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## Connecting to Data

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# CLOUDERA

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# Connecting to a data source in CDP Data Visualization

Data Visualization allows you to create connections to many types of external data sources.

When using Data Visualization in CDP Public Cloud with Cloudera Data Warehouse (CDW), the data connection is automatically set up, but you can connect to other data sources as well. In Cloudera Machine Learning (CML), you can connect to an Impala or a Hive data warehouse, or tie in data from predictive CML models.

The supported connection types are:

- Impala
- Hive
- Druid
- SQLite
- MySQL
- MariaDB
- PostgreSQL

## Related Information

[Connections](#)

[Datasets](#)

[Data modeling](#)

## Creating a CML data connection to an Impala data warehouse

Learn how to connect natively to data stored in Impala when using CDP Data Visualization in Cloudera Machine Learning (CML).

### About this task

You must connect to your data prior to using the data modeling and visualization functions. The following steps show you how to create a new CML data connection to an Impala data warehouse.



#### Note:

Only users who have the Manage data connections privilege or administrators can create and manage connections in CDP Data Visualization.

You must be an administrator to be able to set privileges for a user. If you want to log in as an administrator, you can use the default admin account:

- username: vizapps\_admin
- password: vizapps\_admin

When you create a connection, you automatically have privileges to create and manage datasets on this connection, and to build dashboards and visuals in these datasets.

- For more information on the Manage data connections privilege, see *RBAC permissions*.
- For instructions on how to define privileges for a role, see *Setting role privileges*.
- For instructions on how to assign the administrator role to a user, see *Promoting a user to administrator*.

## Procedure

1. On the main navigation bar, click DATA.

The DATA interface appears, open on the Datasets tab.

The screenshot shows the Cloudera Data Visualization interface. The top navigation bar includes 'HOME', 'VISUALS', and 'DATA' (which is highlighted). Below the navigation bar, there are buttons for 'NEW CONNECTION', 'NEW DATASET', 'ADD DATA', and a search bar. The 'Datasets' tab is selected and highlighted with an orange box. The main content area displays a table of datasets with columns: Title/Table, ID, Created, Last Updated, Modified By, and # Visuals. The table lists various datasets such as 'Food Stores Inspection in NYC', 'Cereals', 'Earthquake Data January 2019', 'World Life Expectancy', 'US County Population', 'US State Populations Over Time', 'Global Information Security Threats', 'Restaurant Inspection SF', 'Iris', and 'NYC Taxicab Rides Detail'.

| Title/Table                                                                                 | ID | Created      | Last Updated | Modified By   | # Visuals |
|---------------------------------------------------------------------------------------------|----|--------------|--------------|---------------|-----------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 3         |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 4         |
| US County Population<br>main.us_counties                                                    | 8  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |
| US State Populations Over Time<br>main.census_pop                                           | 7  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Global Information Security Threats<br>main.infoseq_1559                                    | 6  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 5  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 4  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Iris<br>main.iris                                                                           | 3  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| NYC Taxicab Rides Detail                                                                    | 2  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |

2. In the Data side menu bar, click NEW CONNECTION.



**Note:** The NEW CONNECTION button is only accessible to users assigned to roles with Manage data connections privilege and to administrators.

The screenshot shows the Cloudera Data Visualization interface. The left sidebar has a 'NEW CONNECTION' button highlighted with an orange box. The main area displays a table of datasets.

| Title/Table                                                                                 | ID | Created      |
|---------------------------------------------------------------------------------------------|----|--------------|
| Test Dataset<br>main.census_pop                                                             | 13 | Dec 08, 2021 |
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 |

The Create New Data Connection modal window appears.

## Create New Data Connection

---

|                 |                               |
|-----------------|-------------------------------|
| Connection type | <div>Select an Option ▼</div> |
| Connection name | <div></div>                   |

---

Basic

Cache

---

|                        |                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Hostname or IP address | <div>Enter IP address of the server where your data resides<br/>(example: prod_db.yourcompany.com or 10.0.1.20)</div> |
| Port #                 | <div>0</div>                                                                                                          |
| Database               | <div></div>                                                                                                           |

---

Credentials

|          |             |
|----------|-------------|
| Username | <div></div> |
| Password | <div></div> |

---

TEST

CANCEL

CONNECT

3. Select the Impala Connection type from the drop-down list and enter the hostname or IP address of the running coordinator.

You can get the coordinator hostname from the JDBC URL of the Impala DW.

4. Enter 443 in the Port # field.
5. Enter your workload username and password as credentials.

6. Click the Advanced tab and make the selections below:

### Create New Data Connection

Connection type

Connection name

**Basic** Advanced Parameters Cache

Connection mode ☐ Binary ☒ HTTP

HTTP Path

Socket type ☐ Normal ☒ SSL ☐ SSL with certificate

Authentication mode ☐ NoSasl ☒ Plain ☐ LDAP ☐ Kerberos

Query Timeout

Session Timeout

Socket Timeout

Queue Depth

Impersonation ☐ Enabled

Trusted Impersonation ☐ Enabled

7. Locate the Impala Endpoint for the data hub.

| Event History Autoscale <u>Endpoints (3)</u> Tags (8) Hardware Network Telemetry Repository Details Image Details Recipes (0) |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Database Upgrade                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Name                                                                                                                          | URL                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CM-API                                                                                                                        | <a href="https://jingalls-test-dm-gateway.euph-aw.a465-9q4k.cloudera.site/jingalls-test-dm/cdp-proxy-api/cm-api/">https://jingalls-test-dm-gateway.euph-aw.a465-9q4k.cloudera.site/jingalls-test-dm/cdp-proxy-api/cm-api/</a>                                                                                                                |
| Impala                                                                                                                        | <a href="https://jingalls-test-dm-gateway.euph-aw.a465-9q4k.cloudera.site/jingalls-test-dm/cdp-proxy-api/impala/">https://jingalls-test-dm-gateway.euph-aw.a465-9q4k.cloudera.site/jingalls-test-dm/cdp-proxy-api/impala/</a>                                                                                                                |
| Impala                                                                                                                        | <a href="jdbc:impala://jingalls-test-dm-gateway.euph-aw.a465-9q4k.cloudera.site:443/;ssl=1;transportMode=http;httpPath=jingalls-test-dm/cdp-proxy-api/impala;AuthMech=3;">jdbc:impala://jingalls-test-dm-gateway.euph-aw.a465-9q4k.cloudera.site:443/;ssl=1;transportMode=http;httpPath=jingalls-test-dm/cdp-proxy-api/impala;AuthMech=3;</a>  |

8. Copy it and paste it into the HTTP Path field.

9. Click TEST to test the connection.

10. Click CONNECT to create the connection.

### Results

You have set up a connection to a running Impala DW.

### Related Information

[RBAC permissions](#)

[Setting role privileges](#)

[Promoting a user to administrator](#)

## Creating a CML data connection to a Hive data warehouse

Learn how to connect natively to data stored in Hive when using CDP Data Visualization in Cloudera Machine Learning (CML).

### About this task

You must connect to your data prior to using the data modeling and visualization functionalities. The following steps show you how to create a new CML data connection to a Hive data warehouse.



**Note:**

Only users who have the Manage data connections privilege or administrators can create and manage connections in CDP Data Visualization.

You must be an administrator to be able to set privileges for a user. If you want to log in as an administrator, you can use the default admin account:

- username: vizapps\_admin
- password: vizapps\_admin

When you create a connection, you automatically have privileges to create and manage datasets on this connection, and to build dashboards and visuals in these datasets.

- For more information on the Manage data connections privilege, see *RBAC permissions*.
- For instructions on how to define privileges for a role, see *Setting role privileges*.
- For instructions on how to assign the administrator role to a user, see *Promoting a user to administrator*.

## Procedure

1. On the main navigation bar, click DATA.

The DATA interface appears, open on the Datasets tab.

The screenshot shows the Cloudera Data Visualization interface. The top navigation bar includes 'HOME', 'VISUALS', and 'DATA' (which is highlighted). Below the navigation bar, there's a search bar and a 'NEW CONNECTION' button. The main content area is divided into two sections: 'All Connections' on the left and a list of datasets on the right. The 'Datasets' tab is selected and highlighted with an orange box. The dataset list table is as follows:

| Title/Table                                                                                 | ID | Created      | Last Updated | Modified By   | # Visuals |
|---------------------------------------------------------------------------------------------|----|--------------|--------------|---------------|-----------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 3         |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 4         |
| US County Population<br>main.us_counties                                                    | 8  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |
| US State Populations Over Time<br>main.census_pop                                           | 7  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Global Information Security Threats<br>main.infosec_1559                                    | 6  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 5  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 4  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Iris<br>main.iris                                                                           | 3  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| NYC Taxicab Rides Detail                                                                    | 2  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |

2. In the Data side menu bar, click NEW CONNECTION.



**Note:** The NEW CONNECTION button is only accessible to users assigned to roles with Manage data connections privilege and to administrators.

The screenshot shows the Cloudera Data Visualization interface. The left sidebar has a 'NEW CONNECTION' button highlighted with an orange box. The main area shows a table of datasets with columns 'Title/Table', 'ID', and 'Created'.

| Title/Table                                                                                 | ID | Created      |
|---------------------------------------------------------------------------------------------|----|--------------|
| Test Dataset<br>main.census_pop                                                             | 13 | Dec 08, 2021 |
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 |

The Create New Data Connection modal window appears.

## Create New Data Connection

---

|                 |                               |
|-----------------|-------------------------------|
| Connection type | <div>Select an Option ▼</div> |
| Connection name | <div></div>                   |

---

|       |       |
|-------|-------|
| Basic | Cache |
|-------|-------|

---

|                        |                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Hostname or IP address | <div>Enter IP address of the server where your data resides<br/>(example: prod_db.yourcompany.com or 10.0.1.20)</div> |
| Port #                 | <div>0</div>                                                                                                          |
| Database               | <div></div>                                                                                                           |

---

Credentials

|          |             |
|----------|-------------|
| Username | <div></div> |
| Password | <div></div> |

---

|      |        |         |
|------|--------|---------|
| TEST | CANCEL | CONNECT |
|------|--------|---------|

3. Select the Hive Connection type from the drop-down list and enter the hostname or IP address of the running coordinator.

You can get the coordinator hostname from the JDBC URL of the Hive DW.

4. Use port 443.

5. Click the Advanced tab and make the selections below:

### Create New Data Connection

---

|                 |                 |
|-----------------|-----------------|
| Connection type | Hive            |
| Connection name | HiveConnenction |

---

**Basic**   Advanced   Parameters   Cache

---

|                       |                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Connection mode       | <input type="radio"/> Binary <input checked="" type="radio"/> HTTP                                                            |
| HTTP Path             | SQL path (default cliservice)                                                                                                 |
| Access Token          | Access token (optional)                                                                                                       |
| Socket type           | <input type="radio"/> Normal <input checked="" type="radio"/> SSL <input type="radio"/> SSL with certificate                  |
| Authentication mode   | <input type="radio"/> NoSasl <input checked="" type="radio"/> Plain <input type="radio"/> LDAP <input type="radio"/> Kerberos |
| Query Timeout         | 60                                                                                                                            |
| Session Timeout       | 60                                                                                                                            |
| Socket Timeout        | 60                                                                                                                            |
| Queue Depth           |                                                                                                                               |
| Impersonation         | <input type="checkbox"/> Enabled                                                                                              |
| Trusted Impersonation | <input type="checkbox"/> Enabled                                                                                              |

---

TEST

CANCEL

CONNECT

- Click the Parameters tab and set the `hive.server2.async.exec.async.compile` parameter to false.

### Create New Data Connection

Connection type

Hive

Connection name

HiveConnention

Basic

Advanced

Parameters

Cache

| Parameter Name                                     | Parameter Value |                                                                                     |
|----------------------------------------------------|-----------------|-------------------------------------------------------------------------------------|
| <code>hive.server2.async.exec.async.compile</code> | false           |  |
| Add new row                                        |                 |                                                                                     |

TEST

CANCEL

CONNECT

- Use your workload username and password as credentials.

- Click TEST and then CONNECT to create the connection.

#### Results

You have set up a connection to a running Hive DW.

#### Related Information

[RBAC permissions](#)

[Setting role privileges](#)

[Promoting a user to administrator](#)

## Creating a CDW data connection in Data Visualization

Learn how to connect to data when using CDP Data Visualization in Cloudera Data Warehouse (CDW) data service. You can connect Data Visualization to a Virtual Warehouse to visualize your data. Similar to using a BI client, you can configure and connect to Virtual Warehouses from different clusters.

#### About this task

You must connect to your data prior to using the data modeling and visualization functions. You make the connection to the Virtual Warehouse when you select your warehouse in the steps below. The CDW Warehouse URL has the same compute instance ID as your Virtual Warehouse.

**Note:**

Only users who have the Manage data connections privilege or administrators can create and manage connections in CDP Data Visualization. In CDW, these are the members of the Admin Groups associated with the CDV instance.

When you create a connection, you automatically have privileges to create and manage datasets on this connection, and to build dashboards and visuals in these datasets.

- For more information on the Manage data connections privilege, see *RBAC permissions*.
- For instructions on how to define privileges for a role, see *Setting role privileges*.
- For instructions on how to assign the administrator role to a user, see *Promoting a user to administrator*.

When you are creating a Hive or Impala data connection within the same cluster, the connection is considered secure and trusted, and the connection details can be auto populated with a default authentication user.

**Procedure**

1. Start Data Visualization from the left navigation panel.
2. On the main navigation bar, click DATA.

The DATA interface appears, open on the Datasets tab.

| Title/Table                                                                                 | ID | Created      | Last Updated | Modified By   | # Visuals |
|---------------------------------------------------------------------------------------------|----|--------------|--------------|---------------|-----------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 3         |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 4         |
| US County Population<br>main.us_counties                                                    | 8  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |
| US State Populations Over Time<br>main.census_pop                                           | 7  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Global Information Security Threats<br>main.infoseq_1559                                    | 6  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 5  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 4  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Iris<br>main.iris                                                                           | 3  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| NYC Taxicab Rides Detail                                                                    | 2  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |

3. In the Data side menu bar, click NEW CONNECTION.



**Note:** The NEW CONNECTION button is only accessible to users assigned to roles with Manage data connections privilege and to administrators.

The screenshot shows the Cloudera Data Visualization interface. In the left sidebar, the 'NEW CONNECTION' button is highlighted with an orange box. The main area displays a table of datasets.

| Title/Table                                                                                 | ID | Created      |
|---------------------------------------------------------------------------------------------|----|--------------|
| Test Dataset<br>main.census_pop                                                             | 13 | Dec 08, 2021 |
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 |

The **Create New Data Connection** modal window appears.

The 'Create New Data Connection' modal window is shown. It has tabs for 'Basic', 'Advanced', 'Parameters', and 'Data'. The 'Basic' tab is selected.

Fields in the 'Basic' tab:

- Connection type: CDW Impala
- Connection name: khahn-connection
- CDW Warehouse: impala-1629029940-xx6t
- Hostname or IP address: coordinator.impala-1629029940-xx6t.svc.cluster.local (example: prod\_db.yourcompany.com or 10.0.1.20)
- Port #: 28000

4. In Connection type, select CDW Hive or CDW Impala.
5. Provide a name for the connection.

6. Select a CDW Warehouse to connect to.

**For Data connection within the same cluster**

The following fields are auto populated:

- Hostname or IP address
- Port #
- Username

**For Data connection outside the cluster**

Enter the following information:

- Hostname or IP address
- Port #
- Username
- Password

7. Click the Advanced tab and make the appropriate selections.



**Important:** Depending on the type of connection you are creating, there can be additional tabs in the Create New Data Connection modal window where you have to adjust further settings.

The selections below are correct for the Cloudera iedh system.

## Create New Data Connection

|                 |                  |
|-----------------|------------------|
| Connection type | Impala           |
| Connection name | ImpalaConnection |

---

Basic

Advanced

Parameters

Cache

---

|                       |                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Connection mode       | <input type="radio"/> Binary <input checked="" type="radio"/> HTTP                                                            |
| HTTP Path             | SQL path (default cliservice)                                                                                                 |
| Socket type           | <input type="radio"/> Normal <input checked="" type="radio"/> SSL <input type="radio"/> SSL with certificate                  |
| Authentication mode   | <input type="radio"/> NoSasl <input type="radio"/> Plain <input type="radio"/> LDAP <input checked="" type="radio"/> Kerberos |
| Kerberos service name | Kerberos service name                                                                                                         |
| Query Timeout         | 60                                                                                                                            |
| Session Timeout       | 60                                                                                                                            |
| Socket Timeout        | 60                                                                                                                            |
| Queue Depth           |                                                                                                                               |
| Impersonation         | <input type="checkbox"/> Enabled                                                                                              |
| Trusted Impersonation | <input type="checkbox"/> Enabled                                                                                              |

---

TEST

CANCEL

CONNECT

8. Click TEST.

If the connection is valid, the system returns a Connection Verified message.

9. Click CONNECT.

**What to do next**

You can create a data set, and then start creating visuals, dashboards, and applications. For more information, see *Creating datasets* and *Creating a visual*.

**Related Information**

[RBAC permissions](#)

[Setting role privileges](#)

[Promoting a user to administrator](#)

[Creating datasets](#)

[Creating a visual](#)

## Creating a CDSW data connection to a data warehouse

Learn how to connect natively to data stored in a data warehouse when using CDP Data Visualization in Cloudera Data Science Workbench (CDSW).

**About this task**

You must connect to your data prior to using the data modeling and visualization functionalities. The following steps show you how to create a new CDSW data connection to a running Impala system.



**Note:**

Only users who have the Manage data connections privilege or administrators can create and manage connections in CDP Data Visualization. You must be an administrator to be able to set privileges for a user. If you want to log in as an administrator, you can use the default admin account:

- username: vizapps\_admin
- password: vizapps\_admin

When you create a connection, you automatically have privileges to create and manage datasets on this connection, and to build dashboards and visuals in these datasets.

- For more information on the Manage data connections privilege, see *RBAC permissions*.
- For instructions on how to define privileges for a role, see *Setting role privileges*.
- For instructions on how to assign the administrator role to a user, see *Promoting a user to administrator*.

## Procedure

1. On the main navigation bar, click DATA.

The DATA interface appears, open on the Datasets tab.

The screenshot shows the Cloudera Data Visualization interface. The top navigation bar has 'HOME', 'VISUALS', and 'DATA' (highlighted). Below the navigation bar, there are buttons for 'NEW CONNECTION', 'NEW DATASET', and 'ADD DATA'. The 'Datasets' tab is selected, showing a list of datasets. The datasets are listed in a table with columns: Title/Table, Created, Last Updated, Modified By, and # Visuals.

| Title/Table                                                                                 | Created      | Last Updated | Modified By   | # Visuals |
|---------------------------------------------------------------------------------------------|--------------|--------------|---------------|-----------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | Oct 14, 2020 | 13 days ago  | vizapps_admin | 3         |
| Cereals<br>main.cereals                                                                     | Oct 14, 2020 | 13 days ago  | vizapps_admin | 3         |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | Oct 14, 2020 | 13 days ago  | vizapps_admin | 1         |
| World Life Expectancy<br>main.world_life_expectancy                                         | Oct 14, 2020 | 13 days ago  | vizapps_admin | 3         |
| US State Populations Over Time<br>main.census_pop                                           | Oct 14, 2020 | 13 days ago  | vizapps_admin | 2         |
| US County Population<br>main.us_counties                                                    | Oct 14, 2020 | 13 days ago  | vizapps_admin | 0         |
| Global Information Security Threats<br>main.infoseq_1559                                    | Oct 14, 2020 | 13 days ago  | vizapps_admin | 2         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | Oct 14, 2020 | 13 days ago  | vizapps_admin | 2         |
| Iris<br>main.iris                                                                           | Oct 14, 2020 | 13 days ago  | vizapps_admin | 1         |
| NYC Taxicab Rides Detail<br>main.trips_detail                                               | Oct 14, 2020 | 13 days ago  | vizapps_admin | 0         |

2. In the Data side menu bar, click NEW CONNECTION.



**Note:** The NEW CONNECTION button is only accessible to users assigned to roles with Manage data connections privilege and to administrators.

The screenshot shows the Cloudera Data Visualization interface. The left sidebar has a 'NEW CONNECTION' button highlighted with an orange box. The main area displays a table of datasets.

| Title/Table                                                                                 | ID | Created      |
|---------------------------------------------------------------------------------------------|----|--------------|
| Test Dataset<br>main.census_pop                                                             | 13 | Dec 08, 2021 |
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 |

The Create New Data Connection modal window appears.

## Create New Data Connection

---

|                 |                               |
|-----------------|-------------------------------|
| Connection type | <div>Select an Option ▼</div> |
| Connection name | <div></div>                   |

---

Basic

Cache

---

|                        |                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Hostname or IP address | <div>Enter IP address of the server where your data resides<br/>(example: prod_db.yourcompany.com or 10.0.1.20)</div> |
| Port #                 | <div>0</div>                                                                                                          |
| Database               | <div></div>                                                                                                           |

---

Credentials

|          |             |
|----------|-------------|
| Username | <div></div> |
| Password | <div></div> |

---

TEST

CANCEL

CONNECT

3. Select a Connection type from the drop-down list.
4. Provide a name for the connection.
5. Enter the hostname or IP address of the running coordinator.

In this example, you can see to create an Impala connection. You can get the coordinator hostname from the JDBC URL of the Impala DW.

6. Under Port #, enter the port number.
7. Use your workload username and password as credentials.

8. Click the Advanced tab and make the appropriate selections.



**Important:** Depending on the type of connection you are creating, there can be additional tabs in the Create New Data Connection modal window where you have to adjust further settings.

## Create New Data Connection

|                 |                  |
|-----------------|------------------|
| Connection type | Impala           |
| Connection name | ImpalaConnection |

---

Basic

Advanced

Parameters

Cache

---

|                       |                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Connection mode       | <input type="radio"/> Binary <input checked="" type="radio"/> HTTP                                                            |
| HTTP Path             | SQL path (default cliservice)                                                                                                 |
| Socket type           | <input type="radio"/> Normal <input checked="" type="radio"/> SSL <input type="radio"/> SSL with certificate                  |
| Authentication mode   | <input type="radio"/> NoSasl <input type="radio"/> Plain <input type="radio"/> LDAP <input checked="" type="radio"/> Kerberos |
| Kerberos service name | Kerberos service name                                                                                                         |
| Query Timeout         | 60                                                                                                                            |
| Session Timeout       | 60                                                                                                                            |
| Socket Timeout        | 60                                                                                                                            |
| Queue Depth           |                                                                                                                               |
| Impersonation         | <input type="checkbox"/> Enabled                                                                                              |
| Trusted Impersonation | <input type="checkbox"/> Enabled                                                                                              |

---

TEST

CANCEL

CONNECT

9. Click TEST.

If the connection is valid, the system returns a Connection Verified message.

10. Click CONNECT.

## Results

You have set up a connection to a running data warehouse.

## Related Information

[RBAC permissions](#)

[Setting role privileges](#)

[Promoting a user to administrator](#)

# Editing a data connection

Learn how to edit a data connection in CDP Data Visualization.

## About this task

The following steps demonstrate how to edit existing data connections. The example shows changing an Impala connection to a Hive connection.

## Procedure

1. On the main navigation bar, click DATA.

The Data view appears, open on the Datasets tab.

| Title/Table                                                                                 | ID | Created      | Last Updated | Modified By   | # Visuals |
|---------------------------------------------------------------------------------------------|----|--------------|--------------|---------------|-----------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 3         |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 4         |
| US County Population<br>main.us_counties                                                    | 8  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |
| US State Populations Over Time<br>main.census_pop                                           | 7  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Global Information Security Threats<br>main.infosec_1559                                    | 6  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 5  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 4  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Iris<br>main.iris                                                                           | 3  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| NYC Taxicab Rides Detail                                                                    | 2  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |

2. In the side bar, click the Edit button to the right of the connection you want to change.

The Edit Data Connection modal window appears.

3. Edit the connection details according to the connection type change you want to implement.

In this example, an Impala connection is changed to a Hive connection.

## Edit Data Connection

|                 |                  |
|-----------------|------------------|
| Connection type | Impala           |
| Connection name | ImpalaConnection |

Basic

Advanced

Parameters

Cache

|                        |                                                                            |
|------------------------|----------------------------------------------------------------------------|
| Hostname or IP address | 10.02.40<br><small>(example: prod_db.yourcompany.com or 10.0.1.20)</small> |
| Port #                 | 21050                                                                      |

Credentials

|          |       |
|----------|-------|
| Username | admin |
| Password | ..... |

TEST

CANCEL

DELETE CONNECTION

SAVE

## Edit Data Connection

Connection type

Hive

Connection name

HiveConnection

Basic

Advanced

Parameters

Cache

Hostname or IP address

20.01.20

(example: prod\_db.yourcompany.com or 10.0.1.20)

Port #

10000

Credentials

Username

admin

Password

.....

TEST

CANCEL

DELETE CONNECTION

SAVE

Connection Verified!

×

TEST

CANCEL

DELETE CONNECTION

SAVE

- At the bottom of the modal, click TEST.
- If the connection is verified, click SAVE.

**Results**

After this operation succeeds, the name of the new type of connection appears on the side navigation bar.

# Deleting a data connection

Learn how you can remove a data connection in CDP Data Visualization.

## About this task

The following steps show you how to delete an existing data connection.



**Tip:** You can only delete connections that are not associated with any datasets. To learn how to delete datasets, see *Deleting datasets*.

## Procedure

1. On the main navigation bar, click DATA.

The Data view appears, open on the Datasets tab.

| Title/Table                                                                                 | ID | Created      | Last Updated | Modified By   | # Visuals |
|---------------------------------------------------------------------------------------------|----|--------------|--------------|---------------|-----------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 3         |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 4         |
| US County Population<br>main.us_counties                                                    | 8  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |
| US State Populations Over Time<br>main.census_pop                                           | 7  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Global Information Security Threats<br>main.infoseq_1559                                    | 6  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 5  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 4  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Iris<br>main.iris                                                                           | 3  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| NYC Taxicab Rides Detail                                                                    | 2  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |

2. In the side bar, click the Edit Connection (pencil) button to the right of the connection you want to delete.

The Edit Data Connection modal window appears.

3. At the bottom of Edit Data Connection modal window, click DELETE CONNECTION.

### Edit Data Connection

---

Connection type

Connection name

---

Basic [Advanced](#) [Parameters](#) [Cache](#)

---

Hostname or IP address   
(example: prod\_db.yourcompany.com or 10.0.1.20)

Port #

---

Credentials

Username

Password

---

#### Results

After this operation succeeds, the connection is deleted and its name no longer appears on the side navigation bar.

#### Related Information

[Deleting datasets](#)

## Using the Connection Explorer

CDP Data Visualization enables you to view existing data connections and all data tables accessible through them. In the Connection Explorer interface, you can create new connections to data sources, preview that data, create new

datasets, navigate to these datasets, import supplemental data, and locate existing dashboards and visuals based on specific datasets.

## Discovering the Connection Explorer interface

Learn how you can navigate to the Connection Explorer interface and use it to connect to data in CDP Data Visualization.

### Procedure

1. On the main navigation bar, click DATA.

The Data view appears, open on the Datasets tab. The Datasets tab lists all existing datasets on the connection.

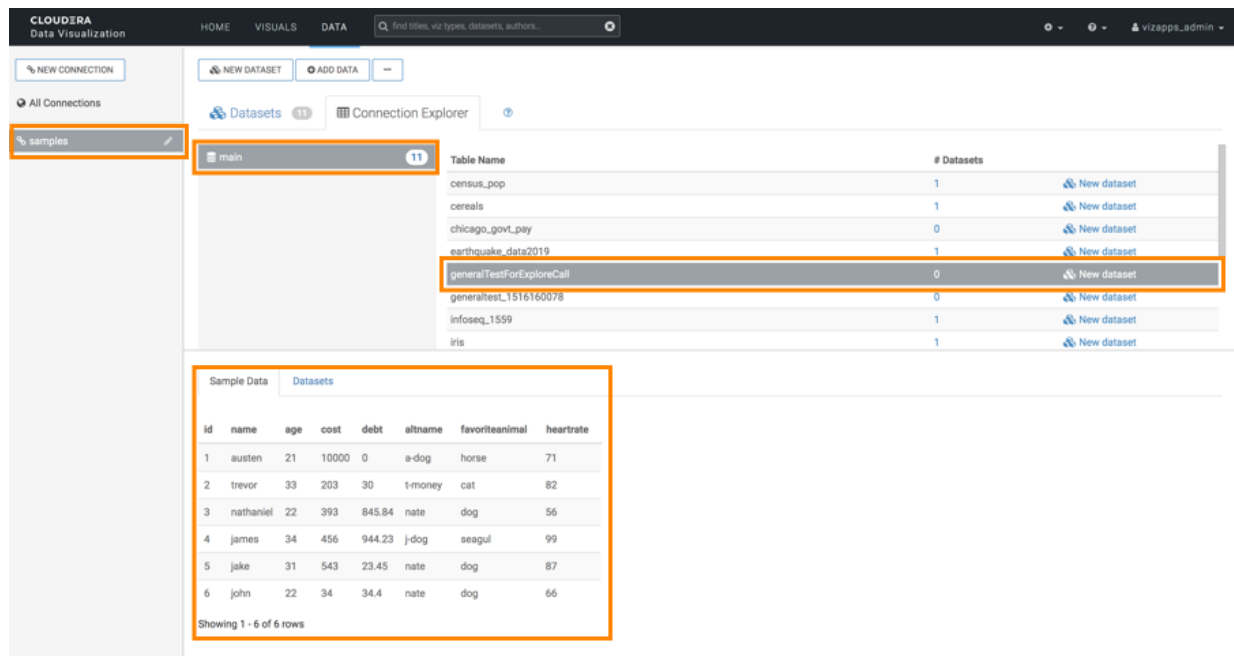
| Title/Table                                                                                 | ID | Created      | Last Updated | Modified By   | # Visuals |
|---------------------------------------------------------------------------------------------|----|--------------|--------------|---------------|-----------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 3         |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 4         |
| US County Population<br>main.us_counties                                                    | 8  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |
| US State Populations Over Time<br>main.census_pop                                           | 7  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Global Information Security Threats<br>main.infosec_1559                                    | 6  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 2         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 5  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | 4  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| Iris<br>main.iris                                                                           | 3  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 1         |
| NYC Taxicab Rides Detail                                                                    | 2  | Nov 22, 2021 | 16 days ago  | vizapps_admin | 0         |

2. In the main area, click the Connection Explorer tab.

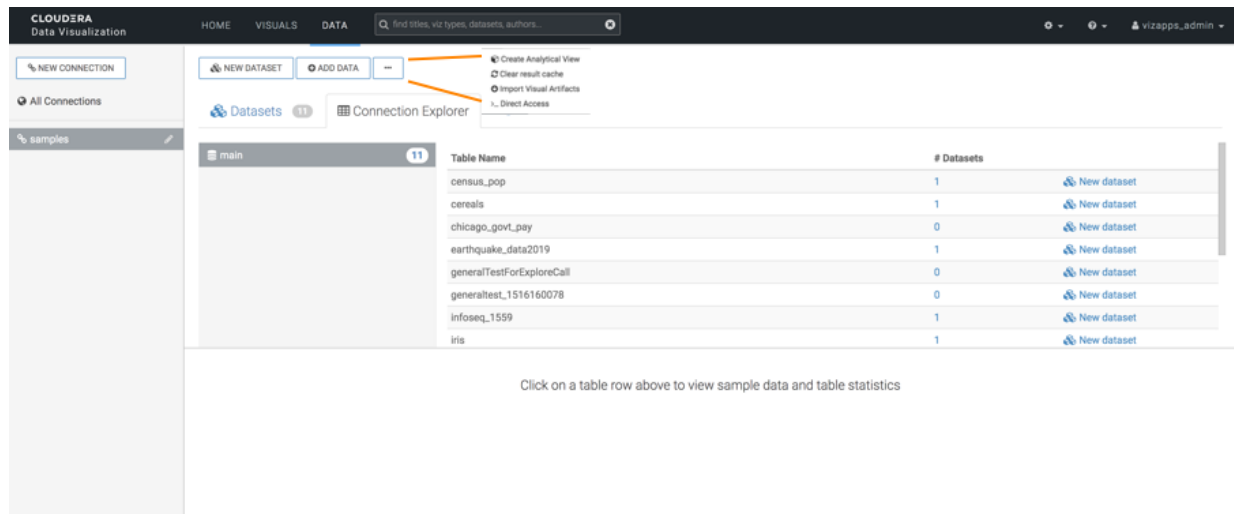
| Title/Table                                                                                 | ID | Created      |
|---------------------------------------------------------------------------------------------|----|--------------|
| Test Dataset<br>main.census_pop                                                             | 13 | Dec 08, 2021 |
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | 12 | Nov 22, 2021 |
| Cereals<br>main.cereals                                                                     | 11 | Nov 22, 2021 |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | 10 | Nov 22, 2021 |
| World Life Expectancy<br>main.world_life_expectancy                                         | 9  | Nov 22, 2021 |

The Connection Explorer interface appears. The Connection Explorer tab (current) enables you to explore the databases and tables available on the connection, and to manage all functions related to the data on the connection.

In this view, you can click a connection in left navigation that you want to explore and select a database. You can also select a specific table from that database, and explore its details.



The Connection Explorer interface contains the following items:



- New Connection is for connecting to any source of data.
- New Dataset is for creating datasets, which are necessary for developing dashboards and visuals. You can also use start a new dataset from a specified table.
- For SQLite connections, the Add Data option enables you to introduce data that enriches your datasets from outside sources.
- The Supplemental menu, under the (ellipsis) icon, opens new options.
  - For Impala connections, clicking the Clear result cache option under the supplemental menu reloads the full table definition.
  - Import Visual Artifacts option under the supplemental menu enables you to restore or import visual artifacts from a backup \*.json file.
  - Direct Access enables you to access data directly by running SQL queries. You can build datasets from specific SQL queries, as opposed to starting with an existing table.

- e.
- f.
- g. The databases area of the screen shows all databases that you can access through the current connection. In our example, there is one called main (selected). Selecting a database shows its tables.
- h. In the list of tables, the # Datasets column lists the number of datasets that use the particular table as their initial definition.
- i. New Dataset is for creating a dataset on a specific table.

## Previewing data table details

Learn how you can preview table details directly in the Connection Explorer interface.

To see more information about data tables in the Connection Explorer, click the row of a table. When you click a row, two tabs, Sample Data and Datasets appear below the list of tables.

## Sample data

When you click a table, you can preview the table data in the Sample Data view.

The screenshot shows the Cloudiera Data Visualization interface. The 'main' database is selected in the Connection Explorer. A list of tables is shown with the following data:

| Table Name                | # Datasets |
|---------------------------|------------|
| census_pop                | 1          |
| cereals                   | 1          |
| chicago_govt_pay          | 0          |
| earthquake_data2019       | 1          |
| generalTestForExploreCall | 0          |
| generalTest_1516160078    | 0          |
| infoseq_1559              | 1          |
| iris                      | 1          |

The 'Sample Data' view for the selected table shows the following data:

| id | name      | age | cost  | debt   | alname  | favoriteanimal | heartrate |
|----|-----------|-----|-------|--------|---------|----------------|-----------|
| 1  | austen    | 21  | 10000 | 0      | a-dog   | horse          | 71        |
| 2  | trevor    | 33  | 203   | 30     | t-money | cat            | 82        |
| 3  | nathaniel | 22  | 393   | 845.84 | nate    | dog            | 56        |
| 4  | james     | 34  | 456   | 944.23 | j-dog   | seagul         | 99        |
| 5  | jake      | 31  | 543   | 23.45  | nate    | dog            | 87        |
| 6  | john      | 22  | 34    | 34.4   | nate    | dog            | 66        |

Showing 1 - 6 of 6 rows

## Datasets

When you click a table, you can check the following data in the Datasets view:

- Title/Table
- Created date
- Last Updated date
- Modified by username
- # Visuals for a link to the dashboards and visuals based on the dataset.

You can also perform the following actions:

- Navigate directly to the dataset interface, where you can rename the dataset, modify fields and other parameters, create joins, and so on.
- Start a new dashboard based on the dataset.

- Order datasets based on any of the table columns.
- Delete datasets.

The screenshot shows the CLOUDERA Data Visualization interface. The top navigation bar includes 'HOME', 'VISUALS', and 'DATA'. The 'DATA' tab is active, showing a search bar and a 'NEW DATASET' button. On the left, there's a sidebar with 'NEW CONNECTION' and 'All Connections'. The main area displays a list of datasets under the 'main' connection. A table lists dataset names, the number of datasets, and a 'New dataset' button. Below this, a 'Sample Data' table is highlighted with an orange border, showing details for 'Earthquake Data January 2019'.

| Table Name                | # Datasets |             |
|---------------------------|------------|-------------|
| census_pop                | 1          | New dataset |
| cereals                   | 1          | New dataset |
| chicago_govt_pay          | 0          | New dataset |
| earthquake_data2019       | 1          | New dataset |
| generalTestForExploreCall | 0          | New dataset |
| generaltest_1516160078    | 0          | New dataset |
| infoseq_1559              | 1          | New dataset |
| iris                      | 1          | New dataset |

| Title/Table                                              | Created      | Last Updated | Modified By   | # Visuals |
|----------------------------------------------------------|--------------|--------------|---------------|-----------|
| Earthquake Data January 2019<br>main.earthquake_data2019 | Oct 14, 2020 | 13 days ago  | vizapps_admin | 1         |

## Using the Direct Access interface

The Direct Access interface of CDP Data Visualization enables you to run SQL queries on data connections directly on the DATA page. You can quickly examine the structure of tables that are available on the connection, build a query using standard SQL syntax, preview its results, and then create a dataset on the query. You can also download the data, if needed.

## Running a SQL query in Direct Access

Learn how you can run a SQL query in the Direct Access interface of CDP Data Visualization.

## Procedure

1. On the main navigation bar, click DATA.

The DATA view appears, open on the Datasets tab.

| Title/Table                                                                                 | Created      | Last Updated | Modified By   | # Visuals |
|---------------------------------------------------------------------------------------------|--------------|--------------|---------------|-----------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | Oct 14, 2020 | 13 days ago  | vizapps_admin | 3         |
| Cereals<br>main.cereals                                                                     | Oct 14, 2020 | 13 days ago  | vizapps_admin | 3         |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | Oct 14, 2020 | 13 days ago  | vizapps_admin | 1         |
| World Life Expectancy<br>main.world_life_expectancy                                         | Oct 14, 2020 | 13 days ago  | vizapps_admin | 3         |
| US State Populations Over Time<br>main.census_pop                                           | Oct 14, 2020 | 13 days ago  | vizapps_admin | 2         |
| US County Population<br>main.us_counties                                                    | Oct 14, 2020 | 13 days ago  | vizapps_admin | 0         |
| Global Information Security Threats<br>main.infoseq_1559                                    | Oct 14, 2020 | 13 days ago  | vizapps_admin | 2         |
| Restaurant Inspection SF<br>main.restaurant_scores_lives_standard                           | Oct 14, 2020 | 13 days ago  | vizapps_admin | 2         |
| Iris<br>main.iris                                                                           | Oct 14, 2020 | 13 days ago  | vizapps_admin | 1         |
| NYC Taxicab Rides Detail<br>main.trips_detail                                               | Oct 14, 2020 | 13 days ago  | vizapps_admin | 0         |

2. Open the Supplemental menu ( ellipsis icon) and click >\_ Direct Access.

| Title/Table                                                                                 | Created      | Last Updated |
|---------------------------------------------------------------------------------------------|--------------|--------------|
| Food Stores Inspection in NYC<br>main.retail_food_store_inspections_current_critical_vio... | Oct 14, 2020 | 13 days ago  |
| Cereals<br>main.cereals                                                                     | Oct 14, 2020 | 13 days ago  |
| Earthquake Data January 2019<br>main.earthquake_data2019                                    | Oct 14, 2020 | 13 days ago  |

The Direct Access interface appears, where you can select the database you want to access.

### 3. Add your SQL data query to the Enter SQL below code-enabled text box.

The Autocomplete option is on by default. It validates the syntax of the SQL query you enter.

If you want to limit the number of, you have two options:

- You can add a limit clause in the SQL query syntax.
- You can mark the Add in a "LIMIT 100" clause to any SQL select query that does not have a limit clause option. This limitation is on by default. If you set a record limit in the SQL query, it will override this default option, even if it is checked.

Data Connection: samples

Database: main

Tables: restaurant\_scores\_lives..., retail\_food\_store\_inspe..., superstore\_sales, trips, trips\_detail, us\_counties, world\_life\_expectancy

Enter SQL below

```
select * from main.us_counties
```

☒ Autocomplete on

☒ Add in a "LIMIT 100" clause to any SQL select query that does not have a limit clause

Enter email address here

### 4. Click RUN to execute the SQL query.

After the query executes, the results area shows the query results.

In this example, the following query has been run: `select * from main.us_counties limit 5`

Data Connection: samples

Database: main

Tables: restaurant\_scores\_lives..., retail\_food\_store\_inspe..., superstore\_sales, trips, trips\_detail, us\_counties, world\_life\_expectancy

Enter SQL below

```
select * from main.us_counties limit 5
```

☒ Autocomplete on

☒ Add in a "LIMIT 100" clause to any SQL select query that does not have a limit clause

Enter email address here

Number of rows in CSV:

☒ select \* from main.us\_counties limit 5

| sumlev | state | county | stname   | ctyname               | year | agegrp | tot_pop | tot_male | tot_female | wa_male | wa_female | ba_male | ba_female | ia_male | ia_female | aa_male |
|--------|-------|--------|----------|-----------------------|------|--------|---------|----------|------------|---------|-----------|---------|-----------|---------|-----------|---------|
| 50     | 51    | 149    | Virginia | Prince George County  | 5    | 0      | 36941   | 20368    | 16573      | 12155   | 10721     | 7230    | 4763      | 171     | 98        | 254     |
| 50     | 51    | 153    | Virginia | Prince William County | 5    | 0      | 430289  | 213820   | 216469     | 141918  | 138857    | 44291   | 47256     | 2453    | 2331      | 16249   |
| 50     | 51    | 155    | Virginia | Pulaski County        | 5    | 0      | 34736   | 17284    | 17452      | 15915   | 16222     | 959     | 866       | 35      | 37        | 93      |
| 50     | 51    | 157    | Virginia | Rappahannock County   | 5    | 0      | 7456    | 3694     | 3762       | 3420    | 3496      | 181     | 171       | 5       | 13        | 19      |
| 50     | 51    | 159    | Virginia | Richmond County       | 5    | 0      | 9059    | 5066     | 3993       | 3138    | 2925      | 1799    | 961       | 24      | 15        | 31      |

Showing 1 - 5 of 5 rows



**Note:** If there is a error in the query the line number with the error will be displayed if the database returns it.

## Downloading the results of a Direct Access query

After obtaining query results in the Direct Access interface, you can download the records in CSV format.

You can download the results in CSV format, by clicking **DOWNLOAD CSV**. The system saves the CSV file to your default download directory.

If you only want to download a subset of the query results, you can specify the Number of rows in CSV. This will limit the number of records in the CSV file.

Data Connection: samples

Database: main

Enter SQL below

```
select * from main.us_counties limit 5
```

☒ Autocomplete on

☒ Add in a "LIMIT 100" clause to any SQL select query that does not have a limit clause

☒ select \* from main.us\_counties limit 5

| sumlev | state | county | stname   | ctyname               | year | agegrp | tot_pop | tot_male | tot_female | wa_male | wa_female | ba_male | ba_female | ia_male | ia_female | aa_male |
|--------|-------|--------|----------|-----------------------|------|--------|---------|----------|------------|---------|-----------|---------|-----------|---------|-----------|---------|
| 50     | 51    | 149    | Virginia | Prince George County  | 5    | 0      | 36941   | 20368    | 16573      | 12155   | 10721     | 7230    | 4763      | 171     | 98        | 254     |
| 50     | 51    | 153    | Virginia | Prince William County | 5    | 0      | 430289  | 213820   | 216469     | 141918  | 138857    | 44291   | 47256     | 2453    | 2331      | 16249   |
| 50     | 51    | 155    | Virginia | Pulaski County        | 5    | 0      | 34736   | 17284    | 17452      | 15915   | 16222     | 959     | 866       | 35      | 37        | 93      |
| 50     | 51    | 157    | Virginia | Rappahannock County   | 5    | 0      | 7456    | 3694     | 3762       | 3420    | 3496      | 181     | 171       | 5       | 13        | 19      |
| 50     | 51    | 159    | Virginia | Richmond County       | 5    | 0      | 9059    | 5066     | 3993       | 3138    | 2925      | 1799    | 961       | 24      | 15        | 31      |

Showing 1 - 5 of 5 rows

The system saves the CSV file to your default download directory.