

## Slack to OpenSearch

Date published: 2021-04-06

Date modified: 2025-09-30

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## ReadyFlow: Slack to OpenSearch [Technical Preview]

You can use the Slack to OpenSearch [Technical Preview] Readyflow to consume messages from a Slack channel, vectorize them using an OpenAI model and write the results to OpenSearch.

This ReadyFlow reads messages from a Slack channel, vectorizes the data using an OpenAI embedding model, and stores the results in OpenSearch vector DB. The default OpenAI model is 'text-embedding-ada-002'. A Slack bot access token, an OpenAI API key and an OpenSearch password are required to run this flow. Define a KPI on the failure\_WriteToOpenSearch connection to monitor failed write operations.



### Note:

This ReadyFlow is considered Technical Preview and is not designed for production use. The flow uses Python processors and must be run in NiFi 2.x.

The ReadyFlow handles the Slack text messages only, it does not handle attachments in the message.

Slack to OpenSearch [Technical Preview] ReadyFlow details	
Source	Slack
Source Format	Slack
Destination	OpenSearch
Destination Format	Vector DB

## Prerequisites

Learn how to collect the information you need to deploy the Slack to OpenSearch [Technical Preview] ReadyFlow, and meet other prerequisites.

### For your data ingest source

- You have created a Slack workspace and channel.
- You have your Slack User or Bot Access Token.
- You have configured the necessary scopes for your token access

### For Cloudera Data Flow

- You have enabled Cloudera Data Flow for an environment.

For information on how to enable Cloudera Data Flow for an environment, see [Enabling Cloudera Data Flow for an Environment](#).

- You have created a Machine User to use as the Cloudera Workload User.
- You have given the Cloudera Workload User the EnvironmentUser role.

1. From the Management Console, go to the environment for which Cloudera Data Flow is enabled.
2. From the Actions drop down, click Manage Access.
3. Identify the user you want to use as a Workload User.



### Note:

The Cloudera Workload User can be a machine user or your own user name. It is best practice to create a dedicated Machine user for this.

4. Give that user EnvironmentUser role.

- You have synchronized your user to the Cloudera on cloud environment that you enabled for Cloudera Data Flow.

For information on how to synchronize your user to FreeIPA, see [Performing User Sync](#).

- You have granted your Cloudera user the DFCatalogAdmin and DFFlowAdmin roles to enable your user to add the ReadyFlow to the Catalog and deploy the flow definition.

1. Give a user permission to add the ReadyFlow to the Catalog.

- a. From the Management Console, click User Management.
- b. Enter the name of the user or group you wish to authorize in the Search field.
- c. Select the user or group from the list that displays.
- d. Click Roles Update Roles .
- e. From Update Roles, select DFCatalogAdmin and click Update.



**Note:** If the ReadyFlow is already in the Catalog, then you can give your user just the DFCatalogViewer role.

2. Give your user or group permission to deploy flow definitions.

- a. From the Management Console, click Environments to display the Environment List page.
- b. Select the environment to which you want your user or group to deploy flow definitions.
- c. Click Actions Manage Access to display the Environment Access page.
- d. Enter the name of your user or group you wish to authorize in the Search field.
- e. Select your user or group and click Update Roles.
- f. Select DFFlowAdmin from the list of roles.
- g. Click Update Roles.

3. Give your user or group access to the Project where the ReadyFlow will be deployed.

- a. Go to Data Flow Projects .
- b. Select the project where you want to manage access rights and click More Manage Access .

4. Start typing the name of the user or group you want to add and select them from the list.

5. Select the Resource Roles you want to grant.

6. Click Update Roles.

7. Click Synchronize Users.

### For your data ingest target

- You have your OpenAI API key.
- You have your OpenSearch instance and index into which you want to index data.
- You have your OpenSearch user name and password.

### Related Concepts

[Required parameters](#)

## Required parameters

When deploying the Slack to OpenSearch [Technical Preview] ReadyFlow, you have to provide the following parameters. Use the information you collected in *Prerequisites*.

**Table 1: Slack to OpenSearch [Technical Preview] ReadyFlow configuration parameters**

Parameter Name	Description
OpenAI API Key	Specify the API key used to authenticate to OpenAI.

Parameter Name	Description
OpenAI Model Name	Specify the OpenAI model name to use for embedding the data. The default model is 'text-embedding-ada-002'.
OpenSearch Document Text Field	The name of the field in the OpenSearch document where the text is stored. The default value is `text`.
OpenSearch Document Vector Field	Specify the name of the field in the OpenSearch document where the embeddings are stored. This field needs to be a 'knn_vector' type. The default value is `vector_embedding`.
OpenSearch Host URL	Specify the URL of the destination OpenSearch instance.
OpenSearch Index	Specify the name of the destination OpenSearch index.
OpenSearch Password	Specify the password to use for authenticating to the OpenSearch server.
OpenSearch Username	Specify the username to use for authenticating to the OpenSearch server.
Slack Channel ID	Specify the Slack channel ID.
Slack User or Bot Access Token	Specify the Slack user or bot access token.

### Related Concepts

[Prerequisites](#)

### Related Information

[Deploying a ReadyFlow](#)