

# Introduction

Doom is a documentation development tool designed for internal use at Alauda, built on top of [rspress](#). It provides users with a rich set of built-in plugins for an out-of-the-box experience.

## TOC

Core Capabilities

Based on Markdown and its extension MDX

Get Started

## Core Capabilities

- Automatically generates a configurable weight (order) left sidebar
- Full-text static document search
- Multilingual support

## Based on Markdown and its extension MDX

MDX is a powerful content development approach. You can write Markdown files as you normally would while also using React components within the Markdown content:



```
// docs/index.mdx
import { CustomComponent } from './custom';

# Hello World

<CustomComponent />
```

For more details, you can refer to the [“Using MDX” documentation](#).

---

## Get Started

Let's [get started quickly](#) with Doom!

---

## Start

### Start

Create Project

Command Line Tool

---

## Usage

## Configuration

Configure `doom` documentation tool

Configuration File

Basic Configuration

API Documentation Configuration

Permission Explanation Document Configuration

Reference Document Configuration

Release Notes Configuration

Left Navigation Configuration

Internal Document Routes Configuration

Only Include Document Routes Configuration

Language Highlight Plugin Configuration

`sites.yaml` Configuration

Translation Configuration

Edit Documentation in Code Repository

Document Linting Configuration

Algolia Search Configuration

Sitemap Configuration

## Convention

Based on the principle of "convention over configuration", we agree on the organization of documents to automatically generate the left sidebar and related content.

Directory Structure

Metadata

Sorting

Preview

## Markdown

Callouts

Mermaid

## MDX

Dynamic content display and content reuse can be achieved using MDX

rspress Components

doom Components

Custom Component Reuse

## Internationalization

Using Internationalized Text in Reusable Components

`i18n.json`

`.ts/.tsx`

`.mdx`

## API Documentation

Advanced APIs

CRD

Common References

Specifying OpenAPI Path

## Permission Description Document

`props`

Example

## Referencing Documents

Document Reference Configuration

## Deployment

After completing the project development, we can deploy the project to the ACP platform.

Build and Preview

Multi-Version Builds

Merged Directory Structure

Dynamic Mounting Configuration File

# Start

## TOC

[Create Project](#)[Command Line Tool](#)[Start Development Service](#)[Production Build](#)[Local Preview](#)[Use Scaffolding Templates](#)[Translate Documentation](#)[Export PDF](#)

## Create Project

First, you can create a new directory using the following command:

```
mkdir my-docs && cd my-docs
```

Run `npm init -y` to initialize a project. You can use npm, yarn, or pnpm to install doom:



```
npm install -D @alauda/doom typescript
```

Then, create files using the following commands:

```
# Create docs directory, supporting both Chinese and English by default
mkdir docs/en && echo '# Hello World' > docs/en/index.md
mkdir docs/zh && echo '# 你好' > docs/zh/index.md
```

Add the following scripts in `package.json` :

```
{
  "scripts": {
    "dev": "doom dev",
    "build": "doom build",
    "new": "doom new",
    "serve": "doom serve",
    "translate": "doom translate",
    "export": "doom export"
  }
}
```

Then initialize a configuration file `doom.config.yml` :

```
title: My Docs
```

Also, create a `tsconfig.json` file with the following content:

```
{
  "compilerOptions": {
    "jsx": "react-jsx",
    "module": "NodeNext",
    "moduleResolution": "NodeNext",
    "noUnusedLocals": true,
    "noUnusedParameters": true,
    "resolveJsonModule": true,
    "skipLibCheck": true,
    "strict": true,
    "target": "ESNext",
  },
  "mdx": {
    "checkMdx": true,
  },
}
```

Lastly, create a `global.d.ts` file with the following content:

```
/// <reference types="@alauda/doom/runtime" />
```

Now you can use the global components provided by doom in your `.mdx` files with type safety.

---

## Command Line Tool



```
doom -h
```

```
# output
```

```
Usage: doom [options] [command]
```

```
Doctor Doom making docs.
```

#### Options:

<code>-V, --version</code>	output the version number
<code>-c, --config &lt;config&gt;</code>	Specify the path to the config file
<code>-v &lt;version&gt;</code>	Specify the version of the documentation, c
<code>-b, --base &lt;base&gt;</code>	Override the base of the documentation
<code>-p, --prefix &lt;prefix&gt;</code>	Specify the prefix of the documentation bas
<code>-f, --force [boolean]</code>	Force to
	1. fetch latest reference remotes or scaffo
	2. translate ignore hash equality check and
<code>-i, --ignore [boolean]</code>	Ignore internal routes (default: false)
<code>-d, --download [boolean]</code>	Display download pdf link on nav bar (defau
<code>-e, --export [boolean]</code>	Run or build in exporting PDF mode, `apis/*
<code>-I, --include &lt;language...&gt;</code>	Include <b>only</b> the specific language(s),
<code>-E, --exclude &lt;language...&gt;</code>	Include all languages except the specific l
<code>-o, --out-dir &lt;path&gt;</code>	Override the `outDir` defined in the config
<code>-r, --redirect &lt;enum&gt;</code>	Whether to redirect to the locale closest t
<code>-R, --edit-repo [boolean url]</code>	Whether to enable or override the `editRepo
<code>-a, --algolia [boolean alauda]</code>	Whether to enable or use the alauda (docs.a
<code>-S, --site-url</code>	Whether to enable the siteUrl for sitemap g
<code>-n, --no-open [boolean]</code>	Do not open the browser after starting the
<code>-h, --help</code>	display help for command

#### Commands:

<code>dev [options] [root]</code>	Start the development server
<code>build [root]</code>	Build the documentation
<code>preview serve [options] [root]</code>	Preview the built documentation
<code>new [template]</code>	Generate scaffolding from templates
<code>translate [options] [root]</code>	Translate the documentation
<code>export [options] [root]</code>	Export the documentation as PDF, `apis/**`
<code>lint [root]</code>	Lint the documentation
<code>help [command]</code>	display help for command

## Start Development Service

Run `yarn dev` to start the development service, and the browser will automatically open the documentation homepage.

```
doom dev -h
```

```
# output
```

```
Usage: doom dev [options] [root]
```

```
Start the development server
```

```
Arguments:
```

```
  root
```

```
Root directory of the documentation
```

```
Options:
```

```
  -H, --host [host]
```

```
Dev server host name
```

```
  -P, --port [port]
```

```
Dev server port number
```

```
  -l, --lazy [boolean]
```

```
Whether to enable `lazyCompilation`, which could
```

```
  -h, --help
```

```
display help for command
```

## Production Build

Run `yarn build` to build the production environment code. After the build is completed, static files will be generated in the `dist` directory.

## Local Preview

Run `yarn serve` to preview the built static files. Note that if you used the `-b`, `-p` options to build, the same options are also required when previewing.

## Use Scaffolding Templates

Run `yarn new` to generate projects, modules, or documentation using scaffolding templates.

## Translate Documentation

```
doom translate -h
```

```
# output
```

```
Usage: doom translate [options] [root]
```

```
Translate the documentation
```

```
Arguments:
```

```
  root                      Root directory of the documentation
```

```
Options:
```

```
-s, --source <language> Document source language, one of en, zh, ru (default)
-t, --target <language> Document target language, one of en, zh, ru (default)
-g, --glob <path...>    Glob patterns for source dirs/files
-C, --copy [boolean]    Whether to copy relative assets to the target directory
-h, --help              display help for command
```

- The `-g, --glob` parameter is required and can specify the directory or path of files to be translated, supporting `glob` syntax. Note that the parameter value must be quoted; otherwise, command line parsing may cause unexpected behavior. Examples:
  1. `yarn translate -g abc xyz` will translate all documents in the `<root>/<source>/abc` and `<root>/<source>/xyz` directories to `<root>/<target>/abc` and `<root>/<target>/xyz`.
  2. `yarn translate -g '*'` will translate all document files under `<root>/<source>`.
- The `-C, --copy` parameter is optional, determining whether to copy local resource files to the target directory when a target file does not exist. The default is `false`, which means changing the reference path of the resource file to the source path. Examples:
  - When this parameter is enabled:
    1. Translating `/<source>/abc.jpg` will copy `<root>/public/<source>/abc.jpg` to `<root>/public/<target>/abc.jpg` and change the document's reference path to `/<target>/abc.jpg`.
    2. In `<root>/<source>/abc.mdx`, when translating the reference `./assets/xyz.jpg`, it will copy `<root>/<source>/assets/xyz.jpg` to `<root>/<target>/assets/xyz.jpg`, keeping the image reference path unchanged.

3. In `<root>/<source>/abc.mdx` , when translating the reference

`./assets/<source>/xyz.jpg` , it will copy

`<root>/<source>/assets/<source>/xyz.jpg` to

`<root>/<target>/assets/<target>/xyz.jpg` and change the document's reference path to `./assets/<target>/xyz.jpg` .

- If this parameter is not enabled:

1. Translating `/<source>/abc.jpg` , if `<root>/public/<target>/abc.jpg` already exists, will change the document's reference path to `/<target>/abc.jpg` ; otherwise, it will keep the image reference path unchanged.

2. In `<root>/<source>/abc.mdx` , when translating the reference

`./assets/<source>/xyz.jpg` , if `<root>/<target>/assets/<target>/xyz.jpg`

already exists, it will change the document's reference path to

`./assets/<target>/xyz.jpg` ; otherwise, it will change to

`../<source>/assets/<target>/xyz.jpg` .

## WARNING

In particular, when using `-g '*'` for full translation, the file lists of the `source` and `target` directories will be compared. Any unmatched `target` files, excluding `internalRoutes` , will be automatically deleted.

## TIP

The translation function requires the local environment variable `AZURE_OPENAI_API_KEY` to be configured. Please contact your team leader for this information.

Metadata can be used in the document to control translation behavior:

```
i18n:
  title:
    en: DevOps Connectors
  additionalPrompts: 'In this text, Connectors is a proper noun, do not trans
  disableAutoTranslation: false
title: DevOps □□□
```

## Export PDF

### WARNING

Please run the `yarn build` operation before executing the export operation.

```
doom export -h
```

```
# output
```

```
Usage: doom export [options] [root]
```

```
Export the documentation as PDF, `apis/**` and `*/apis/**` routes will be ign
```

```
Arguments:
```

```
  root                Root directory of the documentation
```

```
Options:
```

```
-H, --host [host]  Serve host name
-P, --port [port]  Serve port number (default: "4173")
-h, --help         display help for command
```

Run `yarn export` to export the documentation as a PDF file. Note that if you used `-b`, `-p` options to build, the same options are also required during export.

The export functionality relies on [playwright](#) <sup>↗</sup>. In the pipeline, please use `build-harbor.alauda.cn/frontend/playwright-runner:doom` as the base image for dependency installation and documentation building. You can set the following environment variable locally to speed up downloads:

```
.env.yarn
```

```
PLAYWRIGHT_DOWNLOAD_HOST="https://cdn.npmmirror.com/binaries/playwright"
```

# Usage

## Configuration

Configure `doom` documentation tool

Configuration File

Basic Configuration

API Documentation Configuration

Permission Explanation Document Configuration

Reference Document Configuration

Release Notes Configuration

Left Navigation Configuration

Internal Document Routes Configuration

Only Include Document Routes Configuration

Language Highlight Plugin Configuration

`sites.yaml` Configuration

Translation Configuration

Edit Documentation in Code Repository

Document Linting Configuration

Algolia Search Configuration

Sitemap Configuration

## Convention

Based on the principle of "convention over configuration", we agree on the organization of documents to automatically generate the left sidebar and related content.

Directory Structure

Metadata

Sorting

Preview

## Markdown

Callouts

Mermaid

## MDX

Dynamic content display and content reuse can be achieved using MDX

rspress Components

doom Components

Custom Component Reuse

## Internationalization

Using Internationalized Text in Reusable Components

`i18n.json`

`.ts/.tsx`

`.mdx`

## API Documentation

Advanced APIs

CRD

Common References

Specifying OpenAPI Path

## Permission Description Document

`props`

Example

## Referencing Documents

Document Reference Configuration

## Deployment

After completing the project development, we can deploy the project to the ACP platform.

Build and Preview

Multi-Version Builds

Merged Directory Structure

Dynamic Mounting Configuration File



# Configuration

---

## TOC

Configuration File

Basic Configuration

API Documentation Configuration

Permission Explanation Document Configuration

Reference Document Configuration

`frontmatterMode`

Release Notes Configuration

Left Navigation Configuration

Internal Document Routes Configuration

Only Include Document Routes Configuration

Language Highlight Plugin Configuration

`sites.yaml` Configuration

Translation Configuration

Edit Documentation in Code Repository

Document Linting Configuration

Algolia Search Configuration

Sitemap Configuration

---

## Configuration File

In most cases, a static `yaml` configuration file is sufficient. It supports `doom.config.yaml` or `doom.config.yml`. For more complex scenarios, such as requiring dynamic configurations or

customizing `rspress` plugins, `js/ts` configuration files can be used, supporting various formats like `.js/.ts/.mjs/.mts/.cjs/.cts`.

For `js/ts` configuration files, we need to export the configuration, which can be achieved using the `defineConfig` function exported from `@alauda/doom/config` for type assistance:

```
import { defineConfig } from '@alauda/doom/config'

export default defineConfig({})
```

---

## Basic Configuration

- `lang` : The default document language. To accommodate most projects, we support both Chinese and English documents by default, with the default language set to `en`. If the current document project does not require multilingual support, this can be set to `null` or `undefined`.
- `title` : The document title, which will appear in the browser tab.
- `logo` : The logo in the top left corner of the document. It supports image links and file paths; absolute paths reference files in the `public` directory, while relative paths refer to files relative to the current tool directory. By default, it uses the built-in Alauda logo from the `doom` package.
- `logoText` : The document title that will display at the logo location in the top left corner.
- `icon` : The document favicon, which defaults to the same as `logo`.
- `base` : The base path for the document, used for deployment to non-root paths, such as `product-docs`, defaults to `/`.
- `outDir` : The output directory for build artifacts, defaulting to `dist/{base}/{version}`. If specified, it changes to `dist/{outDir}/{version}` where `version` is optional. Refer to [multi-version builds](#).

---

## API Documentation Configuration

**api:**

```
# CRD definition file path, relative to the directory where doom.config.* i
```

**crds:**

```
- docs/shared/crds/*.yaml
```

```
# OpenAPI definition file path, relative to the directory where doom.config
```

**openapis:**

```
- docs/shared/openapis/*.json
```

```
# When rendering OpenAPI related resource definitions, they are inline on t
```

```
# Refer to https://doom.alauda.cn/apis/references/CodeQuality.html#v1alpha1
```

**references:**

```
v1alpha1.CodeQualityBranch: /apis/references/CodeQualityBranch#v1alpha1.C
```

```
# Optional, the API documentation path prefix. If the current business uses
```

```
pathPrefix: /apis
```

For writing documentation, refer to [API documentation](#).

---

## Permission Explanation Document Configuration

```
# Resource file paths below are relative to the directory where doom.config.*
```

**permission:****functionresources:**

```
# `kubectl get functionresources`
```

```
- docs/shared/functionresources/*.yaml
```

**roletemplates:**

```
# `kubectl get roletemplates -l auth.cpaas.io/roletemplate.official=true`
```

```
- docs/shared/roletemplates/*.yaml
```

For writing documentation, refer to [permissions documentation](#).

---

## Reference Document Configuration

**reference:**

- **repo:** `alauda-public/product-doc-guide` # Optional, the repository address
- branch:** # [string] Optional, the branch of the reference document repository
- publicBase:** # [string] Optional, when using a remote repository, the absolute path
- sources:**
  - **name:** `anchor` # The name of the reference document, used for referencing
  - path:** `docs/index.mdx#introduction` # The path to the reference document
  - ignoreHeading:** # [boolean] Optional, whether to ignore the title. If true, the heading will be ignored
  - processors:** # Optional, content processors for the referenced document
    - **type:** `ejsTemplate`
    - data:** # ejs template parameters, accessed using `<%= data.xx %>`
  - frontmatterMode:** `merge` # Optional, the mode for processing the frontmatter

**frontmatterMode**

- **ignore** : Ignores the frontmatter of the referenced document, keeping the current document's frontmatter.
- **merge** : Merges the frontmatter of the referenced document. If there are the same keys, the values from the referenced document will overwrite the current document's values.
- **replace** : Replaces the current document's frontmatter with that of the referenced document.
- **remove** : Removes the current document's frontmatter.

For writing documentation, refer to [reference documentation](#).

## Release Notes Configuration

**releaseNotes:****queryTemplates:**

**fixed:** # May include jql statements with ejs templates.

**unfixed:**

release-notes.md

```
<!-- release-notes-for-bugs?template=fixed&project=DevOps -->
```

release-notes.mdx

```
{/* release-notes-for-bugs?template=fixed&project=DevOps */}
```

Taking the above `template=fixed&project=DevOps` as an example, `fixed` is the template name defined in `queryTemplates`, and the remaining `query` parameter `project=DevOps` will be passed as parameters to the `ejs` template to process the `fixed` template which in turn initiates a Jira `jql` [↗](#) request at `https://jira.alauda.cn/rest/api/2/search?jql=<jql>`. This API requires authentication and needs environment variables `JIRA_USERNAME` and `JIRA_PASSWORD` to preview the results.

## Left Navigation Configuration

```
sidebar:
  collapsed: false # Optional, whether to default the left navigation to be c
```

## Internal Document Routes Configuration

```
internalRoutes: # Optional, supports glob matching, relative to the docs dire
  - '*/internal/**/*'
```

## Only Include Document Routes Configuration

```
onlyIncludeRoutes: # Optional, supports glob matching, relative to the docs d
- '*/internal/**/*'
internalRoutes:
- '*/internal/overview.mdx'
```

---

## Language Highlight Plugin Configuration

```
shiki:
  theme: # Optional, https://shiki.style/themes
  langs: # Optional, https://shiki.style/languages
  transformers: # Optional, only available in js/ts config, https://shiki.sty
```

### WARNING

Languages that are not configured will prompt a warning on the command line and will fall back to `plaintext` rendering.

---

## `sites.yaml` Configuration

The `sites.yaml` configuration file is used to configure the sub-site information associated with the current documentation site. This defined information will be used when [referring to external site components](#) and building single-version documents.

```
- name: connectors # Globally unique name
base: /devops-connectors # Base path for site access
version: v1.1 # Version for ExternalSite/ExternalSiteLink redirection when

displayName: # Site display name, defaults to name if not filled or no match
  en: DevOps Connectors
  zh: DevOps 连接器

# The following properties are used to pull images when building the full site
# Generally, it is necessary to configure the relevant information for sub-
repo: https://github.com/AlaudaDevops/connectors-operator # Site repository
image: devops/connectors-docs # Site build image, used for pulling images w
```

---

## Translation Configuration

**translate:**

```
# System prompt message, ejs template. The passed parameters are `sourceLang`
# `sourceLang` and `targetLang` are the strings `xx` and `yy`, respectively
# `userPrompt` is the global user configuration below, which may be empty
# `additionalPrompts` is the `additionalPrompts` configuration in the document
# The default system prompt message is as follows; it can be modified based on the
```

```
systemPrompt: |
```

```
## Role
```

You are a professional technical documentation engineer, skilled in writing high-quality technical documentation.

```
## Rules
```

- The first message is the latest <%= sourceLang %> document that needs to be translated.
- The input format is MDX format, and the output format must also retain the MDX format.
- Resource links in the document should not be translated or replaced.
- **The content included in MDX components needs to be translated. The MDX components are:**
  - In <Overview />, "Overview" is the component name and does not need to be translated.
  - In <Tab label="value">Component Content</Tab>, "label" is a key and does not need to be translated.
- **Terms:**
  - In <%= terms %>, "terms" is the component name and does not need to be translated.
- If the following comments exist, retain them without translation and do not remove them:
  - { /\* release-notes-for-bugs \*/ }
  - <!-- release-notes-for-bugs -->
- If the following comments exist, remove them entirely and do not keep:
  - { /\* reference-start \*/ }
  - { /\* reference-end \*/ }
  - <!-- reference-start -->
  - <!-- reference-end -->
- During the translation process, be sure to retain the original \< and \{.
- Do not disrupt the original Markdown format during the translation, such as code blocks, tables, etc.

```
## Strategy
```

**The translation work is divided into four steps:**

1. Translate the <%= sourceLang %> document directly into <%= targetLang %>.
2. **Identify specific issues in the direct translation from the first step, document them, and provide suggestions for improvement.**
  - Non-compliance with <%= targetLang %> expression habits. Clearly point out the non-compliance.
  - Sentences that are not fluent, indicating the positions without needing to be explained.
  - Ambiguous or difficult-to-understand phrases can be attempted to be explained.
3. Based on the direct translation result and the issues pointed out in the second step, revise the translation.
4. When there exist previously translated <%= targetLang %> documents, compare the revised translation with the previously translated documents to ensure consistency.

The final output should only include the complete result from the last step, without any other content.

```
<%= userPrompt %>
```



```
<%= additionalPrompts %>
```

```
userPrompt: # optional, used to fill in the global parameters of the `ejs`
```

## Edit Documentation in Code Repository

```
editRepoBaseUrl: alauda/doom/tree/main/docs # The prefix https://github.com/
```

## Document Linting Configuration

```
lint:  
  cspellOptions: # optional, cspell configuration options, refer to https://g
```

## Algolia Search Configuration

```
algolia:  
  appId: # Algolia application ID  
  apiKey: # Algolia API Key  
  indexName: # Algolia index name
```

Please use `public/robots.txt` for Algolia Crawler Verification.

### INFO

Due to the current architectural limitations of `rspress`, the Algolia search function needs to be implemented through a [custom theme](#)<sup>↗</sup>. Therefore, to unify the use of related theme features, we provide the theme entry via `@alauda/doom/theme`. Please add the following theme configuration file to enable it:

```
export * from '@alauda/doom/theme'
```

---

## Sitemap Configuration

```
siteUrl: https://docs.alauda.cn # Optional, site URL used for generating site
```

# Convention

## TOC

[Directory Structure](#)[Metadata](#)[Sorting](#)[Preview](#)

## Directory Structure

The left sidebar is automatically generated based on the file directory structure, where the `index` file in the first-level directory acts as the document's homepage and will display as the first item in the left navigation. Subfolders can use `index.md` or `index.mdx` and define the first-level title to set the grouping title for the left sidebar. Other sub-documents will be automatically merged into the current group, and nested subfolders will follow the same rules.

```
├─ index.md
├─ start.mdx
├─ usage
│   └─ index.mdx
│   └─ convention.md
```

We also agree that:

1. The `public` directory is used to store static resources such as images, videos, etc.
2. The `public/_remotes` directory is used to store static resources associated with [remote reference documents](#). Please do not directly rely on resources from this directory; you may

add `*/public/_remotes` to `.gitignore` to prevent these from being committed to the code repository.

3. The `shared` directory is for storing common components, reusable documents, etc., and will not automatically generate document data.

---

## Metadata

At the beginning of the document, you can define the document's metadata such as title, description, author, category, etc., through the `frontmatter`.

```
---  
title: Title  
description: Description  
author: Author  
category: Category  
---
```

In the body of the document, when using `.mdx` files, you can access these metadata through `frontmatter` as described in [MDX](#).

---

## Sorting

Other documents, except for `index.md` or `index.mdx`, will be sorted by default according to their file names. You can customize the `weight` value in the `frontmatter` to adjust the order of documents in the left sidebar (the smaller the `weight` value, the higher the priority in sorting).

```
---  
weight: 1  
---
```

**WARNING**

Note: Currently, changes to the left navigation configuration require a service restart to take effect, and it is usually not necessary to pay too much attention during development.

## Preview

Sometimes, we do not need to display special content on the group homepage. In this case, you can use `index.mdx` file and the `Overview` component to display the list of documents in the current group. This will showcase the titles, descriptions, and secondary title information of the grouped list file.

# Usage

```
<Overview />
```

You can refer to [Usage](#) for the effect.

# Markdown

In addition to the standard [gfm](#) syntax, Doom has some built-in extended Markdown features.

## TOC

Callouts

Mermaid

## Callouts

Source code annotation component

### NOTE

1. Please use inline code comments according to the actual language, such as `;`, `%`, `#`, `//`, `/** */`, `--`, and `<!-- -->`.
2. If you need to treat it as a code comment, use `[\!code callout]` for escaping.
3. Sometimes, `:::callouts` may display incorrectly due to nested indentation; you can use `<div class="doom-callouts">` or `<Callouts>` component instead.

```
```sh
```

```
Memory overhead per virtual machine ≈ (1.002 × requested memory) \
    + 218 MiB \
    + 8 MiB × (number of vCPUs) \
    + 16 MiB × (number of graphics devices) \
    + (additional memory overhead)
```

```
```
```

```
:::callouts
```

1. Required for the processes that run in the `virt-launcher` pod.
2. Number of virtual CPUs requested by the virtual machine.
3. Number of virtual graphics cards requested by the virtual machine.
4. Additional memory overhead:
  - If your environment includes a Single Root I/O Virtualization (SR-IOV) network device or a Graphics Processing Unit (GPU), allocate 1 GiB additional memory overhead for each device.
  - If Secure Encrypted Virtualization (SEV) is enabled, add 256 MiB.
  - If Trusted Platform Module (TPM) is enabled, add 53 MiB.

```
:::
```

```
Memory overhead per virtual machine ≈ (1.002 × requested memory) \
    + 218 MiB \
    + 8 MiB × (number of vCPUs) \
    + 16 MiB × (number of graphics devices) \
    + (additional memory overhead)
```

- ① Required for the processes that run in the `virt-launcher` pod.
- ② Number of virtual CPUs requested by the virtual machine.
- ③ Number of virtual graphics cards requested by the virtual machine.
- ④ Additional memory overhead:
  - If your environment includes a Single Root I/O Virtualization (SR-IOV) network device or a Graphics Processing Unit (GPU), allocate 1 GiB additional memory overhead for each device.
  - If Secure Encrypted Virtualization (SEV) is enabled, add 256 MiB.
  - If Trusted Platform Module (TPM) is enabled, add 53 MiB.

For more source code conversion features, please refer to [Shiki Transformers](#) ↗.

## Mermaid [↗](#)

Chart drawing tool

```
```mermaid
graph TD;
  A-->B;
  A-->C;
  B-->D;
  C-->D;
```
```



Combined with [Markdown Preview Mermaid](#) [↗](#), you can preview in real-time within VSCode.



# MDX

[MDX ↗](#) is an extended syntax of Markdown that allows the use of JSX syntax within Markdown. For usage, you can refer to [rspress MDX ↗](#).

## TOC

rspress Components

doom Components

Overview

Directive

ExternalSite

ExternalSiteLink

AcpApisOverview and ExternalApisOverview

Term

props

TermsTable

props

JsonViewer

Custom Component Reuse

## rspress Components

The `rspress` theme provides a majority of the [built-in components ↗](#) as global components, which can be used directly in `.mdx` files without import, including:

- Badge
- Card
- LinkCard
- PackageManagerTabs
- Steps
- Tab/Tabs
- Toc

Other less frequently used components can be imported from `@rspress/core/theme`, for example:

preview.mdx

```
import { SourceCode } from '@rspress/core/theme'

<SourceCode href="/" />
```

---

## doom Components

`doom` provides some global components to assist in document writing, which can be used directly without import. Currently, these include:

### Overview

Component for document overview, used to display the document directory.

### Directive

Sometimes, due to nested indentation, the [custom container](#) syntax may become invalid. The `Directive` component can be used as a substitute.

- The directory structure of multi-language documents ( `doc/en` ) needs to be

```
<Directive type="danger" title="Attention">
```

If automated translation tools are used for translation, there is no need worry about this issue, as the automated translation tools will automatically generate the directory structure of the target language documents based on `doc/zh`.

```
</Directive>
```

- The directory structure of multi-language documents ( `doc/en` ) needs to be fully consistent with the documents under the `doc/zh` directory to ensure that the links of multi-language documents are identical except for the language identifier.

### Attention

If automated translation tools are used for translation, there is no need to worry about this issue, as the automated translation tools will automatically generate the directory structure of the target language documents based on `doc/zh`.

## ExternalSite

Component to reference external sites.

```
<ExternalSite name="connectors" />
```

### Note

Because DevOps Connectors releases on a different cadence from Alauda Container Platform, the DevOps Connectors documentation is now available as a separate documentation set at [DevOps Connectors](#)<sup>↗</sup>.

## ExternalSiteLink

Component to reference external site links.

```
<ExternalSiteLink name="connectors" href="link.mdx#hash" children="Content" />
```

Content ↗

### TIP

In mdx, `<ExternalSiteLink name="connectors" href="link" children="Content" />`

has a different meaning from the content below

```
<ExternalSiteLink name="connectors" href="link">
  Content { /* this will be rendered inside a `p` element */ }
</ExternalSiteLink>
```

If you do not want the text to be rendered inside a `p` element, you can use the `children` attribute as shown in the example above.

## AcpApisOverview and ExternalApisOverview

Components to reference external site API overviews.

```
<AcpApisOverview />
{ /* the same as the following */ }
<ExternalApisOverview name="acp" />

<ExternalApisOverview name="connectors" />
```

### Note

For the introduction to the usage methods of ACP APIs, please refer to [ACP APIs Guide](#) ↗.

### Note

For the introduction to the usage methods of DevOps Connectors APIs, please refer to [DevOps Connectors APIs Guide](#) ↗.

## Term

Term component for plain text, dynamically mounted for injection.

```
<Term name="company" textCase="capitalize" />
<Term name="product" textCase="lower" />
<Term name="productShort" textCase="upper" />
```

Alauda alauda container platform ACP

### props

- `name` : Built-in term name, refer to [dynamic mounting configuration file](#).
- `textCase` : Text case transformation, optional values are `lower` , `upper` , `capitalize` .

### TermsTable

Component for displaying a list of built-in terms.

```
<TermsTable />
```

Name	Chinese	Chinese Bad Cases	English	English Bad Cases	Description
company	公司	-	Alauda	-	公司
product	Alauda Container Platform	-	Alauda Container Platform	-	Alauda Container Platform
productShort	ACP	-	ACP	-	Alauda Container Platform

### props

- `terms` : `NormalizedTermItem[]` , optional, a custom term list for reusing when rendering custom terms in internal documentation.

## JsonViewer

```
<JsonViewer value={{ key: 'value' }} />
```

yaml    json

key: value

## Custom Component Reuse

According to [conventions](#), we can extract reusable content to the `shared` directory, then import it where needed, for example:

```
import CommonContent from './shared/CommonContent.mdx'

<CommonContent />
```

If you need to use more [runtime](#) related APIs, you can implement components using `.jsx/.tsx` and then import them into `.mdx` files.

```
// shared/CommonContent.tsx
export const CommonContent = () => {
  const { page } = usePageData()
  return <div>{page.title}</div>
}

// showcase/content.mdx
import { CommonContent } from './shared/CommonContent'
<CommonContent />
```

### WARNING

Note: Currently, components exported from `.mdx` do not support passing `props`. For scenarios where `props` need to be passed, please use `.jsx/.tsx` components for development, refer to [this issue](#).

# Internationalization

Most of the internal documentation for `alauda` is bilingual in Chinese and English. Therefore, we default to supporting the use of `en / zh` subfolders to store documentation in different languages. It is recommended to also store static resources in `en / zh` subfolders under the `public` directory, which facilitates the management of documentation content and static resources.

## TOC

`i18n.json``.ts/.tsx``.mdx`

### `i18n.json`

For reusable components that need to support both Chinese and English within the same component, you must first create an `i18n.json` file in the `docs` directory. Then, you can use `useI18n` in the component to retrieve the text in the current language, for example:

`docs/i18n.json`



```
{
  "title": {
    "zh": "标题",
    "en": "Title"
  },
  "description": {
    "zh": "描述",
    "en": "description"
  }
}
```

---

## .ts/.tsx

```
import { useI18n } from '@rspress/runtime'

export const CommonContent = () => {
  const t = useI18n()
  return <h1>{t('title')}</h1>
}
```

---

## .mdx

```
import { useI18n } from '@rspress/runtime'

# {useI18n()}('title')}

{useI18n()}('description')}
```

# API Documentation

Based on actual business needs, we generally categorize APIs into two types: Advanced APIs and CRDs (Custom Resource Definitions). Therefore, the directory structure is typically organized as follows:

```
|— apis
|   |— advanced-apis # Advanced APIs
|   |— crds # CRDs
|   |— references # Common References
```

## TOC

Advanced APIs

props

CRD

props

Common References

props

Specifying OpenAPI Path

## Advanced APIs

advanced-apis/codeQualityTaskSummary.mdx

```
# CodeQualityTaskSummary
```

```
<OpenAPIPath path="/plugins/v1alpha1/template/codeQuality/task/{task-id}/summ
```

Refer to [CodeQualityTaskSummary](#).

## props

- `path` : The path under OpenAPI schema `paths`
- `pathPrefix` : Can be used to override the `api.pathPrefix` in global configuration
- `openapiPath` : Refer to [Specifying OpenAPI Path](#)

## CRD

```
crds/ArtifactCleanupRun.mdx
```

```
# ArtifactCleanupRun
```

```
<K8sCrd name="artifactcleanupruns.artifacts.katanomi.dev" />
```

Refer to [ArtifactCleanupRun](#).

## props

- `name` : CRD `metadata.name`
- `crdPath` : Similar to [Specifying OpenAPI Path](#), used to specify a particular CRD file

## Common References

```
references/CodeQuality.mdx
```

```
# CodeQuality
```

```
<OpenAPIRef schema="v1alpha1.CodeQuality" />
```

Refer to [CodeQuality](#).

## props

- `schema` : The name under OpenAPI schema `definitions` (v2) or `components/schemas` (v3)
- `openapiPath` : Refer to [Specifying OpenAPI Path](#)

## Specifying OpenAPI Path

For the `OpenAPIPath` and `OpenAPIRef` components, the default behavior is to search for matches across all OpenAPI definition files. If you need to specify a particular OpenAPI file, you can use the `openapiPath` property:

```
<OpenAPIPath  
  path="/plugins/v1alpha1/template/codeQuality/task/{task-id}/summary"  
  openapiPath="shared/openapis/katanomi.json"  
>
```

# Permission Description Document

```
<K8sPermissionTable functions={['devops-testplans', 'devops-testmodules']} />
```

## TOC

props

Example

### props

- `functions` : `string[]` - Required. An array of `FunctionResource` resource names to be displayed.

## Example

Function	Action	Platform Administrator	Platform auditors	Project Manager	Namespace Administrator
testplans devops-testplans	View	✓	✓	✓	✓
	Create	✓	✗	✓	✓
	Update	✓	✗	✓	✓
	Delete	✓	✗	✓	✓

Function	Action	Platform Administrator	Platform auditors	Project Manager	Namespace Administrator
testmodules devops - testmodules	View	✓	✓	✓	✓
	Create	✓	✗	✓	✓
	Update	✓	✗	✓	✓
	Delete	✓	✗	✓	✓

# Referencing Documents

In Markdown files:

```
<!-- reference-start#name -->
```

```
<!-- reference-end -->
```

In MDX files:

```
{/* reference-start#name */}
```

```
{/* reference-end */}
```

The `name` above refers to the name of the referenced document. For more information, please refer to [Document Reference Configuration](#). If the referenced document content uses static resources from a remote repository, the related static resources will be automatically stored locally in the `<root>/public/_remotes/<name>` directory.

Here is an example using `<!-- reference-start#ref -->` :

---

## TOC

Document Reference Configuration

`frontmatterMode`

---

## Document Reference Configuration

**reference:**

- **repo:** `alauda-public/product-doc-guide` # Optional, repository address for
- branch:** # [string] Optional, branch of the referenced document repository
- publicBase:** # [string] Optional, the directory where static resources for
- sources:**
  - **name:** `anchor` # Name of the referenced document, used to reference with
  - path:** `docs/index.mdx#introduction` # Path to the referenced document,
  - ignoreHeading:** # [boolean] Optional, whether to ignore headings. If true
  - processors:** # Optional, processors for handling the content of the referenced document
  - **type:** `ejsTemplate`
    - data:** # EJS template parameters, accessed via `<%= data.xx %>`.
  - frontmatterMode:** `merge` # Optional, mode for handling the frontmatter

**frontmatterMode**

- **ignore** : Ignores the frontmatter of the referenced document and retains the frontmatter of the current document.
- **merge** : Merges the frontmatter of the referenced document. If there are the same keys, the values from the referenced document will overwrite those in the current document.
- **replace** : Replaces the frontmatter of the current document with that of the referenced document.
- **remove** : Removes the frontmatter of the current document.

For writing documentation, refer to [Document Reference](#).



# Deployment

---

## TOC

Build and Preview

Multi-Version Builds

Merged Directory Structure

Dynamic Mounting Configuration File

---

## Build and Preview

Before deployment, we need to build the project for the production environment and preview it locally to ensure the project runs correctly:

```
doom build # Build static artifacts
doom serve # Preview the build artifacts in production mode
```

## Multi-Version Builds

By default, `doom build` will output the build artifacts to the `dist` directory. If multiple versions of the documentation need to be built, you can specify the version number using the `-v` parameter, for example:

```
# Typically determined by the branch name, such as release-4.0 corresponding
doom build -v 4.0 # Build version 4.0, output artifacts to dist/4.0, document
doom build -v master # Build master version, output artifacts to dist/master,
doom build -v {other} # Build other versions, output artifacts to dist/{other}

# unversioned and unversioned-x.y are special version numbers used for building
doom build -v unversioned # Build document without version prefix, output artifacts to dist/
doom build -v unversioned-4.0 # Build document without version prefix but dist
```

## Merged Directory Structure

```
|— console-platform
|   |— 4.0
|   |— 4.1
|   |— index.html
|   |— overrides.yaml
|   └— versions.yaml
|— console-devops-docs
|   |— 4.0
|   |— 4.1
|   |— index.html
|   |— overrides.yaml
|   └— versions.yaml
|— console-tekton-docs
|   |— 1.0
|   |— 1.1
|   |— index.html
|   |— overrides.yaml
|   └— versions.yaml
```

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>Redirecting...</title>
    <meta http-equiv="refresh" content="0; url=/console-docs/4.1" />
  </head>
  <body>
    <p>Redirecting to <a href="/console-docs/4.1">/console-docs/4.1</a></p>
  </body>
</html>
```

## Dynamic Mounting Configuration File

### overrides.yaml

```
# Document information, each document can mount to override default configura
title:
  en: Doom - Alauda
  zh: Doom - 灾祸
logoText:
  en: Doom - Alauda
  zh: Doom - 灾祸
```

### versions.yaml

```
- '4.1'
- '4.0'
```