

## Applications

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# CLOUDERA

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## Creating a new application

Learn how to create an application in Cloudera Data Visualization.

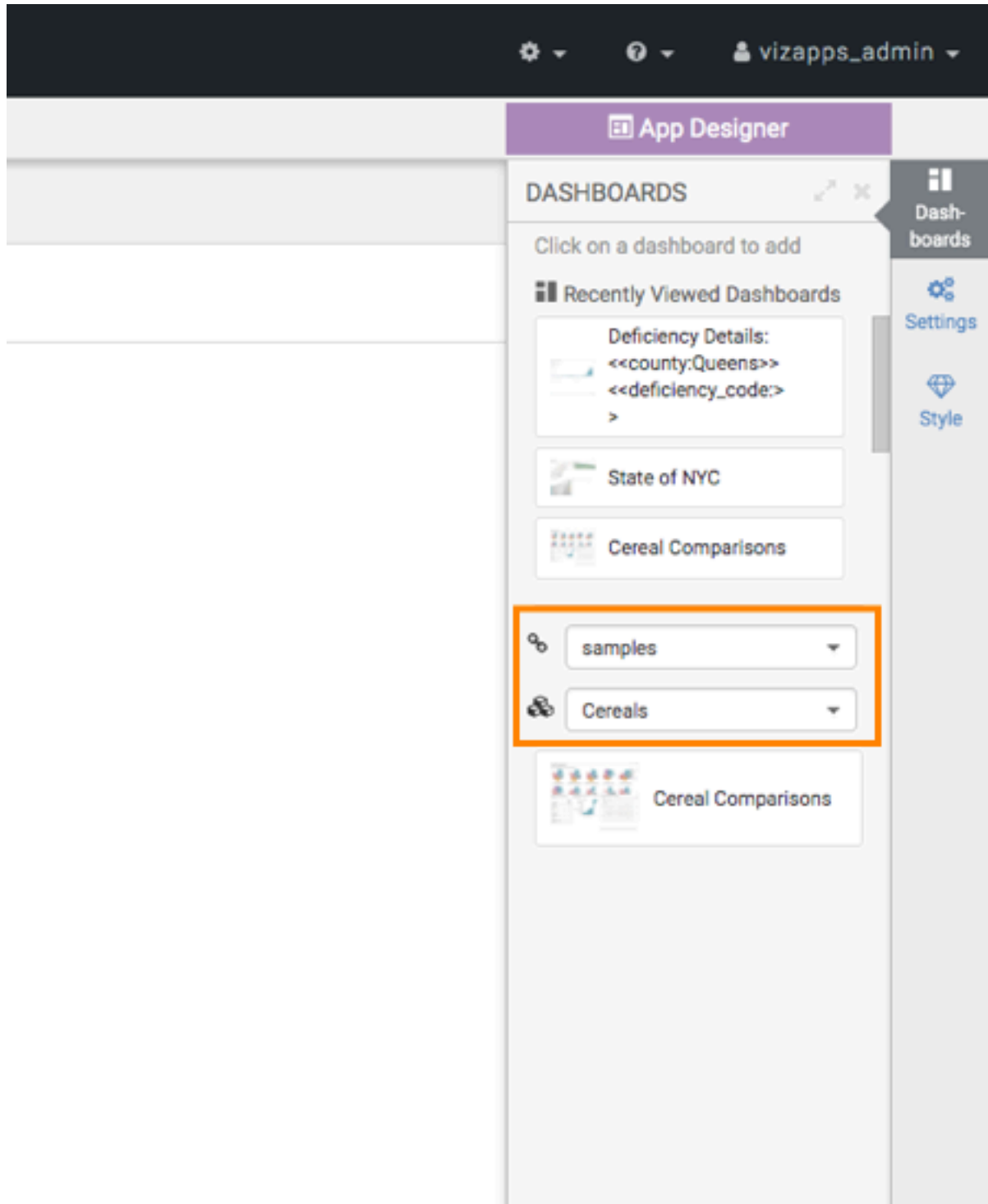
### Procedure

1. Click NEW APP in the top right corner of the main HOME interface.

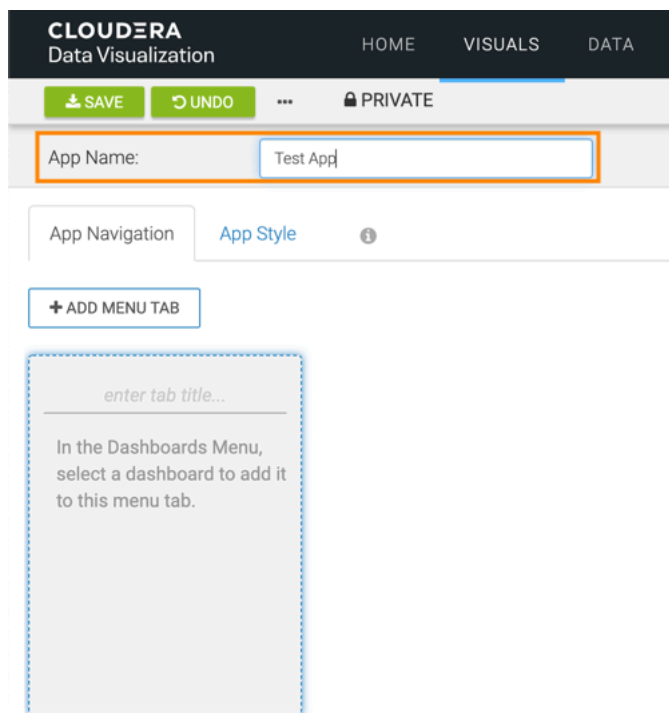
The App Designer interface opens on the App Navigation tab and it has a default menu tab.

Alternatively, you can click `Create New App` in the top right corner of the preview area in the VISUALS interface.

2. In the Dashboards menu of the App Designer, select a dataset.



3. Enter a name for your app in the App Name text box.



The screenshot shows the Cloudera Data Visualization interface. At the top, there's a dark header with the Cloudera logo and navigation links: HOME, VISUALS (selected), and DATA. Below the header, there's a toolbar with buttons for SAVE, UNDO, and a lock icon labeled PRIVATE. The main area has a form for creating an application. The 'App Name' text box, which contains 'Test App', is highlighted with an orange border. Below the form, there are tabs for 'App Navigation' and 'App Style' (selected). A '+ ADD MENU TAB' button is visible. Below this button, a dashed blue box highlights a placeholder for a new menu tab, containing the text 'enter tab title...' and instructions: 'In the Dashboards Menu, select a dashboard to add it to this menu tab.'

4. In the highlighted empty tab, enter the tab title.
5. In the Dashboards menu, select a dashboard to add it to this tab.
6. Switch to the App Style tab.
7. Design the appearance of your new app.
8. Click SAVE.

### Results

Your new application is saved. To the right of the App Name, you can see the ID of the app, its update time information, and the last user who modified it.

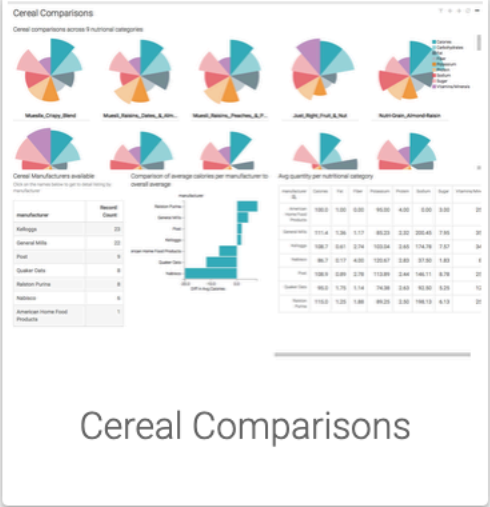
## Adding tabs to applications

In a Cloudera Data Visualization application, you can have several named tabs that contain one or more dashboards.

### Procedure

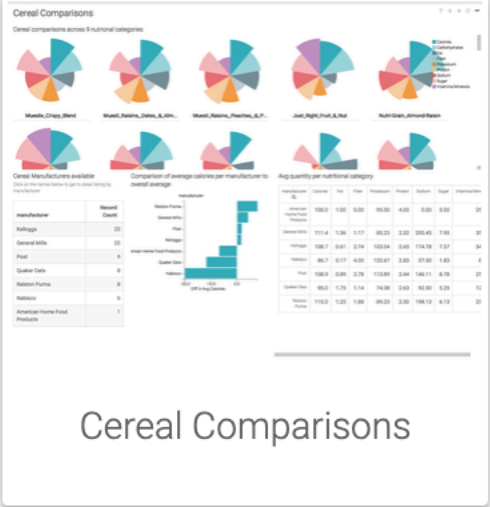
1. In your application, click Add Menu Tab.

## 2. Name the new tab.

App Navigation      App Style      

**+ ADD MENU TAB**

**Cereals**



**Cereal Comparisons**

Cereal comparisons across 5 nutritional categories

Weekly, Crispy, Blend      Wheat, Raisin, Oats, & Bran      Wheat, Raisin, Puffed, & P.      Just, Right, Fruit, & Nut      Multi-Grain, Branched Flakes

Cereal Manufacturers available

Manufacturer	Brand	Count
Kellogg		22
General Mills		22
Post		8
Quaker Oats		8
Rollins-Purina		8
Nabisco		8
Wheatena		1

Comparison of average calories per manufacturer to cereal average

Avg quantity per nutritional category

Manufacturer	Cal	Fat	Fiber	Protein	Sodium	Sugar	Wholegrains
Kellogg	102.0	1.00	0.00	10.00	4.00	0.00	22
General Mills	117.4	1.36	1.17	89.23	0.00	200.40	30
Post	100.7	0.67	0.74	100.00	0.00	176.70	24
Quaker Oats	96.7	0.17	4.00	100.00	0.00	0.00	4
Rollins-Purina	100.9	0.00	0.70	110.00	0.00	140.10	22
Nabisco	98.0	1.70	1.14	70.00	0.00	90.00	10
Wheatena	110.0	0.00	0.00	90.00	0.00	180.10	20

**Cereal Details**

In the Dashboards Menu, select a dashboard to add it to this menu tab.



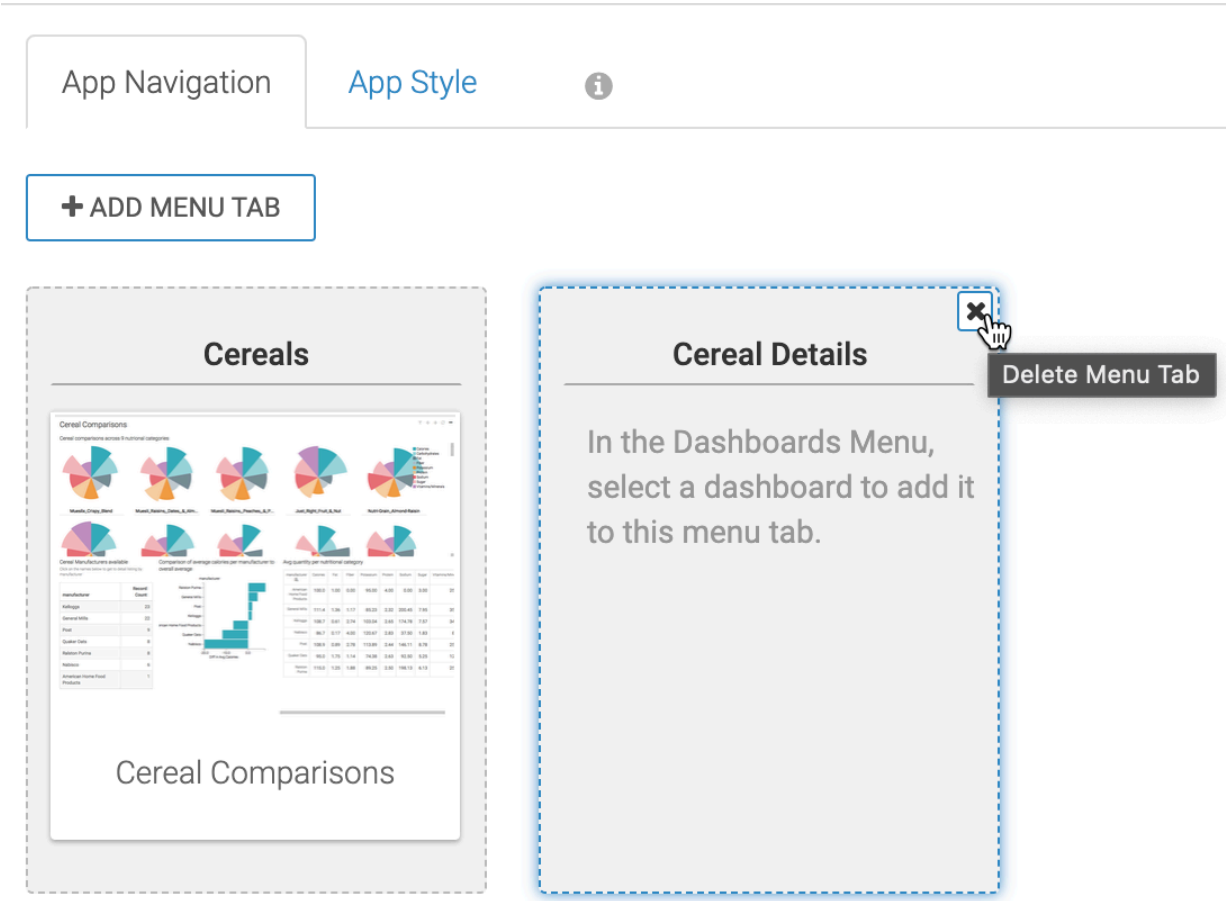
**Note:** Remember that you can use dashboards from any connection or dataset in the same app, provided that the creator/owner has the appropriate privileges.

## Removing a tab from an application

In a Cloudera Data Visualization application, you can easily delete tabs and the dashboards they contain.

Procedure

- 1. In the App Navigation interface, hover over the top of a tab, and click the (remove) icon.



The App Navigation interface no longer shows the deleted tab.

- 2. To ensure that the change persists, click Save.



**Note:** Remember that you can use dashboards from any connection or dataset in the same app, provided that the creator/owner has the appropriate privileges.

Adding dashboards to tabs

Each tab in a Cloudera Data Visualization application contains one or more dashboards.



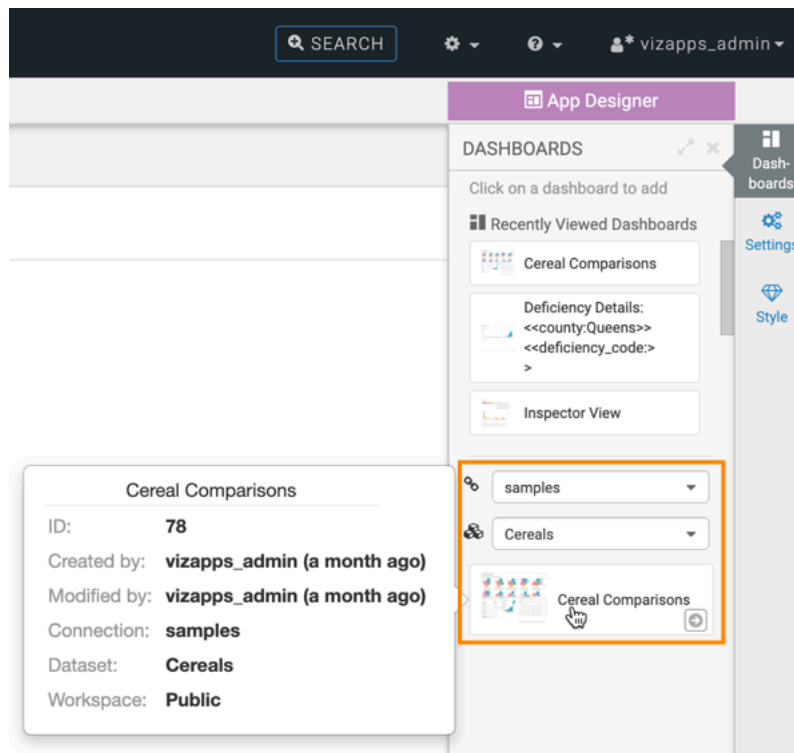
## Procedure

1. Add a dashboard to the first tab in your application by clicking a dashboard in the Dashboards menu on the right side.

You can preview the information about the dashboard by hovering over it.

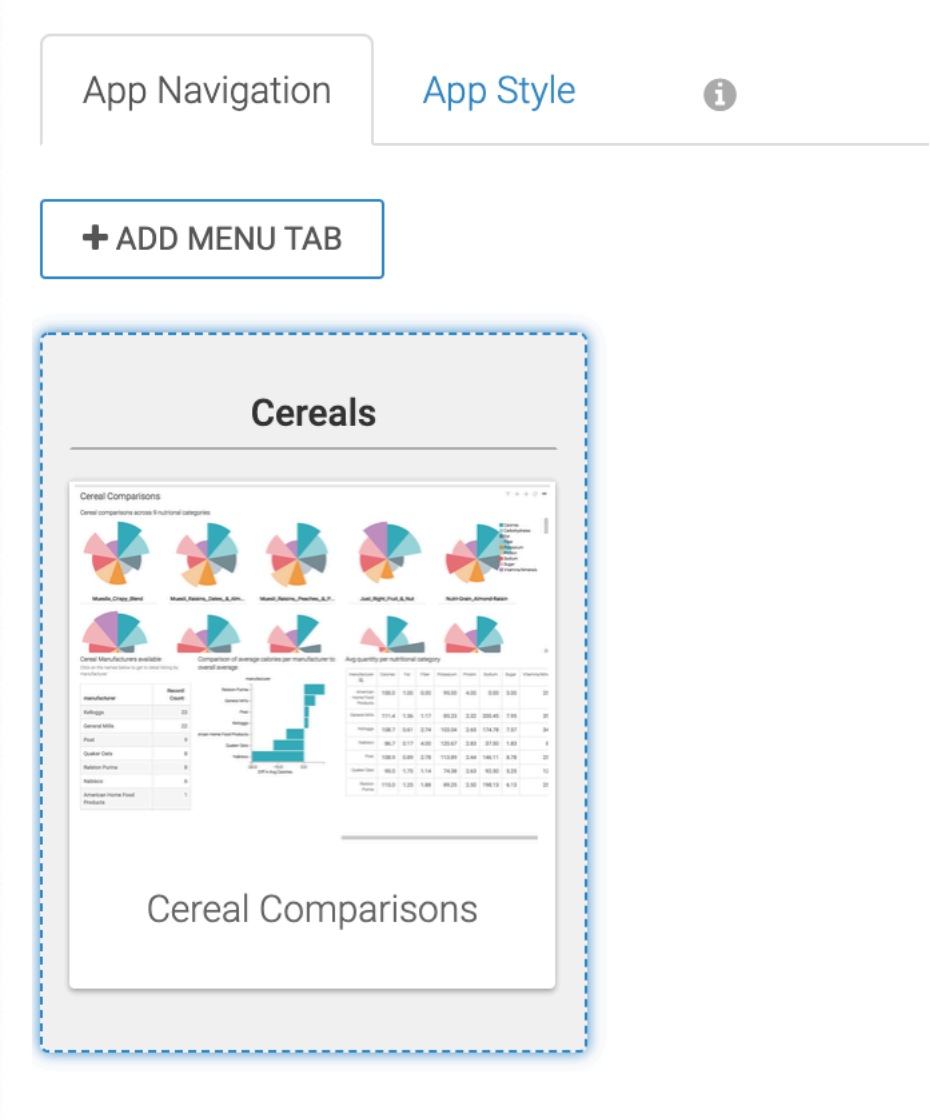


**Note:** You can select recently viewed dashboards, or the dashboards in the selected dataset.



The newly added dashboard appears in the tab container.

- 2. Click Save.

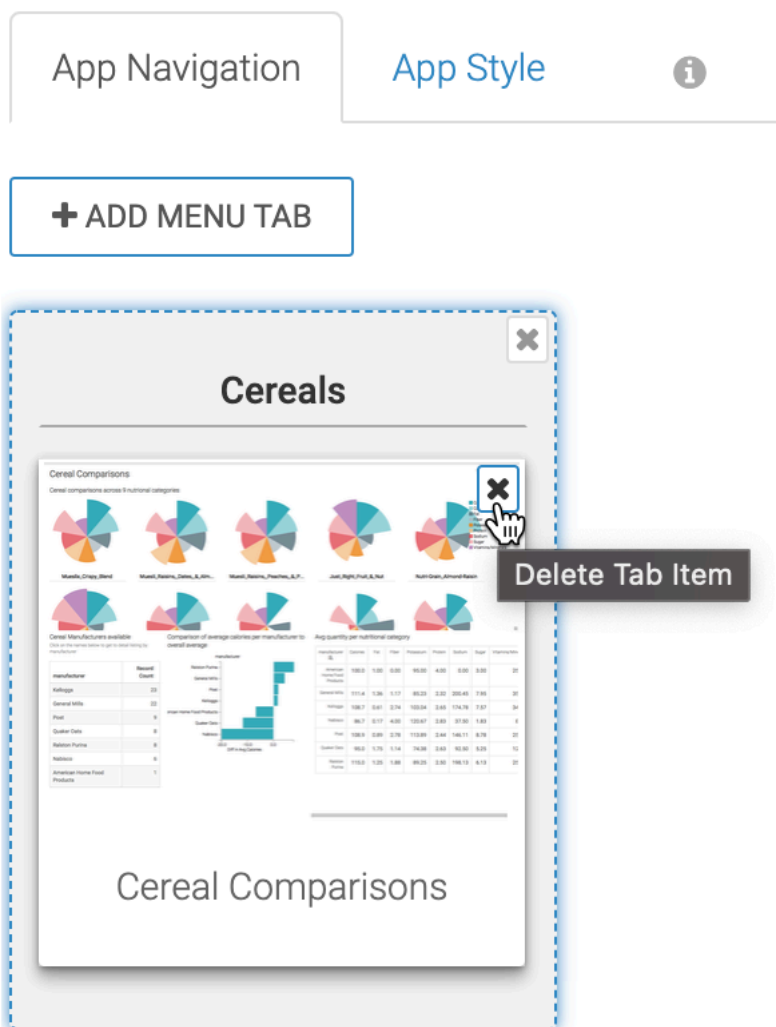


## Removing a dashboard from a tab

In the App Designer of Cloudera Data Visualization, it is very easy to remove dashboards.

## Procedure

1. In the App Navigation interface, hover over a dashboard in a tab, and click the (remove) icon on the dashboard.



At this point, the App Navigation interface still has the tab you used, but the dashboard has been deleted.

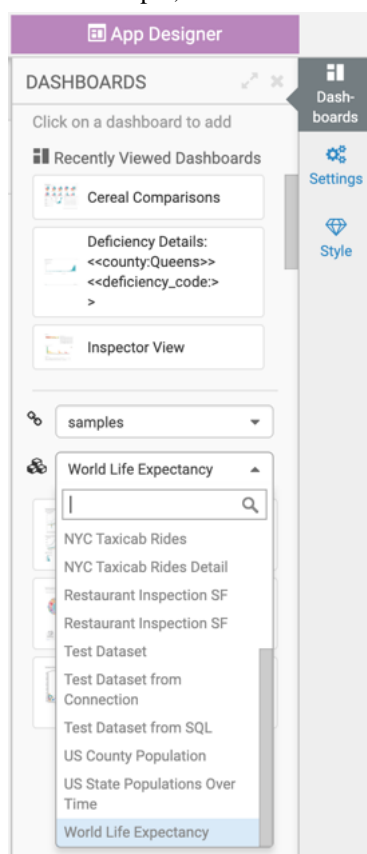
2. To ensure that the change persists, click Save.

## Changing datasets in applications

In a Cloudera Data Visualization application, you can switch between datasets and use dashboards from different datasets, even when sourced from different connections.

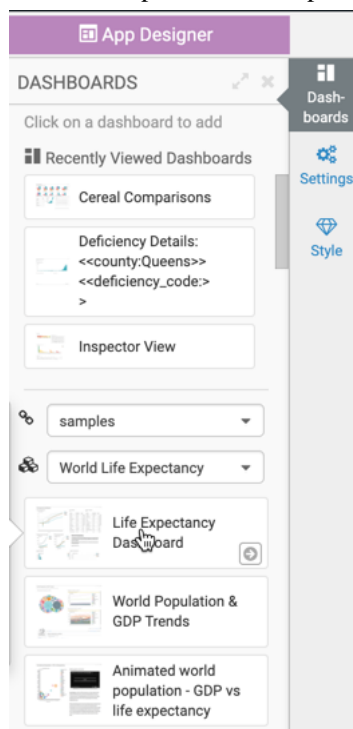
## Procedure

1. In the Dashboards menu, select a different dataset.  
In this example, the World Life Expectancy dataset is used.



2. Select a dashboard available on the dataset you used.

In this example, the Life Expectancy Dashboard is selected.



The newly added dashboard appears in the tab.

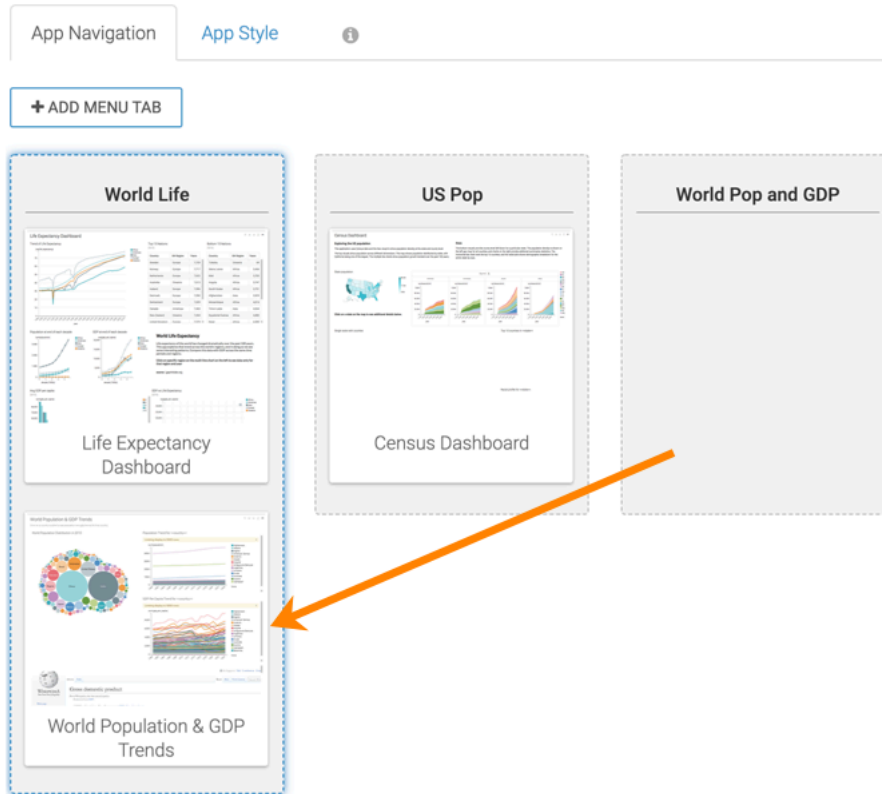
## Rearranging dashboards

You can easily move dashboards in a Cloudera Data Visualization application, both within the same tab, or to a new tab.

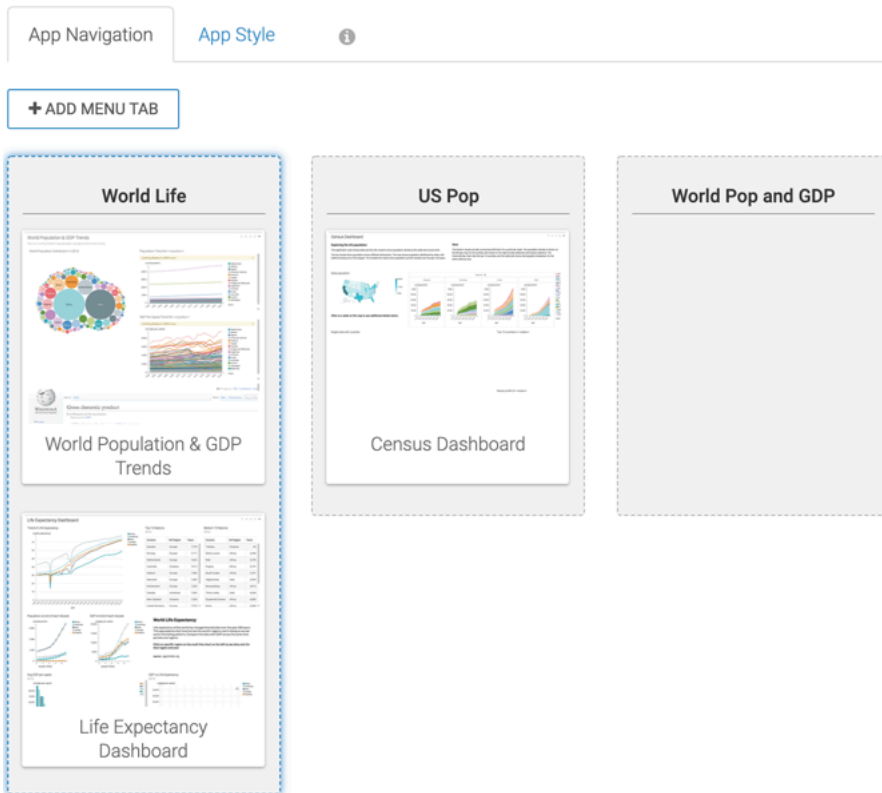
### Procedure

1. Click to select the dashboard that you plan to move. We chose the Maps dashboard.

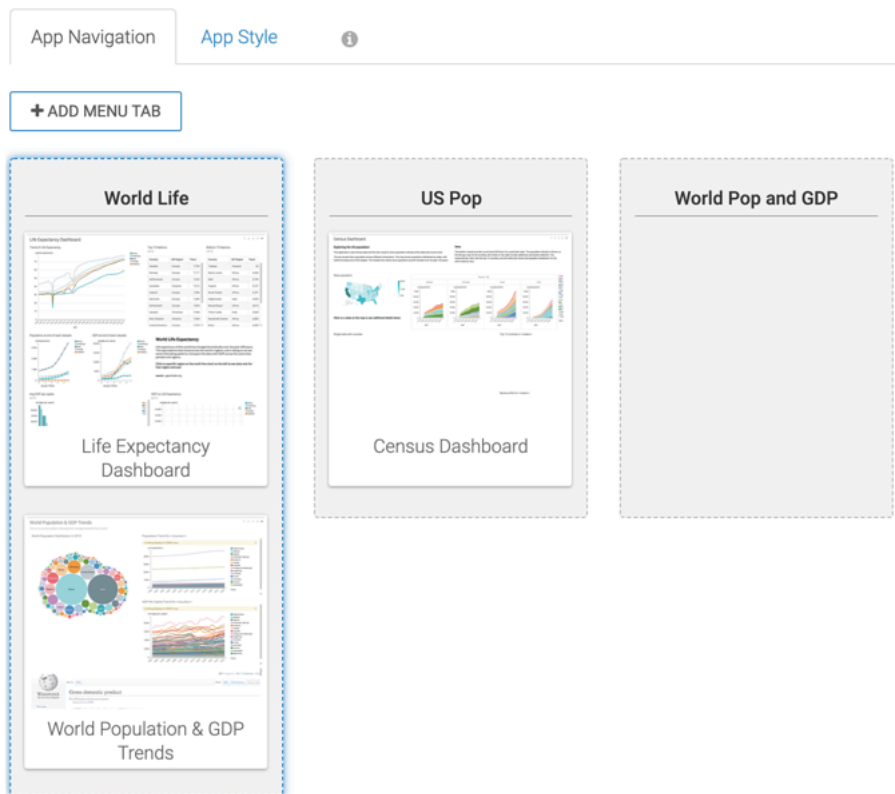
2. Drag the dashboard to a different tab, and drop it.



3. You can change the order of dashboards within a tab simply by dragging them within the tab container.



- You can add the same dashboard to different tabs.



**Note:** You cannot add a dashboard to the same tab twice. You may move a dashboard from a tab into another tab that contains the dashboard; but the duplicate dashboard does not persist after saving the app.

## Rearranging tabs

In the App Designer of Cloudera Data Visualization, you can easily change the order of tabs through drag and drop interaction.

### Procedure

- In the App Navigation interface, click to select the tab that you plan to move.
- Drag the tab to the first position, and drop it.
- Click Save.

### What to do next

To familiarize yourself with app customization, see *Customizing applications*.

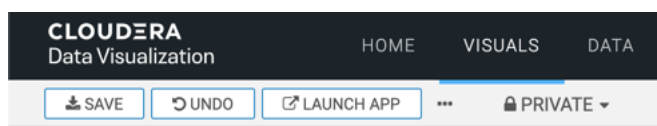
To learn how to launch the app you created, see *Launching applications*.

## Launching applications

Cloudera Data Visualization enables you to externalize an app by launching it.

## Procedure

1. Navigate to the app you plan to launch.  
The following example uses the app Exploring National Parks.
2. In the top navigation bar of App Designer, click Launch App.



A new tab appears in your browser window.

3. Open the tab to see the standalone application you just created.

The externalized, standalone application is fully interactive and has the following features:

- a. The tabs across the top correspond to the names of the apps you defined in the App Designer. The sub-menus correspond to the names of the dashboards; they appear only when there is more than one dashboard in each tab.
- b. The tabs at the bottom correspond to the individual sheets in each dashboard. They appear only if the dashboard has two or more sheets.
- c. The (filter) icon at the top-right corner correspond to the same navigation elements as you would see in a dashboard, Current Parameters.
- d. The Back navigation icon, (back arrow), moves the dashboard backward to the previous parameter state. You can also use the shortcut keys CTRL + B.
- e. The Forward navigation icon, (forward arrow), moves the dashboard forward to the next parameter state. You can also use the shortcut keys CTRL + F.
- f. The Reset navigation icon resets the parameters to the original state of the dashboard. You can also use the shortcut keys CTRL + R.
- g. The Supplemental menu, marked with the (ellipsis) icon, has additional options, such as Get URL. It shows the specific URL address that you can copy and share with others. Pasting this URL into a browser brings up the identical app, opens at the very same visual or dashboard, with specified parameters.

The URL is of the following type:

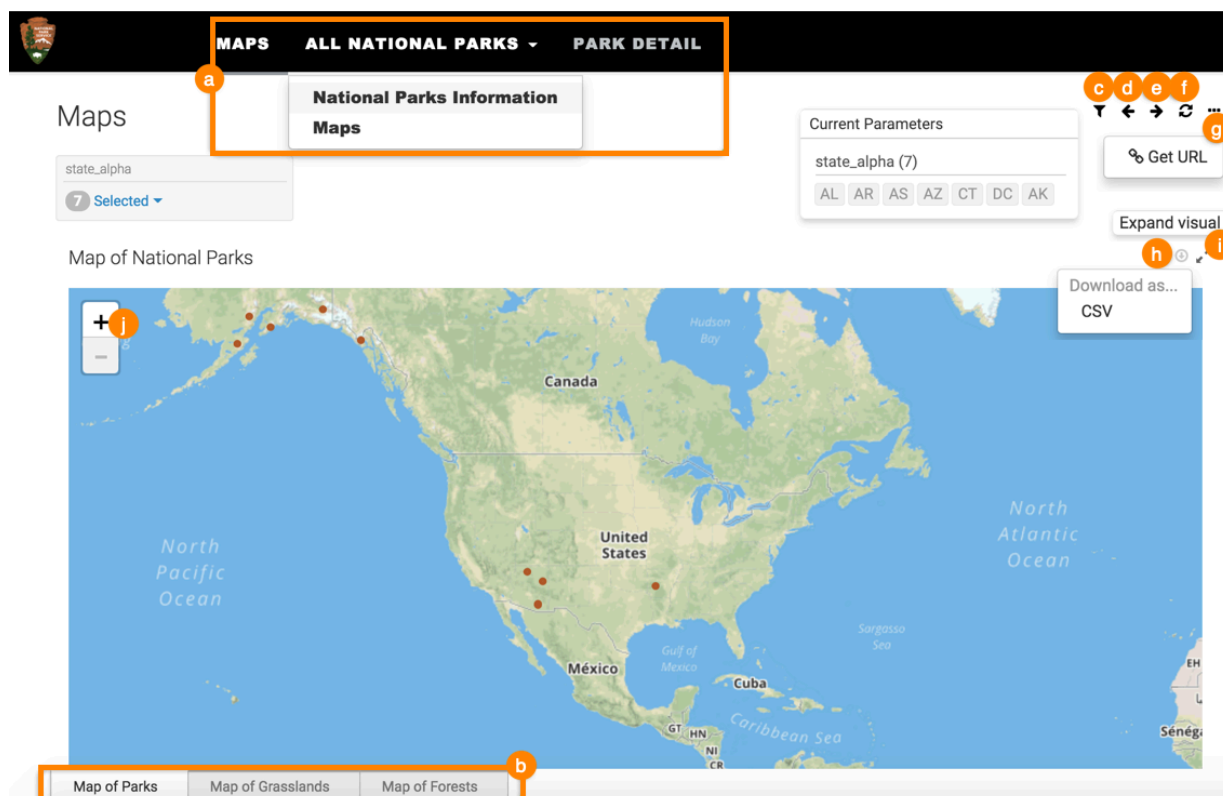
```
IP_ADDRESS:PORT/arc/appgroup/APP-ID?initialapp=VIS-ID&sheet=SHEET_ID
&param.PARAMETER_NAME.data='DATA_LIST'&param.PARAMETER_NAME.
```



```
exclude=[ in | out ]
```

where:

- *IP\_ADDRESS* and *PORT* specify the server
  - *APP-ID* is the integer that specifies the id of the externalized (launched) app
  - *VIS-ID* is the integer that specifies the id of the dashboard or visual
  - *SHEET\_ID* is the integer that represents the sheet order
  - *PARAMETER\_NAME* is the name of the filter parameter, if present
  - *DATA\_LIST* is the list of values that apply to the parameter\_name variable
  - in the exclude setting, in/out specifies the include/exclude setting of the parameter.
- At the level of visuals inside the dashboards, hovering over the top right corner enables you to download the data as CSV by clicking the (download CSV) icon.
  - You can click the (expand visual) icon to bring up the visual in a window modal, superimposed over the application.
  - The zoom in - zoom out control is part of the control mechanism for particular visual types, for example interactive maps.



## Moving apps between workspaces

Whether you are transitioning your app for personal use, or want to share it with a broader audience, or customizing your workspace organization, Cloudera Data Visualization enables you to manage your apps easily across different workspaces.

### About this task

You can create an app in the Private workspace and then change the assigned workspace before sharing it.



**Note:** Cloudera Data Visualization utilizes Role-Based Access Control (RBAC) permissions to govern access to functionalities in the system. Administrators or users with Additional system privilege can move dashboards and apps to any workspace, including private ones.

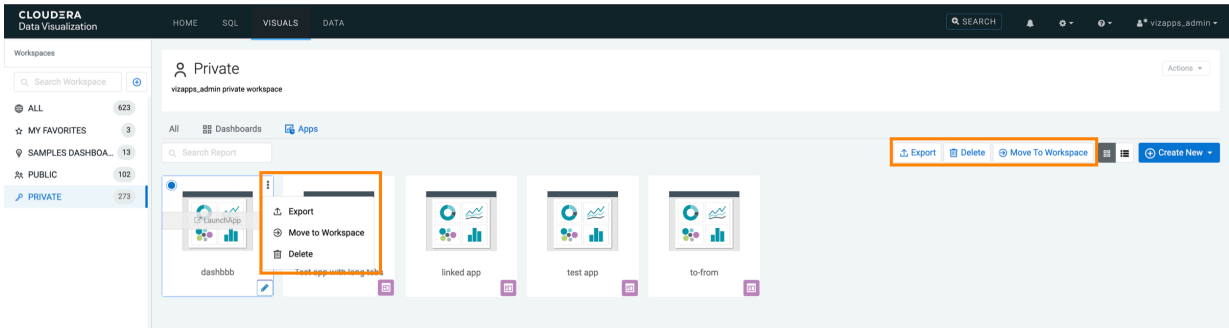
On the VISUALS interface

If you do not want to open the app, you can move it to a different workspace on the VISUALS interface.

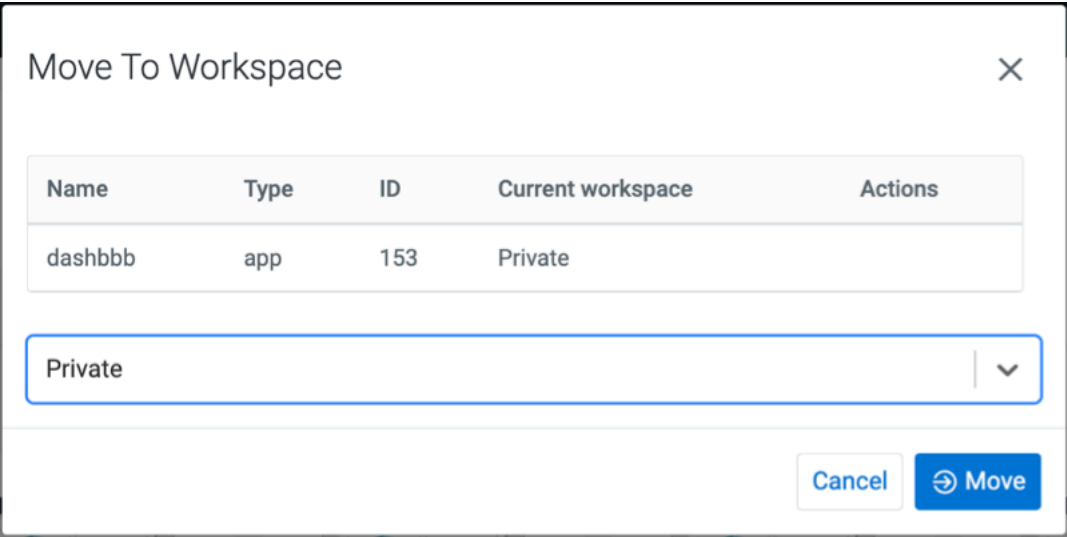
- 1. Hover over the app tile or row and use the Move to Workspace function from the Supplemental menu of the tile. You can also use Move to Workspace from the actions available in the top right corner of the preview area of the interface.



**Note:** Note The action buttons are only active if you select at least one artifact in the preview area.



The Move to Workspace modal window is displayed. It provides information about the app you want to move.



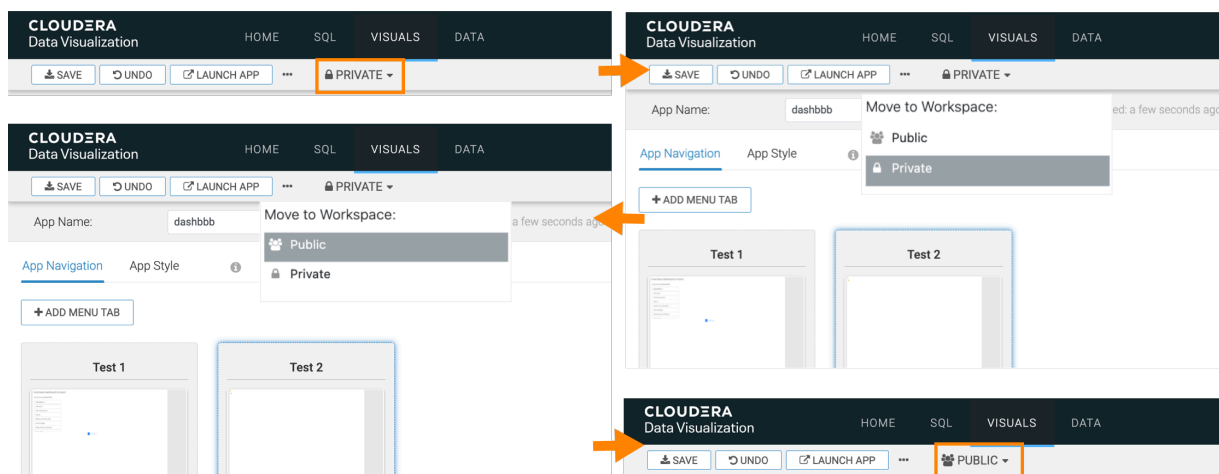
- 2. Select the new workspace from the drop-down list and clickMove.

After opening the app

Procedure

- 1. Find the app you want to move and open it in Edit mode.
- 2. Click the workspace indicator in the top navigation bar of the App Designer.
- 3. From the drop-down menu, choose the workspace where you want to move the app.  
In this example, the app is in the Private workspace. Select Public.

- After selecting the new workspace, click MOVE.



The app is now in the Public workspace. You can verify it by navigating to the Visuals interface, and then selecting and expanding the destination workspace.

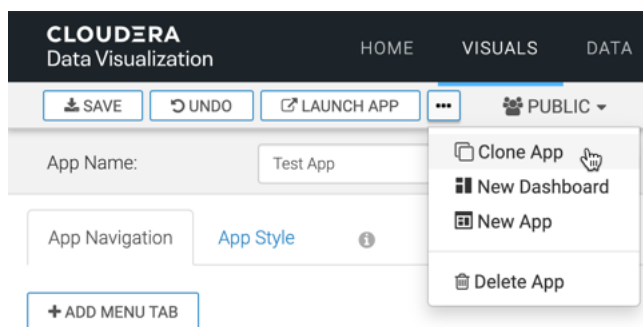
This process is flexible and works for moving dashboards between private, public, and custom workspaces, in any direction. Just ensure you have the necessary privileges to perform the action.

## Cloning an application

Cloudera Data Visualization enables you to clone an existing application.

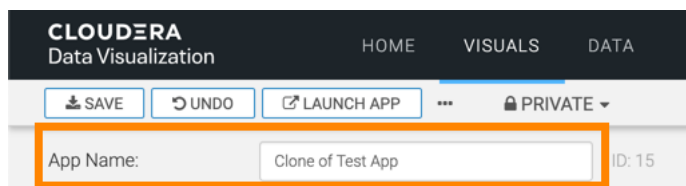
### Procedure

- Navigate to the app.
- In the top navigation bar of App Designer, click the supplemental menu indicated by the (ellipsis) icon, and then select Clone App.



After a brief success message, the new clone app appears on the screen.

The App Name is Clone of ..., it has its own ID, and it is in the Private workspace by default.



- Change the App Name and other properties of the clone and save the new app.

## Exporting an app

In Cloudera Data Visualization, you can export dashboards, apps, and other visual artifacts. When you export a whole app, the process captures all the dependencies, such as visuals, dashboards, datasets, and custom styles.

### Procedure

1. Click VISUALS in the main navigation bar.
2. Select the app that you want to export.

This updates the action buttons available in the top right corner of the preview area and the Export button becomes active.

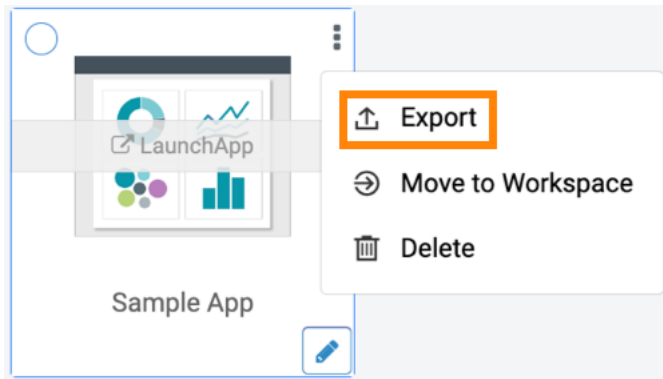


**Note:** The Export button is only active if you select at least one artifact in the preview area.

**3. Click Export.**

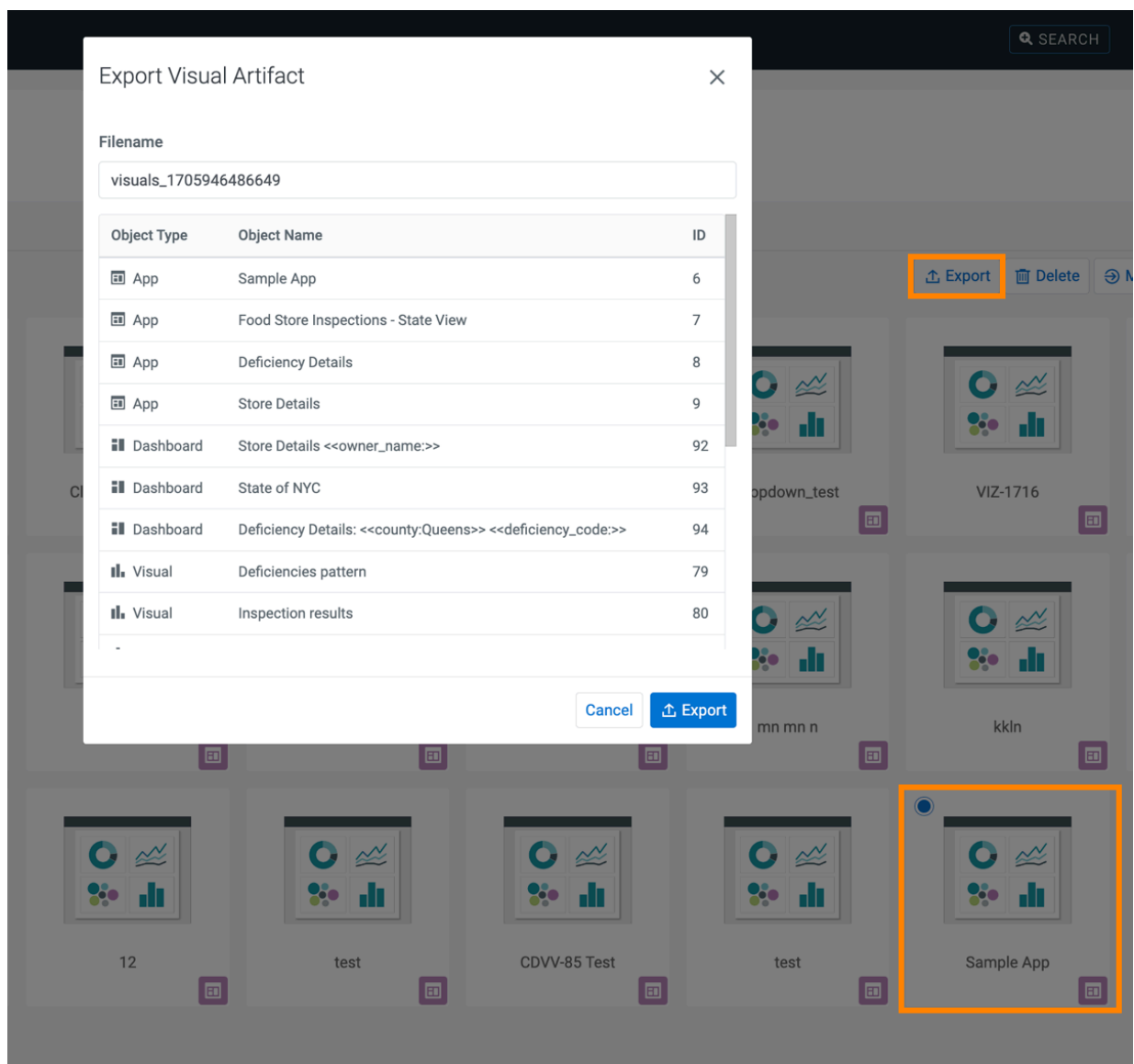
This action exports the app to your default download folder.

You can also use the Supplemental menu of the app tile to initiate the export.



The Export Visual Artifact modal window appears.

In this example, the Sample App is used.



The export file includes the definition of the app and any subgroups that it may have, the visuals and dashboards in the app, and all necessary datasets. When available, the export file also includes custom style dependencies.

4. Change the name of the file you are exporting.
5. Click Export.

This starts the download of the export file to your default download folder. You can confirm the success of the export by finding the file on your system.

### What to do next

For instructions on how to import an app, see *Importing an application*.

For more information about the visual artifact migration utility, see *Exporting and importing visual artifacts*.

### Related Information

[Importing an application](#)

[Exporting and importing visual artifacts](#)

## Importing an application

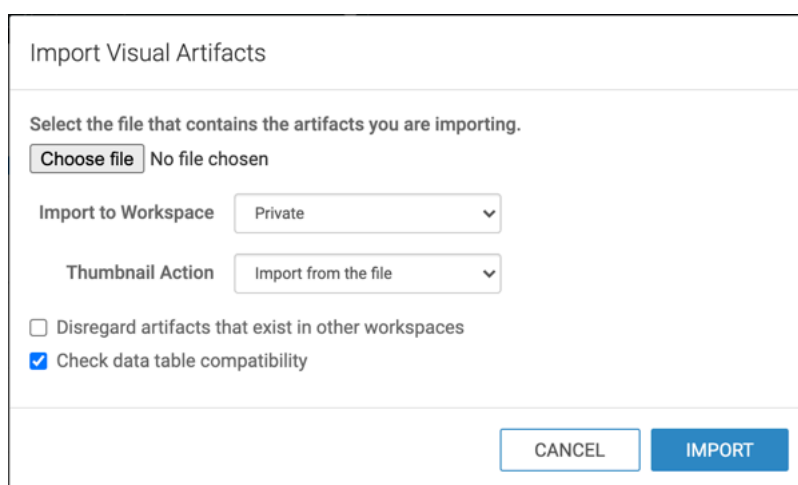
In Cloudera Data Visualization, you can import dashboards, apps and other visual artifacts exported from another system. All you need is the appropriate JSON file that captures the complete definition of the app, including its dependencies: its own app definition, subgroup app definitions, visuals, dashboards, datasets, and custom styles.

### Procedure

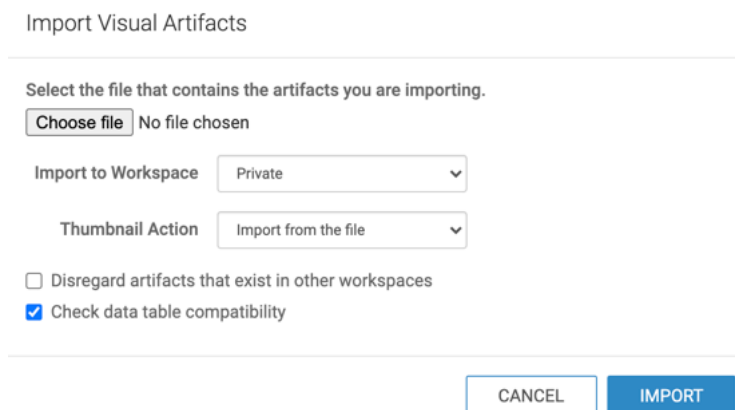
1. Click DATA on the main navigation bar.
2. Select the connection where to import the artifacts.

In this example Samples has been selected showing connecting to the same data source for both systems.

3. At the top of the screen, click the Supplemental menu.
4. In the Supplemental menu, click the Import Visual Artifacts option.



The Import Visual Artifacts modal window appears.



5. Click Choose File.
6. Select the file you want to import.
7. Specify the destination workspace in the Import to Workspace drop-down menu.

By default, Cloudera Data Visualization imports the visual artifacts into your Private workspace. However, you can choose the Public workspace, or another custom workspace as well.

**8. Specify how you want to handle thumbnails.**

There are three options:

- Import from the file
- Generate new thumbnails
- Skip thumbnail import

By default, Cloudera Data Visualization imports the thumbnails from the file. However, you can choose to generate new thumbnails during the import process, or skip thumbnail import.

**9. Define the Disregard artifacts that exist in other workspaces option.**

Before importing an artifact, Cloudera Data Visualization searches for it on the system. If it already exists, it is either updated (if changed from a previous import), or left 'as is'. If it does not exist, it is imported as a new visual artifact. By default, the search domain is the entire system. By selecting this option, you are limiting the search to the specified workspace.

**10. Select the Check data table compatibility option.**

This option is 'on' by default.

**11. Click IMPORT.**

After processing the import JSON file, Cloudera Data Visualization opens the Import interface to show its visual artifacts. In this example, it displays the visual artifacts that you saved earlier into a JSON file during export. All items saved into the `app_documentation_collateral.json` file during export appear on the interface. The Planned Action column shows that this is a new import for some artifacts and they don't have an assigned ID.

In the Importing a dashboard example, the dashboard Flight Delay Information, and its dependencies: visuals Departure Delay by Airline & Day of the week, Originating Airport, and Originating Airport by State, the Custom Style Category colors in tables, and the dataset Flight Data were all imported. For details, see *Importing a dashboard*. The dataset has changed (the description parameter was edited), so the Planned Action is to Replace. The rest of these artifacts is unchanged, so they appear with Planned Action set to None.



**12. Click ACCEPT AND IMPORT.**

**CLOUDERA**  
Data Visualization

[HOME](#)
[VISUALS](#)
[DATA](#)

Import:

✕ DON'T IMPORT

ACCEPT AND IMPORT

Object Type	Object Name	Planned Action	ID
App	Sample App	NEW	--
App	Food Store Inspections - State View	NEW	--
App	Deficiency Details	NEW	--
App	Store Details	NEW	--
Dashboard	Store Details <<owner_name:>>	NEW	--
Dashboard	State of NYC	NEW	--
Dashboard	Deficiency Details: <<county:Queens>> <<deficiency_code:>>	NEW	--
Visual	Deficiencies pattern	NEW	--
Visual	Inspection results	NEW	--
Visual	Last 5 inspections	NEW	--
Visual	Number of deficienciesper county	NEW	--
Visual	Deficiency county correlation	NEW	--
Visual	Deficiency date correlation	NEW	--
Visual	Area graph filtered on deficiency	NEW	--
Visual	Names of stores for that deficiency	NEW	--
Visual	Deficiency trends for <<county:>>	NEW	--
Visual	Stores	NEW	--
Dataset	Food Stores Inspection in NYC	NEW	--

**Results**

After the import completes, a success message appears on the Import interface. All the artifacts have an assigned ID, which are generated by the system, sequentially. Visuals/Dashboards and datasets have separate ID queues.

**CLOUDERA**  
 Data Visualization

[HOME](#)
[VISUALS](#)
[DATA](#)

Success! The import was successful.

Import:

Object Type	Object Name	Planned Action	ID
App	Sample App	NEW	19
App	Food Store Inspections - State View	NEW	20
App	Deficiency Details	NEW	21
App	Store Details	NEW	22
Dashboard	Store Details <<owner_name:>>	NEW	139
Dashboard	State of NYC	NEW	140
Dashboard	Deficiency Details: <<county:Queens>> <<deficiency_code:>>	NEW	141
Visual	Deficiencies pattern	NEW	126
Visual	Inspection results	NEW	127
Visual	Last 5 inspections	NEW	130
Visual	Number of deficienciesper county	NEW	131
Visual	Deficiency county correlation	NEW	132
Visual	Deficiency date correlation	NEW	133
Visual	Area graph filtered on deficiency	NEW	134
Visual	Names of stores for that deficiency	NEW	135
Visual	Deficiency trends for <<county:>>	NEW	136
Visual	Stores	NEW	137
Dataset	Food Stores Inspection in NYC	NEW	19

For instructions on how to export an app, see *Exporting an application*.

For more information about the visual artifact migration utility, see *Exporting and importing visual artifacts*.

### Related Information

[Exporting an application](#)

[Exporting and importing visual artifacts](#)

## Deleting an app

It is very simple to delete an app in Cloudera Data Visualization.

### Procedure

1. Click VISUALS in the main navigation bar.

2. Select the app that you want to delete.

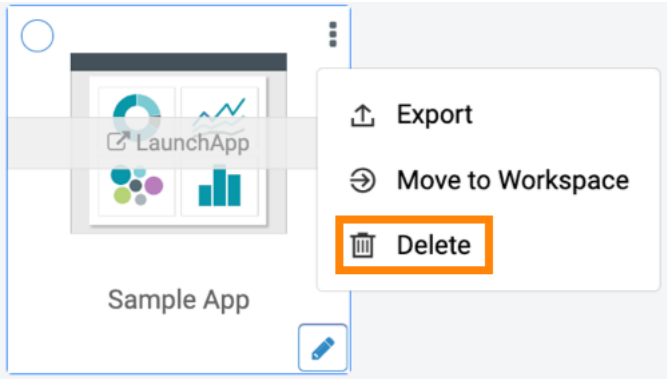
This updates the action buttons available in the top right corner of the preview area and the Delete button becomes active.



**Note:** The Delete button is only active if you select at least one artifact in the preview area.

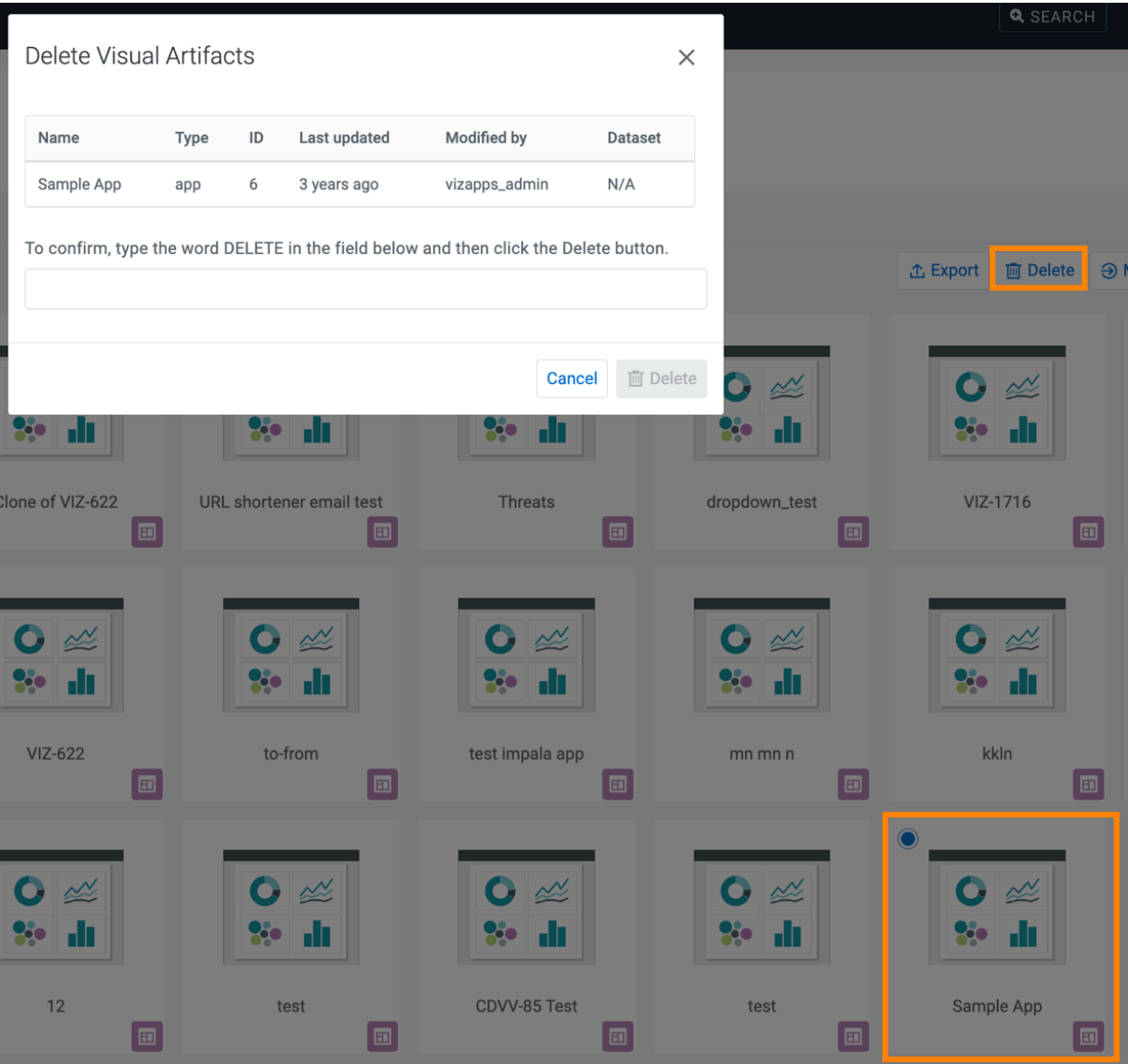
3. Click Delete.

You can also use the Supplemental menu of the app tile to initiate the export.



The Delete Visual Artifacts modal window appears.

In this example, the Sample App is used.



4. Type DELETE in the text box to confirm the action and click Delete.  
The Delete Confirmation modal window appears.

### Results

Cloudera Data Visualization refreshes the Apps view of the VISUALS interface. The deleted application is not available any more.