

Natural Language Search

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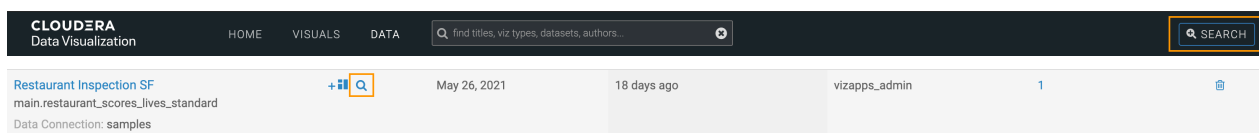
Natural language search UI

Cloudera Data Visualization enables you to find relevant information in the dataset through natural language statements, and renders the result in a graphical format. Using this type of search you can type in a sentence, using regular, spoken language, that describes the information you are looking for.

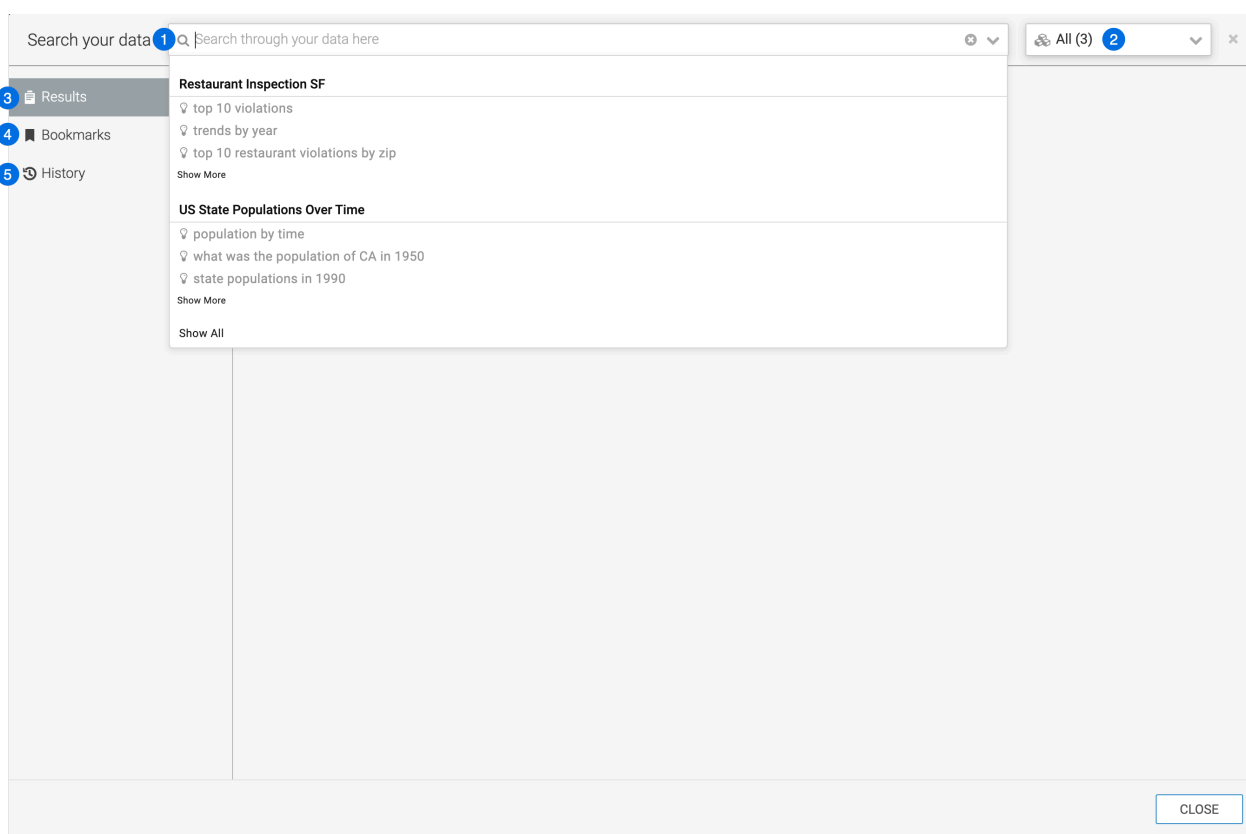
To enable Natural Language Search (NLS) modal globally, see [Enabling NLS in Site Settings](#). For the required configurations, see [Enabling dataset for NLS](#).



Note: To use NLS after enabling search in the Menu Bar and configuring datasets for searching, click SEARCH in the top right corner or the icon next to searchable datasets.



When you click SEARCH, the search modal window opens. It is shown in the figure below:



1. Search text box - You can enter search terms here. For more information on search suggestions in the drop-down list, see [Search types](#).



Note: The drop-down list initially shows a history of queries, organized by dataset. As you type, the search window changes to deliver intermediate results and shows many additional features of the search.

2. Dataset selector - By default the value is 'All' unless you access the modal from a search-enabled dataset page. You can narrow your search to a specific dataset, or a list of datasets - See [Changing the dataset search domain](#).
3. Results tab - See [Search results](#).
4. Bookmarks tab - See [Search bookmarks](#).

5. History tab - See Search history.

Related Information

[Enabling NLS in Site Settings](#)

[Enabling dataset for NLS](#)

[Search types](#)

[Changing dataset search domain](#)

[Search results](#)

[Search bookmarks](#)

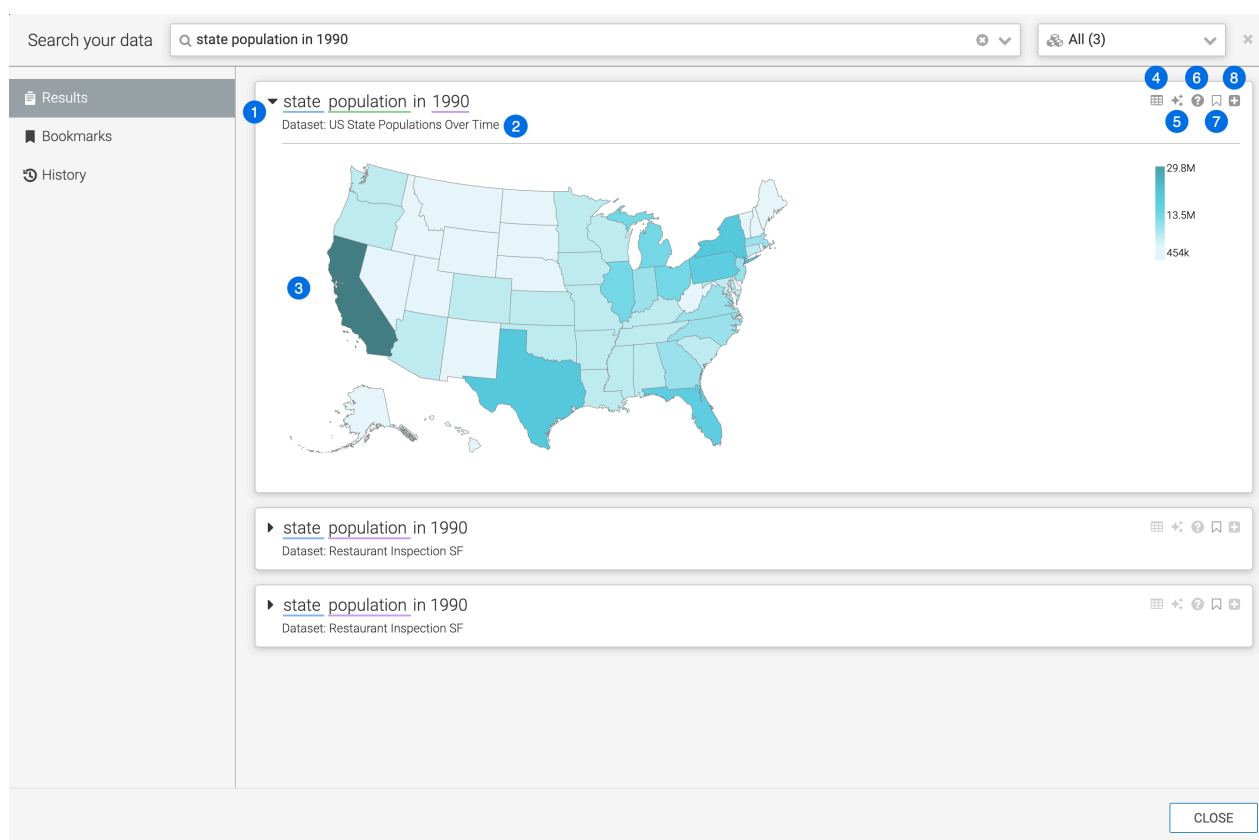
[Search history](#)

Search results

Unless the search phrase explicitly specifies the type of visual representation, Cloudera Data Visualization displays Natural Language Search results using a type that best matches the number and type of fields included in the search, for every searched dataset.

Cloudera Data Visualization displays the results of a Natural Language search directly in the search modal window.

The main features of the search results are shown in the figure below:



1. Search criteria

This is identical to your original search. The various components of the search statement show colored highlights. If you move your mouse over these parts of the statement, the tooltip displays the details of the component.

2. Result dataset

The dataset where a particular search result is found. Note that each search result may represent a different dataset.

3. Result visual

The search result itself is a visual. Note that Cloudera Data Visualization displays results in a default visual type that best represents the number and type of fields in the search phrase.

4. View and download data

This will show the data that is being graphed with an option to download as a CSV file.

5. Explore

Clicking this icon enables you to choose an alternate visual. For more information, see [Changing result visual type through explore](#).

6. Explain

Hovering over this icon shows the dataset and connection informations, the SQL query and shelf information for the visual.

7. Bookmark

Clicking this icon adds the visual to the bookmarked results. Clicking it again to removes it.

8. Dashboard actions

Clicking this icon adds the visual to a dashboard.

Related Information

[Changing result visual type through explore](#)

Order of search results

Cloudera Data Visualization automatically ranks the results of Natural Language Search.

When search produces multiple results from different datasets, you can see the most relevant visual at the top of the list. The ranking is based on the highest number and accuracy of matched search terms.

Search bookmarks

Cloudera Data Visualization enables you to bookmark the results of Natural Language Search, and to easily manage these bookmarks. You can revisit the results using bookmarks without having to locate or search each time.

The Bookmarks tab of the Search modal window has the features displayed in the figure below:

The screenshot shows the Cloudera Data Visualization interface. At the top, there is a search bar labeled "Search your data" with a placeholder "Search through your data here". To the right of the search bar are icons for adding to a dashboard, creating a dashboard, and a supplemental menu. Below the search bar, there is a sidebar with "Results", "Bookmarks", and "History" tabs. The main area displays two search results. The first result is titled "top 10 restaurant violations by zip" with a dataset of "Restaurant Inspection SF". It shows a horizontal bar chart with 10 entries, each with a name, a colored dot, and a zip code. The second result is titled "state population in 1990" with a dataset of "US State Populations Over Time". It shows a horizontal bar chart with 10 entries, each with a name, a colored dot, and a zip code. A blue arrow points to the "ADD TO DASHBOARD" button for the first result. A "CLOSE" button is located at the bottom right of the interface.

1. ADD TO DASHBOARD

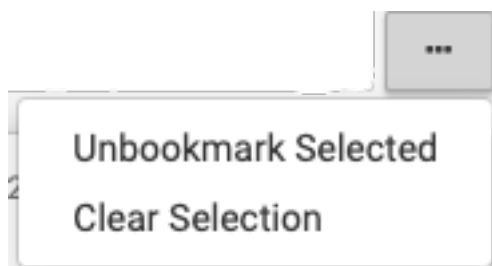
Selecting this option adds selected visuals to an existing dashboard. Note that this is a bulk operation.

2. CREATE DASHBOARD

Selecting this option creates a new dashboard that contains selected visuals. Note that this is a bulk operation.

3. Supplemental menu

Supplemental options enable you to make bulk changes to selected results.



4. Bookmarked results

The main area of the Bookmarks tab shows a list of bookmarked results. By default, they are in collapsed mode.

5. View and download data

This shows the data that is being graphed with an option to download as a .csv file.

6. Explore

Clicking this icon enables you to choose an alternate visual. See Changing result visual type through explore.

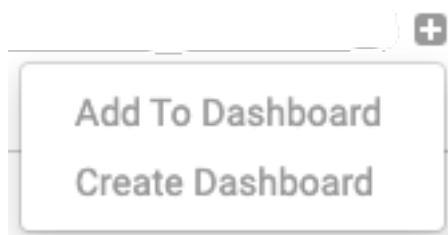
7. Explain

Hovering over this icon shows the dataset and connection information, the SQL query and shelf information for the visual.

8. Unbookmark

This enables you to remove visuals from the bookmarks.

9. Dashboard options



10. Selector

You can select or deselect visuals to make bulk actions on them.

Related Information

[Changing result visual type through explore](#)

Search history

You can browse the history of Natural Language Search in Cloudera Data Visualization, and select the results listed there.

The History tab of the Search page consists of a list of searches made previously, and the date of the search. Cloudera Data Visualization groups this list into three categories:

- Last 7 Days
- Last 30 Days
- Older Searches

Search types

For faster search results, Cloudera Data Visualization enables you to choose from different Natural Language Search types.

In illustrating these topics, the search-enabled, sample datasets Cereals and World Life Expectancy are used.

Hit highlighting

To easily differentiate the visuals in the Natural Language Search results, Cloudera Data Visualization highlights the visuals that match the text in the search text box.

When the user enters text in the search text box, the dropdown list displays all the strings that match the characters entered in the search box. To easily identify and select one of the options, the typed characters are highlighted in a different color.

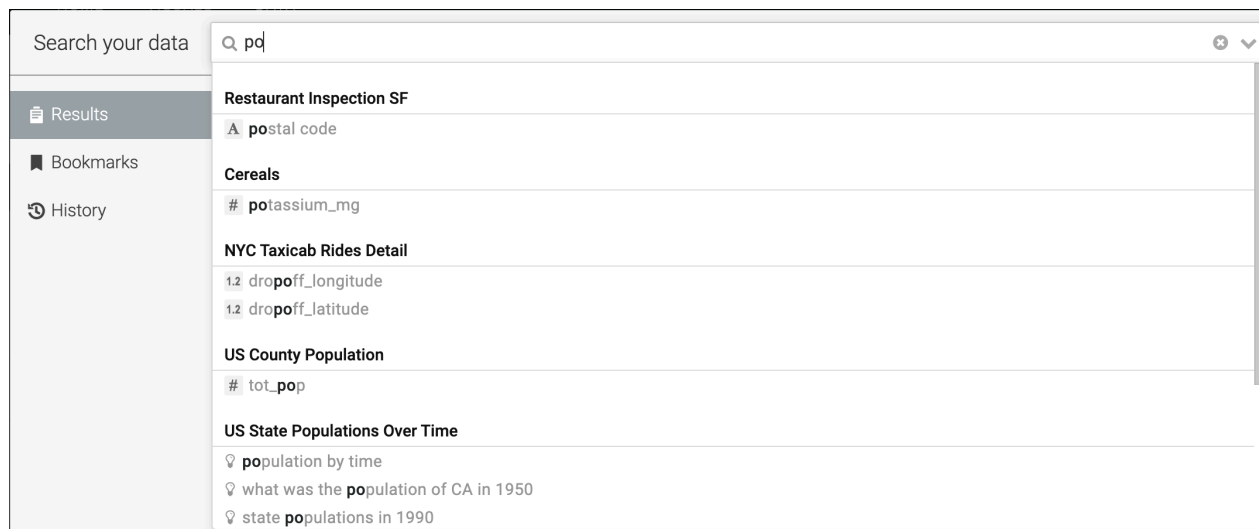
Match field names

For faster search results, Cloudera Data Visualization enables you to search visuals based on the field names entered in the Natural Language Search text box.

When you enter a field name in the search text box, the dropdown list highlights all the field names that match the characters entered in the search box. For example, if you type 'po' then the dropdown list highlights the fields

names, 'tot_pop', 'potassium_mg', and so on. The dropdown list also matches within the strings, so in our example, 'dropoff_longitude' field name is also highlighted.

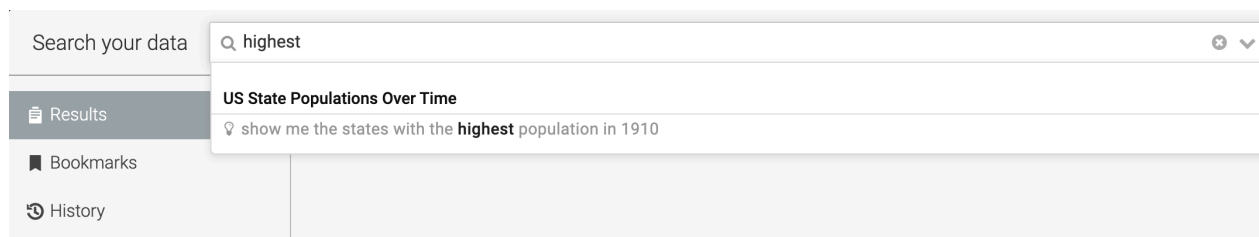
In the following example, 'dropoff_longitude' and 'dropoff_latitude' field names are also highlighted.



Matching suggested questions

For easy and faster search, Cloudera Data Visualization suggests predefined questions in the Natural Language Search drop-down list.

When you start to enter text in the search text box, the drop-down list displays predefined suggested questions that match the characters entered in the search box. In the below example, when the characters 'highest' are entered, the drop-down list highlights a suggestion with the characters 'highest' in the string.

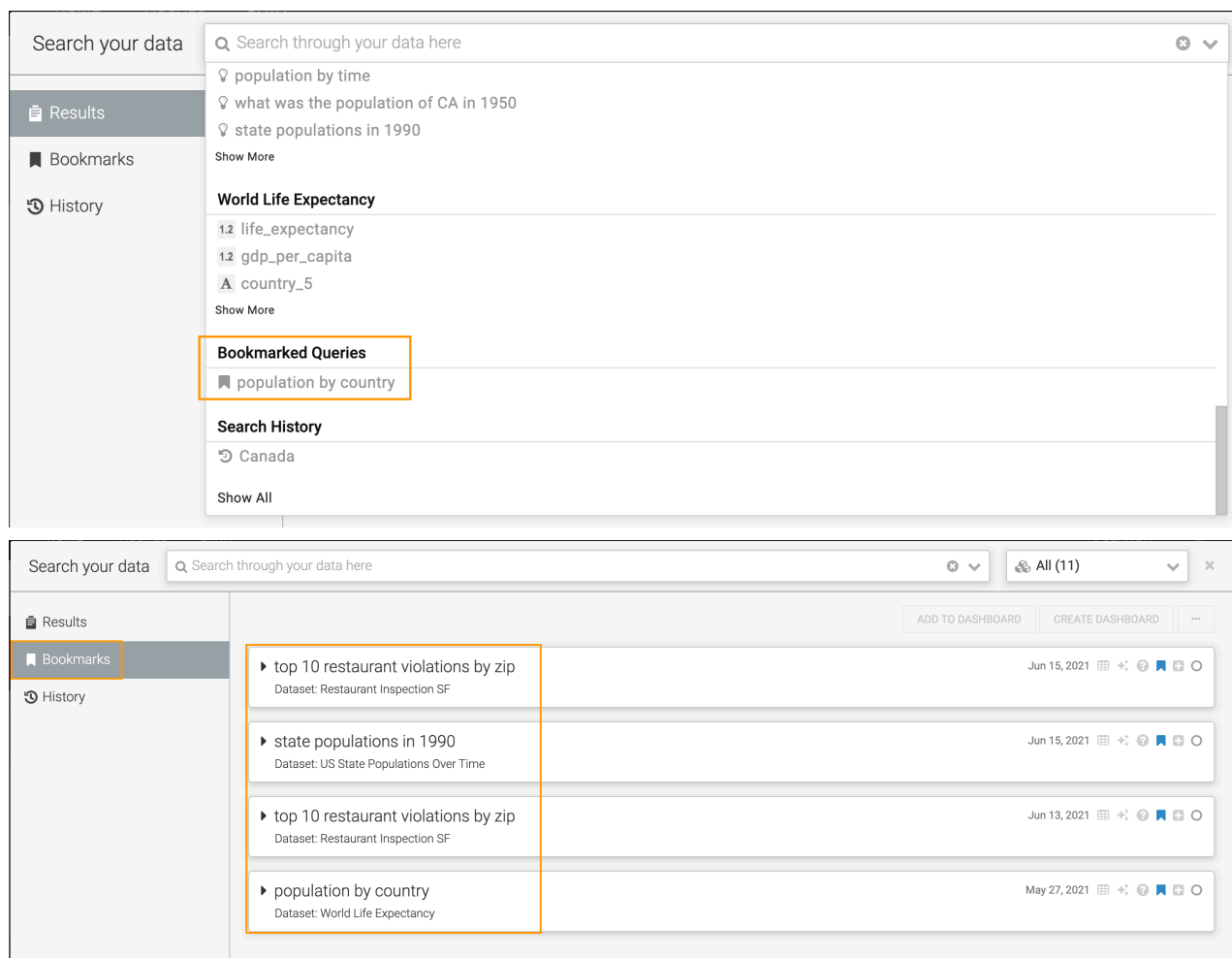


Bookmarked searches

For easier and faster results, Cloudera Data Visualization enables you to search from a list of favorites that are saved as bookmarks.

When you first click the search box and before you start typing, your most recent bookmarked searches appear in the drop-down list.

After you start typing, if the bookmarked options are still relevant for your current search, you can select one of the bookmarked options, as they are still shown in the drop-down list.



Search history

For easier and faster search results, Cloudera Data Visualization enables you to choose from the most recent Natural Language Searches.

When you first click the search box and before you start typing, your most recent searches appear in the drop-down list.

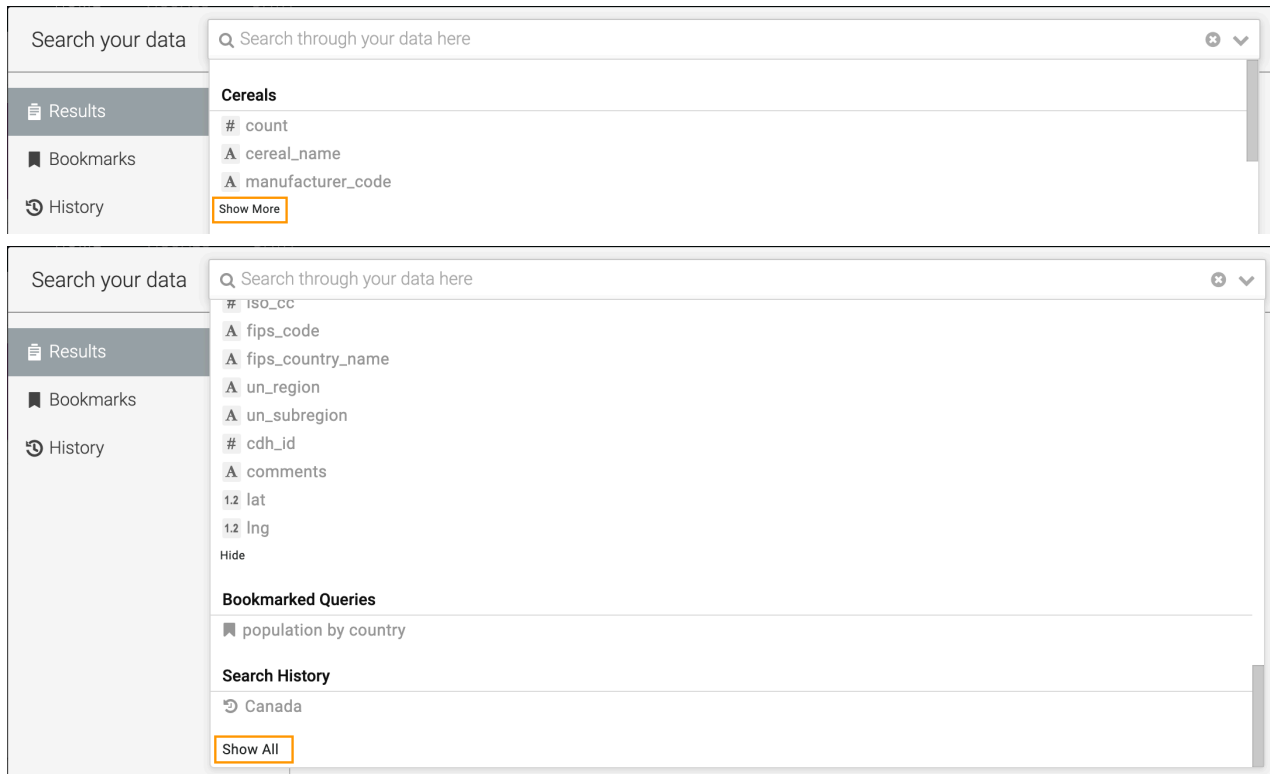
After you start typing, if your previous search is still relevant for your current search, you can select one of the previous search options, as they continue to appear in the drop-down list.

View more searches

To declutter the Natural Language Search drop-down window, Cloudera Data Visualization displays only a few matching values for any particular suggestion type.

If you click Show More in the search drop-down list under a particular dataset, all search results will be displayed for that dataset.

If you click Show All at the very end of the drop down list, all available searches will be displayed.



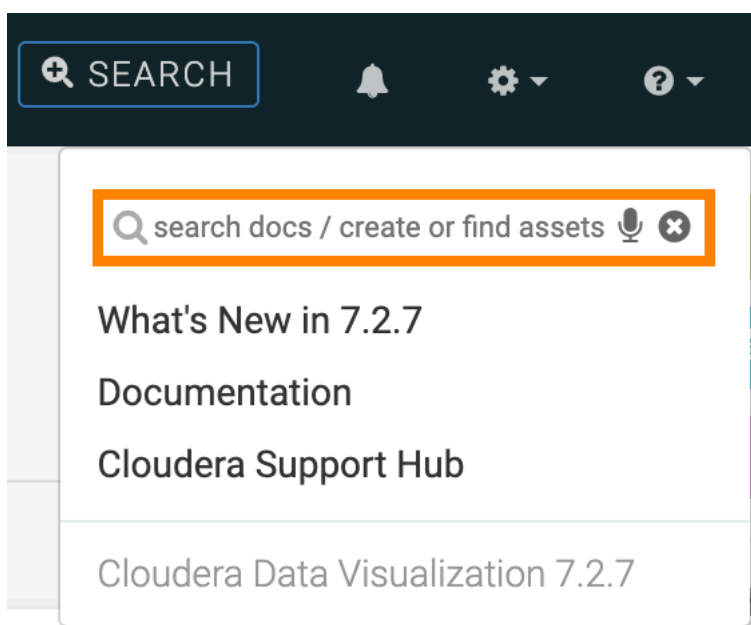
Global search

Global search quick access to various functions and assets within Cloudera Data Visualization, saving you time navigating through menus.

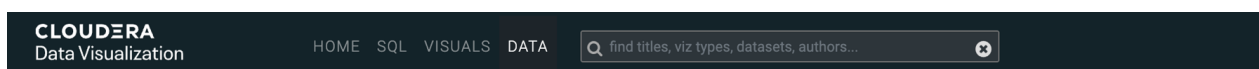
Key uses of global search:

- Create or find assets: Quickly locate existing data assets or create new ones.
- Perform actions: Initiate certain tasks directly from the search results.
- Search through documentation: Easily find relevant help topics or support articles.

On the HOME interface (main of page Cloudera Data Visualization), you can access the global search text box from the Help menu.



If you switch to another interface, for example to DATA, you can find the search box on the main navigation bar for easy access.



Global search supported keywords

The keywords currently supported by global search in Cloudera Data Visualization.

Create

Create app or Create application

Creates a new, empty App and opens the App Designer page.

Create dashboard

Creates a new, empty Dashboard and opens the Dashboard Designer page.

Create data connection or Create connection

Opens the Data page and the Create New Data Connection modal.

Create dataset

Opens the New dataset modal from the last viewed data connection.

Run SQL

Opens the SQL page.

Find

Find data or Find dataset

Opens the data page and inputs remaining text as search input.

Find app or Find application

Opens the visuals page, Apps tab selected, and input remaining text as search input.

Find dashboard

Opens the visuals page, Dashboards tab selected, and inputs remaining text as search input.

None keywords

Everything not listed becomes a search term to be used for searching through the documentation. The search opens in a separate window. For and about keywords are removed from the beginning if included.