

Using Cloudera Data Visualization in Cloudera Data Warehouse

Date published: 2020-10-30

Date modified: 2024-10-30

The Cloudera logo is displayed in a bold, orange, sans-serif font. The word "CLOUDERA" is written in all caps, with a stylized 'E' that has a horizontal bar extending to the right.

Legal Notice

© Cloudera Inc. 2024. All rights reserved.

The documentation is and contains Cloudera proprietary information protected by copyright and other intellectual property rights. No license under copyright or any other intellectual property right is granted herein.

Unless otherwise noted, scripts and sample code are licensed under the Apache License, Version 2.0.

Copyright information for Cloudera software may be found within the documentation accompanying each component in a particular release.

Cloudera software includes software from various open source or other third party projects, and may be released under the Apache Software License 2.0 (“ASLv2”), the Affero General Public License version 3 (AGPLv3), or other license terms. Other software included may be released under the terms of alternative open source licenses. Please review the license and notice files accompanying the software for additional licensing information.

Please visit the Cloudera software product page for more information on Cloudera software. For more information on Cloudera support services, please visit either the Support or Sales page. Feel free to contact us directly to discuss your specific needs.

Cloudera reserves the right to change any products at any time, and without notice. Cloudera assumes no responsibility nor liability arising from the use of products, except as expressly agreed to in writing by Cloudera.

Cloudera, Cloudera Altus, HUE, Impala, Cloudera Impala, and other Cloudera marks are registered or unregistered trademarks in the United States and other countries. All other trademarks are the property of their respective owners.

Disclaimer: EXCEPT AS EXPRESSLY PROVIDED IN A WRITTEN AGREEMENT WITH CLOUDERA, CLOUDERA DOES NOT MAKE NOR GIVE ANY REPRESENTATION, WARRANTY, NOR COVENANT OF ANY KIND, WHETHER EXPRESS OR IMPLIED, IN CONNECTION WITH CLOUDERA TECHNOLOGY OR RELATED SUPPORT PROVIDED IN CONNECTION THEREWITH. CLOUDERA DOES NOT WARRANT THAT CLOUDERA PRODUCTS NOR SOFTWARE WILL OPERATE UNINTERRUPTED NOR THAT IT WILL BE FREE FROM DEFECTS NOR ERRORS, THAT IT WILL PROTECT YOUR DATA FROM LOSS, CORRUPTION NOR UNAVAILABILITY, NOR THAT IT WILL MEET ALL OF CUSTOMER’S BUSINESS REQUIREMENTS. WITHOUT LIMITING THE FOREGOING, AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, CLOUDERA EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, NON-INFRINGEMENT, TITLE, AND FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION, WARRANTY, OR COVENANT BASED ON COURSE OF DEALING OR USAGE IN TRADE.

Contents

| | |
|--|-----------|
| Deploying Cloudera Data Visualization in Cloudera Data Warehouse..... | 4 |
| Editing and deleting Cloudera Data Visualization instances in Cloudera Data Warehouse..... | 7 |
| Upgrading Cloudera Data Visualization in Cloudera Data Warehouse..... | 9 |
| Backing up and restoring Cloudera Data Visualization applications in Cloudera Data Warehouse..... | 10 |

Deploying Cloudera Data Visualization in Cloudera Data Warehouse

Learn how to create and launch a Cloudera Data Visualization instance within the Cloudera Data Warehouse data service. You can use Cloudera Data Visualization with Cloudera Data Warehouse in both Cloudera Public Cloud and Cloudera Private Cloud to explore and visualize data stored in database catalogs providing data-driven insights throughout the entire data lifecycle.

About this task

If you want to create visuals based data stored in Cloudera Data Warehouse, you have to create a Cloudera Data Visualization instance and connect it to Hive or Impala Virtual Warehouse(s).

Cloudera Data Visualization is not tied to a particular Virtual Warehouse (VW). You can access data for your visualizations from multiple Data Catalogs using multiple Hive or Impala Virtual Warehouses in various environments. With multiple Cloudera Data Visualization instances attached to an environment, you can connect to different data sets, create dashboards for different groups and share your visualizations with different users.



Note: When you delete a Virtual Warehouse, your visual artifacts remain intact as long as the Cloudera Data Visualization instance is not deleted.

Before you begin

- You are logged into the Cloudera web interface and you have opened the Cloudera Data Warehouse service.
- You have DWAdmin role in Cloudera Data Warehouse.
- You have activated your environment.
- You have a Hive/Impala warehouse in running state.
- If you are using Cloudera Data Visualization with Cloudera Data Warehouse in Cloudera Private Cloud:

You have an admin group created in Management Console User Management . To log in using LDAP, select the Sync Groups on Login option from Management Console Administration Authentication , so that the associated groups can be imported when you log in to Cloudera Data Visualization.

Procedure

1. In Cloudera Data Warehouse, click Data Visualization in the left navigation panel.
A list of existing Cloudera Data Visualization instances appears, if there are any.
2. Click ADD NEW to create a new instance.

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

| NAME | DATA VISUALIZATION ID | ENVIRONMENT ID | VERSION | CPU | MEMORY | UPTIME | CREATED BY | |
|--------------|-----------------------|----------------|-----------|-----|--------|---------|------------|--------------------------|
| ronn-vs-dv | viz-1728549536-ctdg | env-8trq6b | 7.2.4-041 | 2 | 8 GB | 2 hours | rsuplina | Data VIZ |
| ronn-vc-test | viz-1728549146-mfs7 | env-8trq6b | 7.2.4-041 | 2 | 8 GB | 2 hours | rsuplina | Data VIZ |

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

Mandatory fields are marked with an asterisk.

- a) Name* – Specify a name for the instance.
- b) Environments* – Select the environment that you want Cloudera Data Visualization to be connected to.
- c) User Groups – Add user groups to allow user access to Cloudera Data Visualization for selected groups. If no group is added, all Cloudera users will have non-admin access.
- d) Admin Groups* – Add admin groups to allow configuration access to Cloudera Data Visualization for selected groups.

For more information on Cloudera 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.



Note: This field is not available in Cloudera Data Warehouse on Cloudera Private Cloud.

- f) Resource Template – Select the Cloudera Data Warehouse resource template from the drop-down menu.
 - Default resources
 - Medium resources
 - Large resources

New Data Visualization X

Name *

Environments *

se-sandboxx-aws
▼

User Groups ⓘ

Select Groups

You can select groups present in the CDP user management system. The group(s) must also exist in the external LDAP Identity Provider. Nested groups are not supported. Only users that are direct members of the group are allowed access.

Admin Groups * ⓘ

Select Admin Groups

You can select groups present in the CDP user management system. The group(s) must also exist in the external LDAP Identity Provider. Nested groups are not supported. Only users that are direct members of the group are allowed access.

Tagging ⓘ

Enter key

Enter value

+

Only alphanumeric and _-@: are allowed

Resource Template

Default resources
▼

Create

4. Click CREATE.

Instance creation starts. Wait until the Cloudera Data Visualization instance is in running state.

5. You can find the list of Cloudera Data Visualization instances and environments appears under the Data Visualization menu that you can open from the left navigation panel.

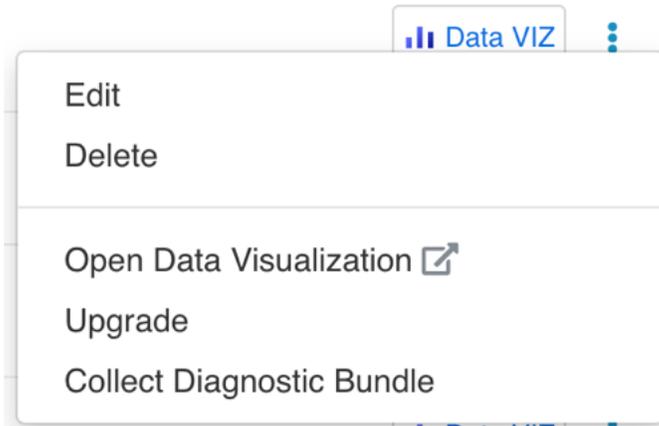
The screenshot shows the Cloudera Data Warehouse interface. On the left is a navigation sidebar with 'Data Visualization' selected. The main content area is titled 'Data Visualization' and contains a table of instances. The table has columns for Name, Data Visualization ID, Environment ID, Version, CPU, Memory, Uptime, and Created By. There are three rows of data, each with a 'Data VIZ' icon and a dropdown menu.

| NAME | DATA VISUALIZATION ID | ENVIRONMENT ID | VERSION | CPU | MEMORY | UPTIME | CREATED BY |
|---------------|-----------------------|----------------|-----------|-----|--------|----------|------------|
| Doc-demo-viz | viz-172855112-6wvm | env-wt479v | 7.2.4-b41 | 2 | 8 GB | a minute | ifeher |
| ronri-vs-dv | viz-1728549536-cdtg | env-8trq6b | 7.2.4-b41 | 2 | 8 GB | 2 hours | rsuplina |
| ronri-vc-test | viz-1728549146-mfs7 | env-8trq6b | 7.2.4-b41 | 2 | 8 GB | 2 hours | rsuplina |

6.

Select one from the list of running Cloudera Data Visualization instances and click  to start Cloudera 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.



SSO authentication is enabled by default both in Cloudera Public Cloud and Cloudera Private Cloud. If you are logged in to the Control Plane, you will be logged into Cloudera Data Visualization automatically. If not, log into the Control Plane using your LDAP credentials. Cloudera Data Visualization opens in a new browser tab and you land on the Cloudera Data Visualization homepage, where you can explore sample dashboards and access the in-tool *Get Started guide* for help.

New users logging in to Cloudera Data Visualization are automatically added to the `viz_guest_group` group. You can assign the System Admin role to this group to grant new users the permission to create new connections. For more information, see *Assigning roles to users*.

Related Information

[Security model](#)

Editing and deleting Cloudera Data Visualization instances in Cloudera Data Warehouse

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

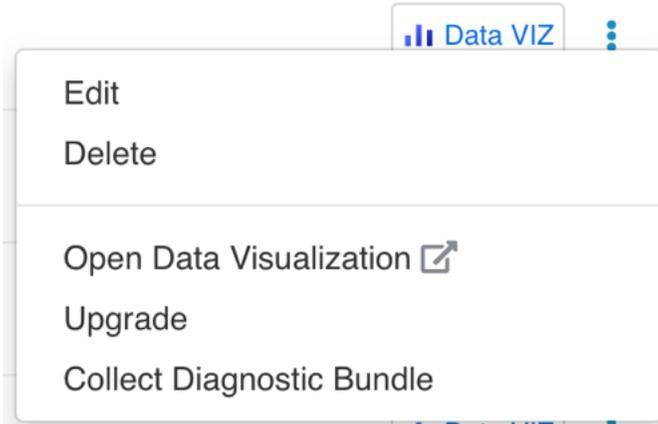
Before you begin

- You are logged into Cloudera Data Warehouse
- You have DWAdmin role in Cloudera Data Warehouse

Procedure

1. In Cloudera Data Warehouse, click Data Visualization in the left navigation panel.
A list of available Cloudera Data Visualization instances appears.
2. In one of the Cloudera Data Visualization instance rows, click the launch/options menu (three dots).

- To change instance details, click Edit.

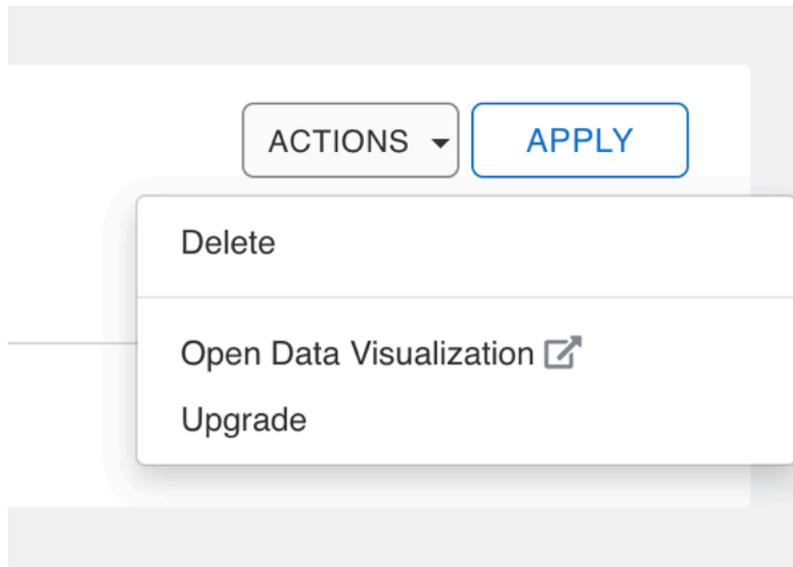


The instance overview page opens and you can make changes to general details and other properties.

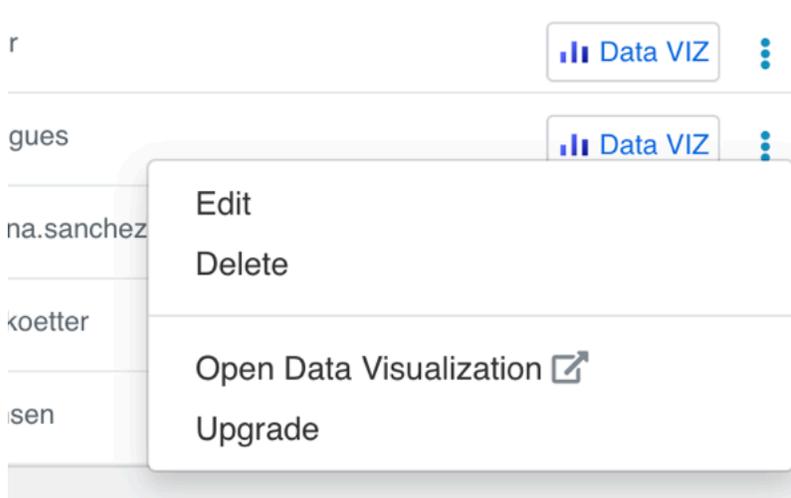
A screenshot of the Cloudera Data Visualization instance overview page. At the top, the instance name 'doc-test (ID: viz-1646829296-snzh)' is displayed next to 'ACTIONS' and 'APPLY' buttons. Below this is a table with columns for STATUS, VERSION, CREATED BY, SIZE, CORES, and MEMORY. The instance is 'Running' with version '6.3.6-b44', size 'small-viz', 2 cores, and 8 GB memory. The environment is 'newenv-aws (ID: env-v7v2wc)'. There are tabs for 'GENERAL DETAILS', 'CONFIGURATIONS', and 'EVENTS TIMELINE'. Under 'GENERAL DETAILS', there are sections for 'User Groups' (with a 'Select Groups' dropdown) and 'Admin Groups' (with a dropdown showing 'users'). Below these are fields for 'Created: 2 hours ago', 'User: csso_', 'User CRN: crn:altus:iam:us-west-1:9d74eee4-1cad-45d7-b645-7ccf9edbb73d:user:0e7b281f-9256-4173-9390-9a43e391d5fe', and 'Email:'.

Click APPLY to save the changes.

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



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



Upgrading Cloudera Data Visualization in Cloudera Data Warehouse

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

About this task

Cloudera Data Visualization upgrades in Cloudera Data Warehouse are centrally managed and can be initiated through the Management Console. This ensures a streamlined and controlled process for keeping your Cloudera Data Visualization deployments up to date.

You can start the upgrade manually when a new version becomes available. Once you start the upgrade, it gets completed automatically, and roll back to a previous Cloudera Data Visualization version is not supported.

Before you begin

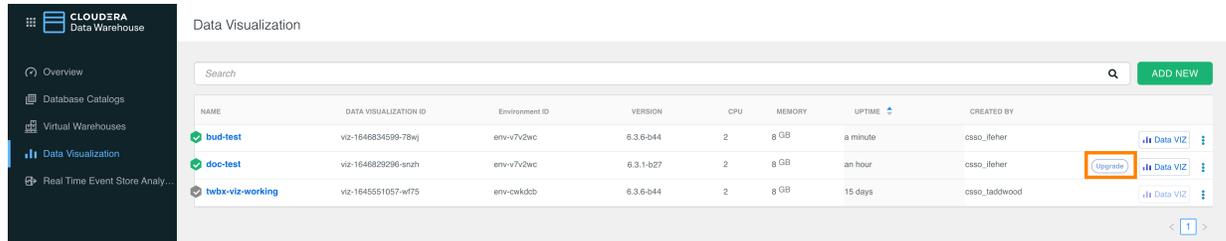
Ensure that:

- You are logged into Cloudera
- You can access the environment of the Cloudera 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 Cloudera Data Visualization instances appears. In Cloudera Public Cloud, if a newer version of Cloudera Data Visualization is available for any listed instance, the Upgrade option is shown in the relevant row.



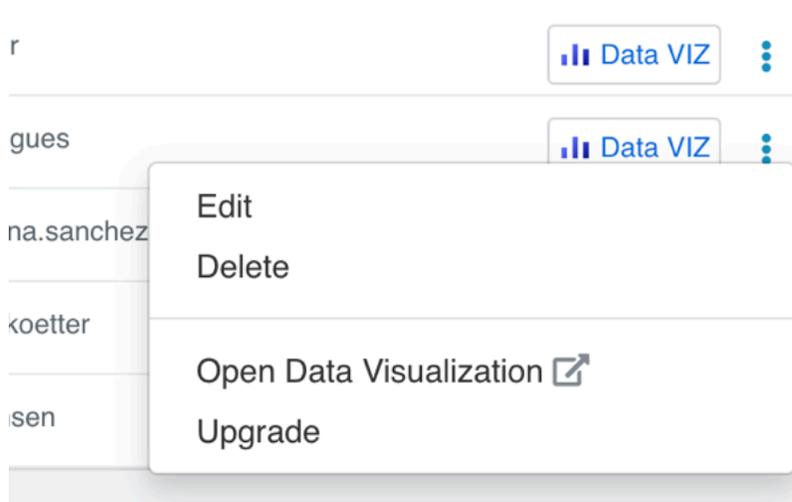
- 2.

Find the instance from the list and click  to start the upgrade.

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



Note: In Cloudera Private Cloud, the  button is not available, so use the Options menu to start the upgrade process.



Backing up and restoring Cloudera Data Visualization applications in Cloudera Data Warehouse

You can ensure the safety of your Cloudera Data Visualization applications in Cloudera Data Warehouse by implementing a proactive backup strategy. The Cloudera Data Warehouse backup/restore feature saves your environment parameters, enabling the recreation of your environment with the same settings, URL, and connection strings used previously.

For more information on the backup/restore feature, see [Backing up and restoring Cloudera Data Warehouse](#).

Backup procedure

A backup is a preventive measure to create a copy of your data to ensure that if data loss or system failure occurs, you can recover it by using the backup copy. This way you can mitigate risks associated with upgrades and return to a known state if unintended consequences arise.

To save the charts and dashboards you have created, it is important to perform data backup. You can use Kubernetes command-line tools, such as k9s or kubectl, to create backups for your Cloudera Data Visualization applications in an AWS environment in Cloudera Data Warehouse.

For detailed instructions, see [Backing up Cloudera Data Visualization applications](#).

Restore procedure

You can use the restore procedure when you encounter issues that cannot be resolved, and you need to bring the system back to a stable state. You can only restore the system, if you have a previously backed up Cloudera Data Visualization instance.

In Cloudera Data Warehouse, you can use the environment-level automated process to restore the environment, the deployed Database Catalog, Virtual Warehouse, and Cloudera Data Visualization entities. If a Cloudera Data Visualization deployment is not present on the cluster, but the backup file contains it, Cloudera Data Visualization will be restored to the cluster. If such an entity is already deployed, no data restoration or configuration updates will take place. For more information, see [Cloudera Data Visualization automatic restoration](#).

For detailed instructions, see [Restoring Cloudera Data Visualization](#).