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Accessing Data Visualization in CDW

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Starting Data Visualization in a Virtual Warehouse

You can run CDP Data Visualization in a Virtual Warehouse (VW) inside a Database Catalog. Learn how you can enable and launch Data Visualization in the CDW Public Cloud data service.

In CDP Public Cloud, you can also work with [Data Visualization in the Cloudera Machine Learning data service](#). For on-prem access, use [Data Visualization in Cloudera Data Science Workbench \(CDSW\)](#).

Follow these steps to set up your Data Visualization instance in CDW:

Enabling Data Visualization in CDW

Learn how to add CDP Data Visualization to a virtual data warehouse.

Procedure

1. Log in to the CDP web interface and navigate to the Data Warehouse service.



2. Locate your database catalog.

- In the Data Warehouse service, click Overview in the left navigation panel.
- On the Overview page, locate the database catalog you want to use and make sure it is running.

The screenshot displays the Cloudera Data Warehouse Overview page. The left navigation panel shows the 'Overview' tab selected. The main content area is divided into two sections: 'Database Catalogs | 5' and 'Virtual Warehouses | 6'.

Database Catalogs | 5

Name	Status	Warehouse	Total Cores	Total Memory	Virtual Warehouses
gg-l2-aw-dl-default	Running	warehouse-1629886575-9lnh	7	17 GB	0
twbx-catalog	Shipped	warehouse-1628117011-f9bz	7	17 GB	0
perf-long-run-dl-default	Running	warehouse-1628079265-fpzn	7	17 GB	3
dbc4t4	Running	warehouse-1625504823-ph5n	7	17 GB	1
eng-ml-lr-prod-env-aws-dl-de...	Error	warehouse-1620073265-b2zn	7	17 GB	2

Virtual Warehouses | 6

Name	Status	Warehouse	Node Count	Total Cores	Total Memory	Type
Hive-Met-One-SMALL	Shipped	compute-1629215613-m4gl	0	12	56 GB	HIVE UNIFIED ANALYTICS
RR-Hive	Shipped	compute-1628283112-wrtg	0	12	56 GB	HIVE UNIFIED ANALYTICS COMPACTOR
RR-Impala	Shipped	Impala-1628202334-a8oq	0	20	137 GB	IMPALA
Impala	Error	Impala-1627413173-j8q8	2	48	365 GB	IMPALA

3. Create a new virtual data warehouse with CDP Data Visualization enabled.

If you already have a virtual data warehouse with the tool enabled, see *Starting Data Visualization in CDW* for information on how to launch Data Visualization.

a) Click the plus icon in the top right corner of the Overview page.

Alternatively, on the Virtual Warehouses page, click ADD NEW.

b) In the New Virtual Warehouse dialog box, specify the following details:

- Name – for the new virtual warehouse
- Type – warehouse type (can be Hive or Impala)
- Database Catalog – that the new warehouse should query
- Size – the preferred compute capacity size



Note: When you specify the size, the auto-suspend and auto-scaling configuration options change depending on the size of the virtual warehouse you set. See the next step for details.

c) [Optional] Configure auto-suspend and auto-scaling settings.

For consistently good response times, especially if you expect interactive style workloads throughout the day:

Set AutoSuspend Timeout to a relatively high number or completely disable it by setting it to zero.



Note: If you do not configure auto-scaling, some user interactions may be impacted by a virtual warehouse resume delay.

d) Toggle the Enable Data Visualization button to install Cloudera Data Visualization with the virtual warehouse.

New Virtual Warehouse

X

Name *

Enter Virtual Warehouse Name

Type *

HIVE

IMPALA

Database Catalog *

gg-l2-aw-dl-default

Tagging ⓘ

*Enter key**Enter value*

Only alphanumeric and _-@:., are allowed

Size *

small - 10 Executor Nodes

☐ Disable AutoSuspend

AutoSuspend Timeout (in seconds): 300



Concurrency Autoscaling ⓘ

Nodes: Min:10, Max:30



HEADROOM

WAIT TIME

Desired Free Capacity: 1

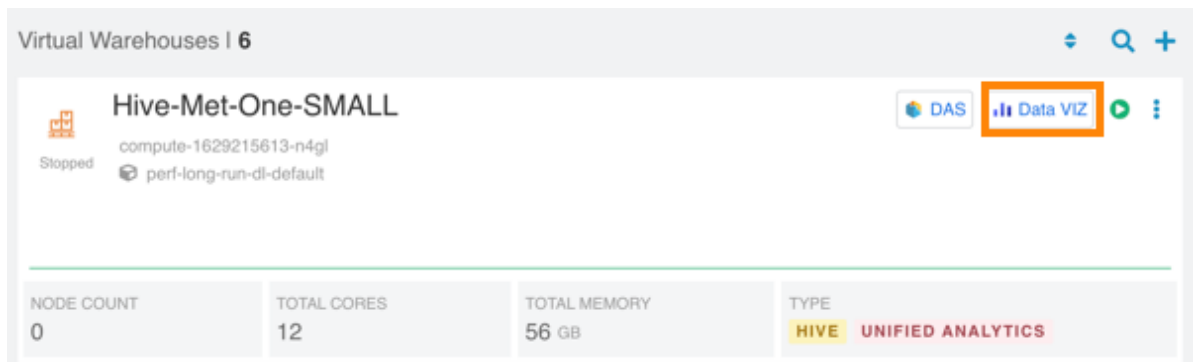
☐ Query Isolation ⓘ☒ Enable Data Visualization ⓘ

If the Enable Data Visualization option is disabled in the New Virtual Warehouse dialog box, another virtual data warehouse already has the tool enabled for the same database catalog.



Important: Currently, only one CDP Data Visualization instance can be enabled per virtual data warehouse per database catalog.

You can identify which virtual data warehouse runs with CDP Data Visualization by the Data VIZ icon shown in the virtual warehouse instances on the Data Warehouse Overview page.



e) Click CREATE to create the new virtual data warehouse.

Results

Your new virtual data warehouse is created with CDP Data Visualization installed. The creation process takes anywhere between a few seconds and a few minutes depending on available resources in the environment.



Note:

On the Data Warehouse Overview page or on the Virtual Warehouses page, the same icon will be blinking through different stages until the virtual data warehouse is launched.

What to do next

[Start Data Visualization in CDW](#)

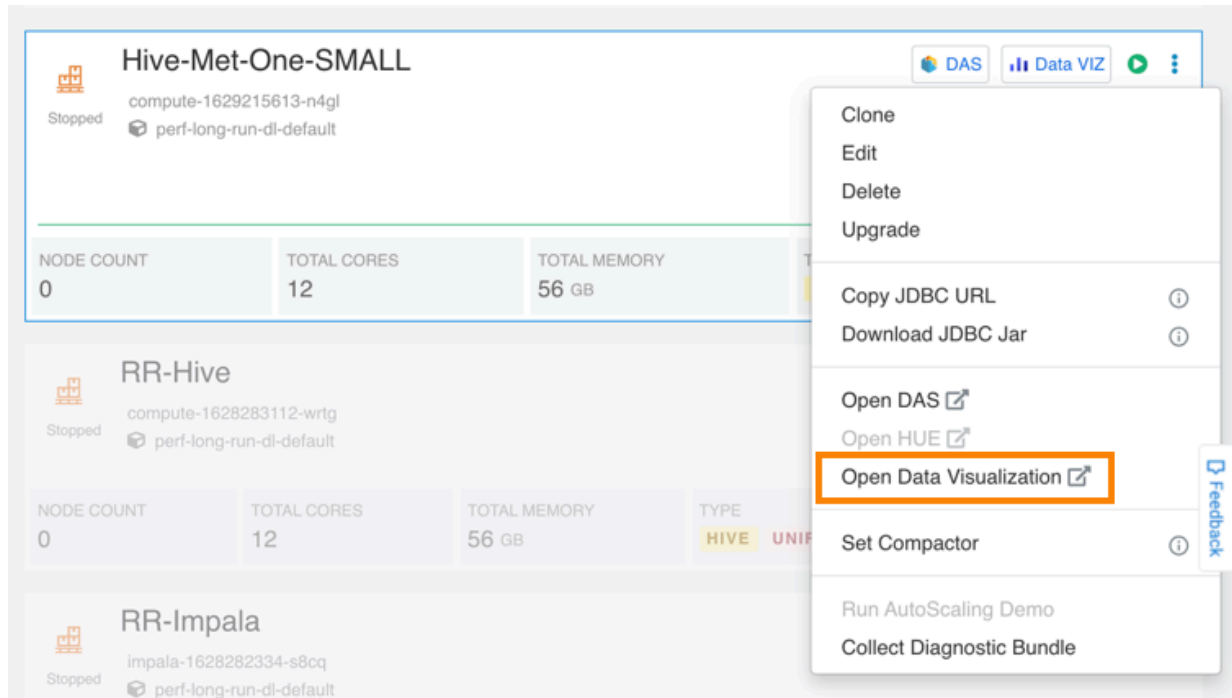
Starting Data Visualization in CDW

Learn how to launch CDP Data Visualization in a virtual data warehouse.

Procedure

1. Locate the virtual data warehouse with CDP Data Visualization enabled that you want to use.
2. Click the launch/options menu (three dots) of the virtual data warehouse.

3. Click Open Data Visualization in the pop-up menu.



Alternatively, you can click the Data VIZ icon to open CDP Data Visualization.

Results

CDP Data Visualization opens in a new browser tab. SSO authentication is enabled by default, so you are logged in automatically. You land on the homepage view of CDP Data Visualization, where you can explore sample dashboards and access the in-tool *Get Started* guide for help.

If you want to log in as an administrator, you can use the following default credentials:

- username: vizapps_admin
- password: vizapps_admin



Important: If you use the default credentials, security issues may arise. Cloudera recommends that you change the default username and password.

See *Setting authentication parameters* for information on how to change authentication settings.

Related Information

[Setting authentication parameters](#)

[Data Visualization in CDP Public Cloud](#)

[User interface overview](#)

[Data Visualization quickstart](#)

Starting Data Visualization in CDW

Cloudera Data Visualization (CDV) is integrated with Cloudera Data Warehouse (CDW) for creating graphic representations of data. You can build custom dashboards and analytic applications to enable users to explore data across the whole CDP data lifecycle.

Data Visualization is not tied to a particular Virtual Warehouse (VW). You can access data for your visualization from multiple Data Catalogs using multiple Hive or Impala Virtual Warehouses and multiple environments.

Having multiple Data Visualization instances attached to an environment, you can create dashboards for different groups. When you delete a Virtual Warehouse, your visuals remain intact.

For other use cases, see:

- [Data Visualization in Cloudera Machine Learning \(CML\)](#)
- [Data Visualization in Cloudera Data Science Workbench \(CDSW\)](#)

Follow these steps to start using Data Visualization in CDW:

Creating a Data Visualization instance in CDW

Learn how to create a Cloudera Data Visualization (CDV) instance in the Cloudera Data Warehouse (CDW) data service.

About this task

If you want to visualize your data, you have to create a Data Visualization instance and connect it to Hive or Impala Virtual Warehouse(s) to be able to create visuals. You can create multiple instances of Data Visualization to connect to different data sets and to share with different users.

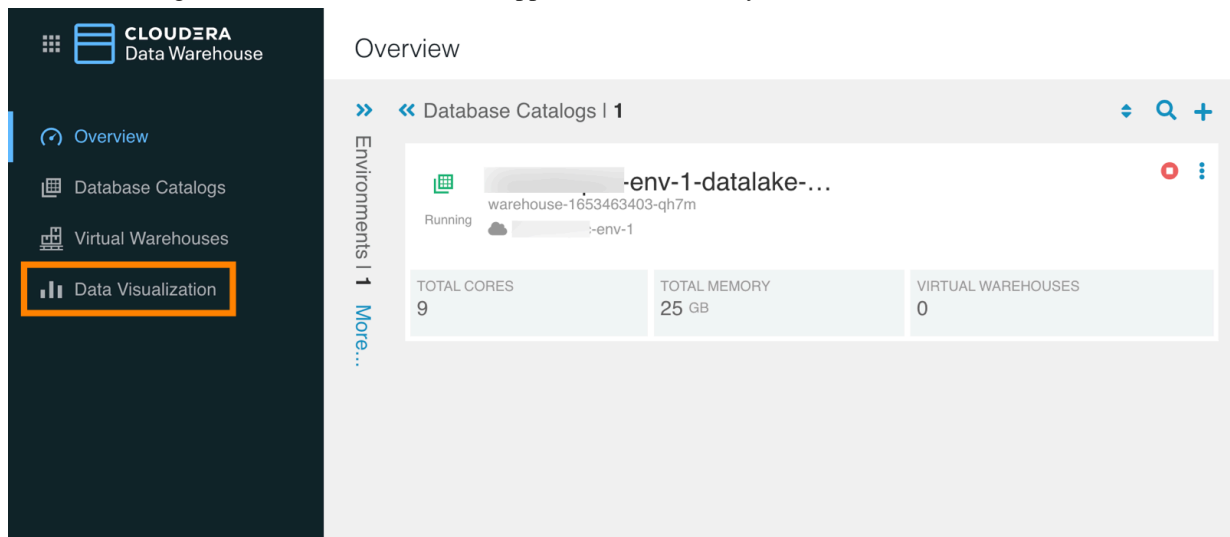
Before you begin

- Log in to the CDP web interface and open the Data Warehouse service.
- Ensure that you have DWAdmin role in CDW.

Procedure

1. In Cloudera Data Warehouse, click Data Visualization in the left navigation panel.

A list of existing Data Visualization instances appears, if there are any.



2. Click ADD NEW to create a new instance.

If you are creating the first Data Visualization instance in CDW, click CREATE.

3. Provide the following information in the **New Data Visualization** modal window:

- a) Name: Specify a name for the instance.
- b) Environments: Select your environment.
- c) User Groups: Add user groups to allow user access to Data Visualization for selected users.
- d) Admin Groups: Add admin groups to allow configuration access to Data Visualization for selected users.

For more information on Data Visualization permission granularity, see the [Security model](#).

- e) Tagging: Enter keys and values to apply tags to your resources for organizing them into a taxonomy.
- f) Size: Select the size of the compute instance from the drop-down menu.

New Data Visualization X

Name *
Enter Data Visualization Name

Environments *
telco-demo-env

User Groups ⓘ
Select Groups

Admin Groups * ⓘ
Select Groups

Tagging ⓘ
Enter key Enter value +

Only alphanumeric and _-@:. are allowed

Size *
-- select an option --

CREATE

4. Click CREATE.

Results

Your Data Visualization instance is created. You can open the instance and connect it to a Virtual Warehouse to create visuals, dashboards, and applications based on the stored data.

What to do next

[Start Data Visualization in CDW](#)

Starting Data Visualization in CDW

Learn how to start Data Visualization in Cloudera Data Warehouse (CDW) data service.

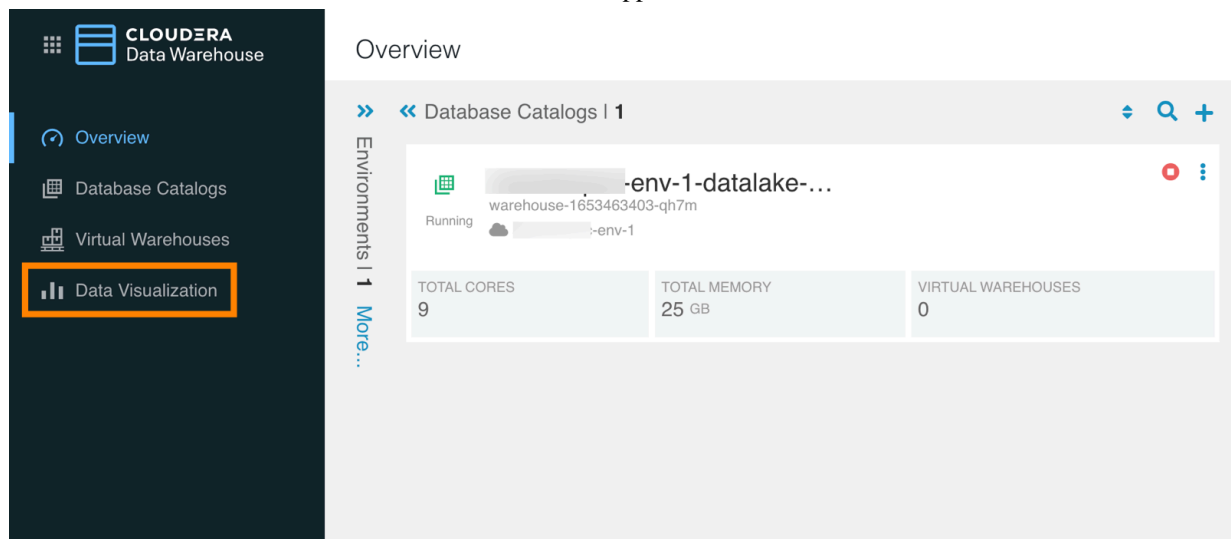
Before you begin

- You have DWAdmin role.
- You are logged into CDW.
- One or more Data Visualization instances are running in CDW.


Procedure

1. In Cloudera Data Warehouse, click Data Visualization in the left navigation panel.

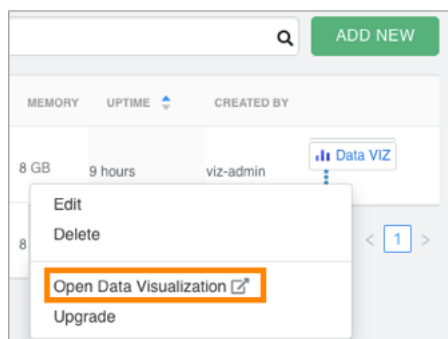
A list of Data Visualization instances and environments appears.



- 2.

From the list of running Data Visualization instances, click  to start Data Visualization.

Alternatively, you can click the launch/options menu (three dots) at the end of the row and click Open Data Visualization in the pop-up menu.



Results

Data Visualization opens in a new browser tab. SSO authentication is enabled by default, so you are logged in automatically. You land on the homepage view of Data Visualization, where you can explore sample dashboards and access the in-tool Get Started guide for help.

Editing and deleting Data Visualization instances in CDW

Learn how to edit and delete Data Visualization instances in Cloudera Data Warehouse (CDW) data service.

Before you begin

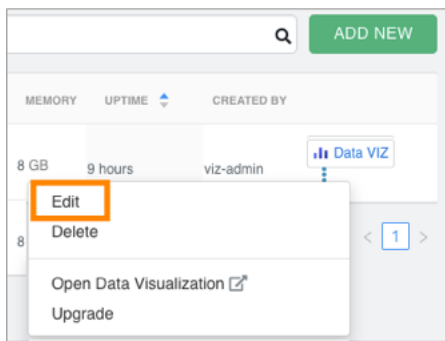
- You are logged into CDW.
- You have created an existing Data Visualization instance that you want to edit or delete, or you have Admin permissions to manage instances created by others.

Procedure

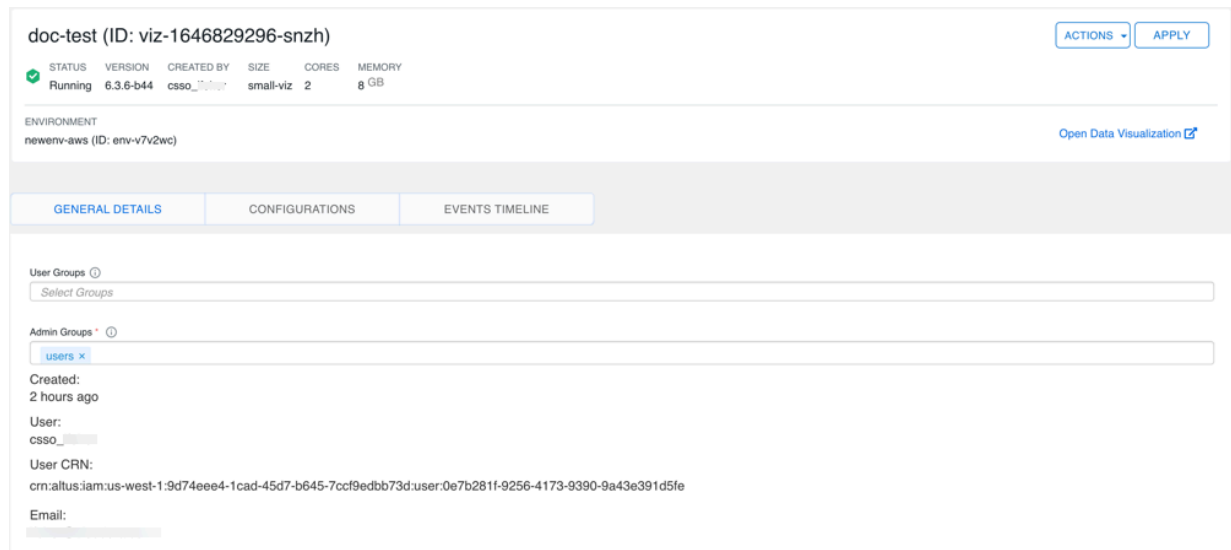
- In Cloudera Data Warehouse, click Data Visualization in the left navigation panel.

A list of Data Visualization instances appears.

- In one of the Data Visualization instance rows, click the launch/options menu (three dots).
- Click Edit.

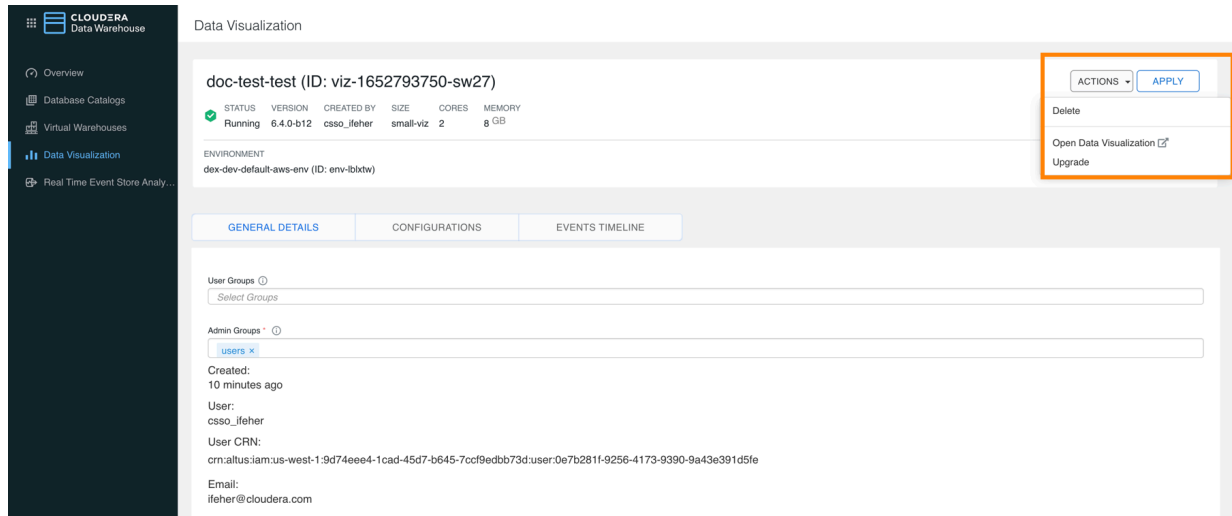


On this instance overview page, you can make changes to general details and other properties.

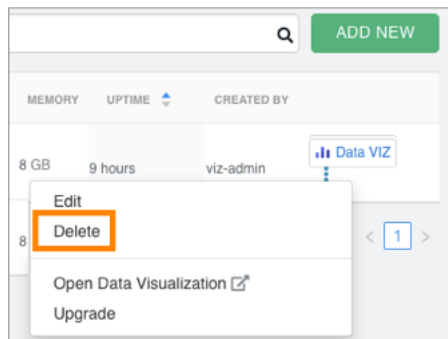


- Click APPLY to save the changes.

5. To delete a Data Visualization instance, click **ACTIONS Delete**.



Alternatively, you can click the launch/options menu (three dots) at the end of a Data Visualization instance row and select Delete.



Upgrading your Data Visualization instance in CDW

Learn how to upgrade your Data Visualization instance if a later version is available in Cloudera Data Warehouse (CDW).

Before you begin

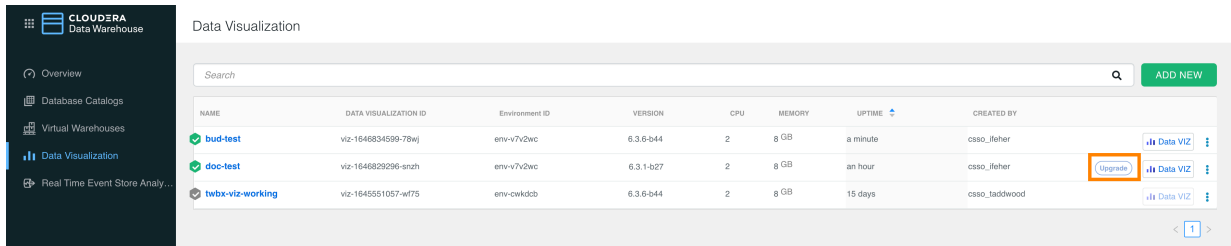
Ensure that:

- you are logged into CDP
- you can access the environment of the Data Visualization to upgrade
- you have DWAdmin role

Procedure

1. In Cloudera Data Warehouse, click Data Visualization in the left navigation panel.

A list of Data Visualization instances appears. In CDP Public Cloud, if a newer version of CDV is available for any listed instance, the Upgrade option is shown in the relevant row.



NAME	DATA VISUALIZATION ID	Environment ID	VERSION	CPU	MEMORY	UPTIME	CREATED BY	
bud-test	viz-1646834599-78wj	env-v7v2wc	6.3.6-b44	2	8 GB	a minute	csso_lfeher	Data VIZ
doc-test	viz-1646829296-snzth	env-v7v2wc	6.3.1-b27	2	8 GB	an hour	csso_lfeher	Upgrade Data VIZ
twbx-viz-working	viz-1645551057-wf75	env-cwddb	6.3.6-b44	2	8 GB	15 days	csso_laddwood	Data VIZ

- 2.

Find the instance from the list and click [Upgrade](#) to start the upgrade.

Alternatively, you can click the Options menu (three dots) in the row of the Data Visualization instance that you want to upgrade and click Upgrade in the pop-up menu.



Note: In CDP Private Cloud, the

[Upgrade](#)

button is not available, so use the Options menu to start the upgrade process.

