

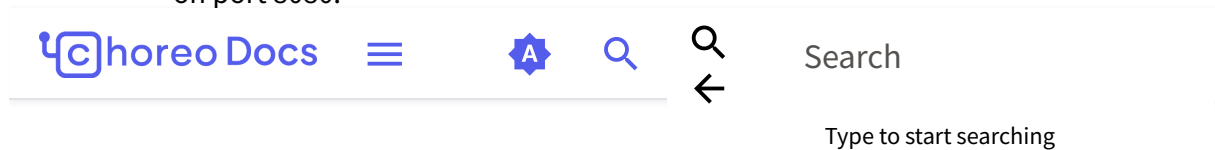
Deploy Your First Service

Choreo, an Internal Developer Platform (IDevP), simplifies the deployment, monitoring, and management of your cloud-native services, allowing you to focus on innovation and implementation.

Choreo allows you to easily deploy services you've created in your preferred programming language in just a few steps.

In this guide, you will:

- Use a pre-implemented service that has resources to maintain a book list.
- Build and deploy the service in Choreo using the `Nodejs` buildpack. It runs on port 8080.



Prerequisites


1. You must have a GitHub account with a repository that contains your service implementation. To proceed with the steps in this guide, you can fork the [Choreo sample book list service repository](#), which contains the sample for this guide.
2. If you are signing in to the Choreo Console for the first time, create an organization as follows:
 - a. Go to <https://console.choreo.dev/>, and sign in using your Google, GitHub, or Microsoft account.
 - b. Enter a unique organization name. For example, `Stark Industries`.
 - c. Read and accept the privacy policy and terms of use.
 - d. Click **Create**.

This creates the organization and opens the organization home page.



Learn the repository file structure

Let's familiarize ourselves with the key files in this sample application. The below table gives a brief overview of the important files in the sample book list service.

 **Note**

The following file paths are relative to the path `<choreo-sample-book-list-service>/`.


Filepath	Description
app.mjs	The Node.js (JavaScript) based service code.
.choreo/endpoints.yaml	Choreo-specific configuration that provides information about how Choreo exposes the service.
openapi.yaml	OpenAPI contract of the service. This is required to publish our service as a managed API. This openapi.yaml file is referenced by the .choreo/endpoints.yaml.

Let's get started!

Step 1: Create a project

Follow the steps given below to create a project:

1. Go to <https://console.choreo.dev/> and sign in. This opens the organization home page.
2. On the organization home page, click **+ Create Project**.
3. Enter a display name, unique name, and description for the project. You can enter the values given below:

 **Info**

In the **Name** field, you must specify a name to uniquely identify your project in various contexts. The value is editable only at the time you create the project. You cannot change the name after you create the project.



Field	Value
Project Display Name	Book List Project
Name	book-list-project
Project Description	My sample project

4. Click **Create**. This creates the project and takes you to the project home page.

Step 2: Create a service component

Let's create a service component by following these steps:

1. On the project home page, click **Service** under **Create a Single Component**.
2. Enter a unique name and a description for the service. For this guide, let's enter the following values:

Field	Value
Name	Book List
Description	Gets the book list

3. Go to the **GitHub** tab.
4. To allow Choreo to connect to your GitHub account, click **Authorize with GitHub**. If you have not already connected your GitHub repository to Choreo, enter your GitHub credentials and select the repository you created in the prerequisites section to install the [Choreo GitHub App](#).

Alternatively, you can paste the [Choreo sample Book List Service repository](#) URL in the **Provide Repository URL** field to connect to it without requiring authorization from the [Choreo Apps](#) GitHub application. However, authorizing the repository with the [Choreo GitHub App](#) is necessary if you want to enable **Auto Deploy** for the component.



**Note**

The **Choreo GitHub App** requires the following permissions:

- Read and write access to code and pull requests.
- Read access to issues and metadata.

You can [revoke access](#) if you do not want Choreo to have access to your GitHub account.

However, write access is exclusively utilized for sending pull requests to a user repository. Choreo will not directly push any changes to a repository.

5. Enter the following information:

Field	Description
Organization	Your GitHub account
Repository	choreo-sample-book-list-service
Branch	main

6. Select the **NodeJS** buildpack.

7. Enter the following information.

Field	Description
NodeJS Project Directory	/
Language Version	20.x.x

8. Click **Create**.

You have successfully created a Service component with the NodeJS buildpack. Now let's build and deploy the service.

Step 3: Build and deploy

Now that the source repository is connected and Choreo has set up the endpoints based on the repository's configuration, it's time to proceed with



building the service. Choreo will create a Docker image in the build process. You can then deploy the built Docker image and test the book list service.

Step 3.1: Build

To build the service, follow these steps:

1. On the project home page, click the **Book List** component listed under **Component Listing**. This takes you to the component overview page.
2. In the left navigation, click **Build**.
3. Click **Build Latest**.

!!! note Building the service component may take a while. You can track the progress via the logs in the **Build Details** pane. Once the build process is complete, the build status changes to **Success**.

Step 3.2: Deploy

Now you are ready to deploy the service. Follow these steps:

1. In the left navigation menu, click **Deploy**.
2. On the **Set Up** card, click **Configure & Deploy**.
3. In the **Environment Configurations** pane, click **Next**.
4. In the **File Mount** pane, click **Next**.
5. Review the **Endpoint Details** and click **Deploy**.



Note

Deploying the service component may take a while. You can track the progress by observing the logs. Once the deployment is complete, the build status changes to **Active** on the **Development** environment card.

Step 4: Test the service

To test the **Book List** service via the integrated OpenAPI Console in Choreo, follow the steps given below:



1. In the Choreo Console left navigation menu, click **Test** and then click **Console**.
2. In the OpenAPI Console that opens, select **Development** from the environment drop-down list.
3. In the **Endpoint** list, select **Books REST Endpoint**.
4. Expand the **GET /books** method and click **Try it out**.
5. Click **Execute**.
6. Check the **Server Response** section.

Similarly, you can expand and try out the other methods.

After you have successfully tested your service, you can now try out various other Choreo features such as [managing](#), [observing](#), [DevOps](#), etc., similar to any other component type within Choreo.

