

Build static sites for production and preview with Netlify

October 27, 2022 • Martin Makarsky • 7 min read



Netlify lets you run automated [builds](#) of your website with each Git commit using CI/CD pipeline designed for web developers. Netlify can generate and publish production and preview sites with every push. You can also trigger these builds by content changes in Kontent.ai using [webhooks](#).

Netlify and Kontent.ai: automatically rebuild your static site

Sites powered by static site generators bring undoubtedly a lot of advantages for programmers, editors, and users. One small drawback is the necessity to rebuild your project with every content change in Kontent.ai.

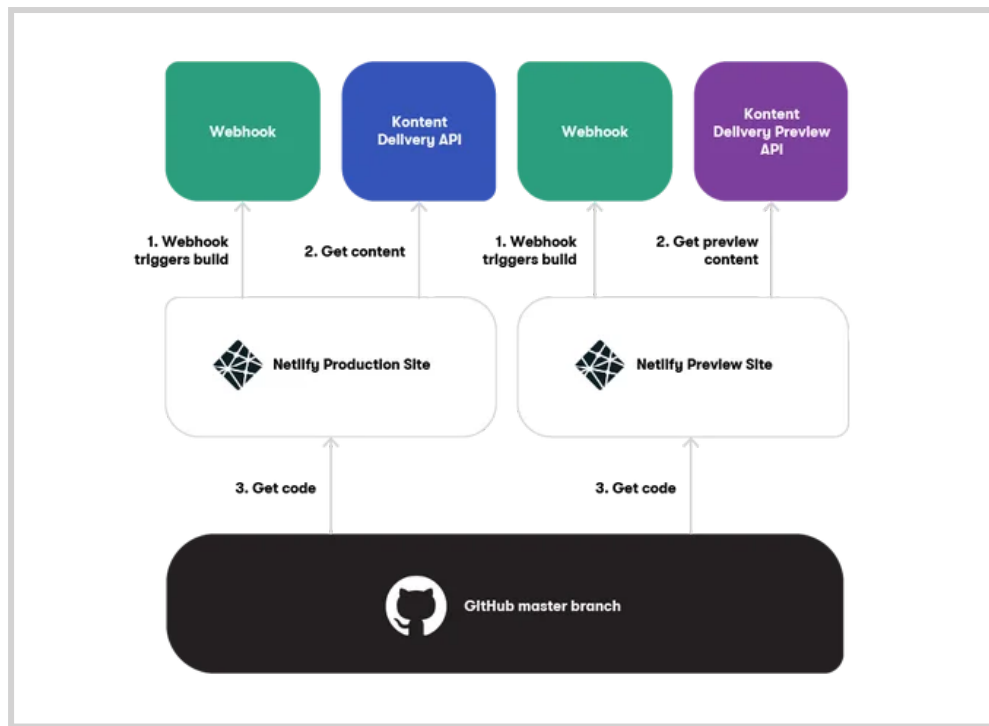
Automated site rebuilding is an essential feature of every static site. You can implement it by leveraging Kontent's webhooks and Netlify's build triggers.

Build production site and preview site

In this tutorial, you'll learn how to use Netlify to run a static site that's built and published with every content update. You'll also find how to use [Delivery Preview API](#) to build a preview site with your latest content. Building and deploying are done automatically using Kontent.ai's webhooks and Netlify's build hooks.

You'll have two separate sites on Netlify, each of them based on your production *master* or *main* branch code:

- The first one is a [site with published content](#). It's rebuilt with every content publish or unpublish.
- The second one is a [preview site](#) with content you haven't published yet that's fetched using the Delivery Preview API. This site's rebuilt when content is created, updated, or deleted. You'll also learn how to [protect the preview site](#) against unauthorized access.



Glossary

Build hooks are URLs you can use to trigger new Netlify builds and deploys.

Webhooks are programmatic notifications that let your application – in this case, Netlify – know when something changes in your Kontent.ai project.

Build a site with published production content

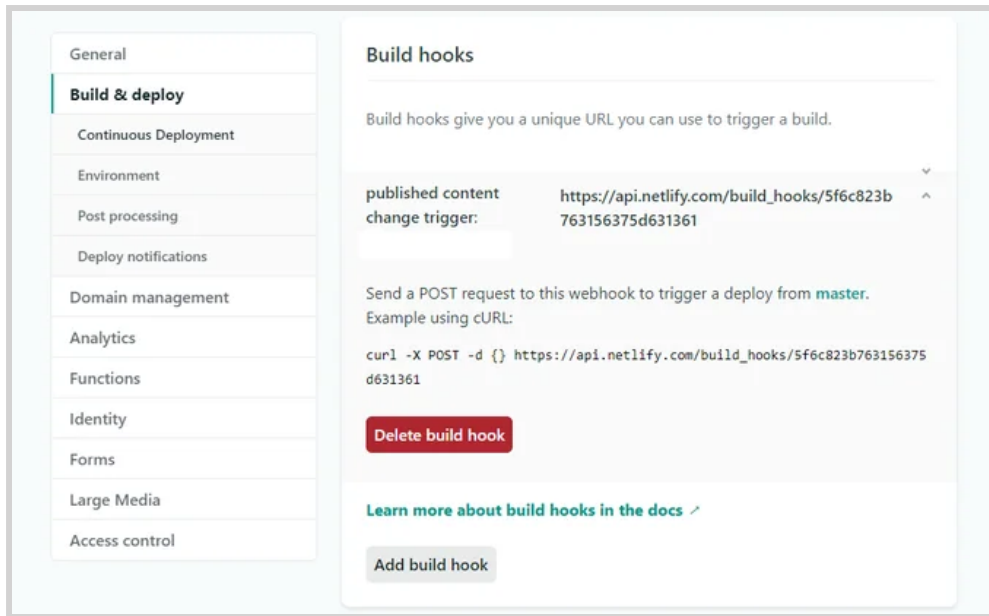
Build your production site with published content using your production *master* or *main* branch.

Before you start


You need to prepare a [statically generated site](#). The site must be already deployed to Netlify and [configured for continuous deployment](#). Learn more about [linking your app repository in Netlify](#). The site needs to fetch content via [Delivery API](#).

Create a production build hook trigger in Netlify

1. In your Netlify production site settings, go to **Build & Deploy > Continuous deployment**.
2. Under **Build hooks**, click **Add build hook**.
3. Enter the **Build hook name**.
4. Select your production branch. For example, *master* or *main*.
5. Save the build hook.
6. Copy the trigger URL.



Register the Netlify's build hook in Kontent.ai

1. In Kontent.ai, go to  **Project settings** > **Environment settings** > **Webhooks**.
2. Click **Create new webhook**.
3. Type a name for the webhook.
4. Paste the URL of the hook trigger provided by Netlify into the **URL address**.
5. Adjust the **Delivery API triggers**.
 - Typically you'd want to trigger the webhook when your content is published or unpublished.
6. Click **Save**.

General

Webhook name

URL address

Secret

Triggers

Choose at least one event that triggers this webhook. The events are evaluated separately. We'll send a notification for each selected event (if it occurs).

Management API triggers

Transition to specific workflow step to watch

Content item events to watch

Delivery API triggers

Content item events to watch

Taxonomy events to watch

Delivery Preview API triggers

Preview content item events to watch

Preview taxonomy events to watch

Now, your production site will be automatically built and deployed with the latest content on Netlify after every publish and unpublish in Kontent.ai.

Build a preview site

Build a preview site using your production branch with content you haven't published yet. You can protect this site with a password and use it to preview changes before you release them publicly.

Before you start

To build a preview site, you need to use a second statically generated site that's already deployed to Netlify and [configured for continuous deployment](#). This site needs to use the same repository as the production site but, unlike the production site, it needs to use [Delivery Preview API](#) to fetch the content.

Distinguish between Delivery API and Delivery Preview API in your code

Distinguishing between the Delivery API and the Delivery Preview API depends on the used static site generator and the overall logic of your code. The most reasonable approach is to distinguish them using environment variables. The example below uses Gatsby.js static site generator with [@kentico/gatsby-source-kontent plugin](#). The `gatsby-config.js` uses the Delivery Preview API if its key is provided in the respective variable.

JavaScript

```

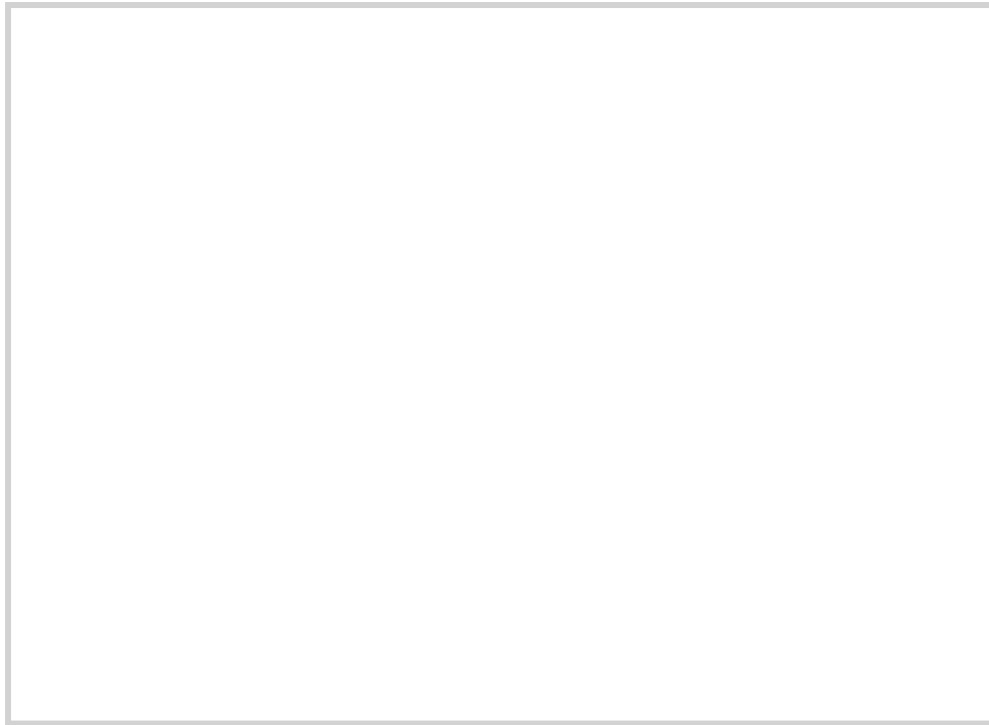
1  {
2    resolve: '@kentico/gatsby-source-kontent',
3    options: {
4      projectId: process.env.KONTENT_PROJECT_ID,
5      usePreviewUrl: process.env.KONTENT_PREVIEW_ENABLED &&
process.env.KONTENT_PREVIEW_ENABLED.toLowerCase() === 'true',
6      authorizationKey: process.env.KONTENT_PREVIEW_ENABLED &&
process.env.KONTENT_PREVIEW_ENABLED.toLowerCase() === 'true'
? process.env.KONTENT_PREVIEW_KEY
: undefined,
7      languageCodenames: ['en-US'],
    },
  }

```

This allows you to have one *master* or *main* branch you can use to build production, and preview sites using different Delivery API endpoints according to the provided environment variables.

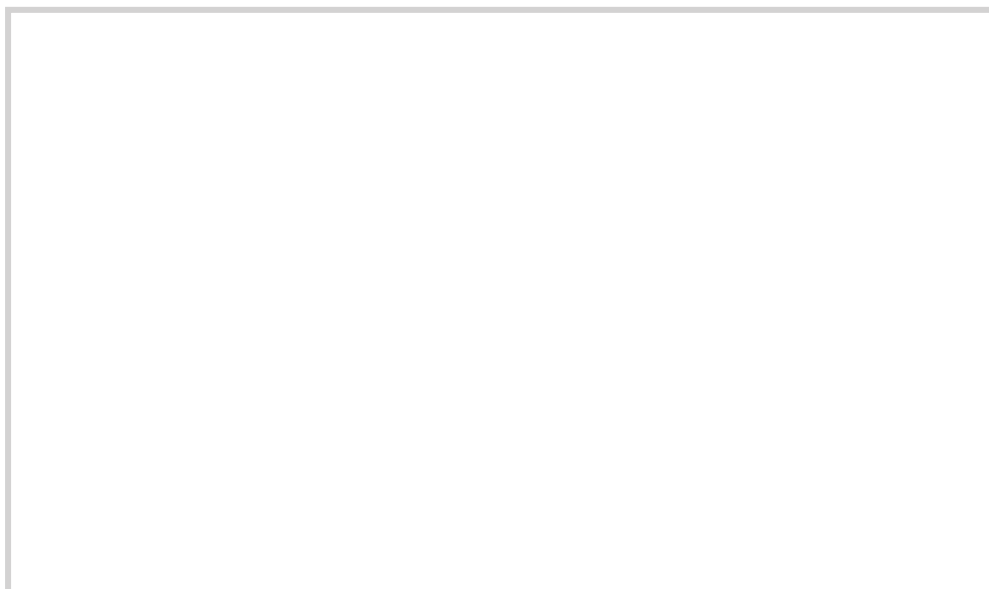
Set Netlify environment variables

1. In your Netlify preview site settings, go to **Build & Deploy > Environment**.
2. Under **Environment variables**, fill in the variables according to your app logic.
 - In `gatsby-config.js`, these variables are `KONTENT_PREVIEW_ENABLED` and `KONTENT_PREVIEW_KEY`.
 - You can [find your Delivery Preview API key](#) in Kontent.ai > Project settings > API keys.
3. Save the changes.




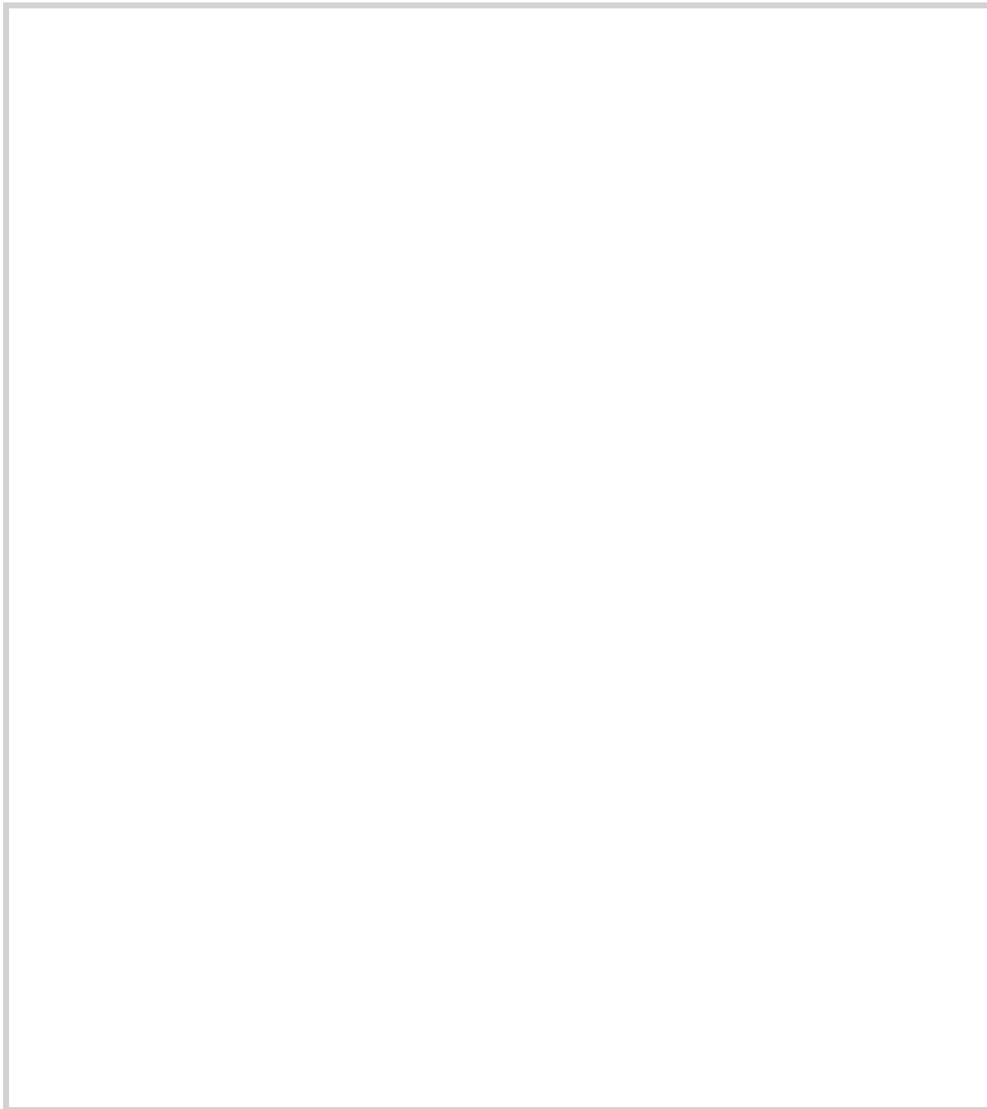
Create a preview build hook trigger in Netlify

1. In your Netlify preview site settings, go to **Build & Deploy > Continuous deployment**.
2. Under **Build hooks**, click **Add build hook**.
3. Enter the **Build hook name**.
4. Select your production branch (typically *master* or *main*).
5. Save the build hook.
6. Copy the trigger URL.



Register the Netlify's build hook in Kontent.ai

1. In Kontent.ai, go to  **Project settings** > **Environment settings** > **Webhooks**.
2. Click **Create new Webhook**.
3. Type a name for the webhook.
4. Paste the URL of the hook trigger provided by Netlify into the **URL address**.
5. Adjust the **Delivery Preview API triggers**.
 - Typically you'd want to trigger the webhook when your content is created, updated, or deleted.
6. Click **Save**.



Now, your preview site will be automatically built and deployed with the latest content on Netlify every time you add, edit, or delete something in Kontent.ai.

Secure your preview site

Unless you want to show your content drafts and development tests to the whole world, it's essential to restrict access to your preview site only to authorized people. To do that, use [Netlify's password protection](#) to hide your site behind a password that you control.

What's next?

You've learned how to create a static site on Netlify that'll get updated with every content publish and unpublish you do in Kontent.ai. You also know how to create a password-protected preview site on Netlify for content and development testing.

This tutorial demonstrated the capabilities in combination with *Gatsby.js*. A similar approach can be used for many other [static site generators](#), such as Next.js.

You can empower your developers and editors to preview published or unpublished content with non-production branches with Netlify's [deploy previews](#).

To explore more:

- Dive deeper into the [structure of webhooks and their triggers](#).
- Configure [webhooks](#) in your Kontent.ai project so that your app can react to changes in published content.