

## Exporting and Importing Dataflows

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# Contents

<b>Exporting and importing dataflows using EFM UI.....</b>	<b>4</b>
<b>Exporting and importing dataflows using REST API.....</b>	<b>5</b>

# Exporting and importing dataflows using EFM UI

Learn how to export and import dataflows using the Edge Flow Manager (EFM) UI in Cloudera Edge Management (CEM).

## About this task

When you export an existing flow, it is stored as a JSON file that contains all details about your flow such as process groups, processors, input/output ports, connections, related parameter context, and agent manifest. If the Export Flow menu is not available, make sure that your user has Viewer, Designer, Operator, or Admin role.

When you import a flow, it overwrites the agent manifest. If the Import Flow menu is not available, make sure that your user has Designer role for your target agent class or Admin role.



### Important:

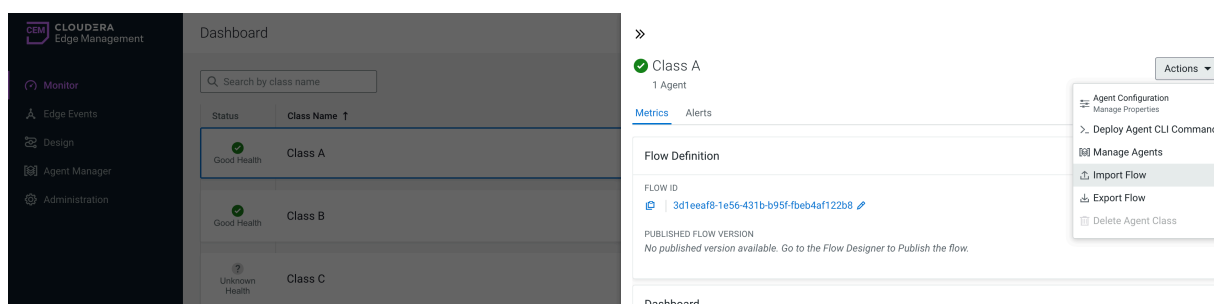
Make sure the flow that you want to import is compatible with the attributes of the target agent such as agent version and agent type. Mismatched attributes may result in the imported flow not functioning properly.

If there is a significant difference between the version of the agent in the flow and the target agent version, flow import is not recommended.

Follow the below steps to perform flow import or export.

## Procedure

1. Click Monitor in the left navigation panel to open the Dashboard.
2. Open Agent Class Details and click Actions.

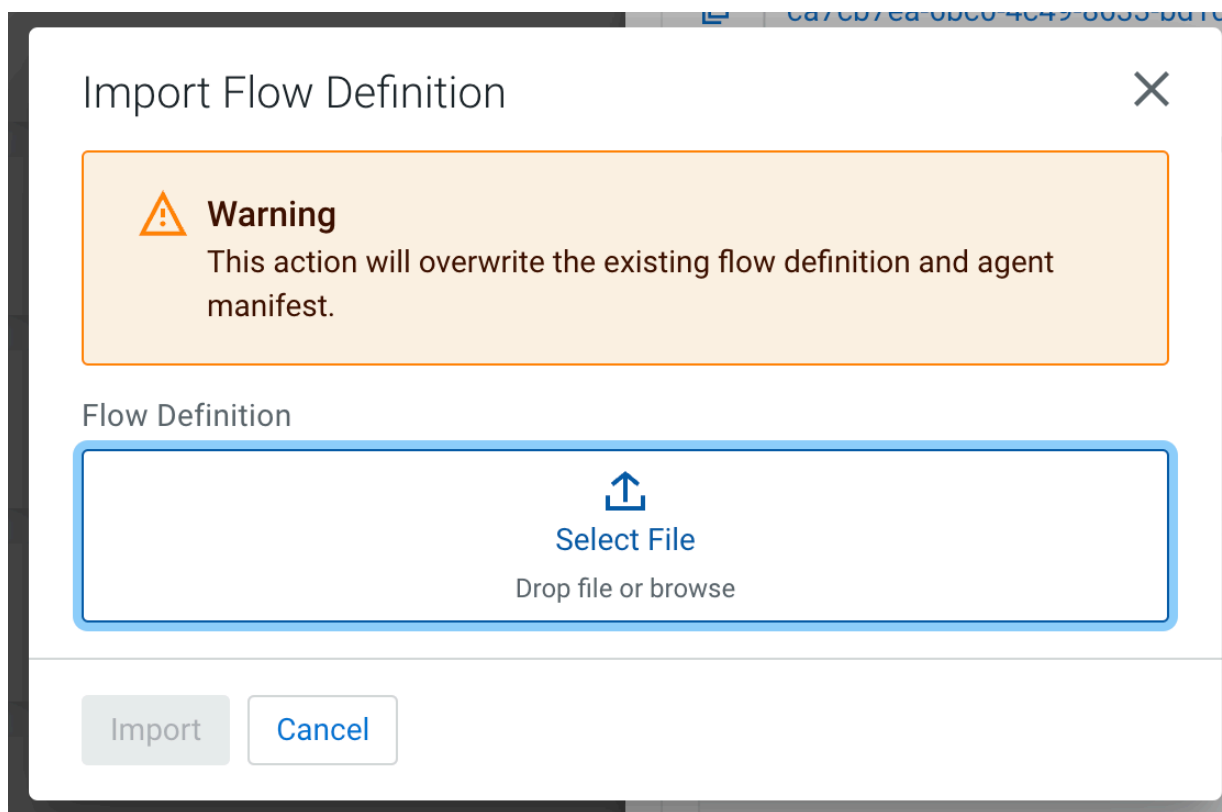


3. Click Import Flow or Export Flow as per your requirement.

When exporting a dataflow, the download will start after you click Export flow, saving the flow on your machine in JSON format.

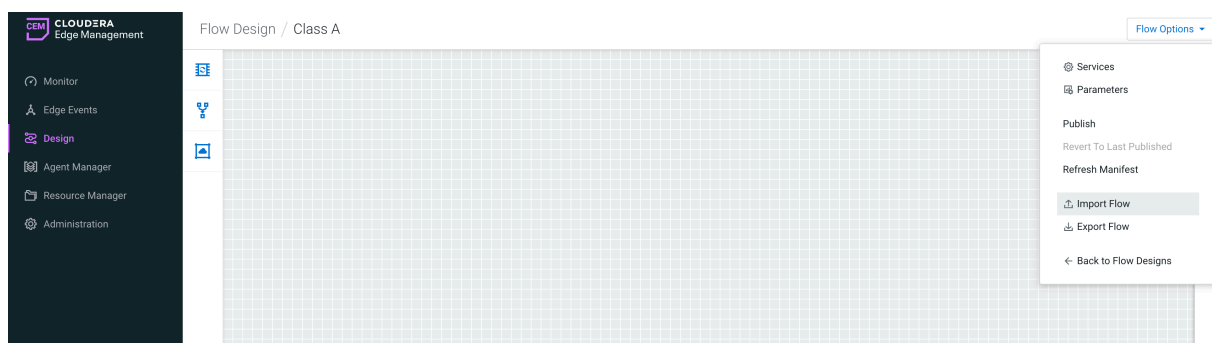
When importing a flow, proceed to the next step.

4. Select a flow file from your local machine and click Import.



5. Reload the page and start working on the imported flow.

The same export/import action can be completed from the Designer view.



## Exporting and importing dataflows using REST API

Learn how to export and import dataflows using the REST API and Swagger in Cloudera Edge Management (CEM).

In this example you use a client certificate for authentication. Ensure that your security settings are correct. For more details, see [Configuration of mutual TLS authentication](#).

### Exporting a dataflow with REST API

#### Using REST API

Trigger the export using the following command, replacing all placeholders with appropriate values:

```
curl -v --cacert <cert-path>/ca-cert.pem \
```

```
--key <cert-path>/admin-key.pem \
--cert <cert-path>/admin-cert.pem \
--pass <admin-password> \
--output flow.json \
https://<efm-host>:<efm-port>/efm/api/designer/<test-agent-class>/flows/export
```

If the export is successful, you can find the exported flow saved in the flow.json file.

### Through Swagger

1. Navigate to the Swagger UI: `http://<cem-host>:<cem-port>/efm/swagger/`.

If you have a secure setup, use https in the drop-down at the top of the page.

2. Go to the Flow Designer section and open `/designer/{agentClassName}/flows/export`.

The screenshot shows two API endpoints in the Swagger UI. The first is a GET endpoint: `/designer/{agentClassName}/flows/export` with the description 'Export flow content, parameters and agent manifest for a given agent class'. The second is a POST endpoint: `/designer/{agentClassName}/flows/import` with the description 'Persists the given flow in the given agent class'.

3. Click Try it out.
4. In the agentClassName field, enter the agent class name that contains the flow you want to export.
5. Click Execute.

After a few seconds, EFM returns the flow content in JSON format.

6. Save the JSON content in a text file.

## Importing a dataflow with REST API

### Using REST API

Trigger the export using the following command, replacing all placeholders with appropriate values:

```
curl -v --cacert <cert-path>/ca-cert.pem \
--key <cert-path>/admin-key.pem \
--cert <cert-path>/admin-cert.pem \
--pass <admin-password> \
-d @flow.json \
-H 'Content-Type: application/json' \ https://localhost:10090/efm/api/designer/<test-agent-class>/flows/import
```

### Through Swagger

1. Navigate to the Swagger UI: `http://<cem-host>:<cem-port>/efm/swagger/`.

If you have a secure setup, use https in the drop-down at the top of the page.

2. Go to the Flow Designer section and open `/designer/{agentClassName}/flows/import`.

The screenshot shows two API endpoints in the Swagger UI. The first is a GET endpoint: `/designer/{agentClassName}/flows/export` with the description 'Export flow content, parameters and agent manifest for a given agent class'. The second is a POST endpoint: `/designer/{agentClassName}/flows/import` with the description 'Persists the given flow in the given agent class'.

3. Click Try it out.
4. In the agentClassName field, enter the agent class name where you want to import the flow.
5. Copy the exported flow content and paste it in the body field.
6. Click Execute.

After few seconds, EFM returns the response, indicating whether the import was successful.



**Tip:** After import, only Edge Flow Manager (EFM) is aware of the new flow. You have to publish the flow to run the flow update on the agent side.



**Note:** Ensure that the agent call attributes (manifest) in the export and import are the same to avoid potential issues.