Cloudera Data Visualization 7.2.1

Using Data Visualization in CDW

Date published: 2020-10-30
Date modified: 2024-02-29

https://docs.cloudera.com/

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Deploying Data Visualization in CDW

Learn how to create a Cloudera Data Visualization (CDV) instance in the Cloudera Data Warehouse (CDW) data service and how to start the CDV application. You can use CDV with CDW either in CDP Public Cloud or with the CDP Private Cloud Data Service to explore the data stored in the database catalogs and use visualization to communicate insights across the whole data lifecycle.

About this task

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

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 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 CDV instance is not deleted.

Before you begin

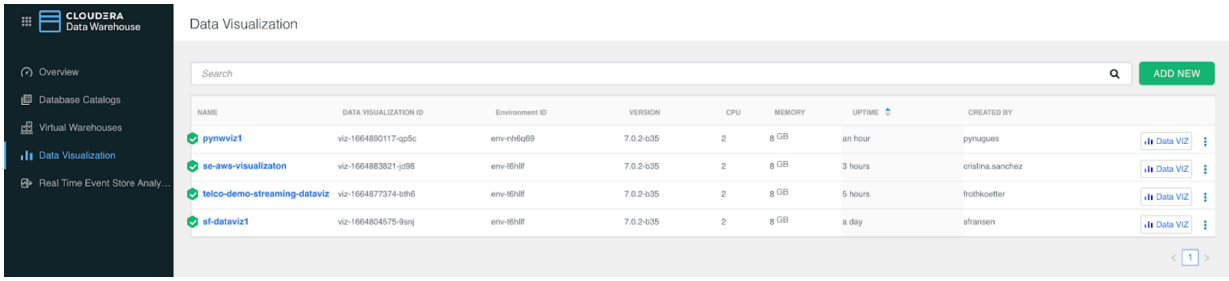
- You are logged into the CDP web interface and you have opened the Data Warehouse service
- You have DWAdmin role in CDW
- You have activated your environment
- You have a Hive/Impala warehouse in running state
- If you are using CDV in CDW Private Cloud: You have an admin group created in Management 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 CDV.

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:

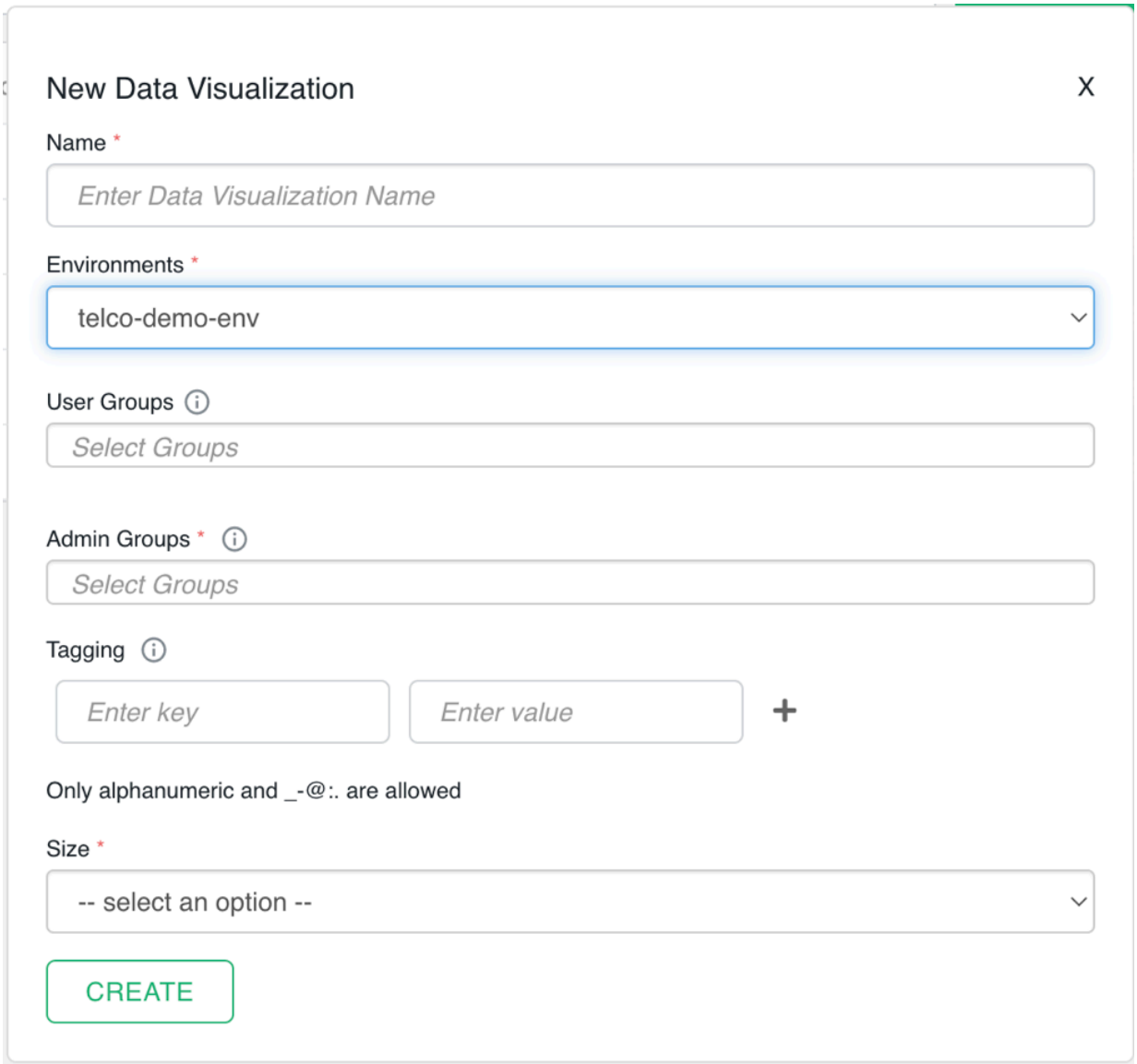
   Mandatory fields are marked with an asterisk.

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

      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.

      Note: This field is not available in CDW Private Cloud.

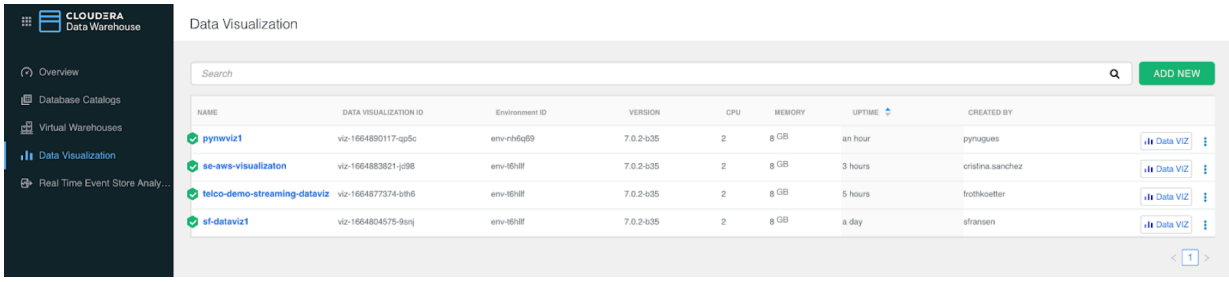
   f) Size* – Select the size of the compute instance from the drop-down menu.



4. Click CREATE.

   Instance creation starts. Wait until the CDV instance is in running state.

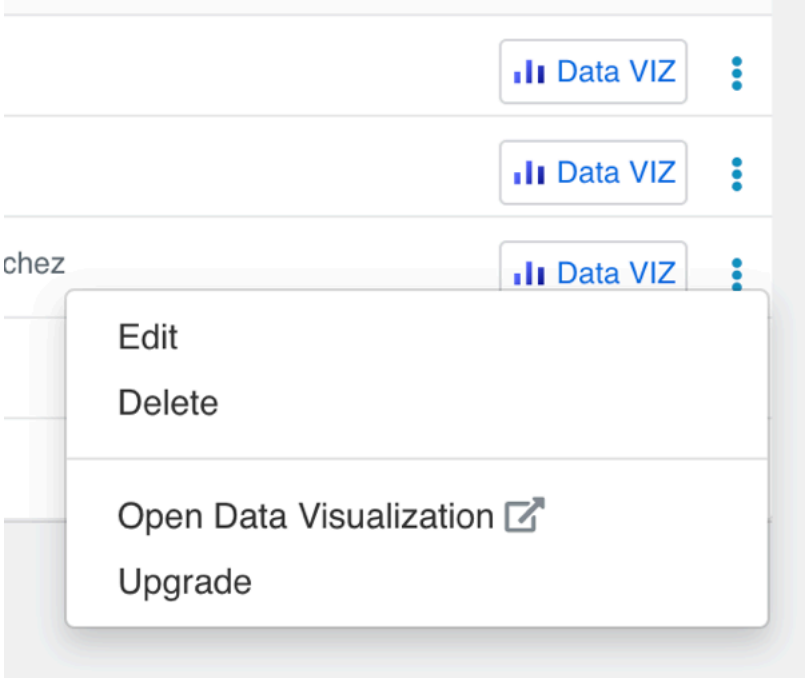
5. You can find the list of Data Visualization instances and environments appears under the Data Visualization menu that you can open from the left navigation panel.



6. Select one from the list of running CDV instances and 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.



SSO authentication is enabled by default both in Public Cloud and 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. Data Visualization opens in a new browser tab and you land on the 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 Data Visualization instances in CDW

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

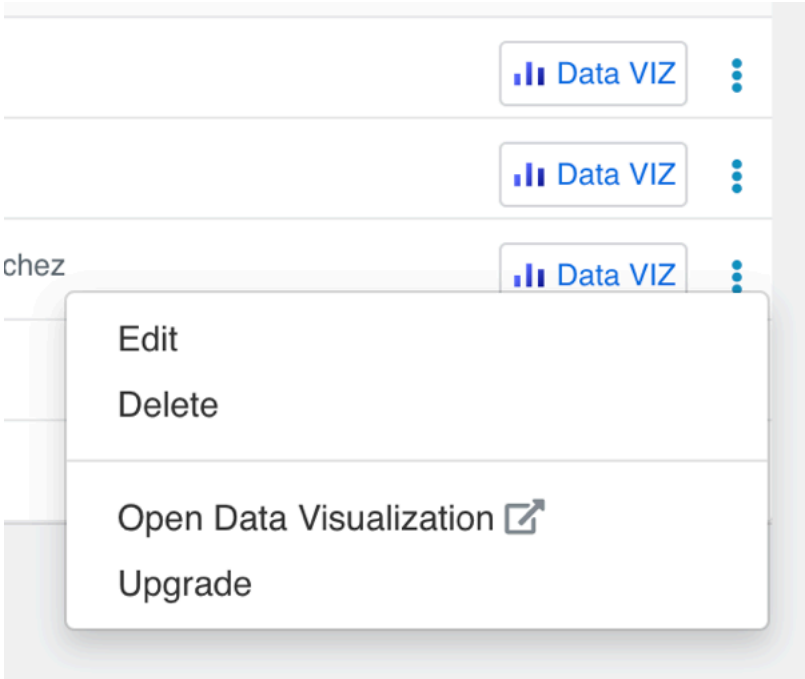
Before you begin

- You are logged into CDW
- You have DWAdmin role in CDW

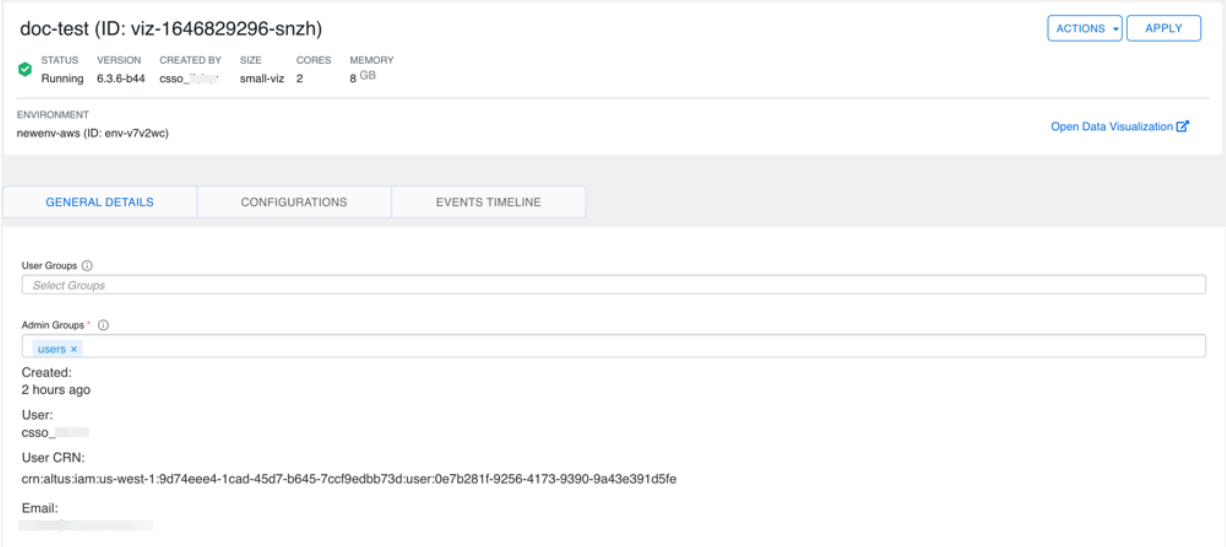
Procedure

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

   A list of available Data Visualization instances appears.
2. In one of the Data Visualization instance rows, click the launch/options menu (three dots).
3. To change instance details, click Edit.

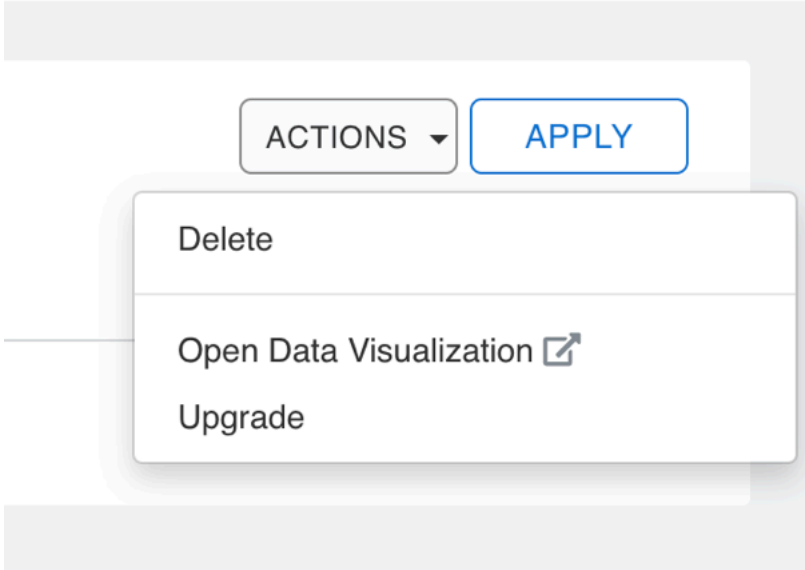


The instance overview page opens and you can make changes to general details and other properties.

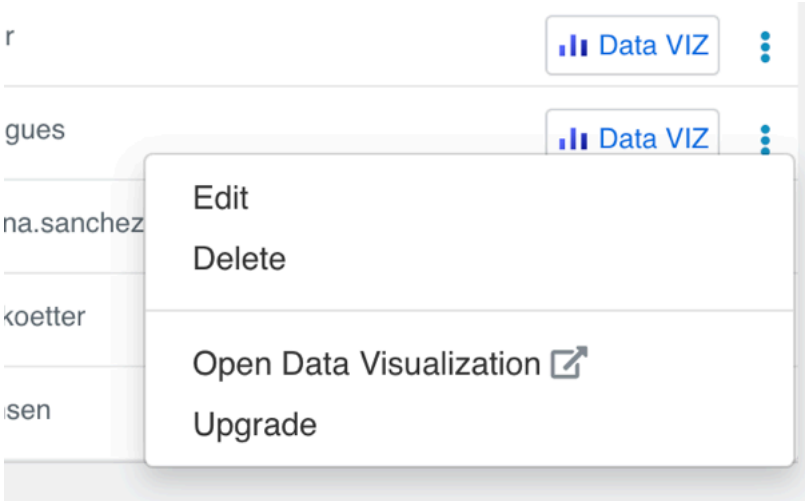


Click APPLY to save the changes.

4. 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 Data Visualization in CDW

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

About this task

CDV upgrades in CDW are centrally managed and can be initiated through the Management Console. This ensures a streamlined and controlled process for keeping your CDV 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 CDV version is not supported.

Before you begin

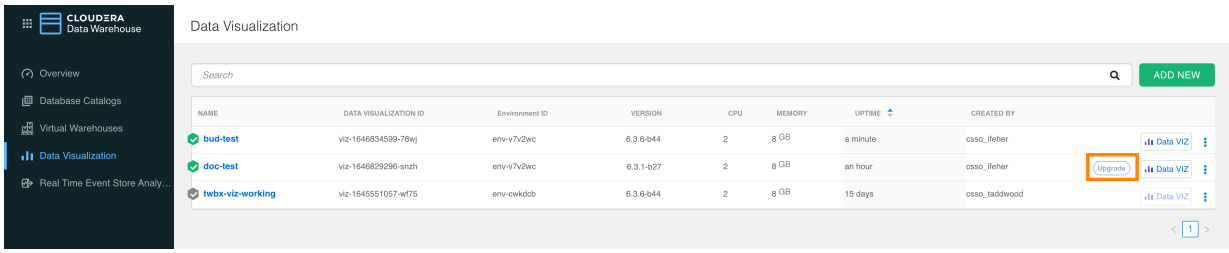
Ensure that:

- 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.



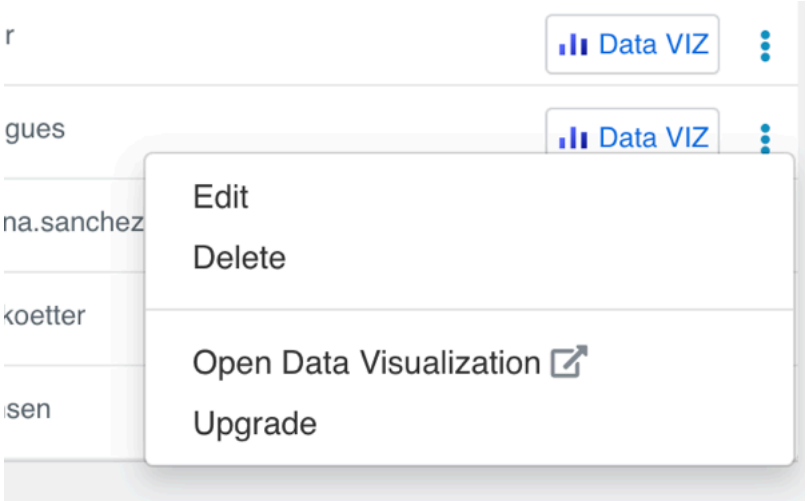
2. Find the instance from the list and click

to start the upgrade.

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

   Note: In CDP Private Cloud, the

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



Backing up and restoring Data Visualization applications in CDW

You can ensure the safety of your Data Visualization applications in Cloudera Data Warehouse (CDW) by implementing a proactive backup strategy. The CDW 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 CDW.

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 Data Visualization applications in an AWS environment in CDW.

For detailed instructions, see Backing up 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 Data Visualization instance.

In CDW, you can use the environment-level automated process to restore the environment, the deployed Database Catalog, Virtual Warehouse, and Data Visualization entities. If a Data Visualization deployment is not present on the cluster, but the backup file contains it, 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 Data Visualization automatic restoration.

For detailed instructions, see Restoring Data Visualization.