

npm or Node package manager

Learn what *npm* is, how to use it, and how it fits in to the Gatsby ecosystem.

What is npm?

npm, or Node package manager, is the default package manager for the Node.js JavaScript runtime. It lets you install and update libraries and frameworks (dependencies) for Node-based projects, and interact with the npm Registry. You'll use npm to install and upgrade Gatsby and its plugins.

npm is a command line tool. You'll need Terminal (Mac, Linux) or Command Prompt (Windows) in order to run its commands. To use one of npm's features, type `npm <command>`. For example, `npm help` displays a list of available features, including `install`, `uninstall`, `update`, and `search`.

npm is installed alongside Node during the default installation process. You don't need to take any additional steps to add it to your environment.

Using npm to install Gatsby

You'll need to install Gatsby globally to use Gatsby CLI commands such as `gatsby new`. To do so, use `npm install` with the `--global` or `-g` flag.

```
npm install -g gatsby-cli
```

Once the installation completes, you can run `gatsby new my-project` to create a new Gatsby project.

Using npx to install Gatsby

Note: `npx` requires npm version 5.2 or later. If you've installed the latest versions of Node and npm, you should also have `npx`. Otherwise, you should upgrade Node and/or npm.

You can also use `npx` to install Gatsby. `npx` ships with npm. It allows you to install a package and run a command in one step. For example, instead of running `npm install -g gatsby-cli` then `gatsby new my-project`, you could use the following command.

```
npx gatsby new my-project
```

This will download and install the latest version of Gatsby, then create a new Gatsby project in the `my-project` folder. Choosing this method will not make the Gatsby CLI globally available, however. If you install Gatsby using `npx`, you'll need to use `npx gatsby` or `npm run` to execute Gatsby commands, e.g.: `npx gatsby develop` or `npm run develop`.

Using npm to install Gatsby plugins

Gatsby has a robust collection of plugins that add functionality or data sourcing to your Gatsby sites. Adding a plugin as a project dependency uses the same process as installing Gatsby itself. Use `npm install <package-name>`. To add the `gatsby-source-filesystem` plugin, for example, you'd use the following command.

```
npm install gatsby-source-filesystem
```

Note: Use `npm install` to add plugins, even if you installed Gatsby using `npx`.

Note: You'll still need to update `gatsby-config.js` to add the plugin's functionality to your site.

This will update the dependencies list of `package.json` and `package-lock.json`. Commit both files to your project's repository. Doing so makes it easy to keep your Gatsby project consistent across team members and computers. When another team member clones your repository, they can use `npm install` to install the dependencies included in `package-lock.json`.

Learn more about npm

- [npm official website](#)
- [Node.js official website](#)
- [An introduction to the npm package manager from Nodejs.dev](#)
- [Set Up Your Development Environment from the Gatsby docs](#)