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## Applications

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# CLOUDERA

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## Creating a new application

Learn how to create an application in CDP Data Visualization.

### Procedure

1. Click New App on the main Home interface, in the top right corner on the side panel.

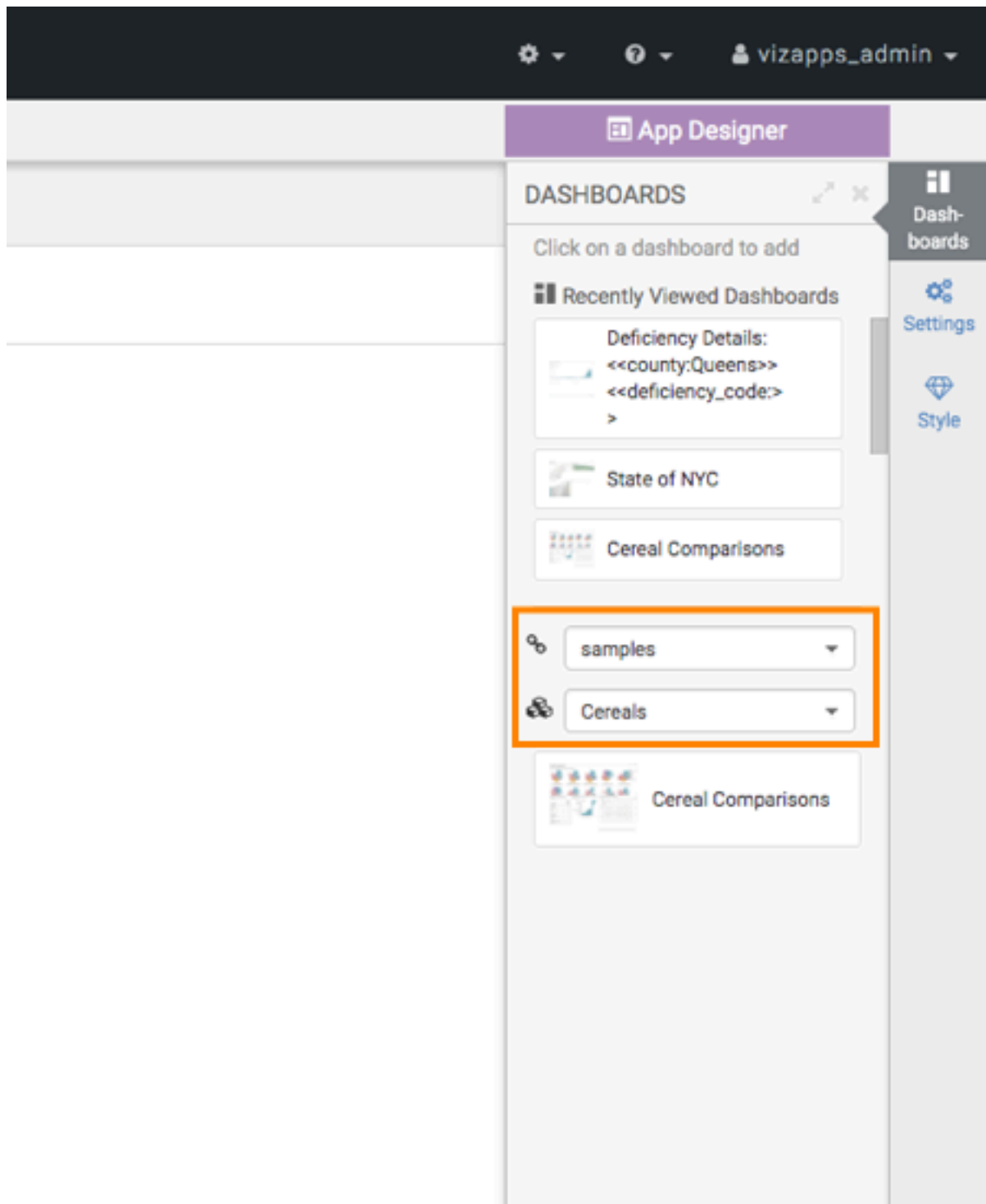
Alternatively, click New App on the main Visuals interface, in the top left corner.

The App Designer interface is displayed.

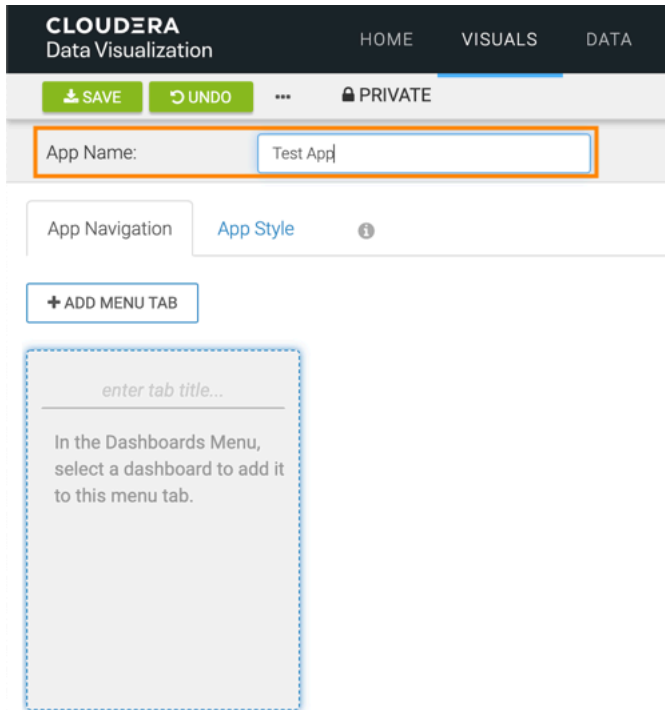


**Note:** The App Designer interface opens on the App Navigation tab, and it has a default menu tab.

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.



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 CDP 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.

The image shows a menu bar with two tabs: 'App Navigation' and 'App Style'. Below the menu bar, there is a button labeled '+ ADD MENU TAB' enclosed in an orange-bordered box. An orange arrow points from this button to a dashed blue box containing a 'Cereal Details' dashboard preview. To the left of this is another dashed box containing a 'Cereals' dashboard preview, which includes several charts and a table. The 'Cereal Comparisons' section of the 'Cereals' dashboard contains the following table:

Cereal Manufacturer	Brand	Weight (Oz)	Calories	Fiber (g)	Total Fat (g)	Total Sugar (g)	Total Fat % Daily Value	Total Sugar % Daily Value	Fiber % Daily Value
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%
Kellogg's	Special K	10	130	1	10	10	20%	20%	2%

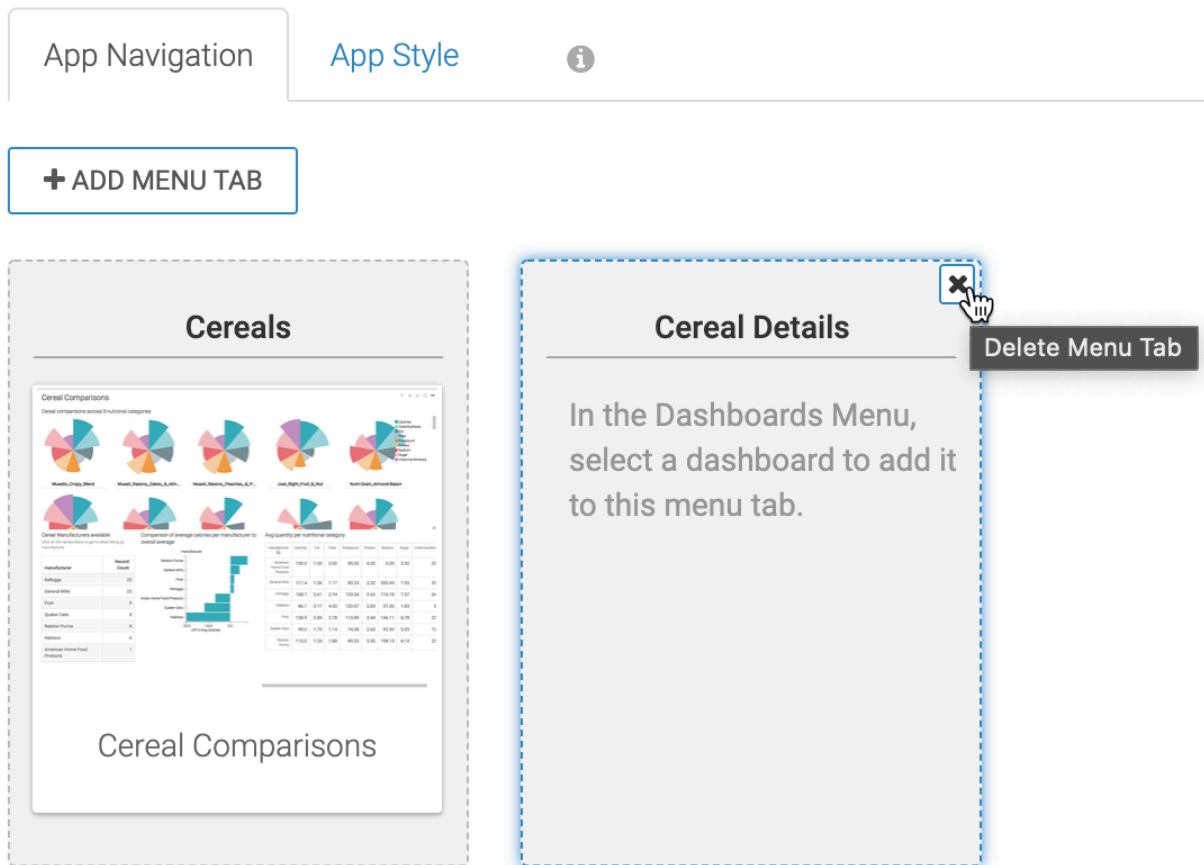
 **Note:** Remember that you can use dashboards from any connection or dataset in the same app, provided that the creator/owner has the appropriate privileges.

## Removing a tab from an application

In a CDP 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 CDP Data Visualization application contains one or more dashboards.



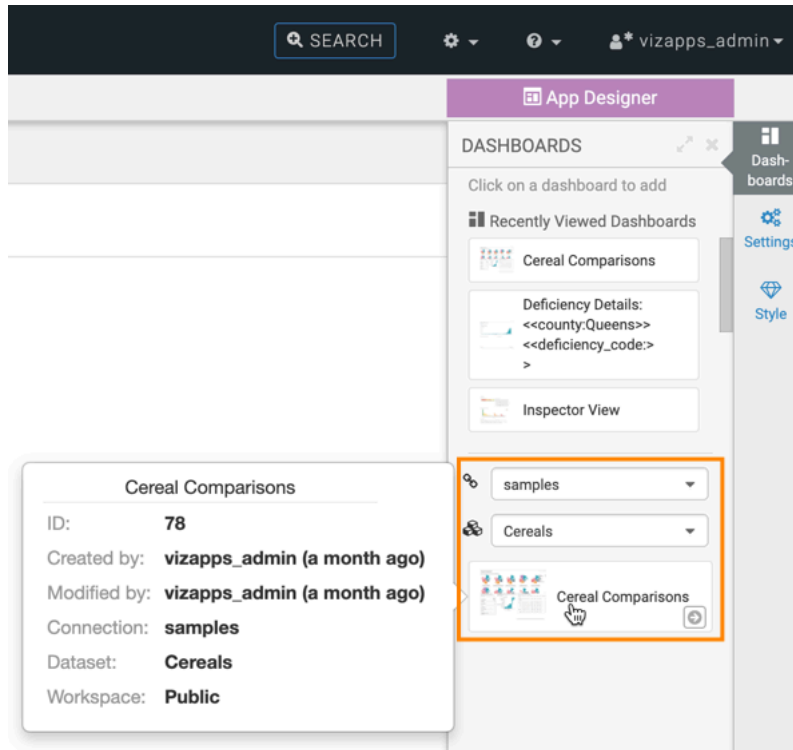
## Procedure

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.

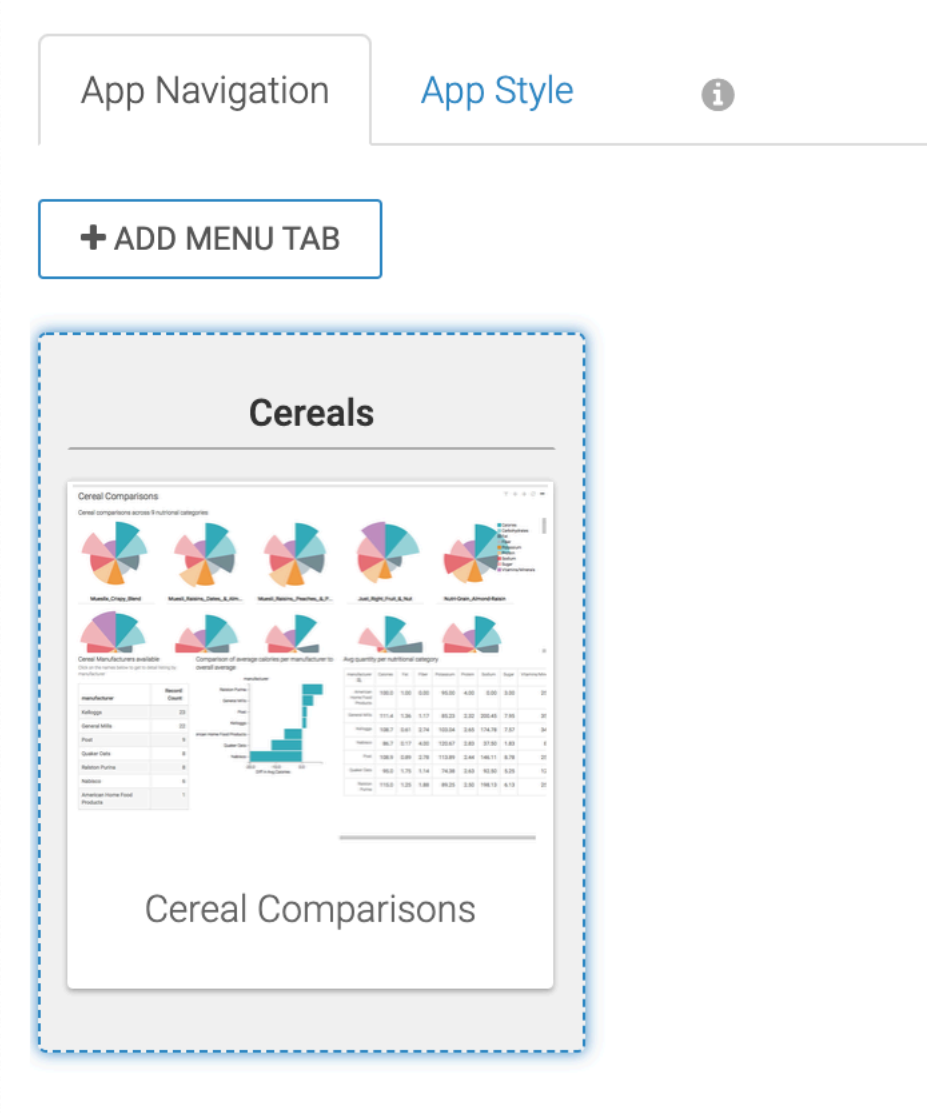


**Note:** You can select recently viewed dashboards, or the dashboards in the selected dataset.



The newly added dashboard appears in the tab container.

2. Click Save.

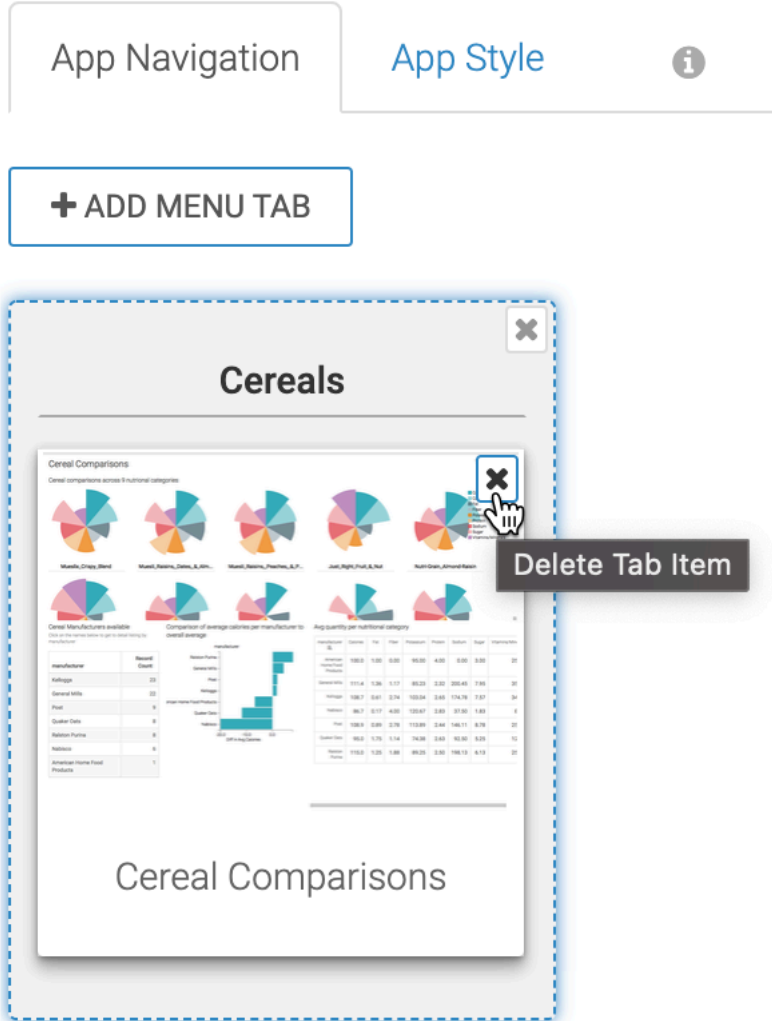


## Removing a dashboard from a tab

In the App Designer of CDP 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.

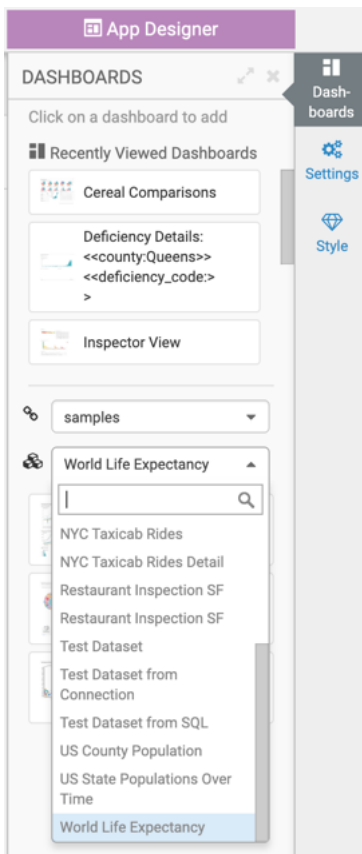
2. To ensure that the change persists, click Save.

## Changing datasets in applications

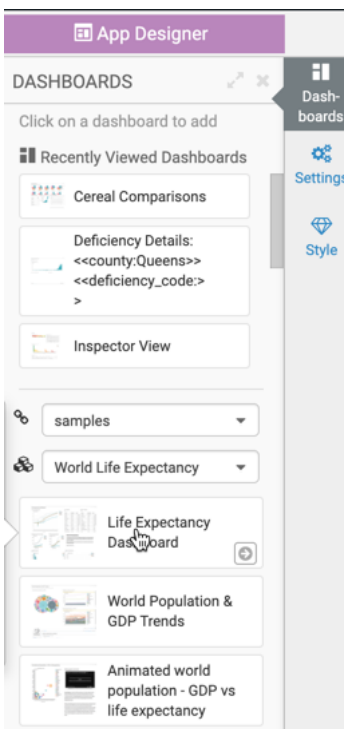
In a CDP Data Visualization application, you can use dashboards from different datasets, sourced from different connections.

## Procedure

1. In the Dashboards menu, select a different dataset. We used World Life Expectancy.



2. Click to select a dashboard from the dataset you chose. We selected Life Expectancy Dashboard.



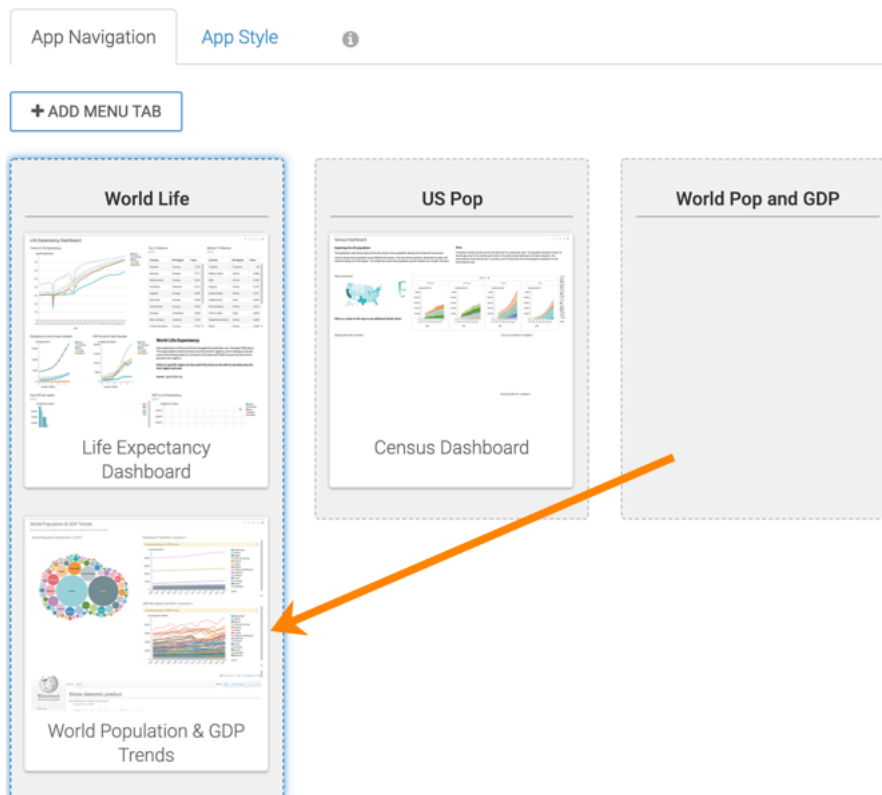
The newly added dashboard, appears in the tab.

## Rearranging dashboards

You can easily move dashboards in a CDP 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.

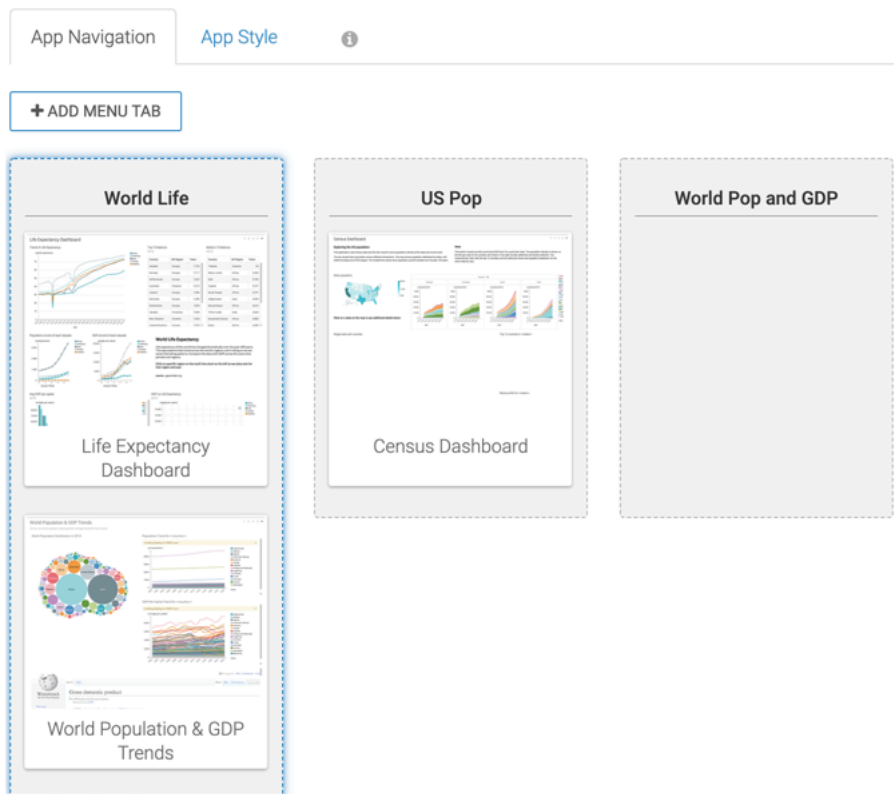


3. You can change the order of dashboards within a tab simply by dragging them within the tab container.

The screenshot displays a dashboard interface with the following elements:

- Navigation tabs: "App Navigation" and "App Style" (selected).
- A button: "+ ADD MENU TAB".
- Three dashboard cards in a row:
  - World Life**: Contains two sub-dashboards: "World Population & GDP Trends" and "Life Expectancy Dashboard". This card is highlighted with a blue dashed border.
  - US Pop**: Contains a sub-dashboard titled "Census Dashboard".
  - World Pop and GDP**: An empty placeholder card.

4. 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 CDP Data Visualization, you can easily change the order of tabs through drag and drop interaction.

### Procedure

1. In the App Navigation interface, click to select the tab that you plan to move. We chose the Maps tab.
2. Drag the tab to the first position, and drop it.
3. Click Save.

### What to do next

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

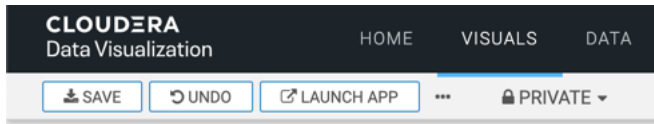
To learn how to launch the app you created, see *Launching applications*.

## Launching applications

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

## Procedure

1. Navigate to the app you plan to launch. We are using 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 standalone application has the following features:

- a. The externalized application is fully interactive.
- b. 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.
- c. The tabs at the bottom correspond to the individual sheets in each dashboard. They appear only if the dashboard has two or more sheets.
- d. The (filter) icon at the top-right corner correspond to the same navigation elements as you would see in a dashboard, Current Parameters.
- e. The Back navigation icon, (back arrow), moves the dashboard backward to the previous parameter state. You can also use the shortcut keys CTRL + B.
- f. The Forward navigation icon, (forward arrow), moves the dashboard forward to the next parameter state. You can also use the shortcut keys CTRL + F.
- g. The Reset navigation icon resets the parameters to the original state of the dashboard. You can also use the shortcut keys CTRL + R.
- h. 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:

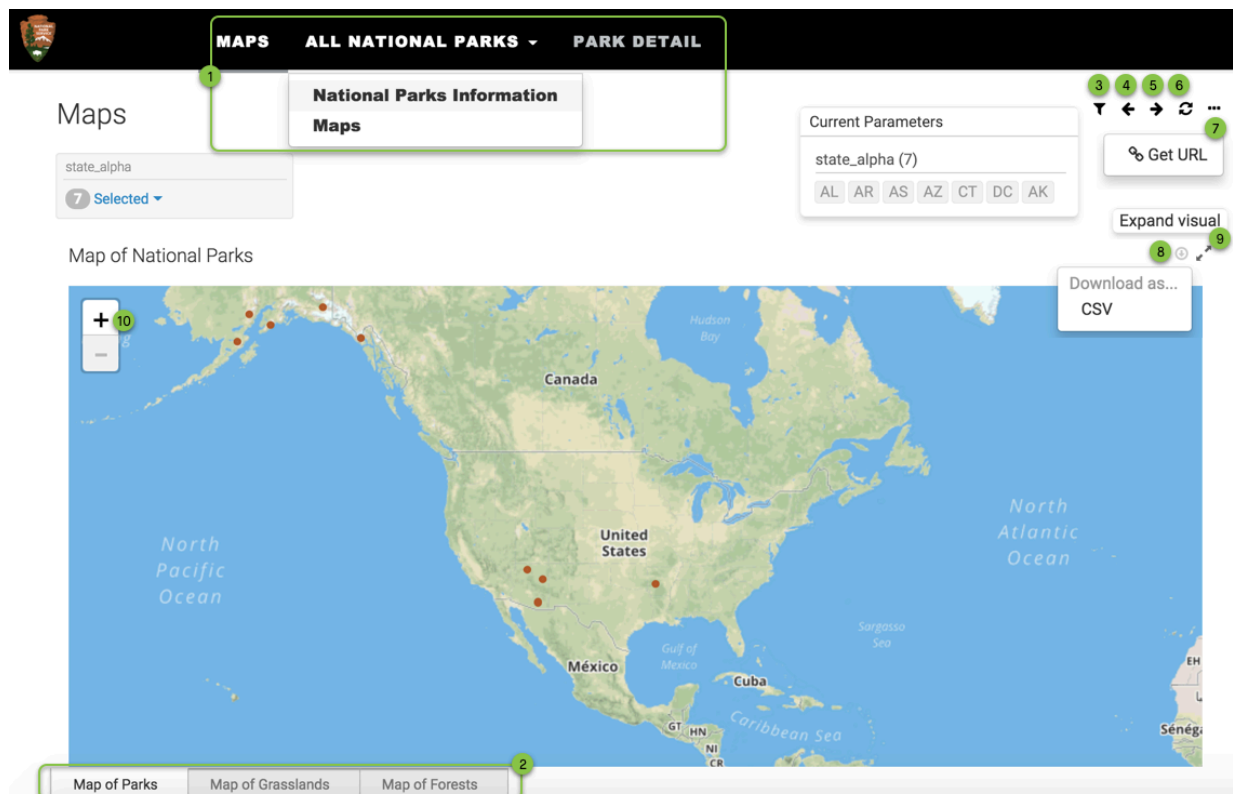
```
ip_address:port/arc/appgroup/app-id?initialapp=vis-id&sheet=sheet_id
&param.parameter_name.data='data_list'&param.parameter_name.
```



```
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.
- i. 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.
  - j. You can click the (expand visual) icon to bring up the visual in a window modal, superimposed over the application.
  - k. The zoom in - zoom out control is part of the control mechanism for particular visual types, for example interactive maps.



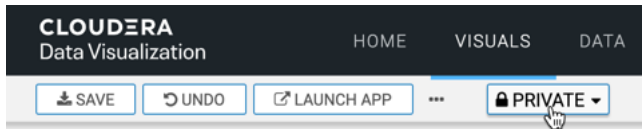
## Changing application workspace

CDP Data Visualization enables you to create an app in the Private workspace and then change the assigned workspace before sharing it.

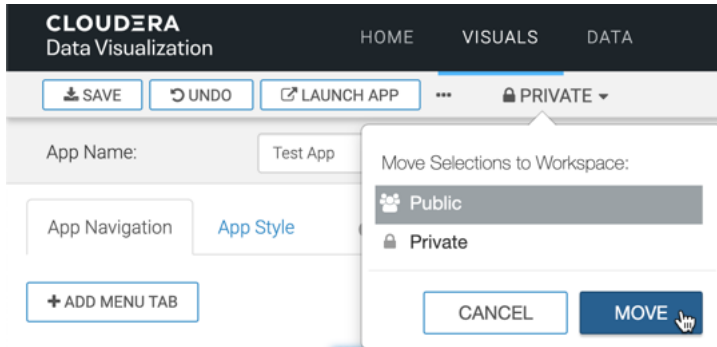
### Procedure

1. Navigate to the app.

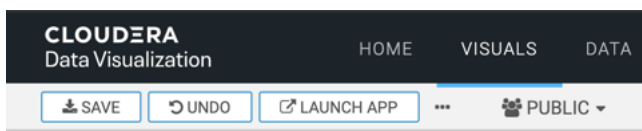
2. In the top navigation bar of App Designer, click PRIVATE.



3. In the drop-down menu, select Public, and then click Move.



After a brief success message, the image appears on the screen, and the app is now in the PUBLIC workspace.



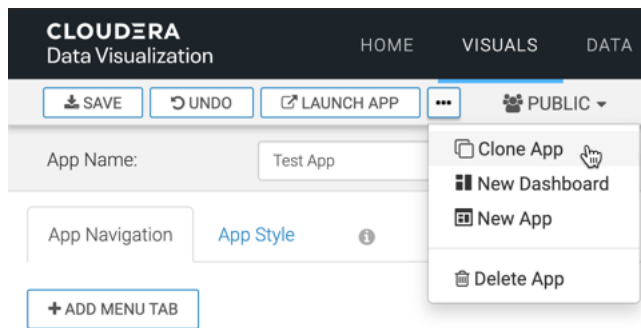
## Cloning an application

CDP Data Visualization enables you to clone an existing application.

### Procedure

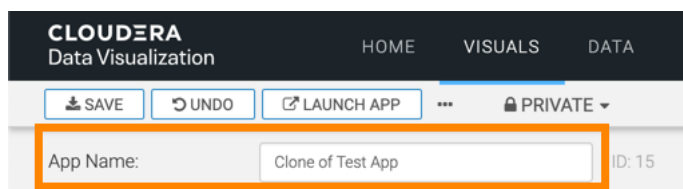
1. Navigate to the app.

- 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 application

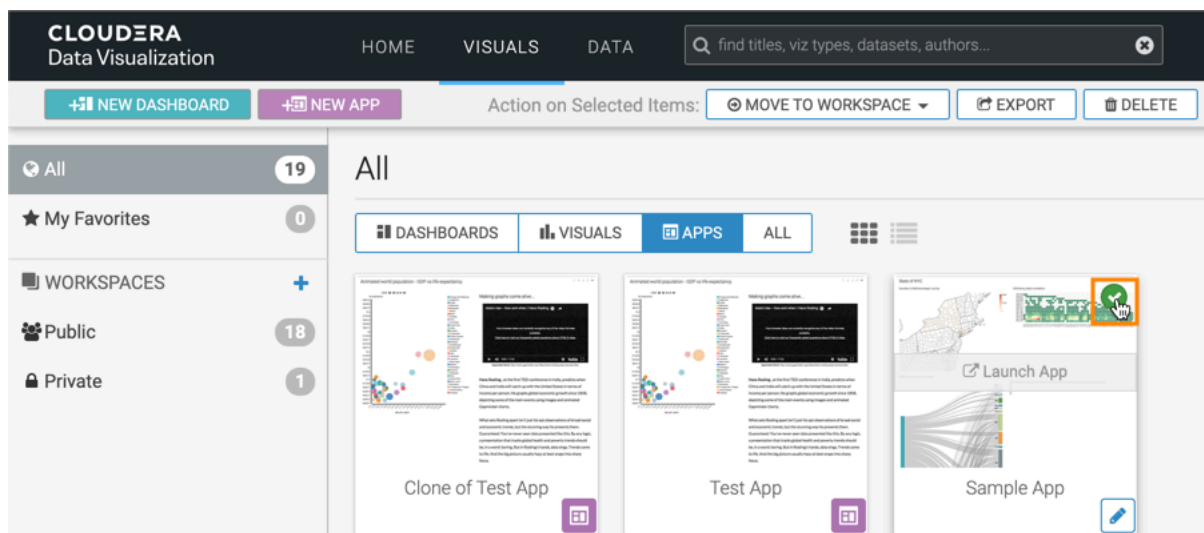
In CDP Data Visualization, you can export dashboards, apps, and other visual artifacts. When you export a whole app, the process captures all the dependencies, such as visuals, dashboards, datasets, and custom styles.

### Procedure

- Click VISUALS in the main navigation bar.
- Select the app that contains the visuals or dashboards for export.

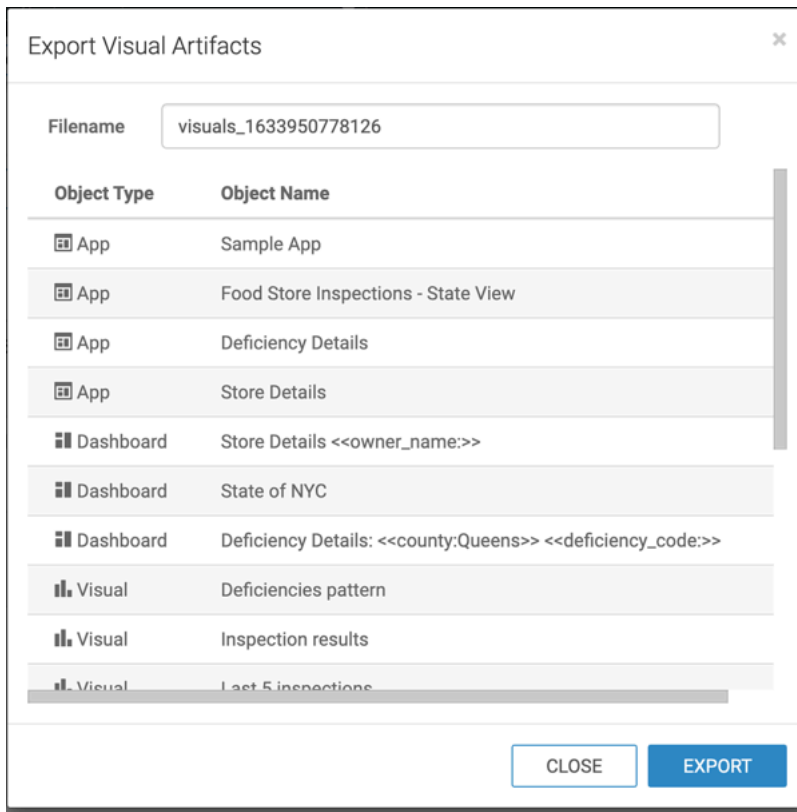
This updates the menus at the top, and shows the Supplemental menu.

In this example, the Sample App is used.



- In the Supplemental menu across the top, click Export.

The Export Visual Artifacts modal window appears, with a default file name of the type visuals\_random-number.



- Change the name of the file.

To see what visual artifacts are exported, click Show Details.

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.

- 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 CDP Data Visualization, you can import dashboards, apps and other visual artifacts exported from another system. All you need is an 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, 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, 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, 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, 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.

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 Data Visualization
 HOME   VISUALS   DATA

Import: ✖ DON'T IMPORT ⬇️ ACCEPT AND IMPORT

Object Type	Object Name	Planned Action	ID
App	Sample App	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
App	Food Store Inspections - State View	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
App	Deficiency Details	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
App	Store Details	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Dashboard	Store Details <<owner_name:>>	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Dashboard	State of NYC	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Dashboard	Deficiency Details: <<county:Queens>> <<deficiency_code:>>	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Deficiencies pattern	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Inspection results	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Last 5 inspections	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Number of deficienciesper county	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Deficiency county correlation	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Deficiency date correlation	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Area graph filtered on deficiency	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Names of stores for that deficiency	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Deficiency trends for <<county:>>	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Visual	Stores	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--
Dataset	Food Stores Inspection in NYC	<span style="background-color: #27ae60; color: white; padding: 2px 5px;">NEW</span>	--

**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.

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[HOME](#)   [VISUALS](#)   [DATA](#)

**Success!** The import was successful.

Import: ✖ DONT IMPORT ✔ ACCEPT AND IMPORT

Object Type	Object Name	Planned Action	ID
App	Sample App	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	19
App	Food Store Inspections - State View	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	20
App	Deficiency Details	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	21
App	Store Details	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	22
Dashboard	Store Details <<owner_name:>>	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	139
Dashboard	State of NYC	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	140
Dashboard	Deficiency Details: <<county:Queens>> <<deficiency_code:>>	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	141
Visual	Deficiencies pattern	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	126
Visual	Inspection results	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	127
Visual	Last 5 inspections	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	130
Visual	Number of deficienciesper county	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	131
Visual	Deficiency county correlation	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	132
Visual	Deficiency date correlation	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	133
Visual	Area graph filtered on deficiency	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	134
Visual	Names of stores for that deficiency	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	135
Visual	Deficiency trends for <<county:>>	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	136
Visual	Stores	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	137
Dataset	Food Stores Inspection in NYC	<span style="background-color: #28a745; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>	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 application

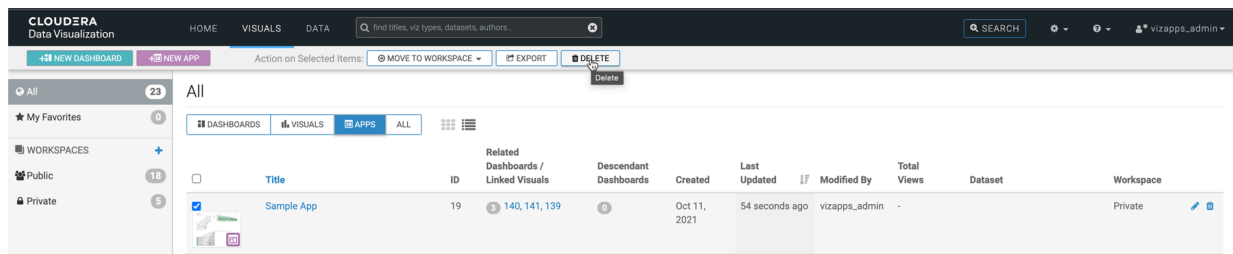
It is very simple to delete an application in CDP Data Visualization.

### Procedure

1. Navigate to the app.

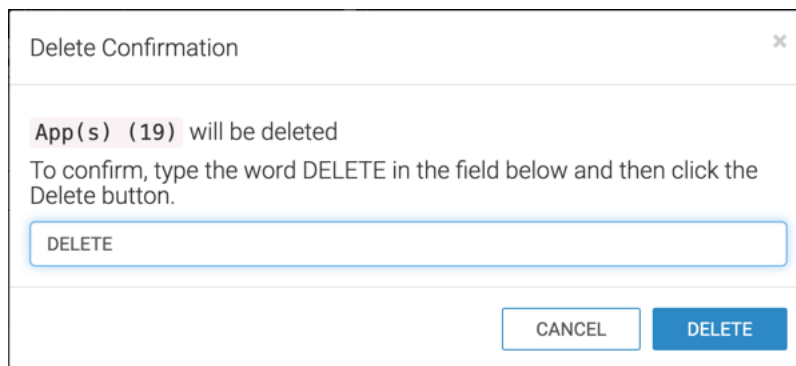


- In the top navigation bar of App Designer, click the supplemental menu indicated by the (ellipsis) icon, and then select Delete App.



The Delete Confirmation modal window appears.

- Type DELETE, and then click Delete.



## Results

Data Visualization refreshes to basic Visuals view, showing All, Apps.

The deleted application is not on that list.