



Red Hat

Red Hat Developer Hub 1.8

Manage and consume technical documentation within Red Hat Developer Hub

Managing the documentation lifecycle – add, search, view, and edit content – using the TechDocs plugin in Red Hat Developer Hub (RHDH)

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Abstract

The TechDocs plugin empowers developers by providing a complete documentation lifecycle management tool. Authorized administrators set up the service, allowing developers to manage documentation directly in Red Hat Developer Hub (RHDH), including adding new content, searching, viewing, and making edits.

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CHAPTER 1. ADDING DOCUMENTATION TO TECHDOCS FOR YOUR PROJECT

After an administrator configures the TechDocs plugin, a developer can add documentation to TechDocs by importing it from a remote repository. Any authorized user or group can access the documentation that is imported into the TechDocs plugin.

1.1. IMPORTING DOCUMENTATION INTO TECHDOCS FROM A REMOTE REPOSITORY

Teams can store their documentation files in the same remote repository where they store their code files. You can import documentation into your TechDocs plugin from a remote repository that contains the documentation files that your team uses.

Prerequisites

- Your organization has documentation files stored in a remote repository.
- You have a **mkdocs.yaml** file in the root directory of your repository.
- You have the **catalog.entity.create** and **catalog.location.create** permissions to import documentation into TechDocs from a remote repository.

Procedure

1. In your Red Hat Developer Hub instance, click **Catalog > Self-service > Register Existing Component**.
2. In the **Select URL** box, enter the URL to the **catalog-info.yaml** file that you want to import from your repository using the following format:
https://github.com/<project_name>/<repo_name>/blob/<branch_name>/<file_directory>/catalog-info.yaml
3. Click **Analyze**
4. Click **Finish**

Verification

1. In the Red Hat Developer Hub navigation menu, click **Docs**.
2. Verify that the documentation that you imported is listed in the table on the **Documentation** page.

CHAPTER 2. SEARCHING FOR RELEVANT CONTENT IN TECHDOCS

By default, the TechDocs plugin **Documentation** page shows all of the documentation that your organization has imported into your Red Hat Developer Hub instance. You can use any combination of the following methods to find the documentation that you want to view:

- Enter a keyword in the search bar to see all documents that contain the keyword anywhere in the document.
- Filter by **Owner** to see only documents that are owned by a particular user or group in your organization.
- Filter by **Tags** to see only documents that contain a particular tag.
- Filter by **Owned** to see only documents that are owned by you or by a group that you belong to.
- Filter by **Starred** to see only documents that you have added to favorites.

By default, the **All** field shows the total number of documents that have been imported into TechDocs. If you search or use filters, the **All** field shows the number of documents that meet the search and filter criteria that you applied.

Prerequisites

- The TechDocs plugin is enabled and configured
- Documentation is imported into TechDocs
- You have the required roles and permissions to add and view documentation to TechDocs

Procedure

1. In the Red Hat Developer Hub navigation menu, click **Docs**.
2. On the **Documentation** page, use the search bar, filters, or both to locate the document that you want to view.

CHAPTER 3. ACCESSING AND READING DOCUMENTATION IN TECHDOCS

In TechDocs, a document might be part of a book that contains other documents that are related to the same topic.

Clicking the name of a document in the table on the **Documentation** page opens the document in a book page. The name of the book is displayed on book the page. The book page contains the following elements:

- The contents of the document.
- A search bar that you can use to search for keywords within the document.
- A navigation menu that you can use to navigate to other documents in the book.
- A **Table of contents** that you can use to navigate to other sections of the document.
- A **Next** button that you can use to navigate to the next sequential document in the book.

You can use the elements on the book page to search, view, and navigate the documentation in the book.

Prerequisites

- The TechDocs plugin is enabled and configured
- Documentation is imported into TechDocs
- You have the required roles and permissions to add and view documentation to TechDocs
- Optional: TechDocs add-ons are installed and configured

Procedure

1. In the Red Hat Developer Hub navigation menu, click **Docs**.
2. In the **Documentation** table, click the name of the document that you want to view.
3. On the book page, you can do any of the following optional actions:
 - Use installed add-ons that extend the functionality of the default TechDocs plugin.
 - Use the search bar to find keywords within the document.
 - Use any of the following methods to navigate the documentation in the book:
 - Use the **Table of contents** to navigate the any section of the document.
 - Use the navigation menu to navigate to any document in the book.
 - Click **Next** to navigate to the next sequential document in the book.

CHAPTER 4. MAKING CHANGES TO PROJECT DOCUMENTATION IN TECHDOCS

You can edit a document in your TechDocs plugin directly from the document book page. Any authorized user in your organization can edit a document regardless of whether or not they are the owner of the document.

Procedure

1. In the Red Hat Developer Hub navigation menu, click **Docs**.
2. In the **Documentation** table, click the name of the document that you want to edit.
3. In the document, click the **Edit this page** icon to open the document in your remote repository.
4. In your remote repository, edit the document as needed.
5. Use the repository provider UI and your usual team processes to commit and merge your changes.

CHAPTER 5. ADDING VIDEO CONTENT TO ENHANCE TECHDOCS

You can use `<iframe>` elements to add video content to enhance your experience with TechDocs.

Prerequisites

- An administrator has configured your AWS S3 bucket to store TechDocs sites.
- An administrator has configured the appropriate `techdocs.sanitizer.allowedIframeHosts` and `backend.csp` settings in your `app-config.yaml` file.

Procedure

1. In the section of the TechDocs file that you want to embed a video into, add the following configuration:

```
<iframe  
    width="<video_width>"  
    height="<video_height>"  
    src="<video_url>"  
    title="<video_title>"  
    frameborder="<frame_border>"  
    allow="picture-in-picture"  
    allowfullscreen>  
</iframe>
```

where

`<video_width>`

Specifies the width of the video in number of pixels, for example, **672**.

`<video_height>`

Specifies the height of the video in number of pixels, for example, **378**.

`<video_url>`

Specifies the url of the video, for example, <https://www.youtube.com/watch?v=LB1w8hjBt5k>.

`<video_title>`

Specifies the title of the video, for example, **Red Hat Developer Hub Overview Video**.

`<frame_border>`

Specifies the size of the frame border in number of pixels, for example, **0**. Use a value of **0** for no border.



NOTE

TechDocs uses DOMPurify to sanitize HTML. To prevent DOMPurify from removing the `<iframe>` elements, you must list every permitted video host, such as `www.youtube.com`, under the `techdocs.sanitizer.allowedIframeHosts` section of your `app-config.yaml` file. You must also add the video host to the `backend.csp` section of your `app-config.yaml` file.

2. In the **frame-src** and **allowedIframeHosts** fields of your **app-config.yaml** file, add any video hosts that you want to use. You can add multiple hosts. For example:

```
backend:  
  csp:  
  connect-src: ['https:']  
  frame-src: ['https://www.youtube.com/']  
techdocs:  
  builder: external  
  sanitizer:  
    allowedIframeHosts:  
      - www.youtube.com  
      - <additional_video_host_url>  
publisher:  
  type: awsS3  
  awsS3:  
    bucketName: ${AWS_S3_BUCKET_NAME}  
    accountId: ${AWS_ACCOUNT_ID}  
    region: ${AWS_REGION}
```

CHAPTER 6. STREAMLINING DOCUMENTATION BUILDS USING GITHUB ACTIONS

Red Hat Developer Hub (RHDH) includes a built-in TechDocs builder, however, the default setup is not intended for production use. Deploying TechDocs documentation in a production environment involves the following actions:

- **Building the documentation in a CI/CD system**
- **Publishing the generated documentation site to external object storage**, such as AWS S3, to ensure that the generated documentation persists between restarts of RHDH and can handle larger documentation workloads.
- **Configuring TechDocs in your RHDH deployment to run in read-only mode** so that TechDocs reads the static generated documentation files from the cloud storage bucket without attempting to generate them at runtime.

You can implement a TechDocs pipeline using GitHub Actions to automatically generate and publish your TechDocs whenever a user in your organization makes a change to a documentation file stored in your GitHub repository.

Prerequisites

- The TechDocs plugin is enabled and configured on your RHDH instance.
- Your organization has documentation files stored in a remote repository.
- You have an mkdocs.yaml file located in the root directory of your repository.
- You have the **catalog.entity.create** and **catalog.location.create** permissions to import documentation into TechDocs from a remote repository.
- You have an AWS S3 bucket to store your TechDocs sites.
- Minimal IAM Policies are configured for your S3 bucket, granting both Write and Read access.
- An administrator has created an IAM User, attached the necessary policy, and generated an access key in the AWS console.

Procedure

1. Set up the GitHub Actions workflow.
 - a. On GitHub, create a fork of the [RHDH TechDocs Pipeline](#) repository.
- 

NOTE

The **rhdh-techdocs-pipeline** repository contains a **generate-and-publish-techdocs.yaml** workflow that automatically generates TechDocs from the docs folder and publishes them to an Amazon S3 bucket.
- b. Use the GitHub GUI to make sure that all of the permissions required to run the workflow are enabled.

- c. Add the **Repository secrets** required to connect the workflow to your AWS account, for example, **TECHDOCS_S3_BUCKET_NAME**, **AWS_ACCESS_KEY_ID**, **AWS_SECRET_ACCESS_KEY**, **AWS_REGION**.



NOTE

The default **mkdocs.yaml** file in the **rhdh-techdocs-pipeline** workflow installs the **techdocs-core** and **minify** plugins.

- d. Optional: Customize the default structure or files of the **rhdh-techdocs-pipeline** repository to meet the needs of your organization.
 - e. Optional: Add other **mkdocs** plugins that you want to use by adding the name of the plugins to the **plugins** section of the **mkdocs.yaml** file and to the **steps.name: install mkdocs and mkdocs plugins** section of the **generate-and-publish-techdocs.yaml** file.
2. In the navigation menu of the OpenShift Container Platform console, click **ConfigMaps** and select your RHDH **app-config.yaml** file.
 3. Update the **app-config.yaml** file to enable your Amazon S3 bucket to serve TechDocs to your RHDH instance. For example:

```
techdocs:
  builder: external
  publisher:
    type: awsS3
    awsS3:
      bucketName: ${AWS_S3_BUCKET_NAME}
      accountId: ${AWS_ACCOUNT_ID}
      region: ${AWS_REGION}

aws:
  accounts:
    - accountId: ${AWS_ACCOUNT_ID}
      accessKeyId: ${AWS_ACCESS_KEY_ID}
      secretAccessKey: ${AWS_SECRET_ACCESS_KEY}

catalog:
  locations:
    - type: url
      target: https://github.com/<your_org>/rhdh-techdocs-pipeline/blob/main/catalog-info.yaml
```

4. Click **Save**.
5. In the navigation menu of the OpenShift Container Platform console, click **Topology** and restart the pod.



NOTE

Changes to the **docs** folder or the **mkdocs.yaml** file trigger the **rhdh-techdocs-pipeline** workflow to run. After the **rhdh-techdocs-pipeline** workflow runs successfully, the generated TechDocs are uploaded to your Amazon S3 bucket.

Verification

1. Go to your RHDH instance and click **Docs** to see the TechDocs served from your Amazon S3 bucket.