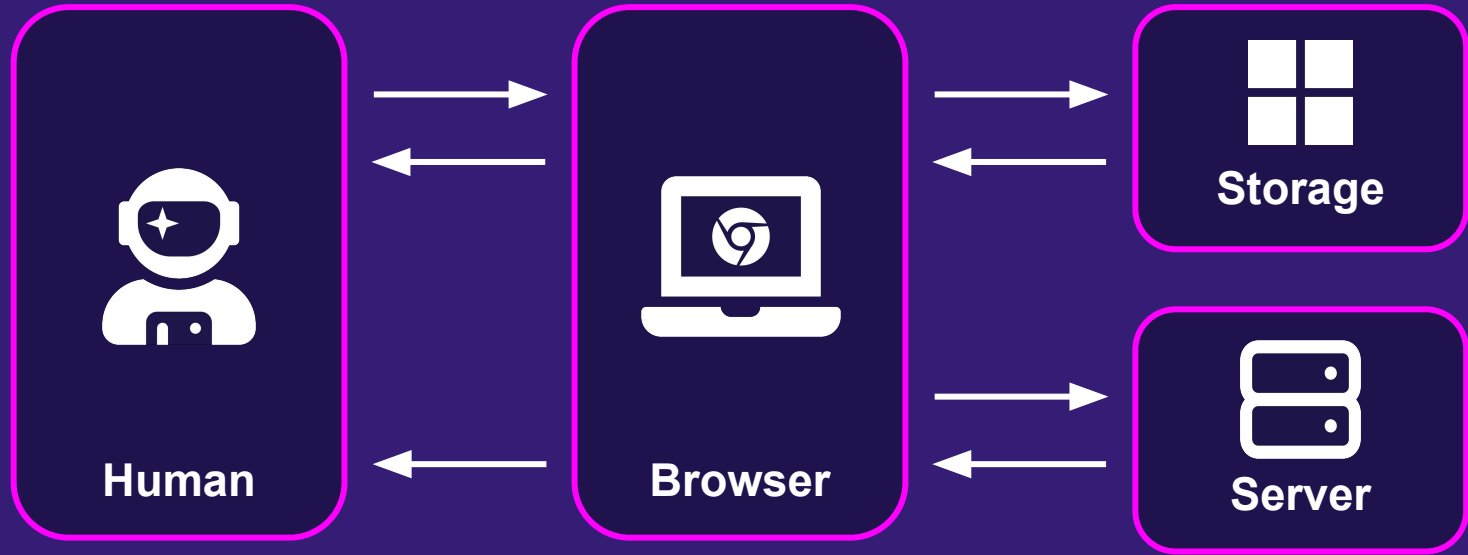
WordPress

What is “headless”?

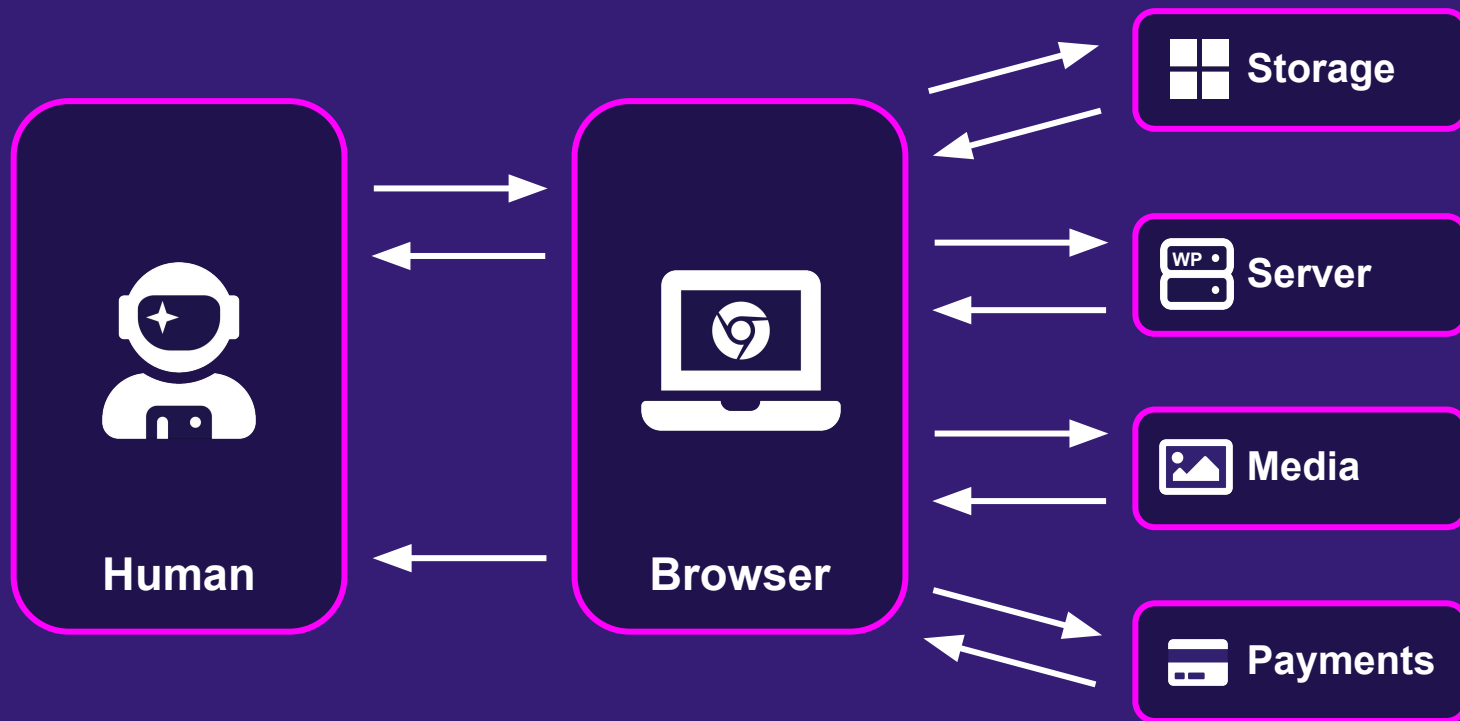
Traditional



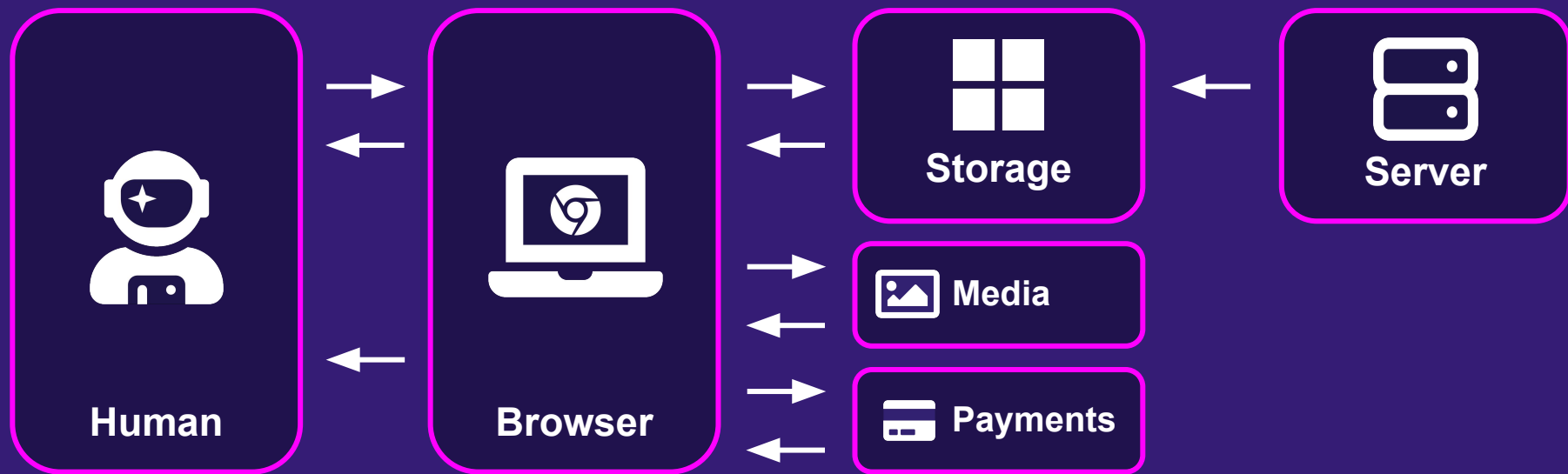
Headless



Headless+



Headless+ Static



What is “Jamstack”?

Jamstack



Jamstack



Why headless?

Why Jamstack?

Why not regular WordPress?

Jamstack



Operational
Excellence



Security



Reliability



Performance
Efficiency



Cost
Optimization



AWS Well-Architected

Performance

Plugins

[My Favorites](#)[Beta Testing](#)[Developers](#)

Showing results for: **cache**



LiteSpeed Cache

★★★★★ (1,169)

All-in-one unbeatable acceleration & PageSpeed improvement: caching, image/CSS/JS optimization...

LiteSpeed Technologies

1+ million active installations Tested with 5.5.1



W3 Total Cache

★★★★★ (4,573)

Search Engine (SEO) & Performance Optimization (WPO) via caching. Integrated caching: CDN, Page, Minify, Object, Fragment, Database support.

BoldGrid

1+ million active installations Tested with 5.5.1



WP Fastest Cache

★★★★★ (3,215)

The simplest and fastest WP Cache system

Emre Vona



WPOptimize

WP-Optimize – Clean, Compress, Cache.

★★★★★ (1,187)

Makes your site fast and efficient. It cleans the database, compresses images and caches pages. Cached sites attract more traffic and users.

Performance

aws

Services

Resource Center

Type a prefix and press Enter to search

Upload

Create folder

component---src-templates-

component---src-templates-

component---src-templates-

component---src-templates-

component---src-templates-

favicon.gif

index.html

resume.pdf

styles-f4fca833434e9b8756b5

styles-f4fca833434e9b8756b5

styles.31968c143acc1eddc48

webpack-runtime-ff7acf49e4

webpack-runtime-ff7acf49e4

webpack.stats.json

Elements

Console

Sources

Network

Performance

Memory

Application

Filter

Hide data URLs

All

XHR

JS

CSS

Img

Media

Font

Doc

WS

Ma

Blocked Requests

50 ms

100 ms

150 ms

200 ms

Name	Status	Type	Initi...	Size	Time	Wa
page-data.json	200	json	pref...	35.1 kB	45 ms	
component---src-templates-po...	200	javascript	pref...	2.3 kB	39 ms	
app-68985b05b0da25bf78b.js	200	script	(ind...	114 kB	36 ms	
styles-f4fca833434e9b8756b5.js	200	script	(ind...	486 B	34 ms	
gtm.js?id=GTM-NJ75NM>m_...	200	script	(ind...	28.9 kB	32 ms	
commons-c11b7f53e4e20f816...	200	script	(ind...	160 kB	30 ms	
page-data.json	200	json	(ind...	472 B	29 ms	
colby-fayock-bite-world.jpg	200	jpeg	(ind...	51.6 kB	29 ms	
colbyfayock.com.s3-website-u...	200	docum...	Other	72.3 kB	29 ms	
page-data.json	200	xhr	VM...	19.7 kB	28 ms	
page-data.json	200	xhr	VM...	19.7 kB	27 ms	
favicon-e7251aa0ffb9bcbef691...	200	png	Other	25.2 kB	27 ms	
page-data.json	200	xhr	VM...	35.1 kB	26 ms	
css?family=Source+Sans+Pro:...	200	stylesh...	(ind...	821 B	26 ms	
page-data.json	200	json	pref...	19.7 kB	24 ms	
component---src-pages-index-j...	200	script	(ind...	33.9 kB	24 ms	
webpack-runtime-ff7acf49e460...	200	script	(ind...	4.3 kB	23 ms	
app-data.json	200	xhr	VM...	390 B	23 ms	
page-data.json	200	xhr	VM...	35.1 kB	23 ms	
analytics.js	200	script	gtm...	18.4 kB	13 ms	
collect?v=1&_v=j85&a=408353...	200	gif	anal...	61 B	12 ms	

Network

Performance

Memory

Application

Filter

Hide data URLs

All

XHR

JS

CSS

Img

Media

Font

Doc

WS

Ma

Blocked Requests

50 ms

100 ms

150 ms

200 ms

250 ms

Name	Status	Type	Initi...	Size	Time	Wa
app-68985b05b0da25bf78b.js	200	script	(ind...	114 kB	36 ms	
page-data.json	200	json	(ind...	472 B	29 ms	
commons-c11b7f53e4e20f81649e.js	200	script	(ind...	160 kB	30 ms	
webpack-runtime-ff7acf49e4604a8f0bd8.js	200	script	(ind...	4.3 kB	23 ms	
page-data.json	200	json	(ind...	472 B	29 ms	
gtm.js?id=GTM-NJ75NM>m_cookies_...	200	script	(ind...	28.9 kB	32 ms	
colbyfayock.com.s3-website-us-east-1.a...	200	docum...	Other	72.3 kB	29 ms	
page-data.json	200	json	(ind...	472 B	29 ms	
styles-f4fca833434e9b8756b5.js	200	script	(ind...	486 B	34 ms	
colby-fayock-bite-world.jpg	200	jpeg	(ind...	51.6 kB	29 ms	
page-data.json	200	json	(ind...	472 B	29 ms	
css?family=Source+Sans+Pro:400,600,700	200	stylesh...	(ind...	821 B	26 ms	
page-data.json	200	json	(ind...	472 B	29 ms	
component---src-pages-index-js-e09aeb...	200	script	(ind...	33.9 kB	24 ms	
page-data.json	200	json	(ind...	472 B	29 ms	
favicon-e7251aa0ffb9bcbef691127fb85c...	200	png	Other	25.2 kB	27 ms	
app-data.json	200	xhr	VM...	390 B	23 ms	
analytics.js	200	script	gtm...	18.4 kB	13 ms	
collect?v=1&_v=j85&a=1341425568&t=p...	200	gif	anal...	61 B	12 ms	
component---src-templates-post-js-a76...	200	script	(ind...	4.3 kB	23 ms	

Headers

Preview

Response

Initiator

T

General

Request URL: http://colbyfayock.com.s3-website-us-east-1.amazonaws.com/

Request Method: GET

Status Code: 200 OK

Remote Address: 52.216.143.163:80

Referrer Policy: no-referrer-when-downgrade

Response Headers

Content-Length: 71955

Content-Type: text/html

Date: Mon, 07 Sep 2020 02:04:44 GMT

ETag: "b8f7bd3c920771bda901ccecef75a05f"

Last-Modified: Wed, 19 Feb 2020 00:54:41 GMT

Server: AmazonS3

x-amz-id-2: LHyo2tTtthb5rweDtkf1J43NM5Poz...

x-amz-request-id: BCA69B162EE48601

Request Headers

Accept: text/html,application/xhtml+xml,application/xml;q=0.8,application/signed-exchange;v...

Accept-Encoding: gzip, deflate, br

Accept-Language: en-US,en;q=0.9

Feedback

English (US)

@colbyfayock

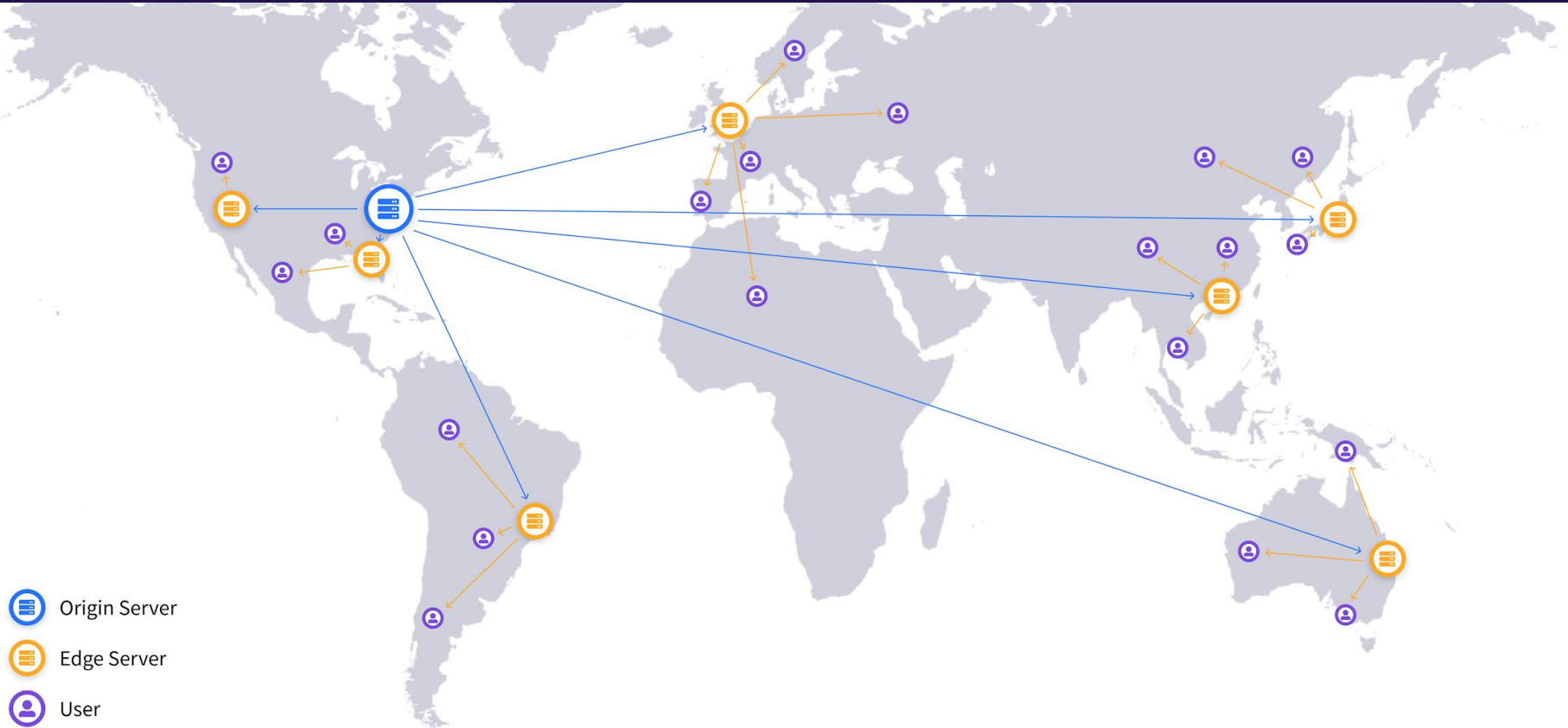
Reliability

5xx SERVER ERROR

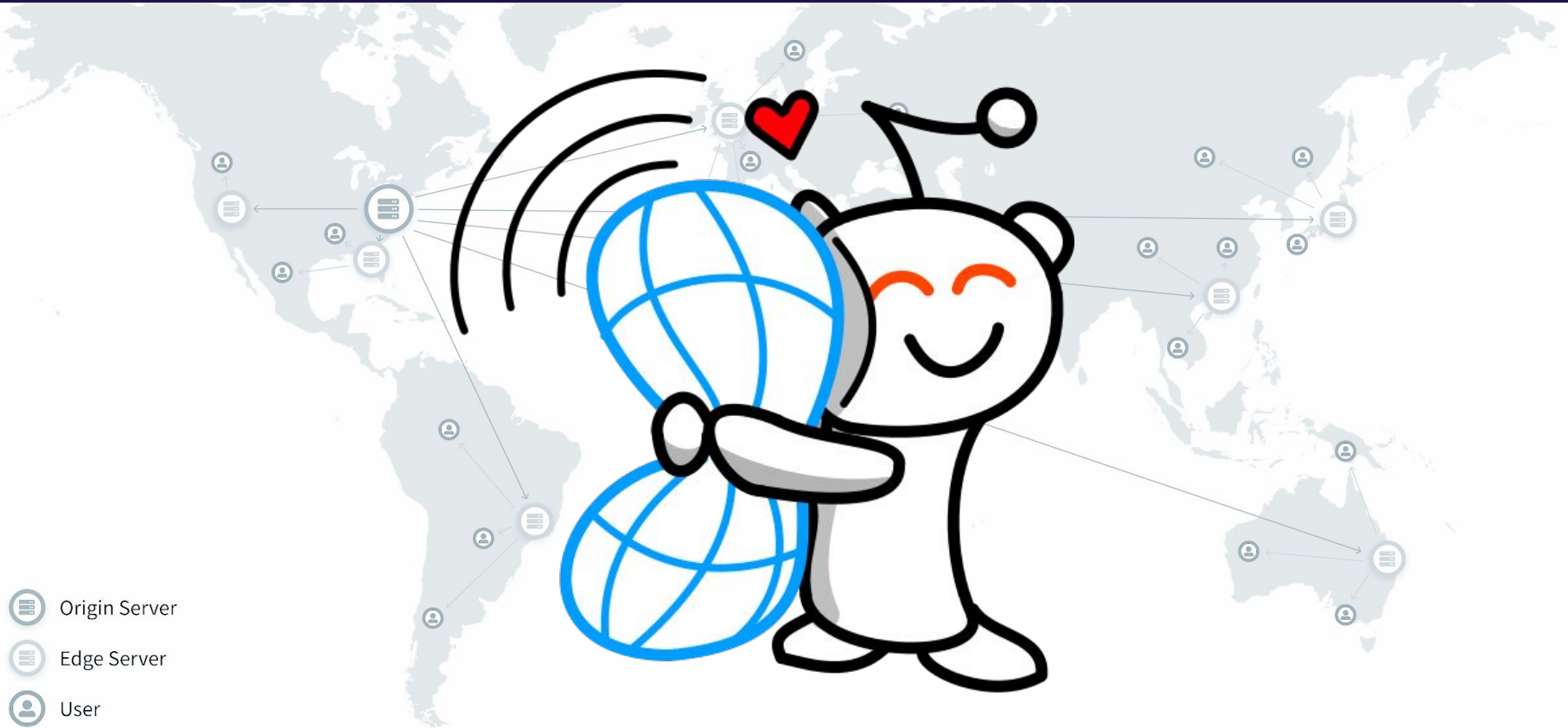
503 SERVICE UNAVAILABLE

The server is currently unable to handle the request due to a temporary overload or scheduled maintenance, which will likely be alleviated after some delay.

Reliability



Reliability



Cost

Choose your instance plan [?](#)

New! Check out our new 16 GB and 32 GB RAM bundles!

Sort by: **Price per month** Memory Processing Storage Transfer



Amazon Lightsail

First month free!

\$3.5

USD

\$5

USD

\$10

USD

\$20

USD

\$40

USD

>

\$3.50 USD	\$5 USD	\$10 USD	\$20 USD	\$40 USD	Price per month
512 MB	1 GB	2 GB	4 GB	8 GB	Memory
1 vCPU	1 vCPU	1 vCPU	2 vCPUs	2 vCPUs	Processing
20 GB SSD	40 GB SSD	60 GB SSD	80 GB SSD	160 GB SSD	Storage
1 TB	2 TB	3 TB	4 TB	5 TB	Transfer

Cost

Storage pricing

S3 Standard - General purpose storage for any type of data, typically used for frequently accessed data

First 50 TB / Month

\$0.023 per GB

Next 450 TB / Month

\$0.022 per GB

Over 500 TB / Month

\$0.021 per GB

	PUT, COPY, POST, LIST requests (per 1,000 requests)	GET, SELECT, and all other requests (per 1,000 requests)	Lifecycle Transition requests (per 1,000 requests)	Data Retrieval requests (per 1,000 requests)	Data retrievals (per GB)
S3 Standard	\$0.005	\$0.0004	n/a	n/a	n/a

What are options?

 graphcms

SANITY

 strapi

 contentful

 TakeShape

 agility

What are they good at?

Full Control

What are they good at?

Full Control

Separation of Concerns

What are they good at?

Full Control

Separation of Concerns

Developer Experience

What about WordPress?!

What's WordPress good at?

User Experience

What's WordPress good at?

User Experience

Familiarity

What's WordPress good at?

User Experience

Familiarity

Ecosystem

How about WordPress?!

WordPress API

[Showcase](#) [Themes](#) [Plugins](#) [Mobile](#) [Support](#) [Get Involved](#) [About](#) [Blog](#) [Hosting](#)[Get WordPress](#)

REST API Handbook



CHAPTERS

REST API Handbook

[Key Concepts](#)[Frequently Asked Questions](#)[Using the REST API](#)[Extending the REST API](#)[Endpoint Reference](#)

Browse: [Home](#) / REST API Handbook

REST API Handbook

[Edit](#)

The WordPress REST API provides an interface for applications to interact with your WordPress site by sending and receiving data as [JSON](#) (JavaScript Object Notation) objects. It is the foundation of the [WordPress Block Editor](#), and can likewise enable your theme, plugin or custom application to present new, powerful interfaces for managing and publishing your site content.

Using the WordPress REST API you can create a plugin to provide an entirely new admin experiences for WordPress, build a brand new interactive front-end experience, or bring your WordPress content into completely separate applications.

TOPICS

[What Is A REST API?](#)[Using the WordPress REST API](#)[Next Steps](#)

WordPress API

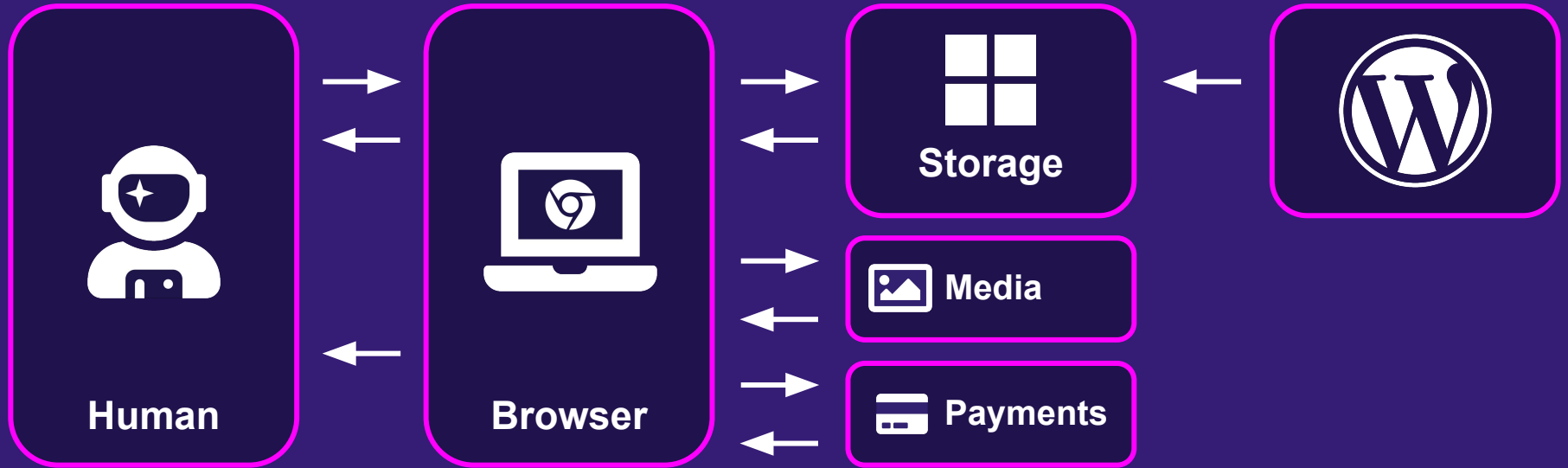
← → ↻ ⚠ Not Secure | 54.243.240.9/wp-json/wp/v2/posts

🔍 ☆ 📄 🛡️ ⚙️ 👤 ⋮

+ - [View source](#) ⚙️

```
- {
  id: 17,
  date: "2020-08-24T03:02:09",
  date_gmt: "2020-08-24T03:02:09",
- guid: {
    rendered: "http://18.214.25.217/?p=17"
  },
  modified: "2020-08-24T03:02:09",
  modified_gmt: "2020-08-24T03:02:09",
  slug: "hey-you-add-a-one-and-two-zeros-to-that-or-we-walk",
  status: "publish",
  type: "post",
  link: "http://54.243.240.9/2020/08/24/hey-you-add-a-one-and-two-zeros-to-that-or-we-walk/",
- title: {
    rendered: "Hey, you add a one and two zeros to that or we walk!"
  },
- content: {
    rendered: " <p>Dr. Zoidberg, that doesn't make sense. But, okay!"
```

WordPress API Static



WordPress API Static

Next.js WordPress Starter

Now with more fillerama.io!

Fry, we have a crate to deliver

Pansy. I am Singing Wind, Chief of the Martians. Then throw her in the laundry room, which will hereafter be referred to as "the brig". Fry! Stay back! He's too powerful! And until then, I can never die? Can we have Bender Burgers again? Bender! Ship! Stop bickering or I'm going to come back there and change...

Hey, you add a one and two zeros to that or we walk!

Dr. Zoidberg, that doesn't make sense. But, okay! Fry, we have a crate to deliver. Then we'll go with that

WordPress API Static



Deploy **Next.js** on the platform it was made for →

[Showcase](#)[Docs](#)[Blog](#)[Enterprise](#)[Learn](#)[Next.js Conf](#)**NEW****Next.js Conf** — An interactive online experience by the community, free for everyone. **Register** →

The React Framework for Production

Next.js gives you the best developer experience with all the features you need for production: hybrid static & server rendering, TypeScript support, smart bundling, route pre-fetching, and more. No config needed.

WordPress API Static

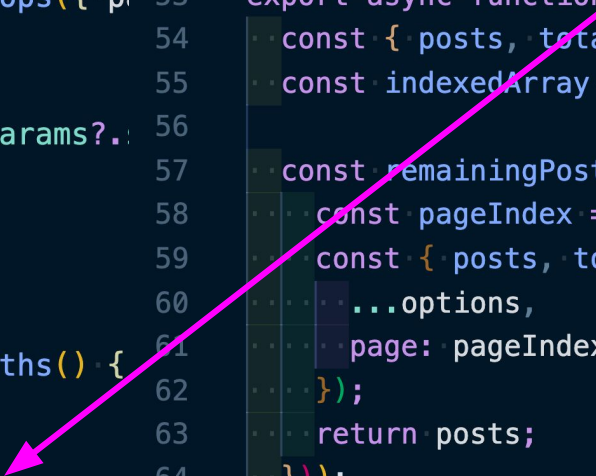
```
10
11 export async function getStaticProps() {
12   const { posts } = await getPosts();
13   return {
14     props: {
15       posts
16     }
17   }
18 }
19
20 export default function Home({ posts }) {
21   const { metadata = {} } = useSite();
22   const { name, description } = metadata;
```

```
22
23 export async function getPosts({ perPage = 100, page = 1,
24   const params = [
25     `per_page=${perPage}`,
26     `page=${page}`
27   ];
28
29   Object.keys(query).forEach(key => {
30     params.push(`${key}=${query[key]}`);
31   });
32
33   const request = new WpRequest({
34     route: `${ROUTE_POSTS}?${params.join('&')}`
35   });
36
37   const { data: posts, headers } = await request.fetch();
38
39   const pages = headers['x-wp-totalpages'];
40
41   return {
42     posts,
```

WordPress API Static

```
47 export async function getStaticProps({ params }) {
48   return {
49     props: {
50       post: await getPostBySlug(params?.slug);
51     }
52   }
53 }
54
55 export async function getStaticPaths() {
56   const routes = {};
57
58   const { posts } = await getAllPosts();
59
60   const paths = posts.map(post => {
61     const { slug } = post;
62     return {
63       params: {
64         slug
65       }
66     }
67   });
68
69   return {
70     paths,
71     fallback: true
72   };
73 }
```

```
53 export async function getAllPosts(options) {
54   const { posts, totalPages } = await getPosts(options);
55   const indexedArray = [...new Array(totalPages - 1)];
56
57   const remainingPosts = await Promise.all(indexedArray.map(async (index, i) => {
58     const pageIndex = index + 2;
59     const { posts, totalPages } = await getPosts({
60       ...options,
61       page: pageIndex
62     });
63     return posts;
64   }));
65
66   const allPosts = [...posts, ...remainingPosts.flat()];
67
68   return {
69     posts: allPosts
70   };
71 }
```



WordPress API Static

```
module.exports = function indexSearch 10
const { env, outputLocation, output 11
const { WORDPRESS_HOST } = env; 12

return Object.assign({}, nextConfig 14
  webpack(config) { 15
    config.plugins.push(new Search] 16
    host: WORDPRESS_HOST, 17
    outputLocation, 18
    outputName 19
  }); 20

return config; 21
  } 22
}); 23

} 24

}); 25

} 26

} 27

} 28

} 29

} 30

} 31

} 32

} 33

} 34

} 35

class SearchIndexWebpackPlugin { 1
  constructor(options = {}) { 2
    this.options = options; 3
  } 4

  async index(compilation, options) { 5
    const { 6
      host, 7
      outputDirectory = DEFAULT_OUTPUT_DIRECTORY, 8
      outputName = DEFAULT_OUTPUT_NAME 9
    } = options; 10

    if (typeof host !== 'string') { 11
      throw new Error(`Failed to compile search index`); 12
    } 13

    const outputLocation = path.join(outputDirectory, 14
    const data = await fetch(`${host}${WORDPRESS_API}`); 15
    const posts = await data.json(); 16

    const index = posts.map((post = {}) => { 17
      return { 18
        title: post.title.rendered, 19
        slug: post.slug, 20
        "generated": 1598926888737, 21
        "posts": [ 22
          { 23
            "title": "Fry, we have a crate to deliver", 24
            "slug": "fry-we-have-a-crate-to-deliver", 25
            "date": "2020-08-24T03:02:31" 26
          }, 27
          { 28
            "title": "Hey, you add a one and two", 29
            "slug": "hey-you-add-a-one-and-two-zero", 30
            "date": "2020-08-24T03:02:09" 31
          }, 32
          { 33
            "title": "Throw her in the brig", 34
            "slug": "throw-her-in-the-brig", 35
            "date": "2020-08-24T03:01:52" 36
          }, 37
          { 38
            "title": "I love you, buddy!", 39
            "slug": "i-love-you-buddy", 40
            "date": "2020-08-24T03:01:30" 41
          }, 42
          { 43
            "title": "You don't know what you're doing", 44
            "slug": "you-dont-know-what-youre-doing", 45
            "date": "2020-08-24T03:01:15" 46
          } 47
        ] 48
      } 49
    }); 50
  } 51
}
```

WordPress API Static

Fry, we have a crate to deliver

Pansy. I am Singing Wind, Chief of the Martians. Then throw her in the laundry room, which will hereafter be referred to as "the brig". Fry! Stay back! He's too powerful! And until then, I can never die?



What are the downsides?

What are the downsides to headless WP?

Feature Support

What are the downsides to headless WP?

Feature Support

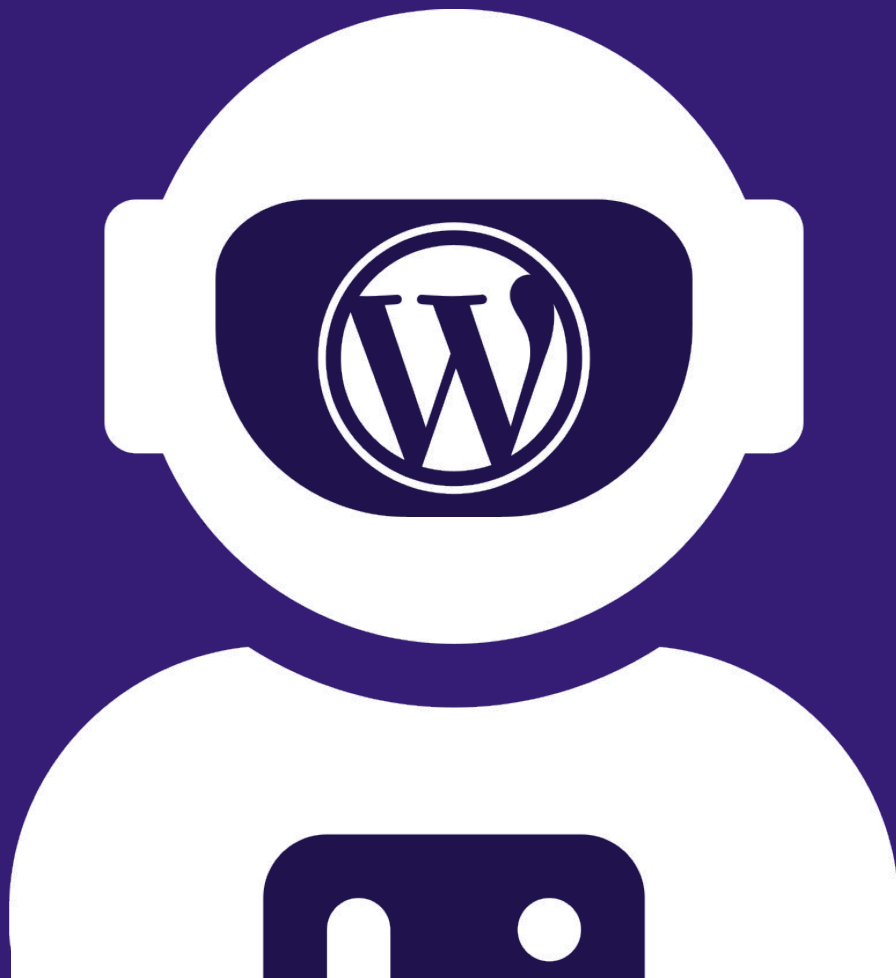
Plugins

What are the downsides to headless WP?

Feature Support

Plugins

Not API First



 Search or jump to... Pulls Issues Marketplace Explore

colbyfayock / next-wordpress-starter

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<> Code ! Issues 2 Pull requests 1 Actions Projects Wiki ...

master Go to file Add file Code

 colbyfayock moving search indexer to a webpack ... 9 days ago 15

plugins	moving search indexer to a webpack c...	9 days ago
public	moving search indexer to a webpack c...	9 days ago
src	request search index on nload	9 days ago
.gitignore	Initial commit from Create Next App	17 days ago
README.md	README	9 days ago
jsconfig.json	setting up basic scaffolding for pulling...	17 days ago
next.config.js	request search index on nload	9 days ago
package.json	search index	9 days ago
yarn.lock	search index	9 days ago

About Bring WordPress to the static world with Next.js

next-wordpress-start... Readme

Languages

- JavaScript 76.2%
- CSS 23.8%

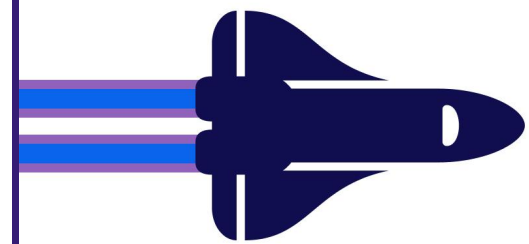
README.md

WIP - Next.js WordPress Starter

This is a [Next.js](#) project bootstrapped with [create-next-app](#).

Jamstack Handbook

Building fast, dynamic apps with Javascript and the static web



Colby Fayock

Lead UX & Front End Engineer

Element

84

@colbyfayock



Thank You