

Importing Flow Definitions

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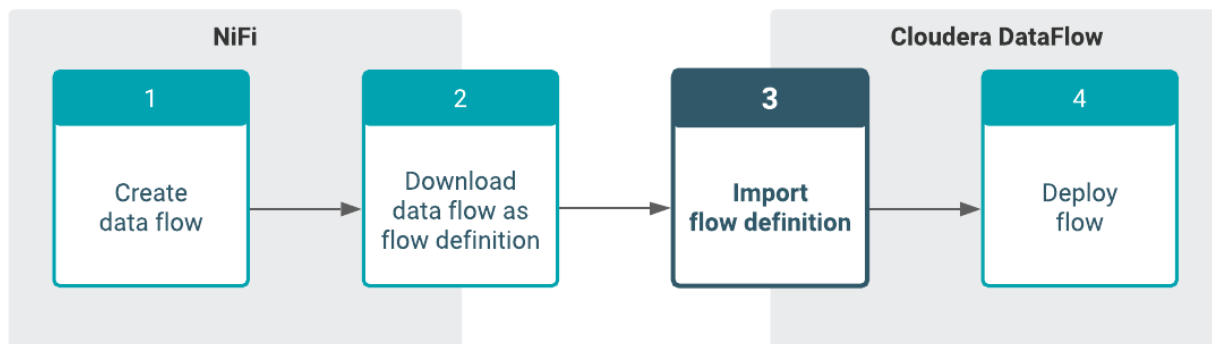
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Importing flow definitions from NiFi

If you want to use a NiFi flow in Cloudera DataFlow, you must import it as a flow definition. When imported, the flow definition is added to the flow Catalog.



Note: For information on publishing a draft from Flow Designer, see *Managing Drafts*.

Related Information

[Creating a Flow Definition in NiFi](#)

[Managing Flow Definitions](#)

[Deploying Flows](#)

[DataFlow Authorization](#)

[Managing drafts](#)

Importing using the webUI

Learn about importing a flow definition developed in NiFi using the CDF webUI.

Before you begin

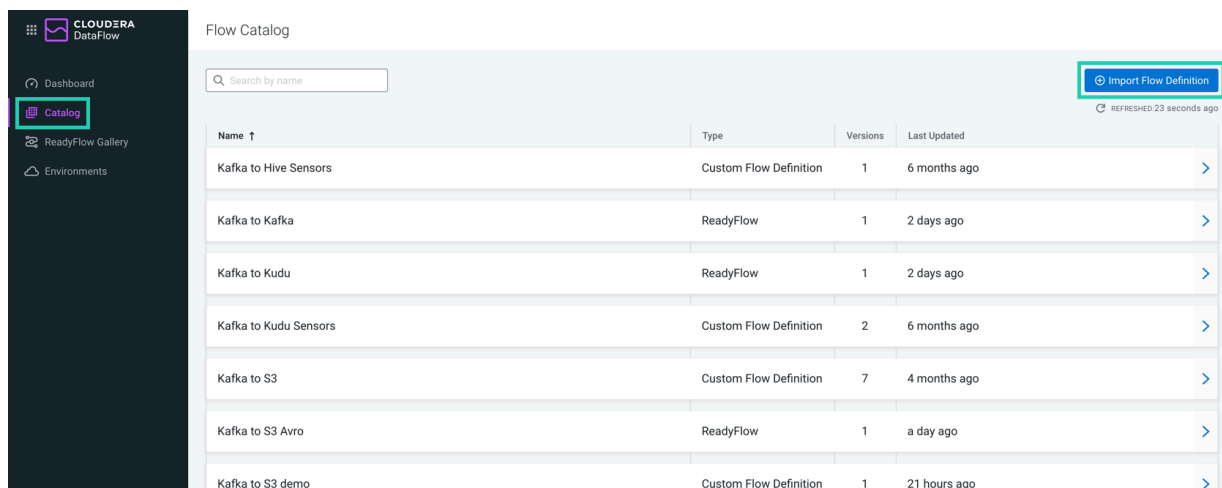
- Create a data flow in NiFi and download it as a flow definition JSON file. For more information, see *Creating a Flow Definition*.
- Make sure that you have DFCatalogAdmin permission to perform this task. For information on account and resource roles, see *DataFlow Authorization*.

Procedure

1. Open Cloudera DataFlow by clicking the DataFlow tile in the CDP sidebar.
2. Click Catalog from the left navigation pane.

The Flow Catalog page is displayed. Previously imported flow definitions are displayed, one definition per row.

3. Click Import Flow Definition.



4. Provide a name (Flow Name) and a description (Flow Description) for the flow definition.



Note: Flow name and flow description cannot be changed later.

5. In the NiFi Flow Configuration field, select the JSON file you downloaded from NiFi.

Alternatively, you can drop the JSON file into this field to select it.

6. You can add comments to the flow definition version you are importing (Version Comments).



Note: When you are importing the first version of a flow definition, the Version Comments field contains Initial Version by default. You can change this comment if needed.



Note: Version comments cannot be changed later.

7. You can add custom tags to the flow definition version you are importing (Custom Tag).



Note: Custom tags can also be added later, in the Catalog. You cannot modify custom tags, but they can be deleted. They are a good option to introduce dynamic information to your flow definition versions (for example, 'preview' or 'obsolete').

8. Click Import.

Results

You have successfully imported your NiFi flow to Cloudera DataFlow. It is available in the Flow Catalog as the first version of your flow definition.

What to do next

Deploy the flow definition to an environment. For more information, see *Deploying Flows*.

Importing using the CLI

Learn about importing a flow definition developed in NiFi using the CDP CLI.

Before you begin

- Create a data flow in NiFi and download it as a flow definition JSON file. For more information, see *Creating a Flow Definition*.

- Make sure that you have DFCatalogAdmin permission to perform this task. For information on account and resource roles, see *DataFlow Authorization*.
- You have installed the CDP CLI

Procedure

To import a flow definition, enter:

```
cdp df import-flow-definition
--file [***FILE***]
--name [***NAME***]
[--description [***DESCRIPTION***]]
[--comments [***COMMENTS***]]
```

Where:

- --file specifies the path to the flow definition file you want to import.
- --name is a distinct name for your flow definition.
- --description is a short description you can use to help identify the flow definition within the DataFlow Catalog.
- --comments optionally includes any additional information for your flow definition.

Results

Successfully importing a new flow definition results in output similar to:

```
cdpcli % ./cdp.sh --profile priv df import-flow-definition --file /Users/user1/Downloads/test-flow.json --name EmptyRelName
{
  "crn": "crn:cdp:df:us-west-1:9d74eee4-1cad-45d7-b645-7ccf9edbb73d:flow:EmptyRelName",
  "name": "EmptyRelName",
  "versionCount": 1,
  "createdTimestamp": 1632782902156,
  "modifiedTimestamp": 1632782902156,
  "versions": [
    {
      "crn": "crn:cdp:df:us-west-1:9d74eee4-1cad-45d7-b645-7ccf9edbb73d:flow:EmptyRelName/v.1",
      "bucketIdentifier": "https://s3.us-west-2.amazonaws.com/dfx-flow-artifacts.mow-priv.mow-dev.cloudera.com/dswift/9d74eee4-1cad-45d7-b645-7ccf9edbb73d/18b3b7aa-da62-49a9-bf23-61da8b7a36dc",
      "author": "David Swift",
      "version": 1,
      "timestamp": 1632782902170,
      "deploymentCount": 0
    }
  ]
}
```

What to do next

Deploy the flow definition to an environment. For more information, see *Deploying Flows*.

Importing a new version of an existing flow definition

You can add new versions to an existing flow definition using either the Cloudera DataFlow UI or the CDP CLI.

Before you begin


- You have imported at least one flow definition.

For UI


Steps

1. In the DataFlow UI, from the left navigation pane, click Catalog.
Flow definitions available for you to deploy are displayed, one definition per row.
2. Identify the flow definition you wish to upload a new version for, and click the row to display the flow definition details and versions.
3. From the Actions drop-down, select Import New Version.

Import New Version

NAME	VERSION
 Kafka to Hive Sensors	2

NiFi Flow Configuration


Select File
Drop file or browse

Version Comments

0/1000

Add comments for this flow version

CancelImport

4. Select the new version file of the NiFi flow configuration, and click Import.

For CLI

Before you begin

- You have installed the CDP CLI.
- You have run `cdp df list-flows` to retrieve the flow-crn.

Steps

1. To import a new flow definition version, enter:

```
cdp df import-flow-definition-version
--flow-crn [***FLOW_CRN***]
--file [***FILE***]
```

```
[ --comments [ ***COMMENTS*** ] ]
```

Where:

- --flow-crn specifies the flow-crn you obtained when completing the pre-requisites.
- --file specifies the path to the new flow definition version you want to import.
- --comments allows for option comments about the new version of the flow definition.

Result

Successfully importing a new flow definition version results in output similar to: