

Importing Content with the CLI and CMA

Introduction to the Content Management API

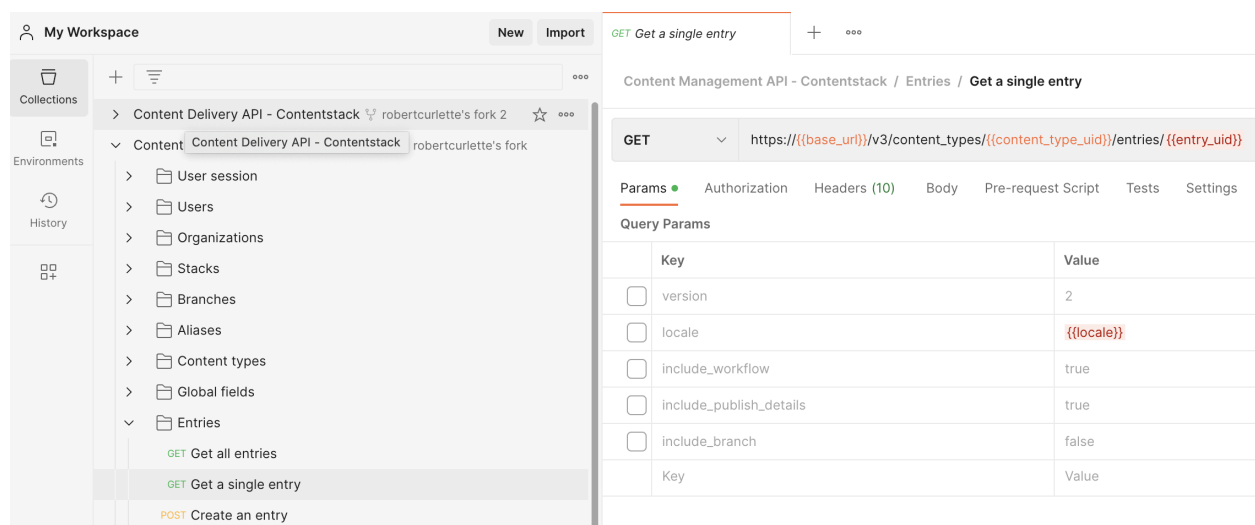
Our Content Management API (CMA) is a powerful tool that provides a read/write API with a REST interface, as well as SDKs for JavaScript, .NET, and Java. To authenticate with the CMA, we use Tokens. In this exercise, we'll guide you through how to use the CMA with Postman, a popular tool that helps developers use APIs.

Let's get started with the exercise. We'll be using Postman, so first, make sure to download the latest Contentstack Postman collection from here:

<https://www.contentstack.com/docs/developers/apis/content-management-api/#install-postman>

Also, download and use the Postman Environment Files from Github here:

<https://github.com/contentstack/contentstack-postman-collections#environment-files>



The next step is to create a Management Token to use in our Postman query. To do this, go to Settings in the Contentstack UI, then Tokens, Content Management, and create a Management Token. You can follow this guide for more detailed instructions:

<https://www.contentstack.com/docs/developers/create-tokens/generate-a-management-token/>

Stack
Academy - Starter App ▾

Branch
main ▾

Search Entries (%K)

←

Create New Management Token

Global ⓘ

Name*

CRUD Token

Description

Management Token for creating / updating entries

Scope

Branches

Select the branch(es) for which this token should be applicable.

☒ All Branches

☐ Specific Branch(es)

Branch Aliases

When you select alias(es) here, we recommend that you also make this token applicable to data of the branch(es) associated with these alias(es).

☒ All Branch Aliases

☐ Specific Branch Alias(es)

Permissions*

Assign Read/Write permissions to this token. [Read more.](#)

☒ Read

☒ Write

Expiry*

Now, open Postman and add the Content Management API Postman Collection. Select Content Management API - Contentstack, Entries, Get a single entry, and you're ready to go!

In Postman, select Content Management API - Contentstack, Entries, Get a single entry

Update the API Key and Access Token

There are two ways to set the values, using Postman variables like above or hard-coding the values in the Value column. I prefer to use the Environment variables.

<https://github.com/contentstack/contentstack-postman-collections#environment-files>

1. Set the Environment variable values for your Stack in Postman by selecting the icon in the top-right of Postman to open the Environment variable window.

Specify the following header values:

- api_key - This is located in the Settings, Tokens, Management Token page. You can also see it in the URL of the browser, after the /stack/ part of the URL, http://app.contentstack.com/#!/stack/{api_key}

- authorization - Management token created in step 1

2. Use the 'Get a single entry' method and add the base_url, content_type_uid (character) and entry uid to the query. This will retrieve the JSON for the Entry using the backend CMA.

*Note, we do not use this API for our frontend website applications as it is not intended for high load / performance. Instead, the frontend web applications use the Content Delivery API which is tuned for high performance.

3. Run the query and see the JSON result.

Notice that we have Create / Read / Update / Delete operations for most types.

Using the JSON returned from the Get Entry method, we will create new JSON to use for the Create Entry method in the next exercise.

Learn More:

Key Features of Management Tokens:

<https://www.contentstack.com/docs/developers/create-tokens/key-features/>

Creating content with the API: Using the Content Management API

Exercise: Create an entry with the Postman API

In this exercise, we'll guide you through creating a new Entry in Contentstack programmatically using our Content Management API. This method is incredibly useful for quickly migrating content from external systems and avoiding manual entry.

The trickiest part of this process is creating well-formed JSON that contains all the properties and content for the Entry. But don't worry - we've got you covered. In the previous exercise, we used our CMA to retrieve the Entry JSON, and now we'll use a subset of that JSON to create our new Entry.

If you weren't able to retrieve the JSON Entry export in the previous exercise, we've included a sample below. Just make sure to update the UID of the Content Type for it to work.

To get started, let's create the Entry JSON required to make a new Entry. Below is an example JSON, but remember to replace the Content Type UID:

```
{
  "title": "New Entry Title",
  "url": "/new-entry-url",
  "description": "This is a new Entry created programmatically using the Content Management API.",
  "content_type_uid": "your-content-type-uid",
  "metadata": {
    "tags": ["tag1", "tag2"],
    "author": "John Doe"
  },
  "body": "
This is the body of the new Entry.
" }
```

Now, in Postman, open the 'Create an entry' method and in the body tab, paste the JSON of the new Entry. Please note that the Title property of the Entry needs to be unique.

As we used Postman variables in the previous exercise, you won't need to add any additional settings here, since the `api_key` and management token are already specified.







Finally, hit the Send button in Postman to create your new Entry. Head over to the Contentstack UI to confirm that it has been created successfully.

Exporting Content from Contentstack

Contentstack stores all text content in JSON format. This makes it very easy to import / export and update content using the Content Management API or the CLI. In this section we will discuss the three ways to export content from Contentstack: UI, CM API, and the CLI.

Exporting with the UI

<input type="checkbox"/> Company Name	English - United States	Header	6	<ul style="list-style-type: none">● preview ⓘ● development ⓘ +1 more	--
<input type="checkbox"/> Composable Heroes Introduction	English - United States	Page	24	<ul style="list-style-type: none">● development ⓘ● preview ⓘ +1 more	--



Exporting with Postman

← → Home Workspaces ▾ API Network ▾ Explore Search Postman

workspace New Import Globals GET Get a single entry GET Get all entries GET Get all entries

Content Management API - Contentstack / Entries / **Get all entries**

GET ▾ `https://{{base_url}}/v3/content_types/{{content_type_uid}}/entries`

Params • Authorization Headers (12) Body Pre-request Script Tests Settings

Query Params

	Key	Value
<input type="checkbox"/>	locale	<code>{{locale}}</code>
<input type="checkbox"/>	include_workflow	false
<input type="checkbox"/>	include_publish_details	true
<input type="checkbox"/>	include_branch	false
	Key	Value

GET Get all entries
GET Get a single entry

Exporting with the CLI

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Usage

```
csdx cm:stacks:export -a <<alias>>
```

Alternatively, refer to the following command to add several parameters/options in a single line:

```
csdx cm:stacks:export -a <<alias>> -d <<file_path>>
```

Options

- `-c`, `--config=config` : [optional] path of the config.
- `-k`, `--stack-api-key=stack-api-key` : API key of the source stack.
- `-a`, `--alias=alias` : The [management token](#) of the source stack from which you will export content.
- `-d`, `--data-dir=data-dir` : The path or the location in your file system to store the exported content. For e.g., `./content`
- `--branch=branch` : The name of the branch where you want to export your content. If you don't mention the branch name, then by default the content will be exported from **all** the branches of your stack.
- `--module=module` : [optional] Specific module name. If not specified, the export command will export all the modules to the stack. The available modules are *assets*, *content-types*, *entries*, *environments*, *extensions*, *marketplace-apps*, *global-fields*, *labels*, *locales*, *webhooks*, *workflows*, and *roles*.
- `--content-types=content-types` : [optional] content type
- `--secured-assets=secured-assets` : [optional] use when assets are secured.
- `-y`, `--yes` : Force override all Marketplace prompts.

Note: If the `--yes` flag is not passed, you are prompted to enter an encryption key while exporting the Marketplace App for the app configurations.

Examples:

- To export all modules from a stack:

```
csdx cm:stacks:export -a mytoken -d "C:\Users\Name\Desktop\cli\content"
```

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Export

Exporting with Postman

The screenshot shows the Postman interface with a workspace named 'workspace'. The left sidebar lists the API collection 'Content Management API ...' with folders for 'User session', 'Users', 'Organizations', 'Stacks', 'Branches', 'Aliases', 'Content types', 'Global fields', and 'Entries'. The 'Entries' folder is expanded, showing two requests: 'GET Get all entries' and 'GET Get a single entry'. The main panel displays the details of the 'GET Get all entries' request, including the URL 'https://{{base_url}}/v3/content_types/{{content_type_uid}}/entries' and a table of query parameters.

Key	Value
<input type="checkbox"/> locale	{{locale}}
<input type="checkbox"/> include_workflow	false
<input type="checkbox"/> include_publish_details	true
<input type="checkbox"/> include_branch	false
Key	Value

Exporting with the CLI

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Examples:

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