Cloudera Data Visualization 7.2.8

Filter Widgets on Dashboards

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

https://docs.cloudera.com/

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

Creating dataset filters on a dashboard....5

Creating custom filters on a dashboard....10

Creating date/time filters on a dashboard....15
Using fixed dates (date range picker) mode....18
Using relative dates mode....24
Using quick filters....28
Including null values in date filters....31
Creating a dashboard with date filters....31
Including null values in a visual....32

Setting parameters through URL....37

Customizing output parameters....40

Configuring ranges on a date/time filter....44

Configuring data options for a dashboard filter....46
Changing number of initial options in dashboard filters....47
Changing number of options in search output of dashboard filters....48
Disabling incremental queries in filters....48
Configuring sort order in filter values....48

Configuring display settings for a dashboard filter....49
Displaying a textbox parameter....51
Changing the width of the filter text box....53
Entering values manually....54
Using single value mode with radio buttons....58
Selecting all values....59
Using single value with dropdown menu....61
Displaying distinct parameters....62
Hiding filters....64
Remembering previous selections on dashboard filters when searching....65
Using multi-select mode....67

Configuring dashboard filter scope....69

Configuring custom style for a dashboard filter....72
Configuring custom style using CSS code....74

Moving filter widgets on a dashboard.....76

Creating dataset filters on a dashboard

Cloudera Data Visualization enables you to add a filter widget to the dashboard based on any field in the dataset.

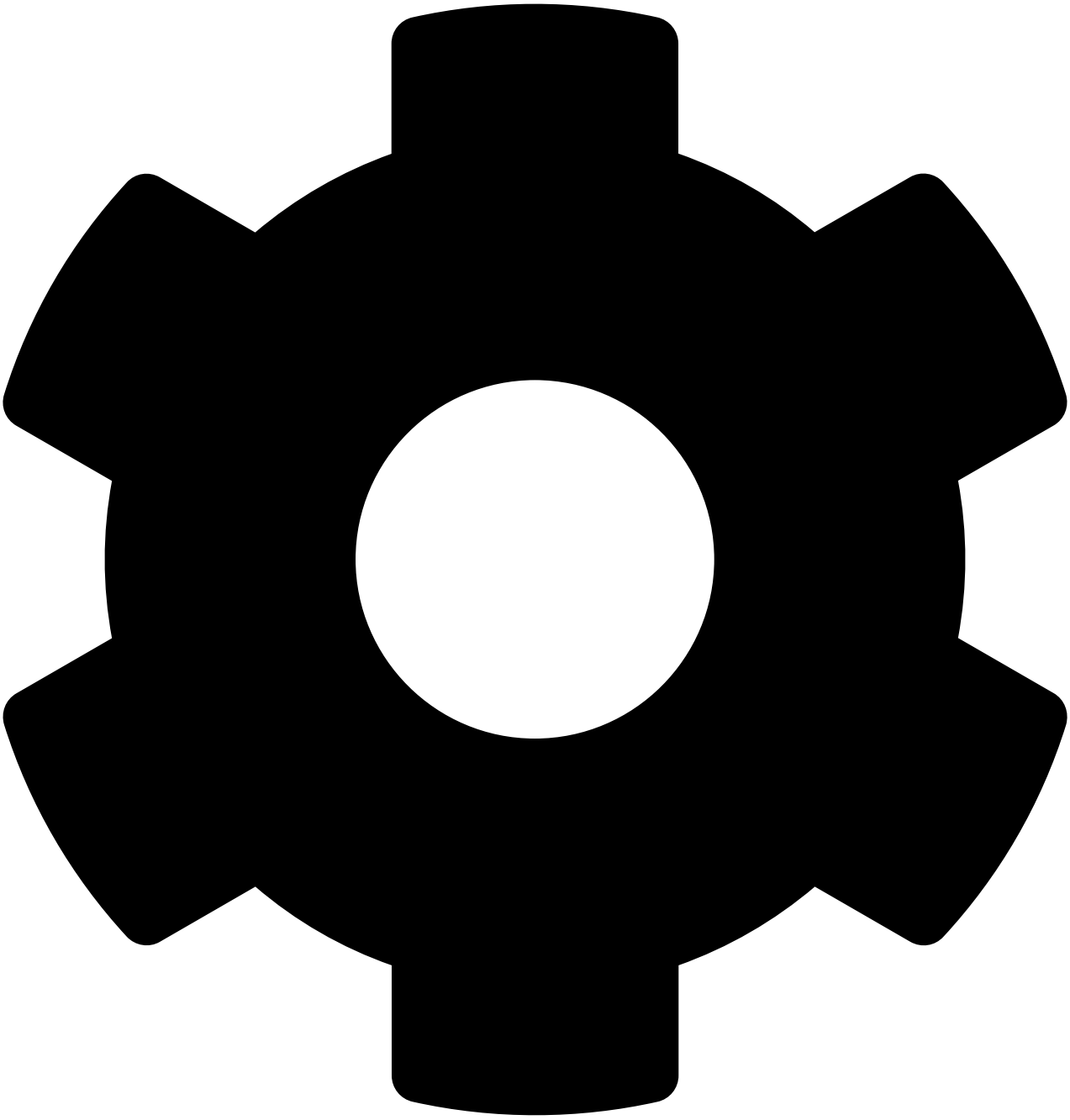
Procedure

1. Open an existing dashboard in Edit mode.
2. Go to the Filters tab on the Dashboard Designer side menu bar.

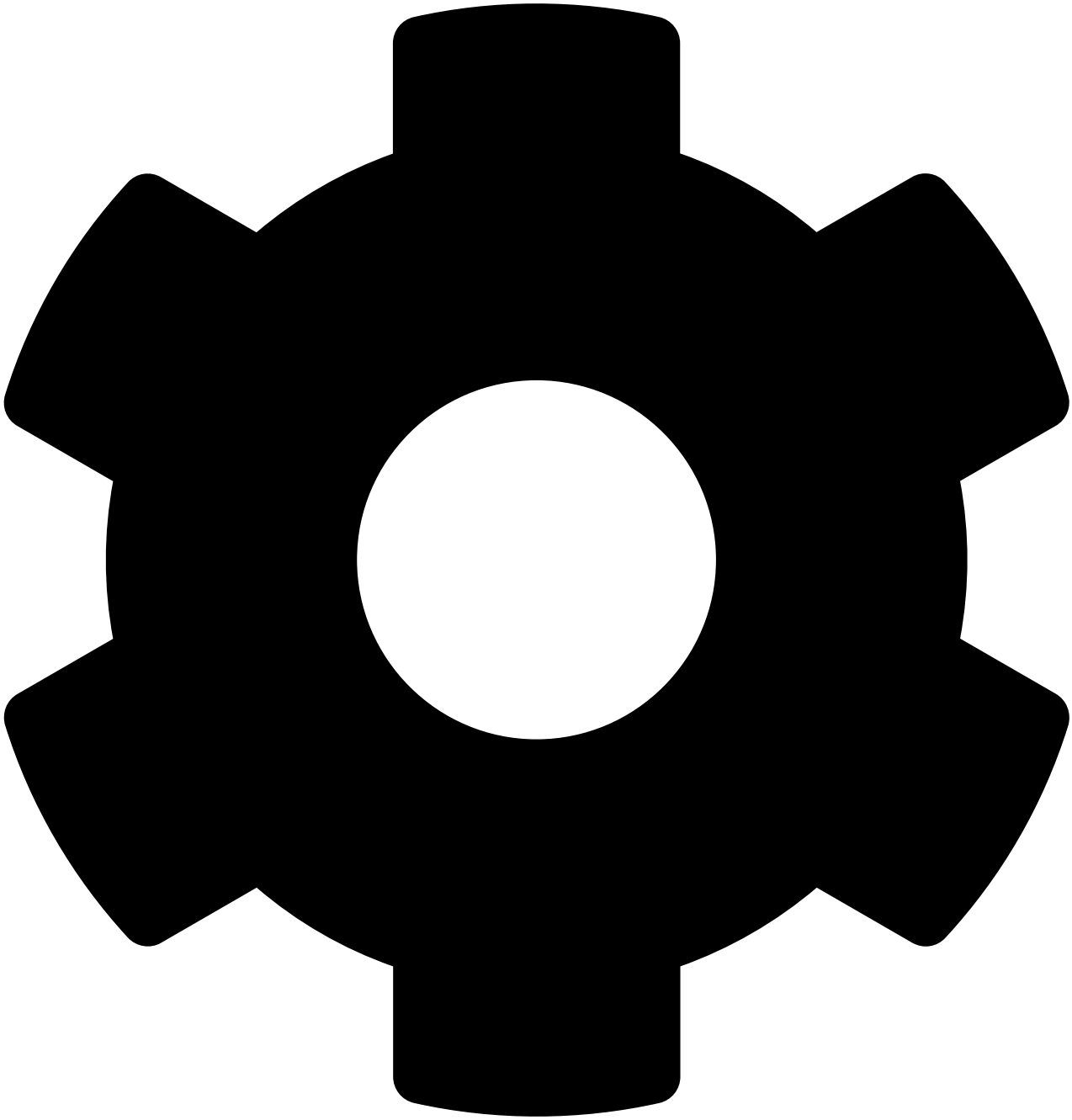
3. Click any field of the dataset from Dimensions or Measures to add a widget to the dashboard that filters on that field.

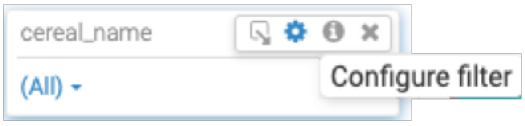
   Alternatively, you can also drag the field that you want to use as a filter and drop it into the filter bar on the dashboard.

   A new filter widget is added in the filter area of the dashboard, named after the field you have used. You can hover over the widget to access filter actions in the top-right corner.

   - Clicking the icon moves the filter to the grid area.
   - Clicking  opens the Settings modal window that allows you to configure the filter.
   - Hovering over the Info icon displays the filter's information modal, providing information about the visual and the dataset.

- Clicking the icon removes the filter from the dashboard.

4. To set the basic configuration for the new dashboard filter, click  in the top right corner.

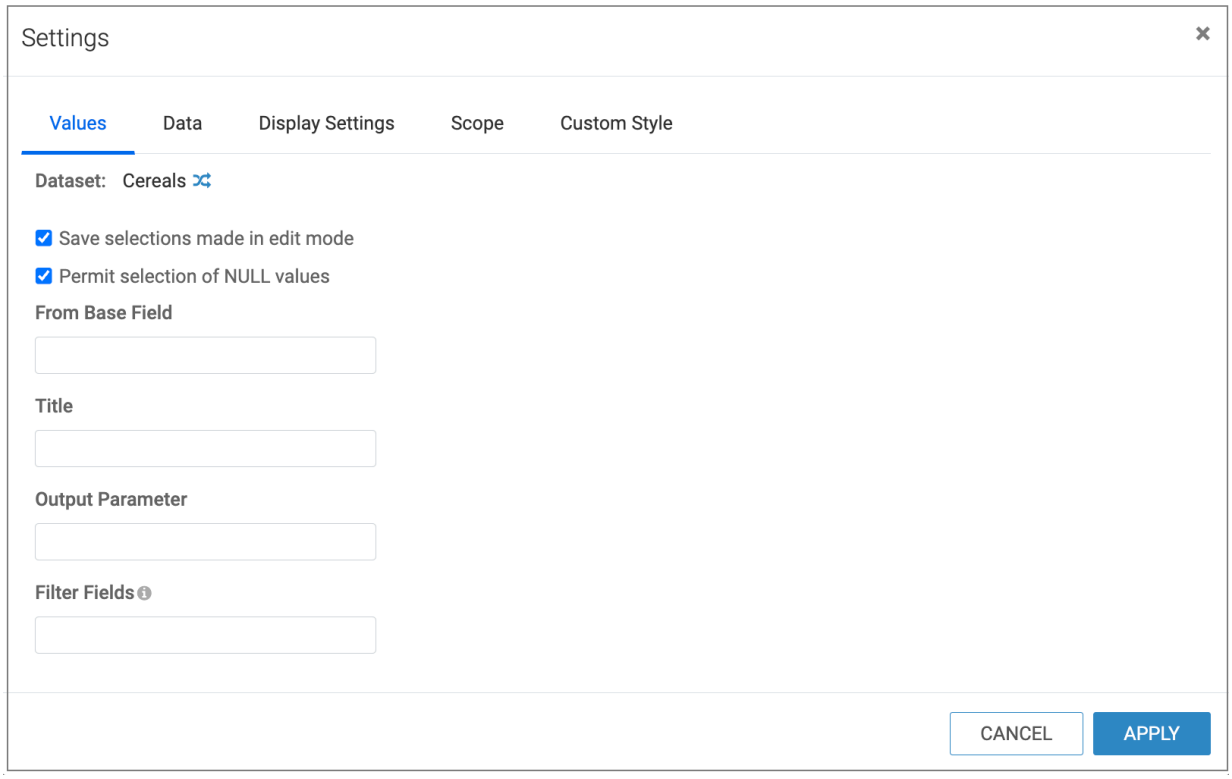


The Settings modal window opens on the Values tab, showing the dataset of the filter and several configuration options.

a) To switch the filter to another dataset and connection, click .
b) To preserve the adjusted filter settings for View mode, select the Save selections made in edit mode option. You can use it to save all changes made in Edit mode.
c) To exclude null values for all filter types, use the Permit selection of NULL values setting.

d) From Base field specifies the filter-controlling field. You can change the base field to another field of the dataset. This option is available only in dataset-based filters.
e) Title shows the name of the filter as it appears in the application at run-time. Keep it short and descriptive providing information on the filter's function.
f) Output Parameter is the parameter sent to the target visual to determine which field to display. For optional or variable parameters, output parameter is used on the shelves of the target visual, such as <<[dim], or <<[agg], or in an expression that contains the variable.

   When used in filters that are based on existing fields, the output parameter ensures field name match across datasets. For example, a filter that is based on the state field in the US State Populations Over Time dataset must have the output parameter stname to control visuals in the US County Population dataset.
g) Filter Fields specifies the base fields of another field, based on which options of the current filter can be filtered. You can enter multiple base fields separated by a comma. This option is available only in dataset-based filters.



5. Click APPLY to save the configuration settings.

What to do next

For more information on further configuration options, see the following documentation.

Related Information

Setting parameters through URL
Customizing output parameters
Configuring data options for a dashboard filter
Configuring display settings for a dashboard filter
Configuring dashboard filter scope
Configuring custom style for a dashboard filter

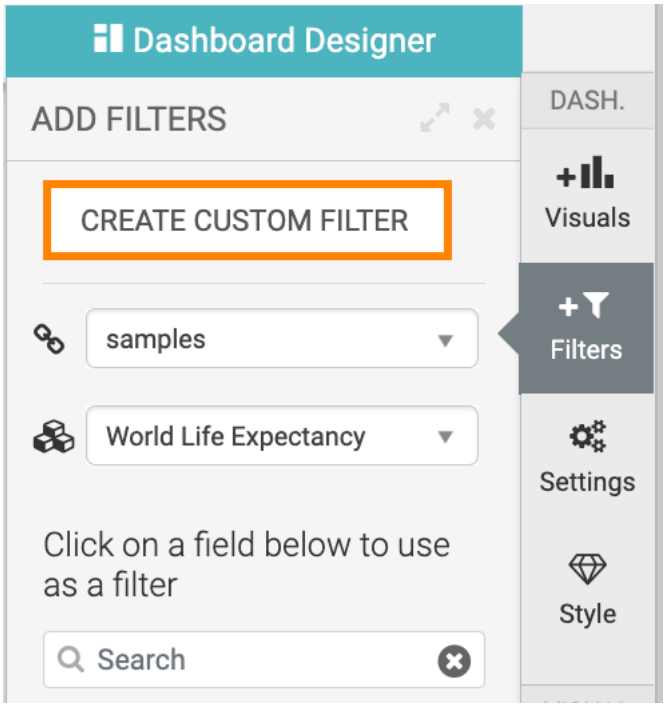
Creating custom filters on a dashboard

Cloudera Data Visualization enables you to create a custom filter based on any parameter.

Procedure

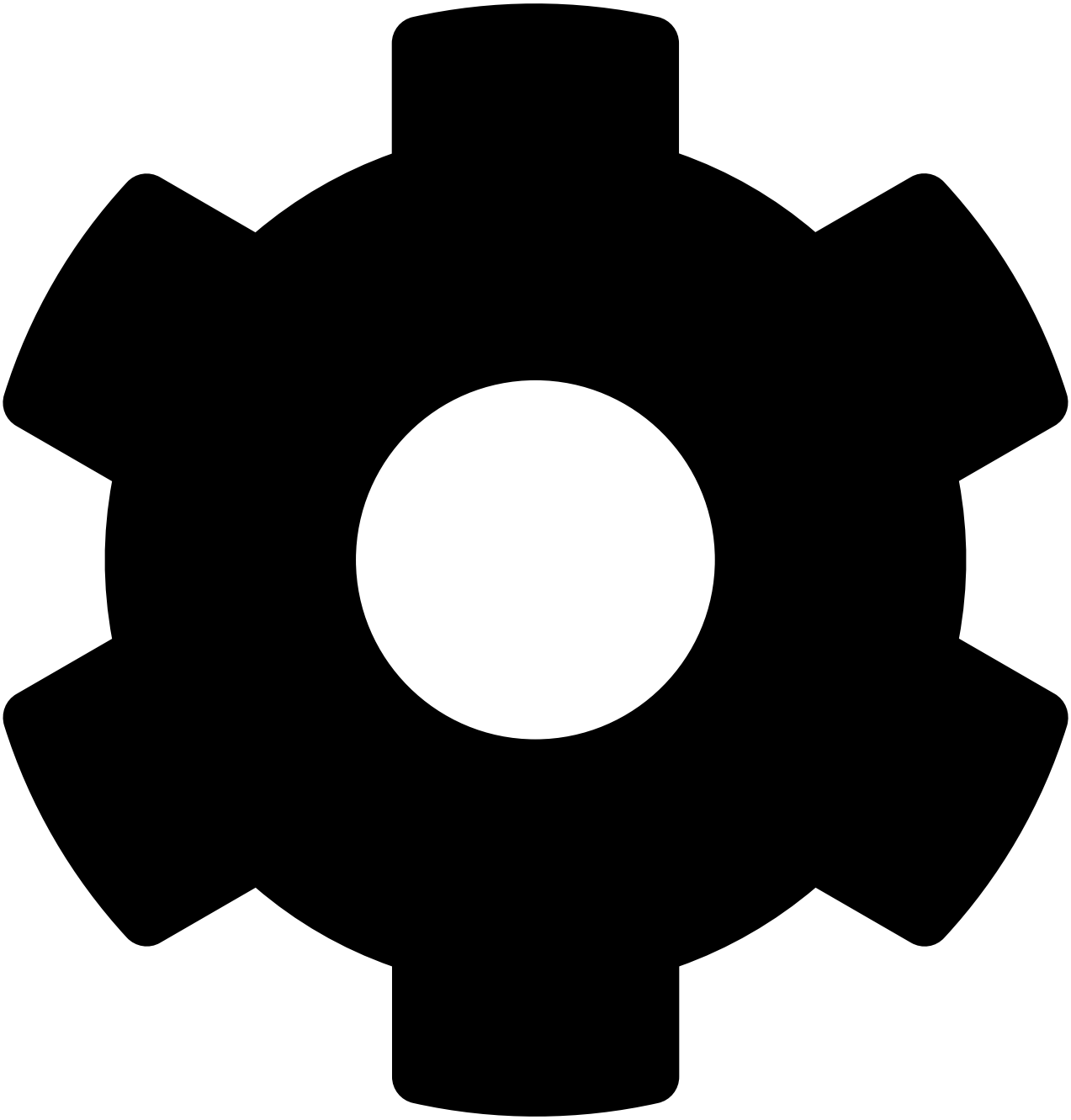
1. Open an existing dashboard in Edit mode.
2. Go to the Filters tab on the Dashboard Designer side menu bar.

3. Click CREATE CUSTOM FILTER.

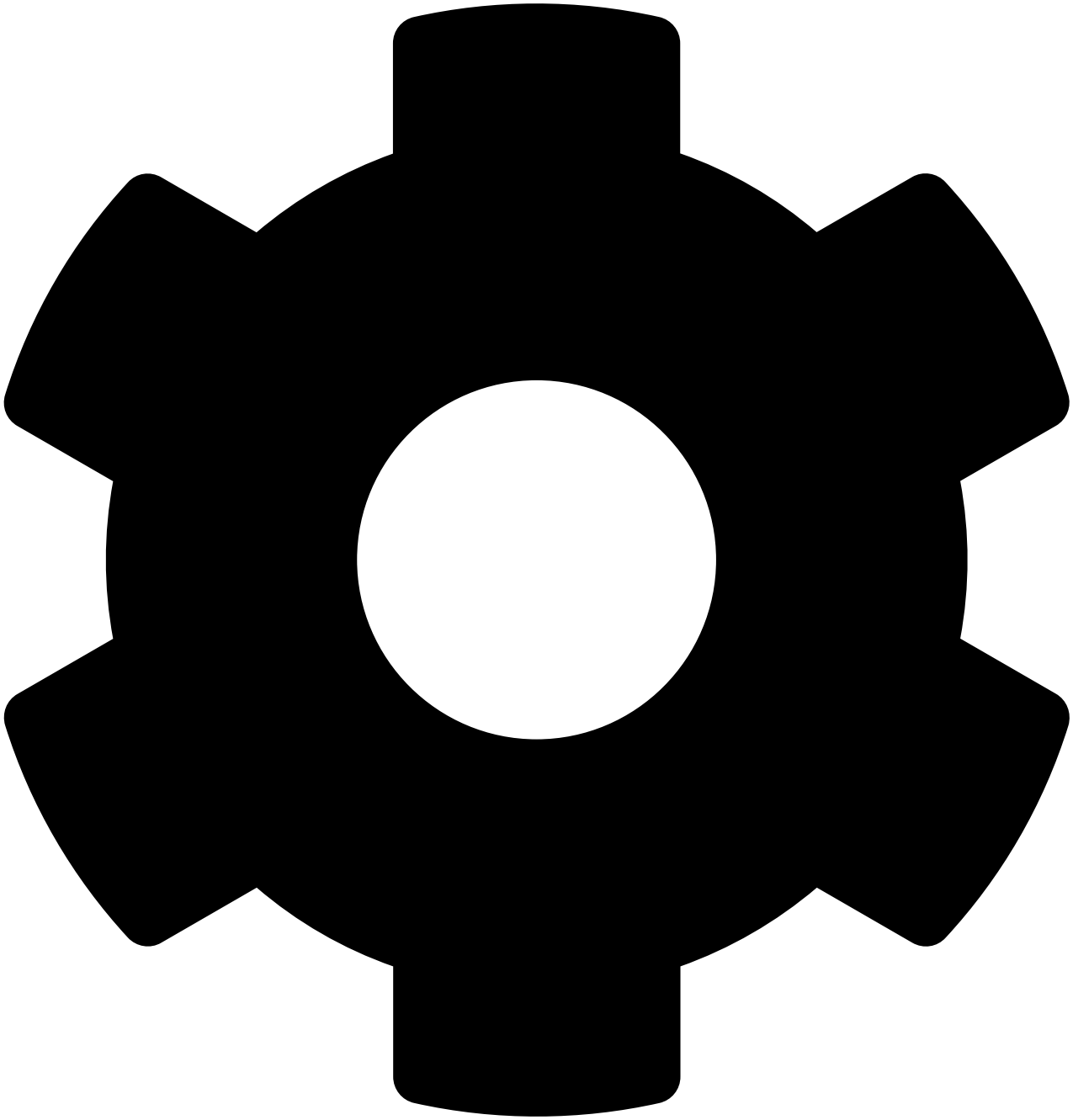


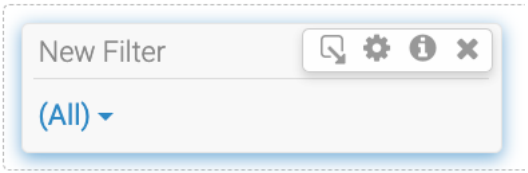
A new filter widget named New Filter is added to the dashboard. You can hover over the widget to access filter actions in the top-right corner.

- Clicking the Move icon moves the filter to the grid area.

- Clicking 

  opens the Settings modal window that allows you to configure the filter.
- Hovering over the Info icon displays the filter's information modal, providing information about the visual and the dataset.
- Clicking the Cross icon removes the filter from the dashboard.

4. To set the basic configuration for the new dashboard filter, hover over the filter widget and click  in the top right corner.



The Settings modal window opens on the Values tab, showing several configuration options.

a) To preserve the adjusted filter settings for View mode, select the Save selections made in edit mode option. You can use it to save all changes made in Edit mode.
b) Title shows the name of the filter as it appears in the application at run-time. Change it from New Filter to something that provides information on the filter's function. Keep the name short and descriptive.

c) Output Parameter is the parameter sent to the target visual to determine which field to display. In cases of optional or variable parameters, output parameter is used on the shelves of the target visual, such as <<[dim], or <<[agg], or in an expression that contains the variable.

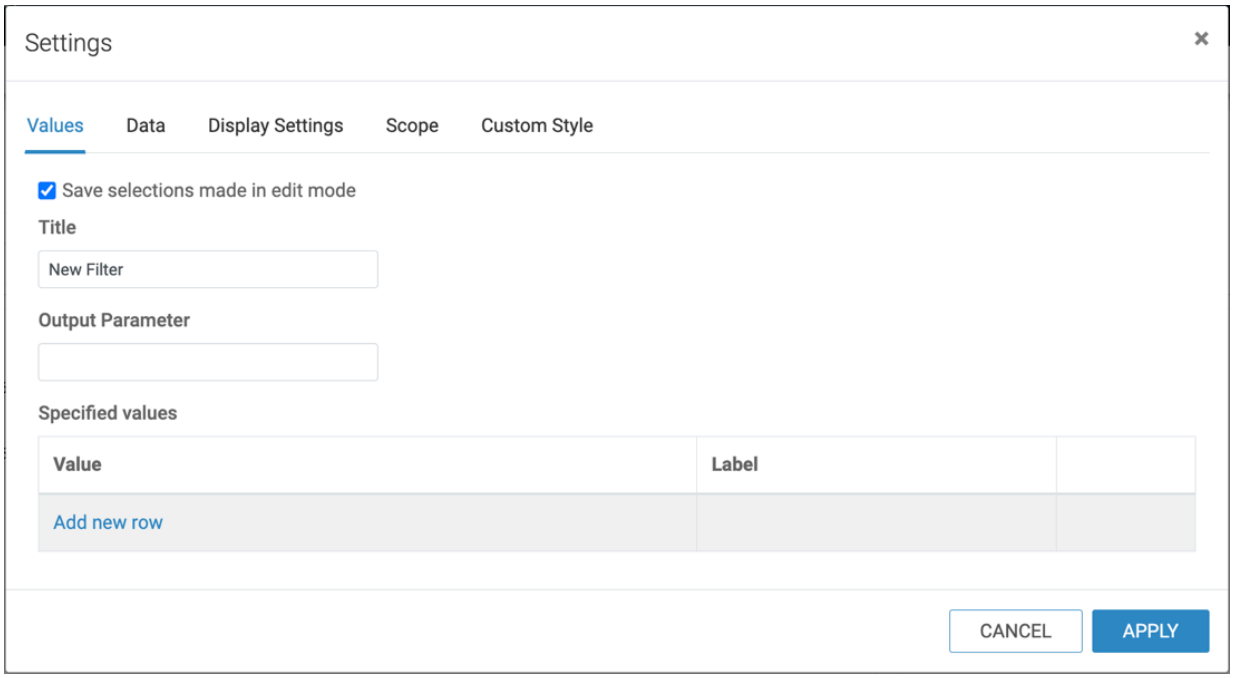
When used in filters that are based on existing fields, the output parameter ensures field name match across datasets. For example, a filter that is based on the state field in the US State Populations Over Time dataset must have the output parameter stname to control visuals in the US County Population dataset.

d) Specified values specifies the distinct values of the output parameter on which the filter acts, and labels them.

For example, a <<mes>> output parameter can have the following specified values:

- Value: gdp_per_capita, Label: GDP per Capita
- Value: life_expectancy, Label: Life Expectancy

This option is available only in custom filter widgets. For more information see *Setting parameters through URL*



5. Click APPLY to save the configuration settings.

What to do next

For more information on further configuration options, see the following documentation.

Related Information

Setting parameters through URL
Customizing output parameters
Configuring data options for a dashboard filter
Configuring display settings for a dashboard filter
Configuring dashboard filter scope
Configuring custom style for a dashboard filter

Creating date/time filters on a dashboard

In Cloudera Data Visualization, date and timestamp filters are essential for dynamically adjusting your dashboard visuals based on time-related data. By using date/time filters, you can allow users to easily explore and analyze records filtered by specific dates or time ranges. These instructions walk you through the process of creating and configuring date/time filters on a dashboard, including basic settings, time range selection, and customization options. You will learn how to add filters, adjust their configurations, and optimize them for a more tailored user experience.

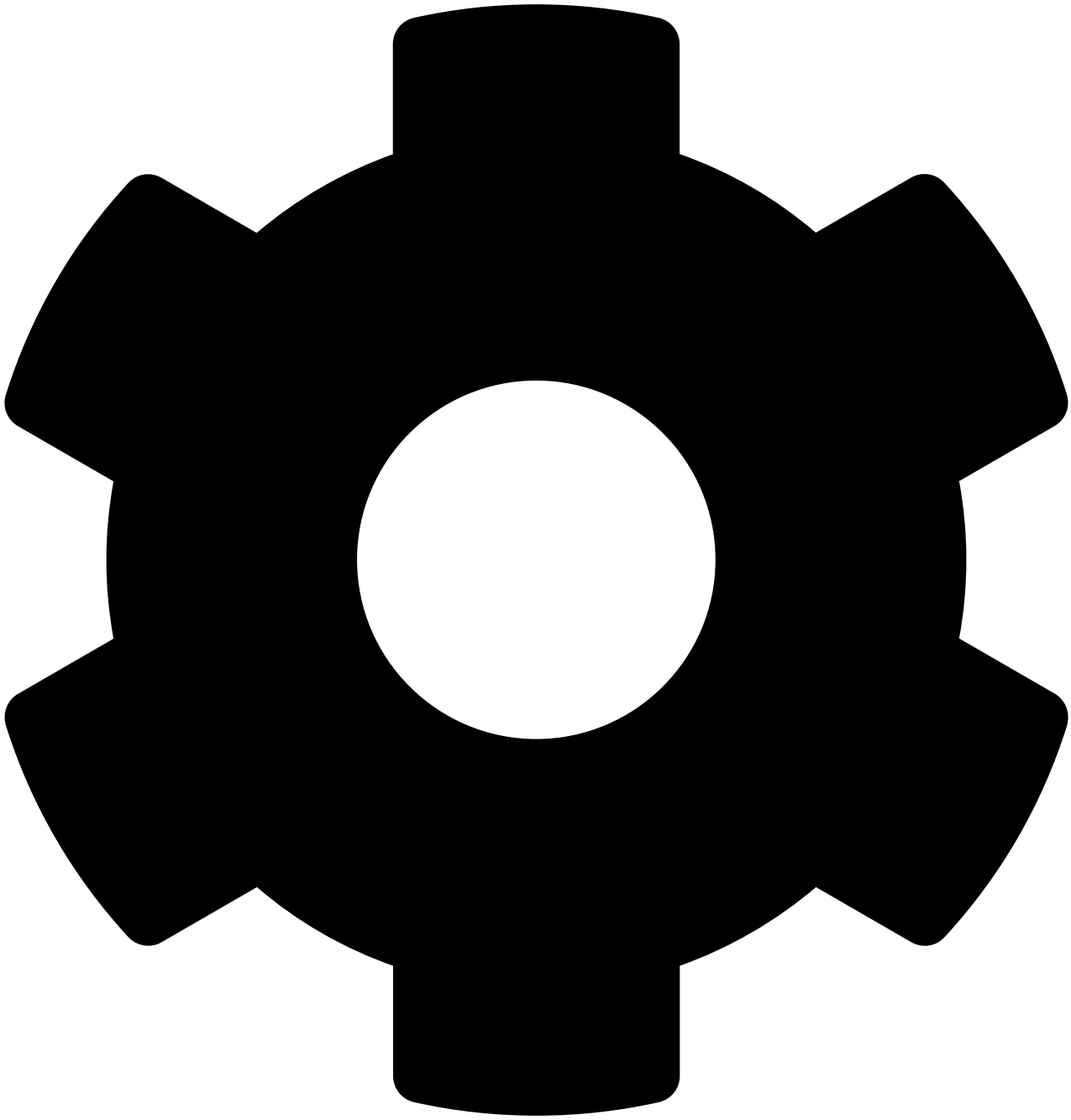
Procedure

1. Open an existing dashboard in Edit mode.
2. Go to the Filters tab on the Dashboard Designer side menu bar.

3. Click any date type field from the dataset under Dimensions or Measures.

   You can see a new date/time filter widget added to the dashboard named after the selected field. You can hover over the widget to access filter actions in the top-right corner.

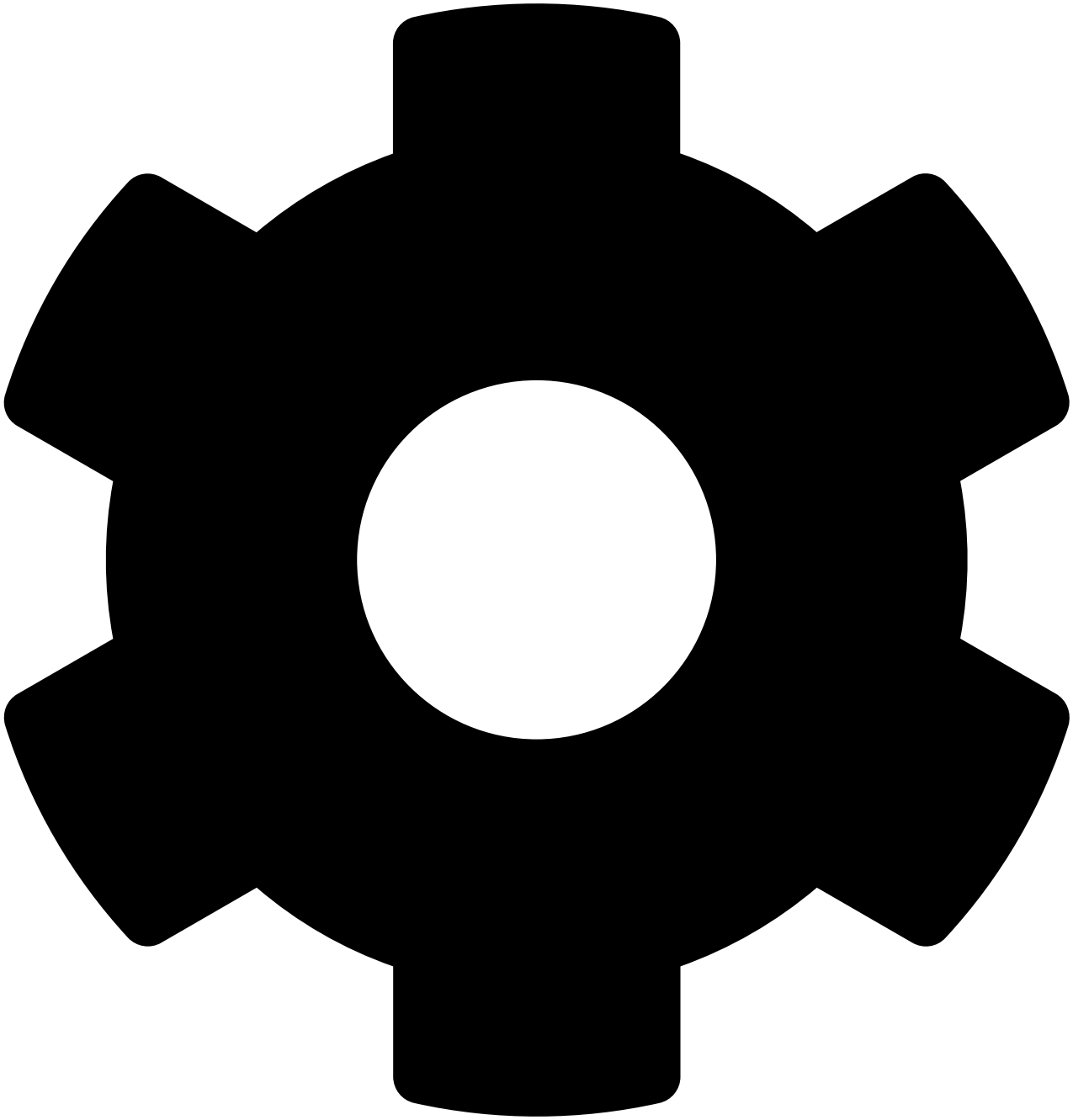
   - Clicking the Move icon moves the filter to the grid area.
   - Clicking

     opens the Settings modal window that allows you to configure the filter.
   - Hovering over the Info icon displays the filter's information modal, providing information about the visual and the dataset.
   - Clicking the Cross icon removes the filter from the dashboard.

   For instructions on how to configure date ranges, see *Configuring ranges on dashboard filters*.

4. To set basic configuration for the new dashboard filter, hover over the filter widget and click



in the top right corner.

The Settings modal window opens on the Basic tab, showing the dataset of the filter and several configuration options.

a) You can switch the filter to another dataset and connection by clicking .
b) You can filter data by specifying a start and end date/time range on the dashboard using Permit selection of time range.

   Time Zone enables you to adjust the date/time filter to a specific time zone. To activate this, first check Permit selection of time range then choose the time zone from the drop-down. The default is UTC.
c) You can use the Permit selection of NULL values setting to exclude null values for all filter types.

   For more information, see *Including null values in date filters* .
d) To show only the latest timestamp, select the Default to the latest available timestamp option.

Note: If you select this option, the Save date range selections made in edit mode becomes unavailable.

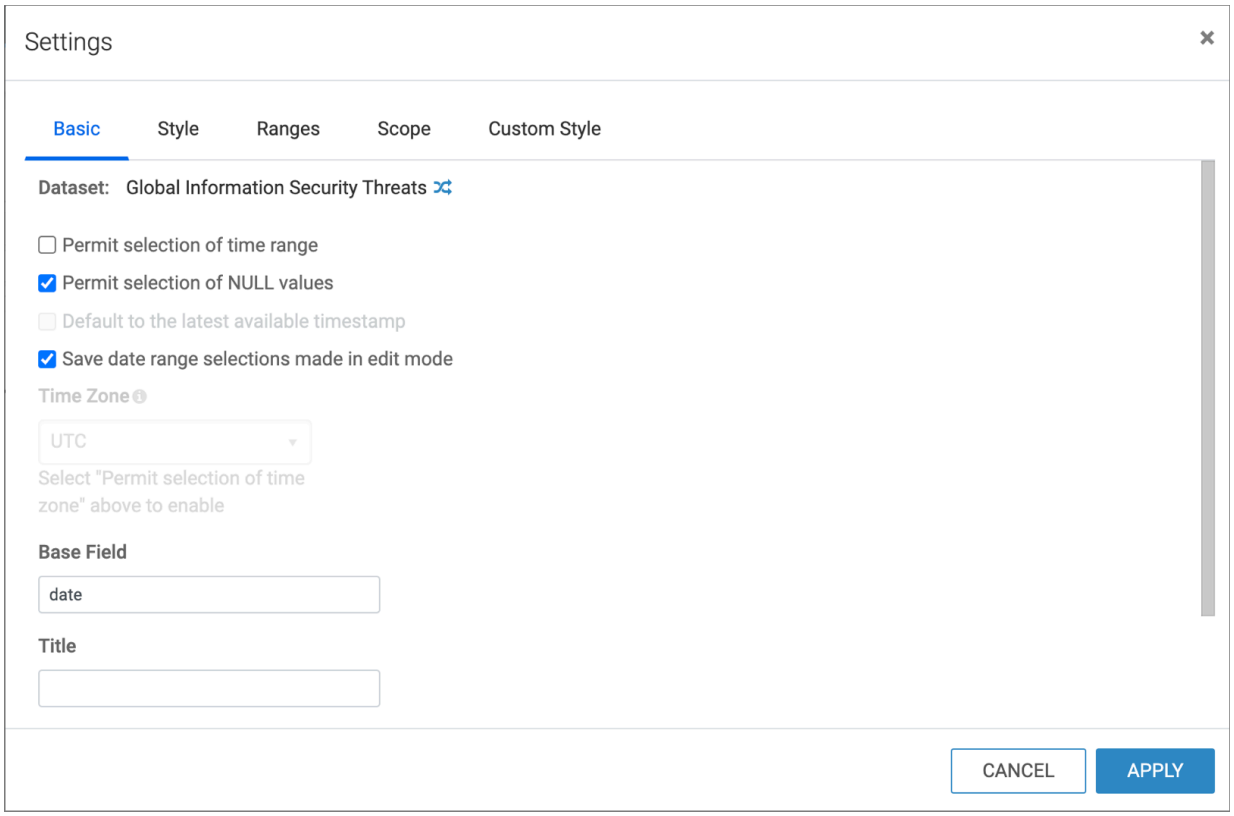
e) To preserve the adjusted filter settings for View mode, select the Save date range selections made in edit mode option. You can use it to save the changes made in Edit mode.

f) Base field specifies the filter-controlling field. You can change the base field to another field of the dataset. This option is available only in dataset-based filters.

g) Title shows the name of the filter as it appears in the application at run-time. Keep it short and descriptive providing information on the filter's function.

Important:

Avoid adding the same field to the dashboard filter if it is used as both a date range picklist AND a time control on the dashboard.



5. Click APPLY to save the configuration settings.

What to do next

For more information on further configuration options, see the following documentation.

Related Information

Configuring ranges on a date/time filter
Configuring dashboard filter scope
Configuring custom style for a dashboard filter

Using fixed dates (date range picker) mode

In Cloudera Data Visualization, using fixed dates in a date filter enables you to select a subset range of dates for visualizing your data.

About this task

The following steps show you how to use the date range picker option of a date and time filter. The instructions use a calendar heatmap visual as an example.

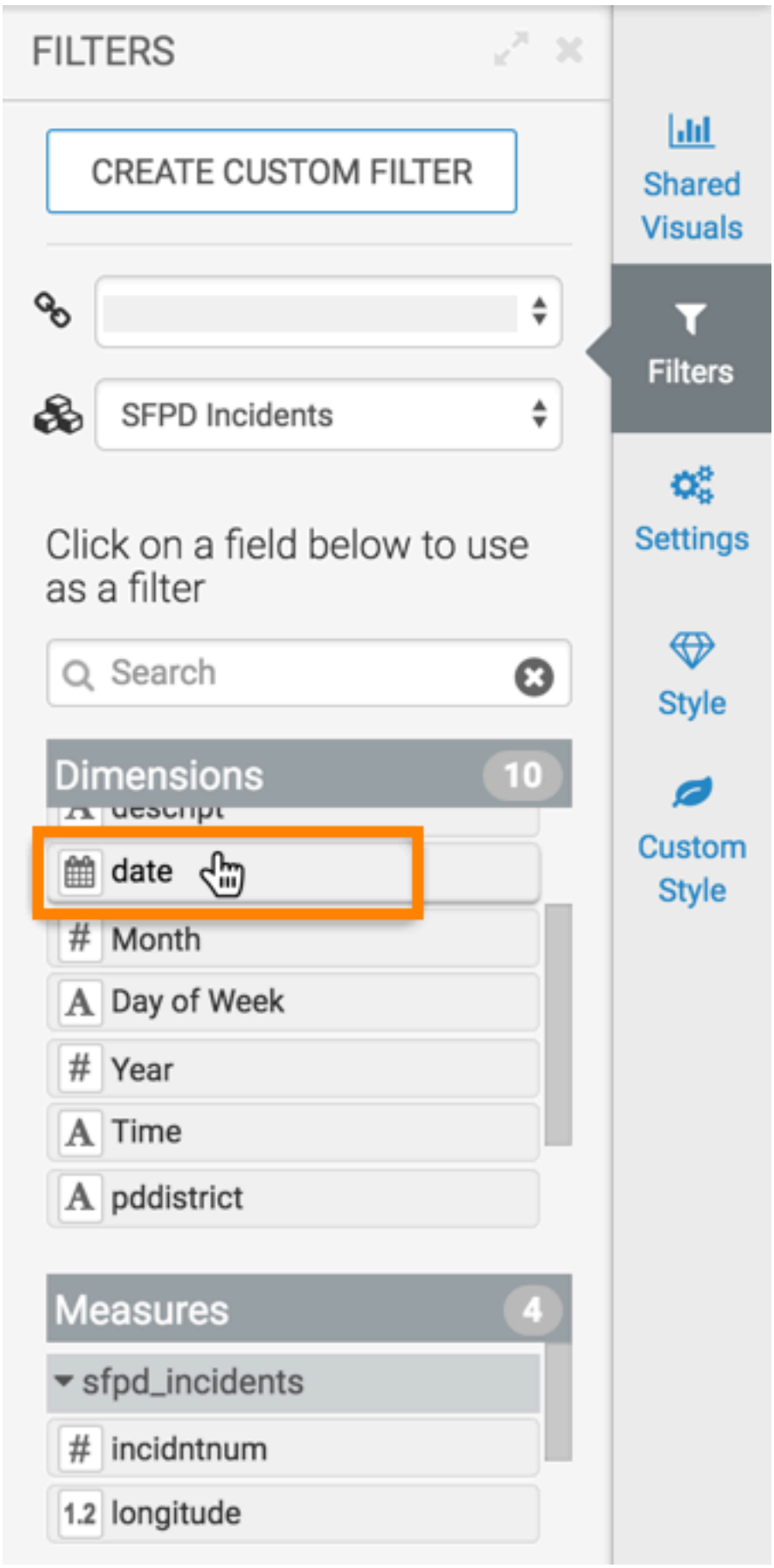
Before you begin

- You have created a calendar heat map visual using the SFPD Incidents dataset. For more information on this visual type, see Calendar heatmaps.
- You have added this visual to a dashboard.

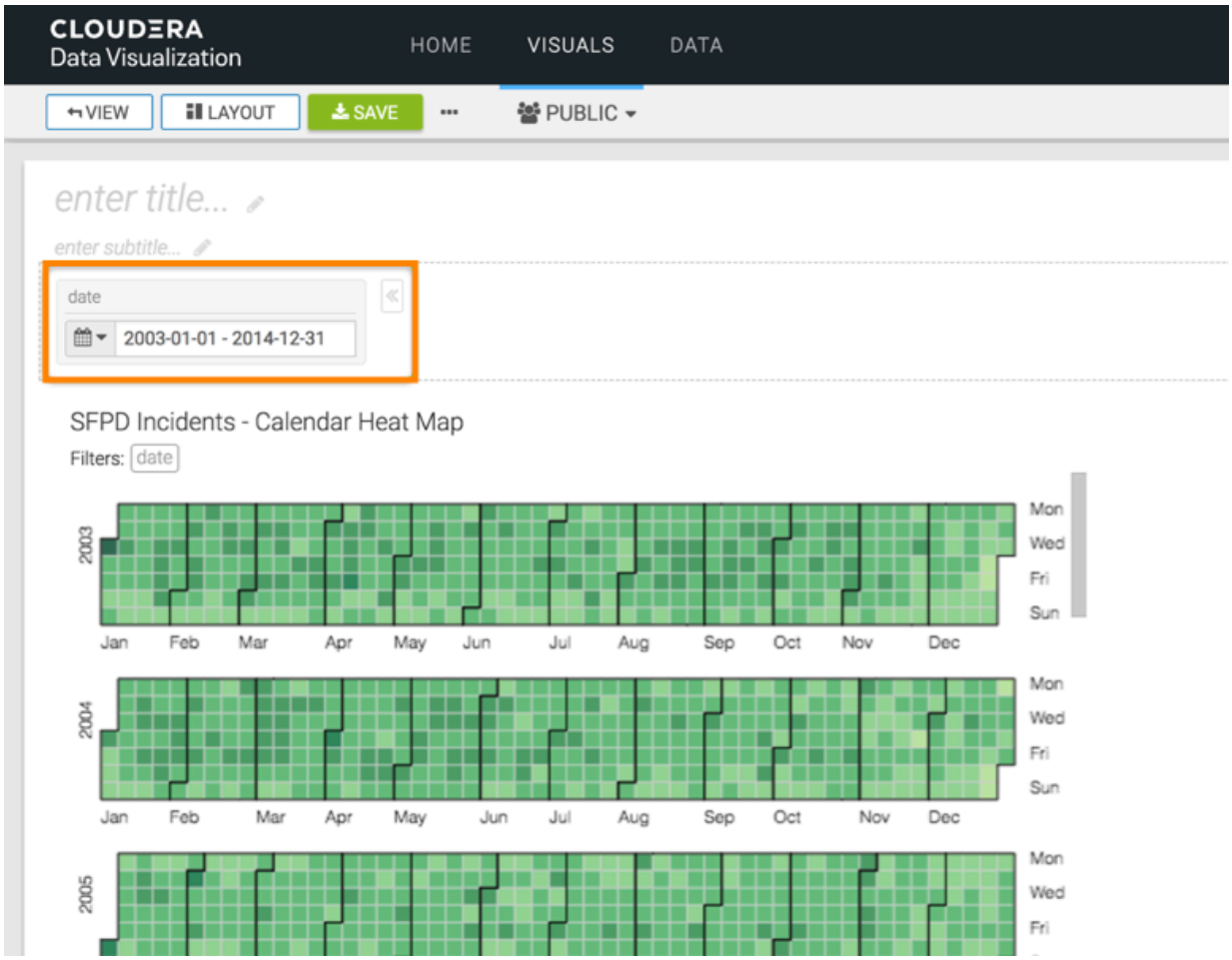
Procedure

1. Open your dashboard that contains the heatmap visual in Edit mode.
2. Switch to the Filters tab on the Dashboard Designer side menu bar.

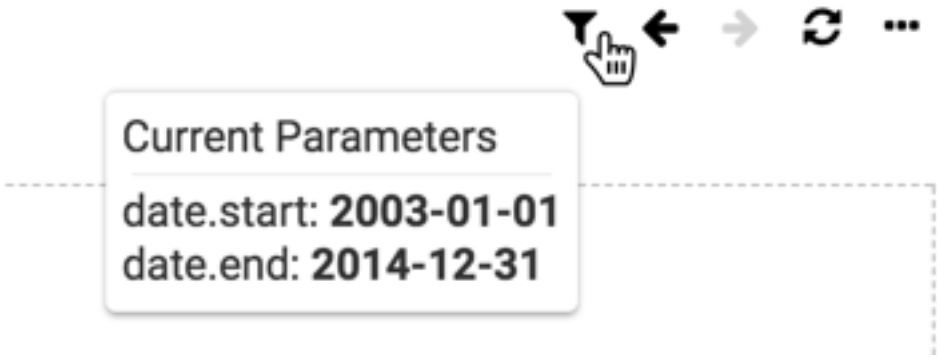
3. Under Dimensions, click the date field.


FILTERS
CREATE CUSTOM FILTER
SFPD Incidents
Click on a field below to use as a filter
Search
Dimensions 10
date
Month
Day of Week
Year
Time
pddistrict
Measures 4
sfpd_incidents
incidntnum
longitude
Shared Visuals
Filters
Settings
Style
Custom Style

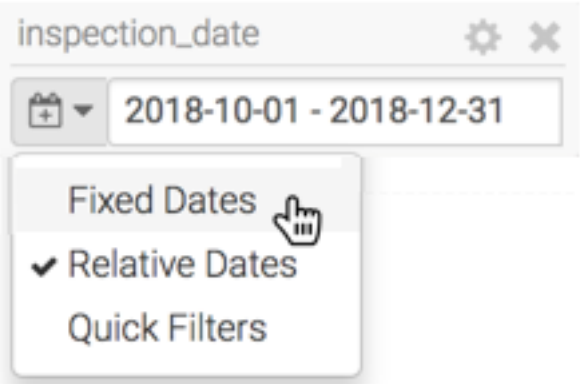
This adds a filter to the dashboard. This filter is based directly on the date field and has a timestamp type.



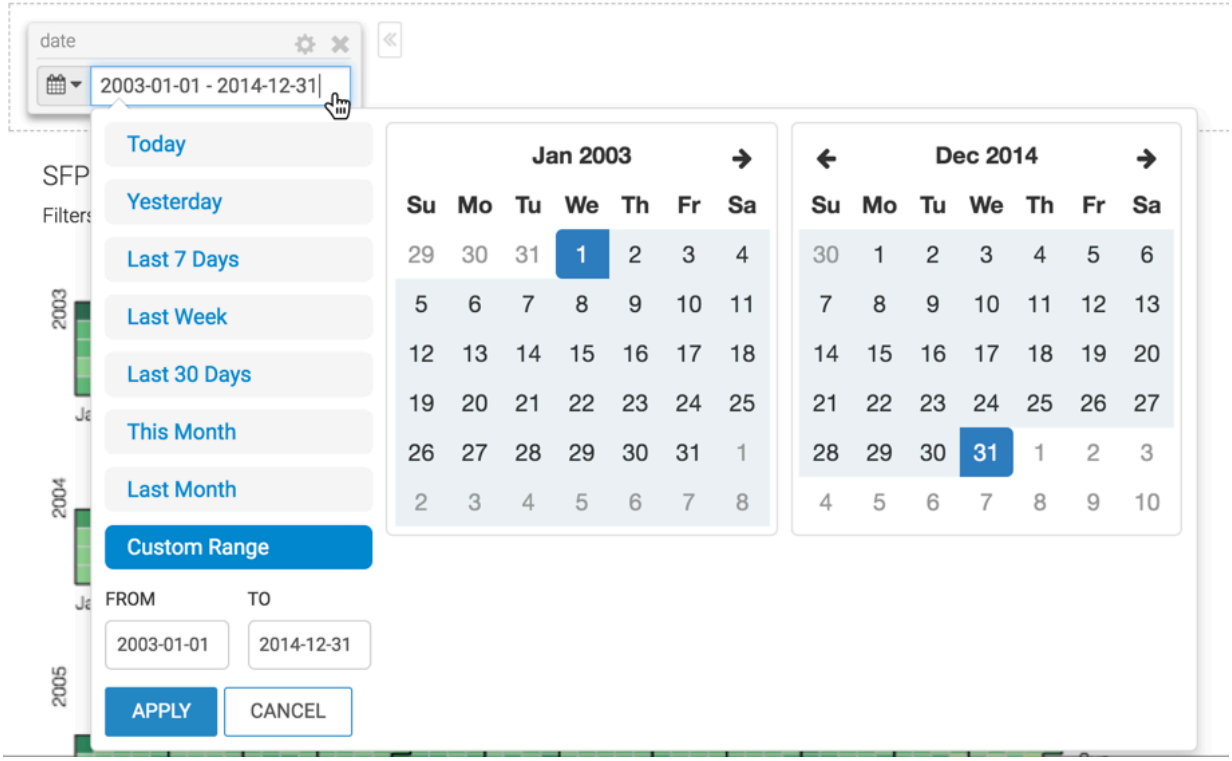
The dashboard filter contains the date range for the entire dataset; in this case, it is from 2003-01-01 through 2014-12-31.



4. To use the date range picker interface, click the Calendar icon on the filter, and select Fixed Dates from the menu.



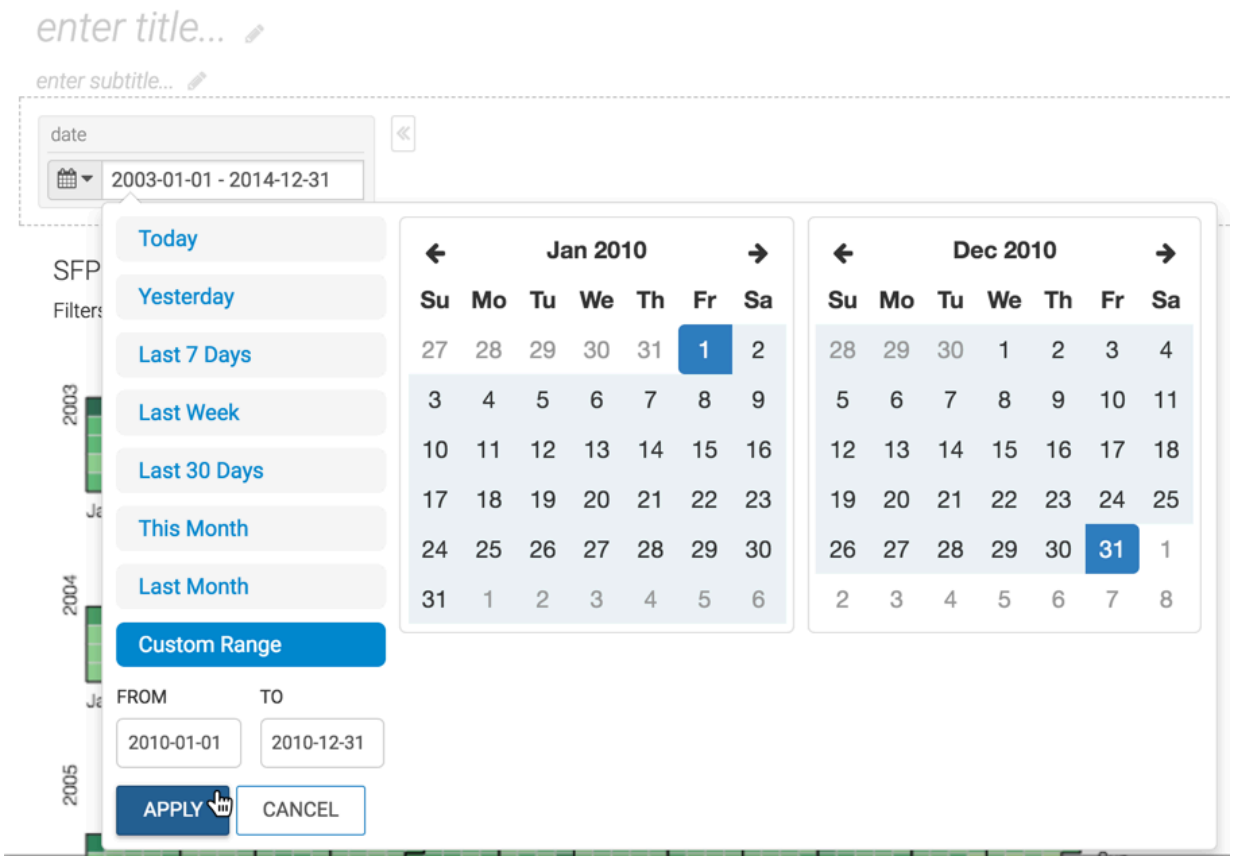
You can also click the date field of the dashboard filter to see the date range picker interface.



You can change the date range in various ways:

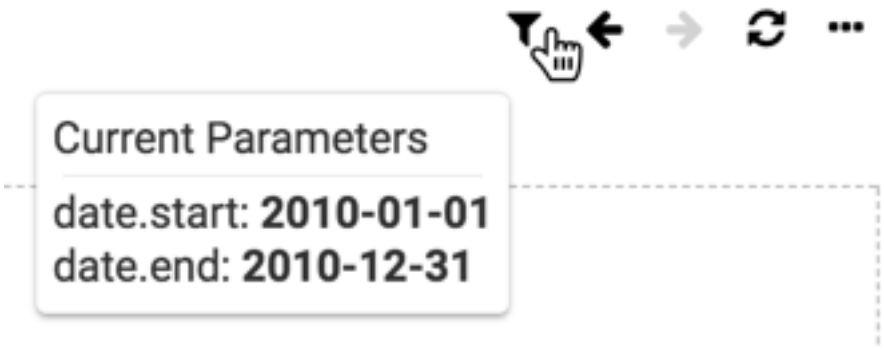
- By selecting the default options:
  - Today
  - Yesterday
  - Last 7 Days
  - Last Week
  - Last 30 Days
  - This Month
  - Last Month
- By changing the date entries for FROM and TO fields
- By picking the start and end dates directly on the calendar interface

5. Change the date range to 2010-01-01 through 2010-12-31, and click APPLY.



Results

The visual output is now limited to the 2010 calendar year and the application filter shows this new date range.



Related Information

Calendar heat maps

Using relative dates mode

In Cloudera Data Visualization, the relative date mode in a date filter enables you to select a subset range of dates anchored to a particular date.

About this task

The following steps show you how to use relative date mode of a date and time filter. The instrucions use a calendar heat map visual as an example. You can learn how to anchor a date to 2015-01-01 and limit the visual output to the next two years from this date.

Before you begin

- You have created a a calendar heat map visual using the Food Stores Inspection in NYC dataset with the inspecti on_date dimension on the Date shelf and the Record Count measure on the Measures shelf.

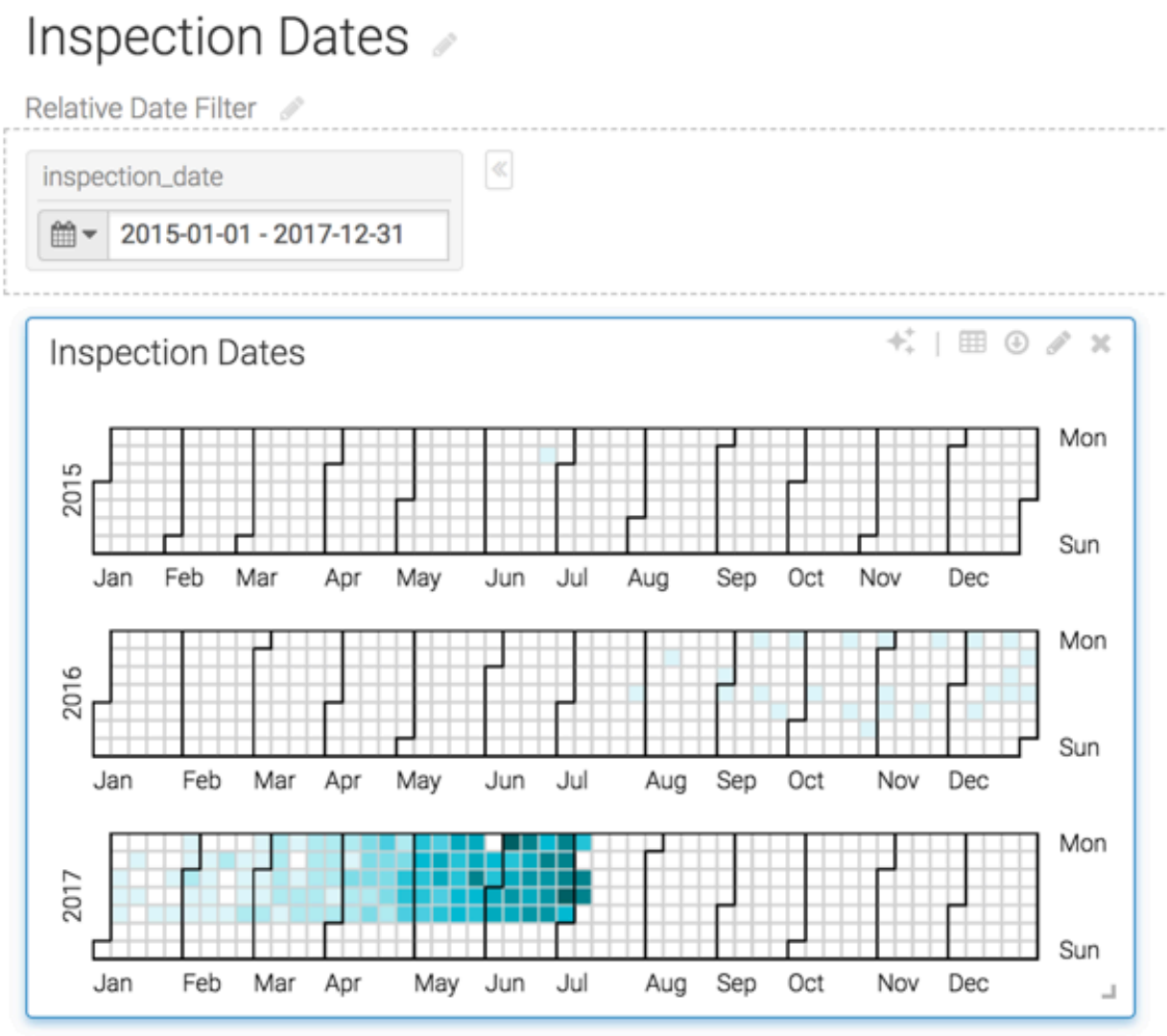
  For more information on this visual type, see Calendar heatmaps.
- You have added this visual to a dashboard.

Procedure

1. Open your dashboard in Edit mode.
2. Switch to the Filters tab on the Dashboard Designer side menu bar.

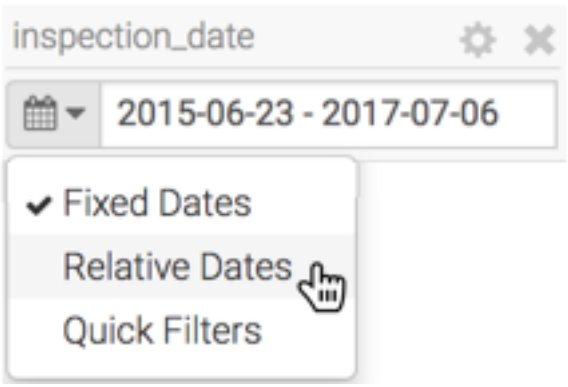
3. Under Dimensions, click the inspection_date field.

   This adds a filter to the dashboard. This filter is based directly on the inspection_date field, and has a timestamp type.

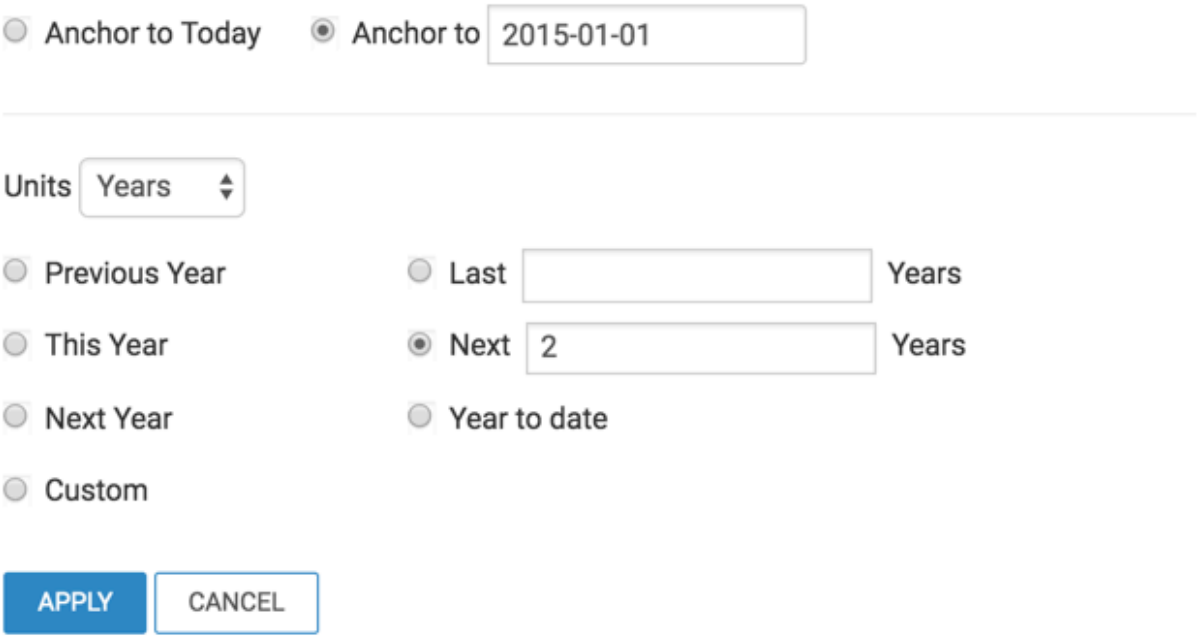


   The dashboard filter contains the date range for the entire dataset. In this case, it is for three years from 20015-01-01 through 2017-12-31.

4. Cick the Calendar icon on the filter and select Relative Dates from the menu.



The Relative Date modal window appears.



5. Anchor the date to 2015-01-01 and limit the visual output to the next two years from this date:
   - Select Anchor to and click in the date field to select 2015-01-01 from the calendar interface.
   - The other option is Anchor to Today (default).
6. Under Units, select Years.

   The other options are:
   - Days
   - Weeks
   - Months
   - Quarters

7. Select Next and enter '2' in the field next to it.

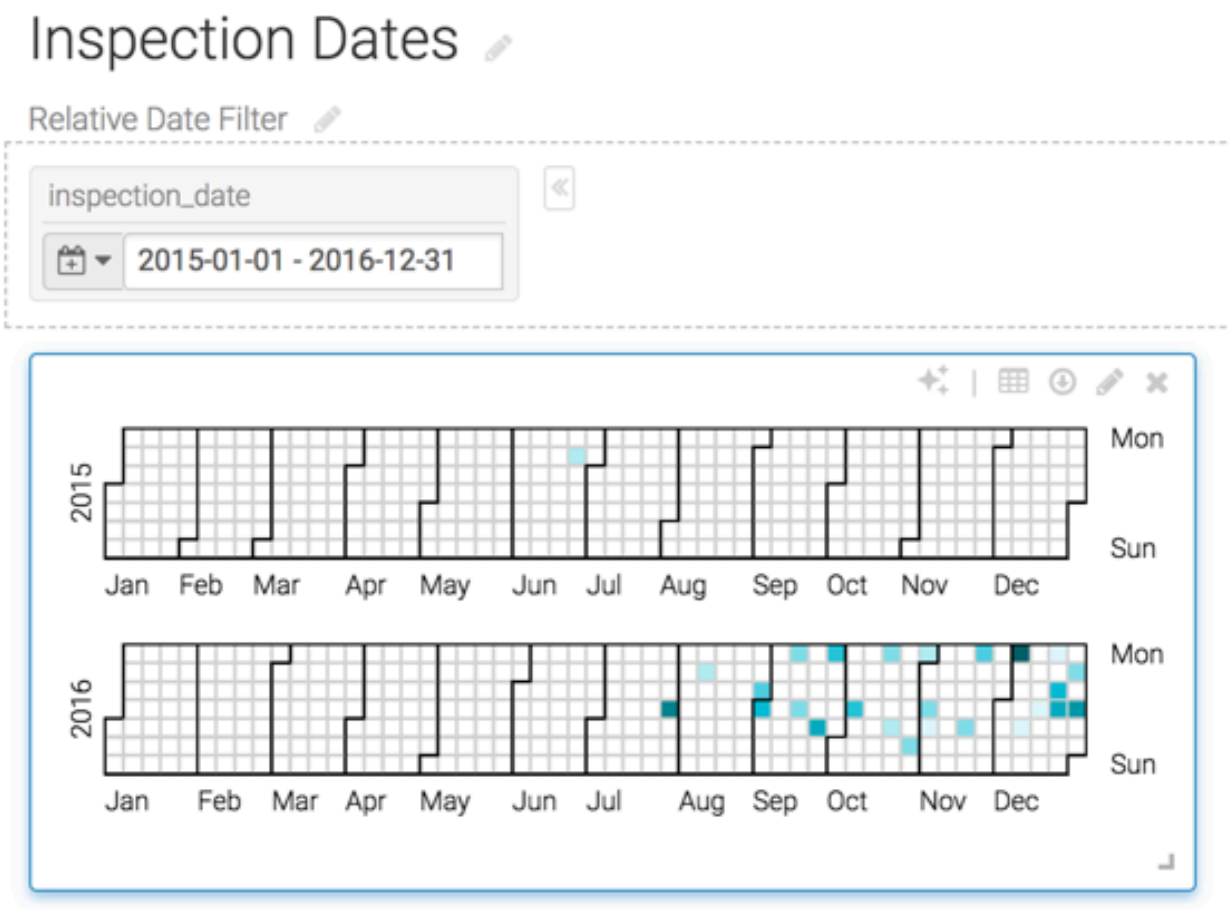
   The other options are:

   - Previous Year
   - This Year
   - Next Year
   - Custom
   - Last <number> Years
   - Next <number> Years
   - Year to date

8. Click APPLY.

Results

The visual output is now limited to two years, starting from the anchor year of 2015 and the application filter shows the new date range of 2015-01-01 - 2016-12-31.



Using quick filters

In Cloudera Data Visualization, the quick date filter enables you to provide a quick selection of date ranges for visualizing your data.

About this task

The following steps show you how to use the quick filters option for a date and time filter. The instructions use a calendar heatmap visual as an example.

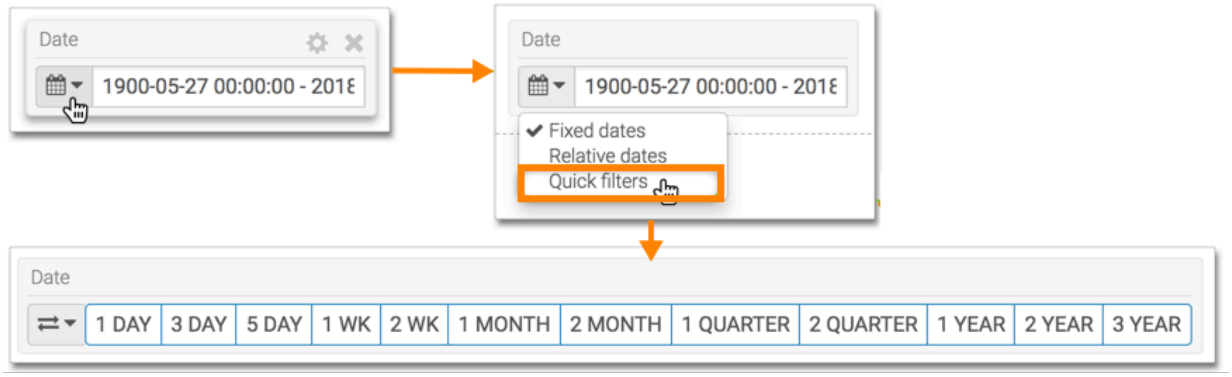
Before you begin

You have created a dashboard with quick filters. For instructions, see Configuring ranges on a date/time filter.

Procedure

1. Open your dashboard in Edit mode.
2. Click the Calendar icon on the filter and select Quick filters from the menu.

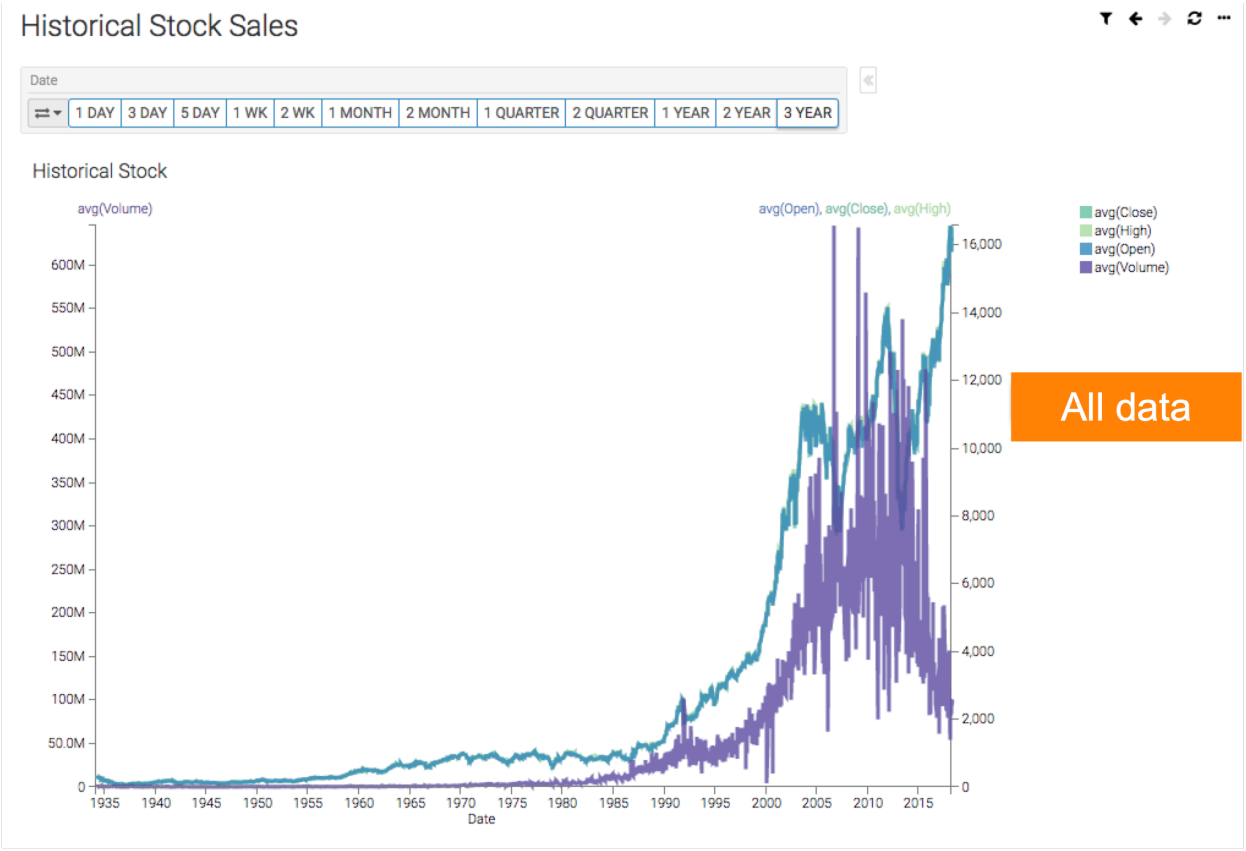
   The appearance of the filter changes to show the set of custom date ranges.

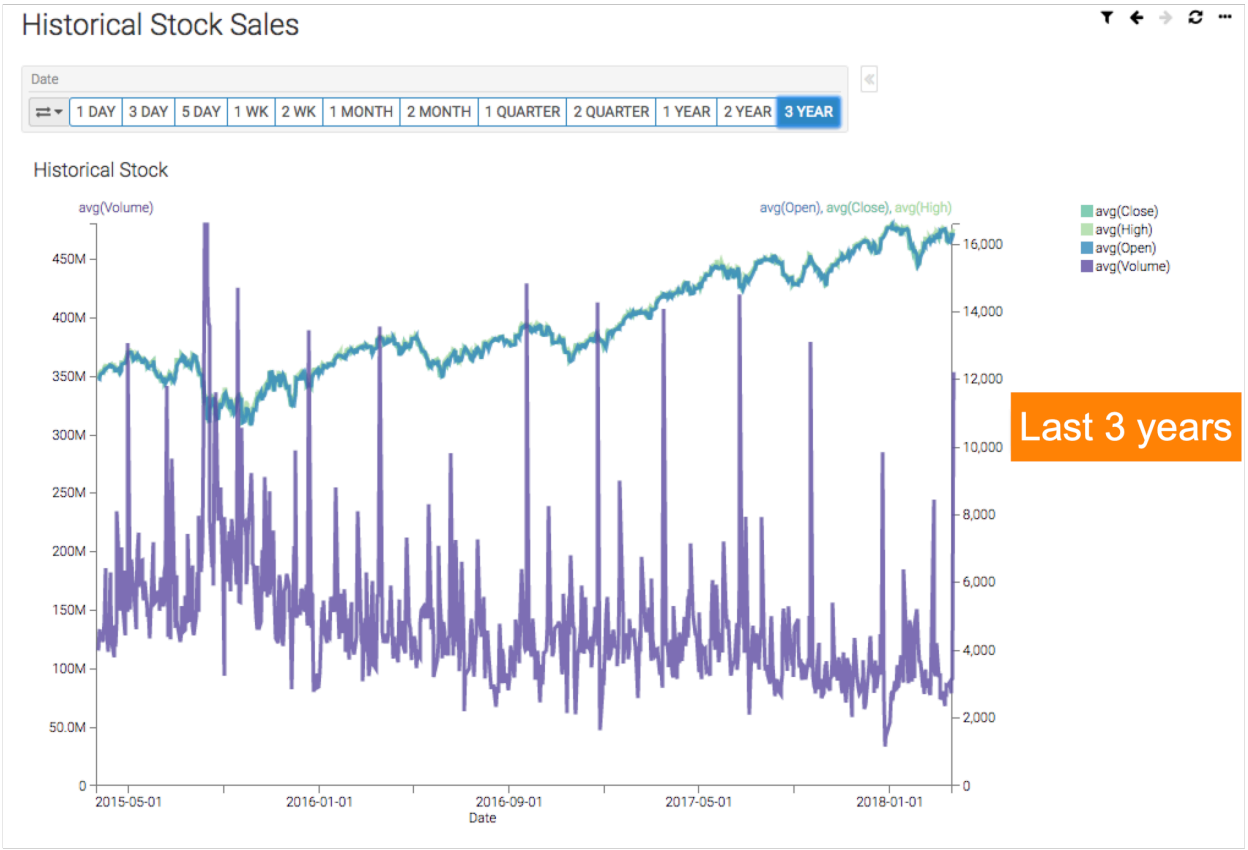


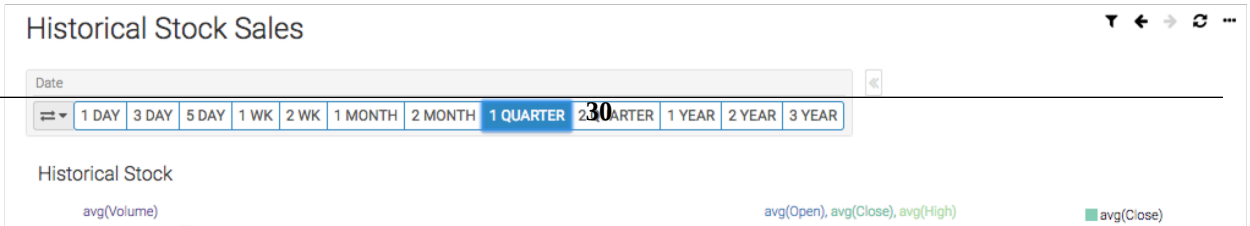
3. To use the quick filter, save the dashboard and switch to View mode.
4. Explore how the visual display changes when you click the different filter ranges.

Example

In these examples, you can see how the visual changes when the following filter date ranges are applied: none (all data), 3 years, and 1 quarter.


Historical Stock Sales
Date
1 DAY 3 DAY 5 DAY 1 WK 2 WK 1 MONTH 2 MONTH 1 QUARTER 2 QUARTER 1 YEAR 2 YEAR 3 YEAR
Historical Stock
avg(Volume)
avg(Open), avg(Close), avg(High)
avg(Close)
avg(High)
avg(Open)
avg(Volume)
All data
Date


Historical Stock Sales
Date
1 DAY 3 DAY 5 DAY 1 WK 2 WK 1 MONTH 2 MONTH 1 QUARTER 2 QUARTER 1 YEAR 2 YEAR 3 YEAR
Historical Stock
avg(Volume)
avg(Open), avg(Close), avg(High)
avg(Close)
avg(High)
avg(Open)
avg(Volume)
Last 3 years
Date


Historical Stock Sales
Date
1 DAY 3 DAY 5 DAY 1 WK 2 WK 1 MONTH 2 MONTH 1 QUARTER 1 YEAR 2 YEAR 3 YEAR
Historical Stock
avg(Volume)
avg(Open), avg(Close), avg(High)
avg(Close)

Related Information

Managing custom dates
Configuring ranges on a date/time filter

Including null values in date filters

The date filter enables you to select null values for visualization. The following instructions use a Scatter visual, which is built on the Issue Tracker dataset. This dataset includes issues that are created and resolved and also issues that are created but still open. Resolved issues have a timestamp and open issues have a 'null' value. By default, visuals only display values with a timestamp. This feature enables you to configure the date filter and display 'null' values in the visuals.

Creating a dashboard with date filters

The quick date filter enables you to provide a quick selection of date ranges for visualizing your data. This example shows a dashboard with a Scatter visual that plots created and resolved issues.

Procedure

1. Create a new dashboard and name it 'Issue Completeness'.
2. In the Dashboard Designer, create a Scatter visual based on the Issue Tracker dataset.
3. Populate the shelves from the available Dimensions and Measures fields in the DATA menu.
   a. Under the X shelf, add created from Measures.
   b. Under the Y shelf, add resolved from Measures.
   c. Click the field to open the Field Properties menu and make the following changes:
      - Select Enter/Edit Expression, enter the following expression, and click SAVE:

        ```
        if([resolved] IS NOT NULL,datediff([resolved],[created]),datediff(no
        w(),[created]))
        ```

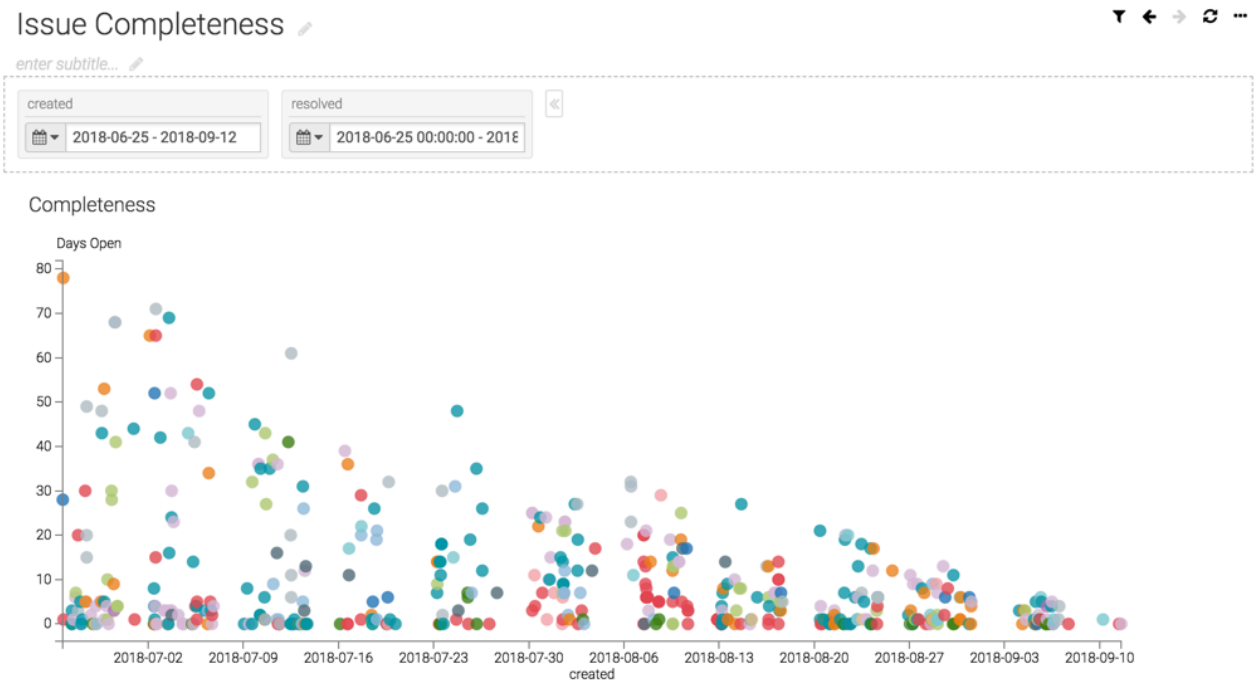
      - Select Alias and name the field 'Days Open'.
   d. Under Colors, add assignee from Dimensions.
   e. Under Tooltips, add the following fields:
      - Description
      - Issue Key
      - Assignee
      - Date Open
      - Date Closed
   f. Under Filters, add created and resolved from Dimensions.
4. Click REFRESH VISUAL.
5. Click SAVE.

   The visual appears in the main area of the dashboard interface.
6. Add two date filters, created and resolved in the dashboard, with a date range from 2018-06-25 to 2018-09-12.

   For information on how to create date filters in a dashboard, see *Using fixed dates (date range picker) mode*.
7. Click SAVE.

Results

The following image shows the new dashboard you have created. This visual does not include the null values in the dataset.



What to do next

Proceed to the next section to learn how to include null values in a visual.

Including null values in a visual

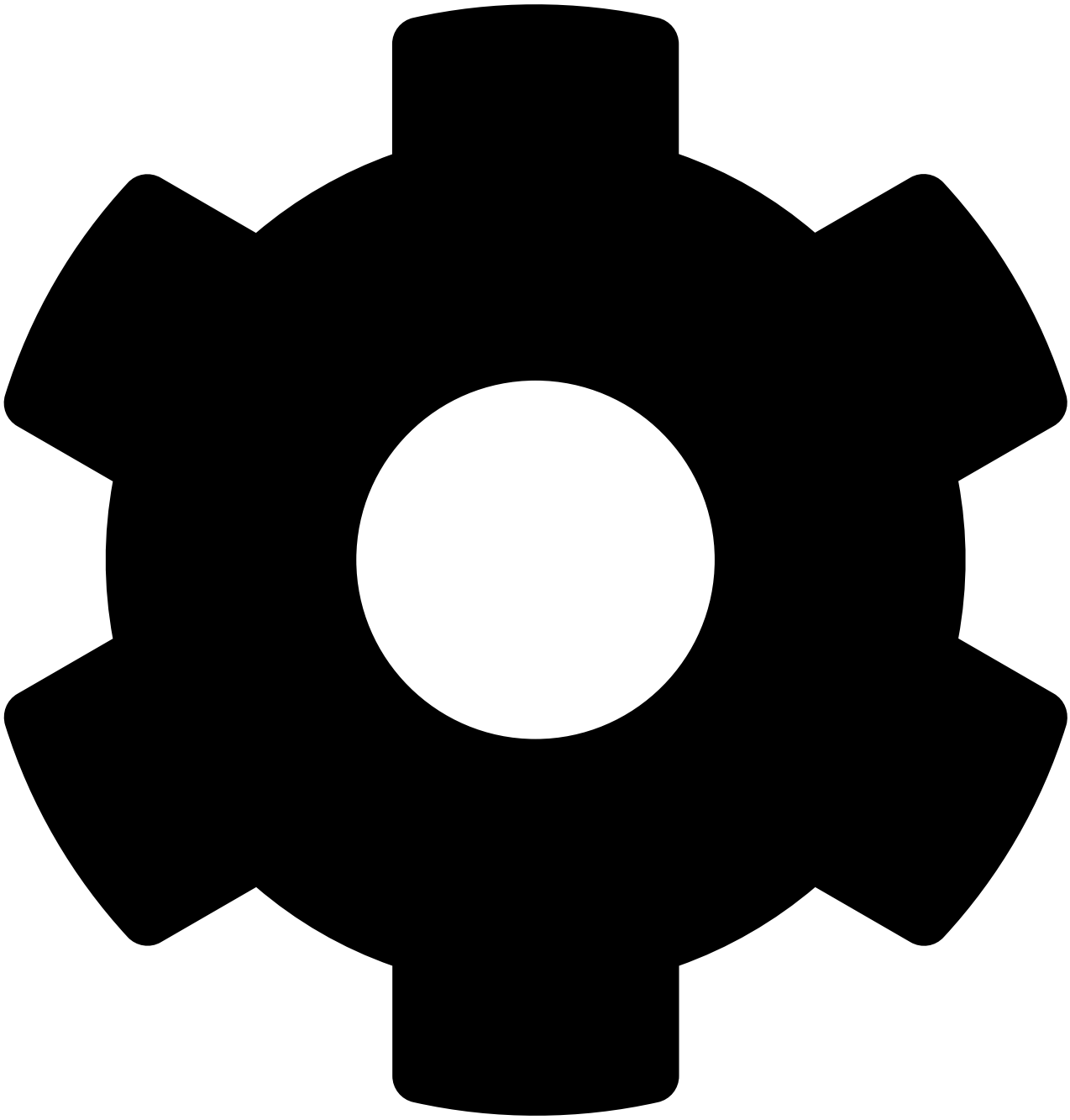
The quick date filter enables you to provide a quick selection of date ranges for visualizing your data.

Before you begin

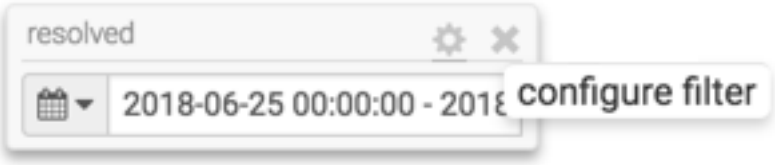
You have created dashboard with a scatter visual that plots created and resolved issues.

Procedure

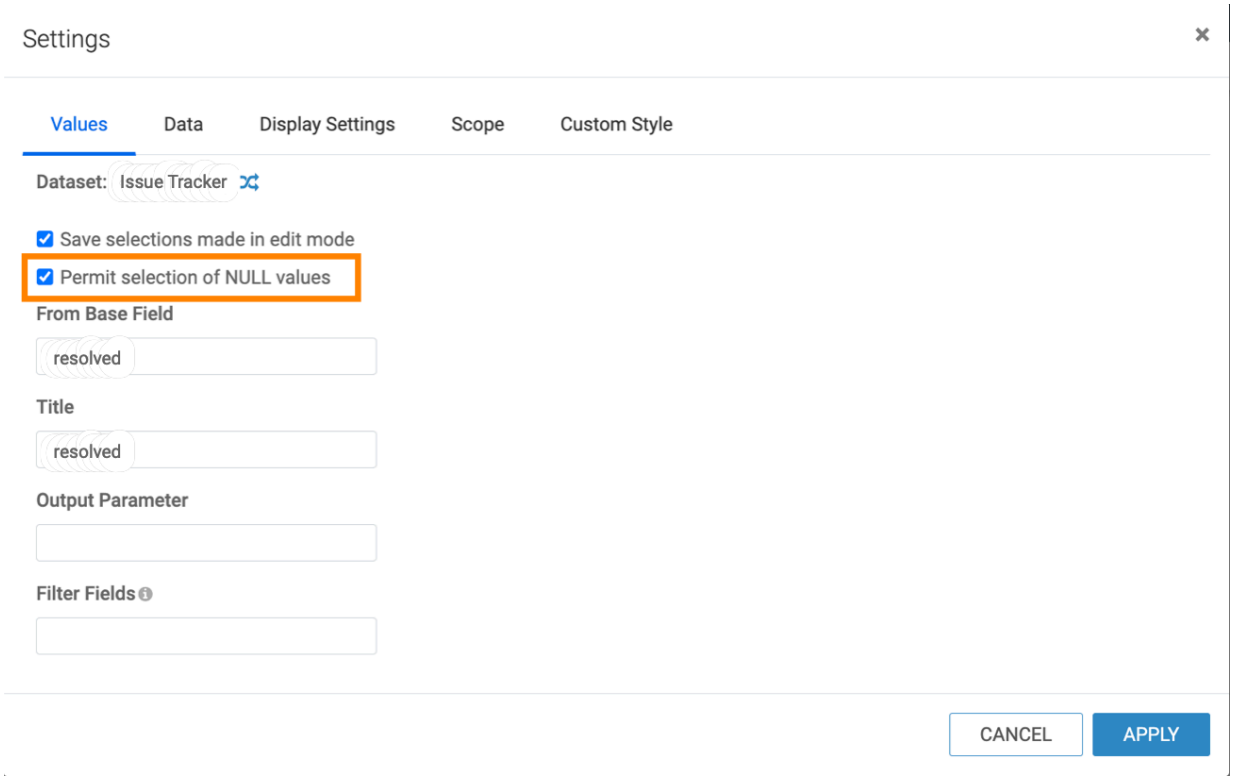
1. Hover over the top right corner of the resolved filter and click



to configure the filter.



2. On the Values tab of the Settings modal window, select the Permit selection of NULL values option.

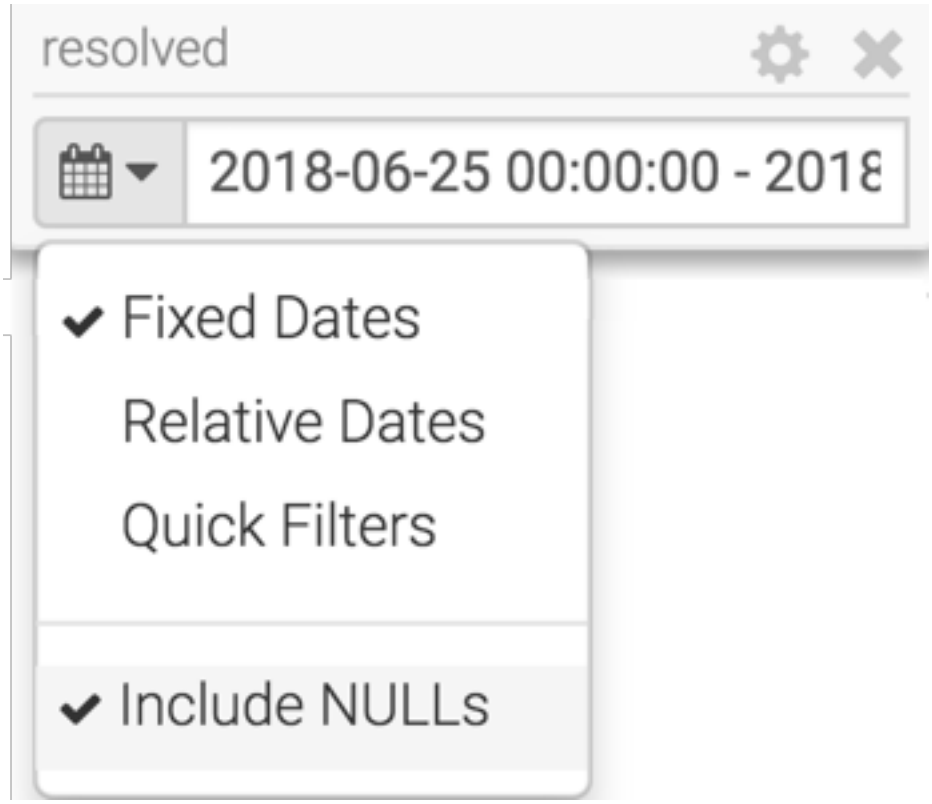


3. Click APPLY.

4. Click the Calendar icon on the resolved filter.

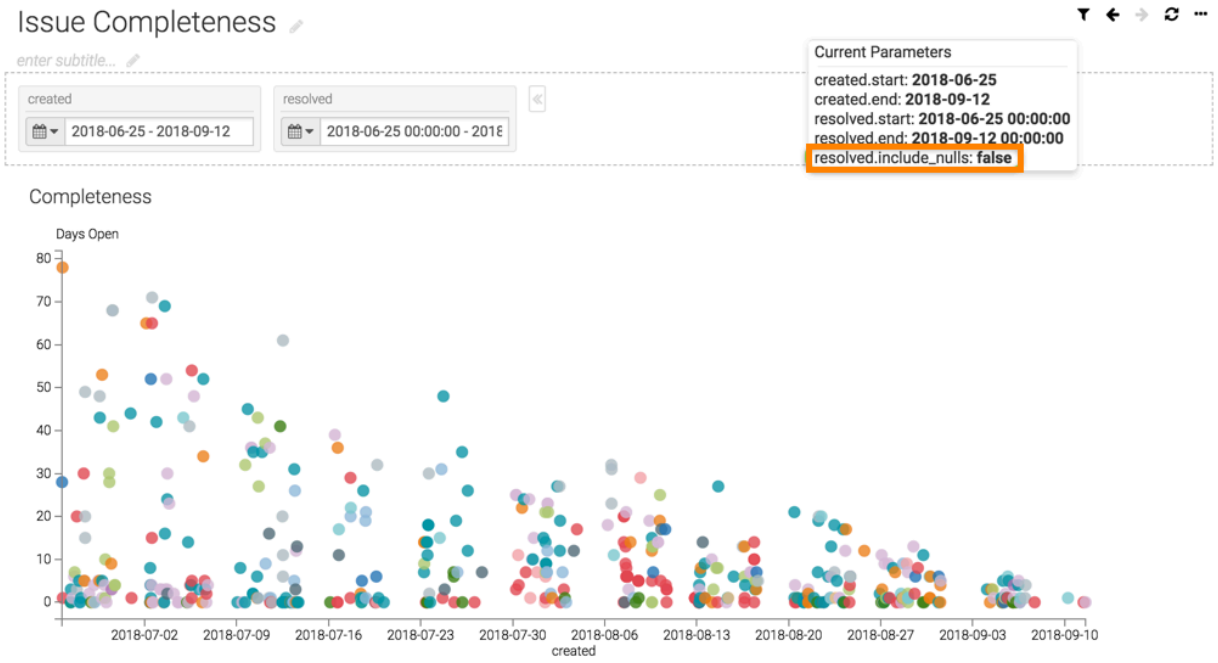
   The Include NULLs option appears in the drop-down menu.

   Note: If the Permit selection of Null values option is not selected in the previous step, the Include NULLs option is not visible in the dropdown.



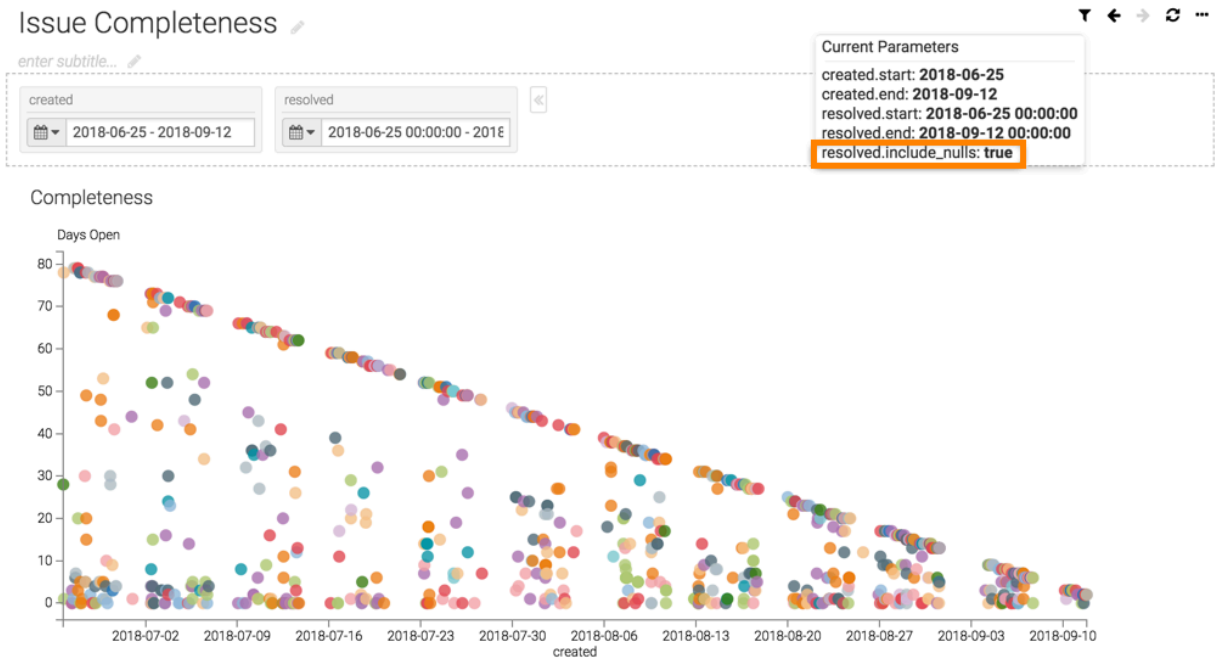
5. Close the drop-down menu without selecting the Include NULLs option.

   The following image shows that the Current Parameters on the top right corner shows resolved.include_nulls: false, indicating that the Include NULLs option was not selected in the filter.



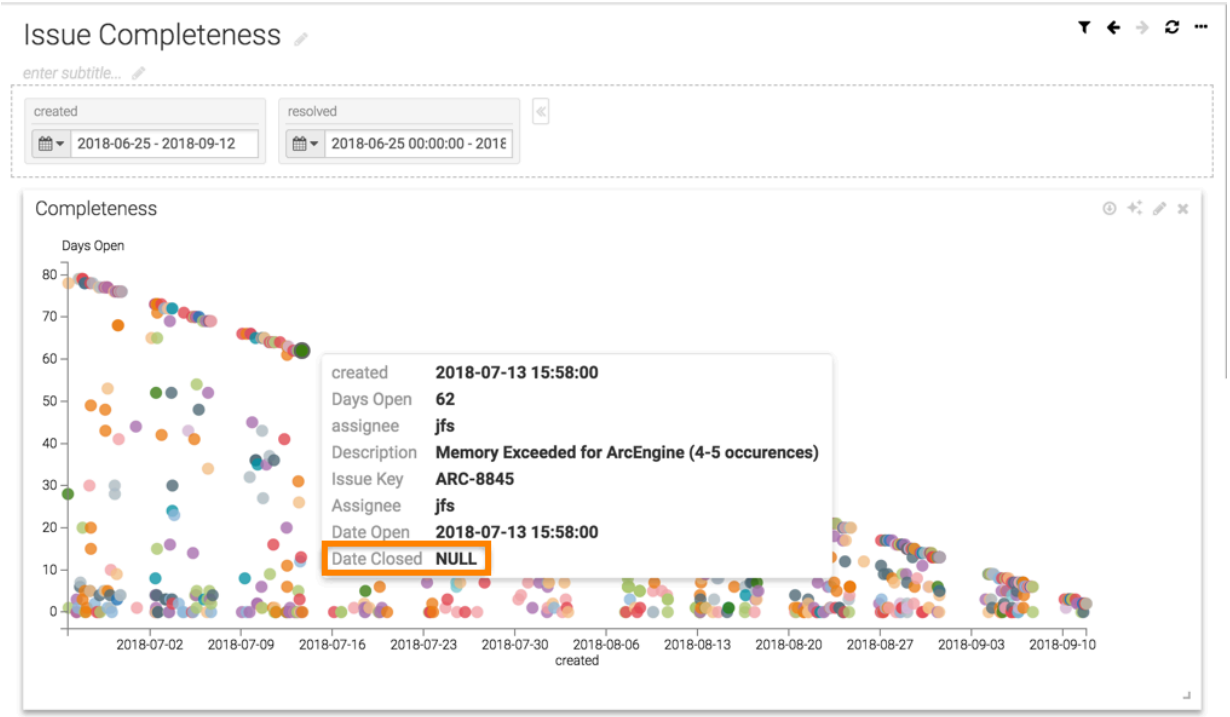
6. Click the Calendar icon on the resolved filter and select the Include NULLs option.

   The following image shows that the Current Parameters modal in the top right corner shows resolved.include_nulls: true, indicating that the Include NULLs option was selected in the filter. The visual now includes the null values in the dataset.



7. To verify that the visual includes null values, hover over one of the selections to view the tooltip.

   The following image shows that Date Closed has a 'NULL' value.



Setting parameters through URL

In Cloudera Data Visualization, setting parameters through the URL allows you to dynamically add selection options without altering the app's saved values. These settings can also be easily shared by including them in emails, documents, or similar mediums.

About this task

Important: URL strings must use single quotes (be a valid JSON array), and usual character limitations on URL addresses apply.

The basic syntax for URL formatting:

```
http://baseurl/arc/apps/app/id?config.output={setting: value}
```

baseurl

The IP address of the site, such as 27.0.0.1:8000, or sf.mycompany.org.

id

Unique number of the dashboard or the visual.

output

The output of the parameter or the picklist.

setting

The available option is VALUE.

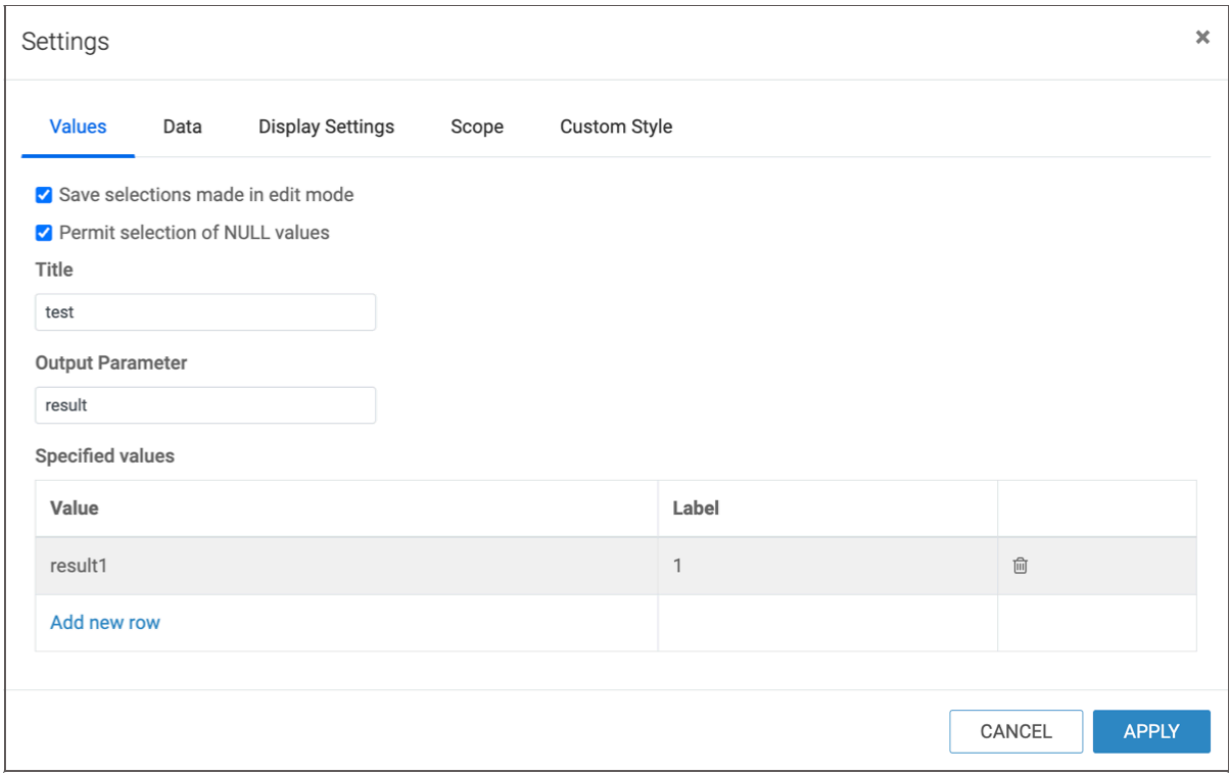
value

An array of value-label pairs in the format [["value1","label1"],["value2","label2"],["value3","label3"], ...,].

The following steps demonstrate how to use parameters through URLs:

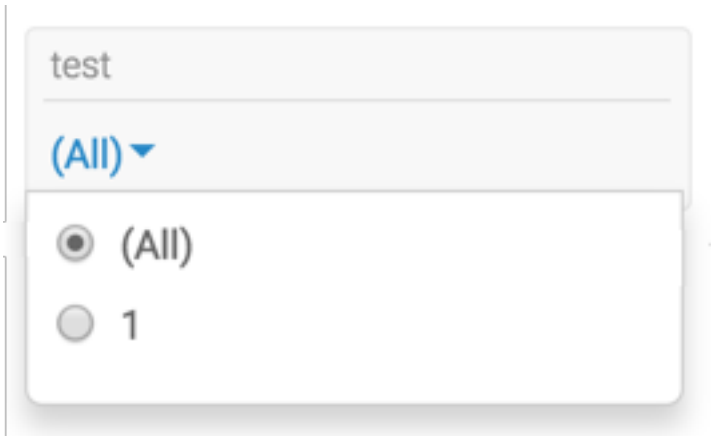
Procedure

1. On the Values tab of the Settings modal window, specify the Title and Output Parameter.
   In this example, test and result are used, respectively.
2. You can specify one or more Value:Label pairs.
   In this example, result1:1 is used.



3. Click APPLY.
4. In the dashboard, check the possible options for the parameter.
5. In the test parameter, click the Down Arrow icon.

   There are two options: (All) and 1.



6. Select 1 and hover the pointer over the Filter icon at the top right of the dashboard.

   The Current Parameters are set to result: result1 and result.alias: 1.

7. Save the dashboard.
8. Switch to View mode.
9. Copy the URL.

   In this example, it is http://127.0.0.1:8000/arc/apps/app/38.

10. In another browser window, paste the value saved in the previous step, add the code specific to setting parameters through URL, and click enter.

    In this example, two more pairs: result2:2, and result3:3 are added. The new code is in bold font, starting with '?'.

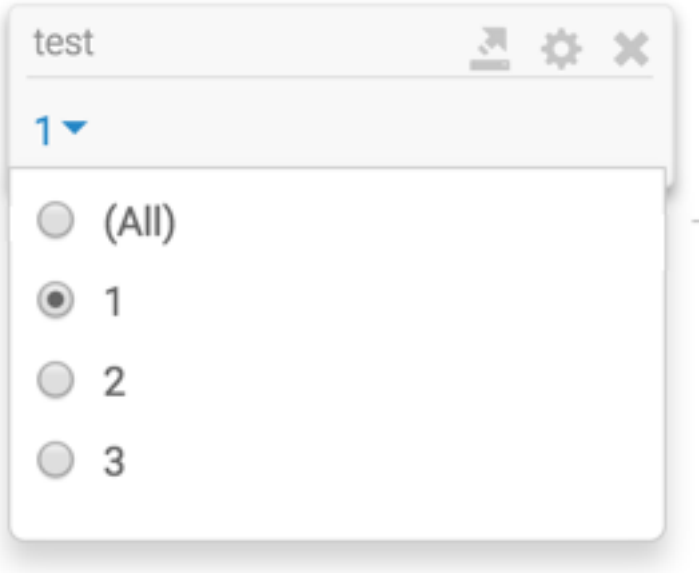
```
http://127.0.0.1:8000/arc/apps/app/38?config.result={values:
[["result2","2"],["result3","3"]]}
```

11. In the dashboard, check the possible options for the parameter.

    Options 2 and 3 appear in the selection list.

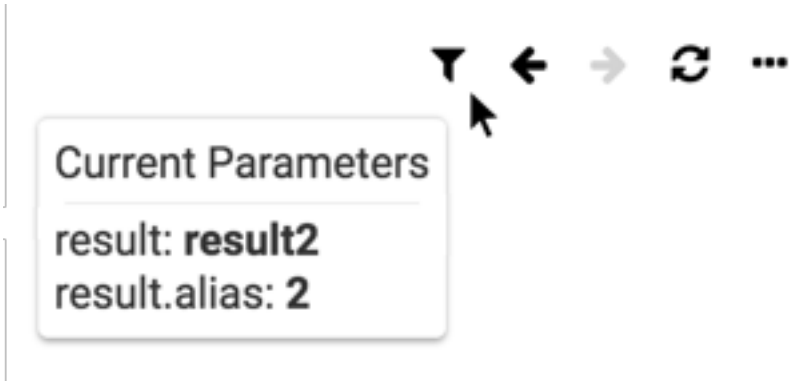
12. In the test parameter, click Select.

    There are two additional options: 2 and 3.



13. Select 2 and hover the pointer over the Filter icon at the top right of the dashboard.

    Current Parameters are set to result: result2 and result.alias: 2.



Customizing output parameters

In Cloudera Data Visualization, application controls can use custom output parameters. You can use custom output parameters for application controls. This allows you to apply a filter from one dataset to control the visual presentation of another dataset.

About this task

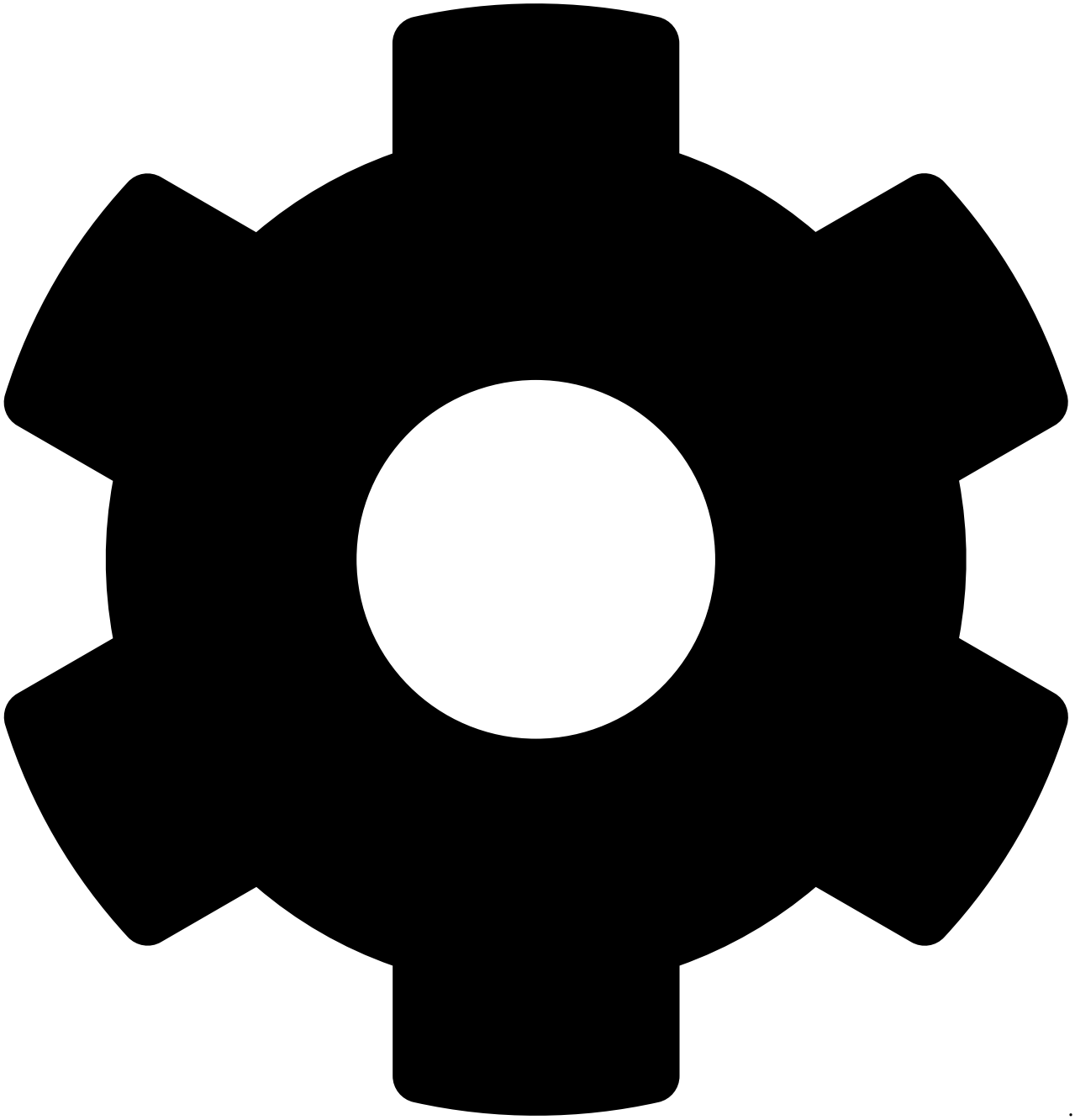
Often, the field names between the source (driver) and target datasets do not match. You can resolve this by mapping the filter's value to the correct field in the target dataset.

The following steps show you how to configure a filter based on the US State Populations Over Time dataset to control a visual based on the US County Population dataset.

Procedure

1. Open an existing dashboard in Edit mode or create a new one.
2. Ensure that includes visuals from both datasets. If not, click the Visuals tab on the left navigation and add the required visuals.
3. Click the Filters tab and select the US State Populations Over Time dataset.
4. Under Dimensions, click the state field to add it as a filter.

5. Hover over the added filter until controls appear in the top right corner, then click



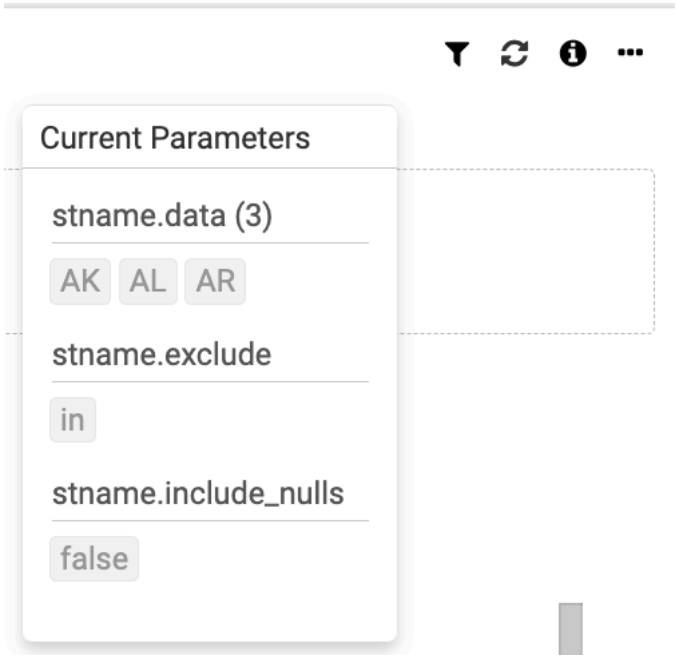
The Settings modal window opens on the Values tab.

6. Configure the following values:
   - Title: Set to States.
   - Output Parameter: Set to stname.

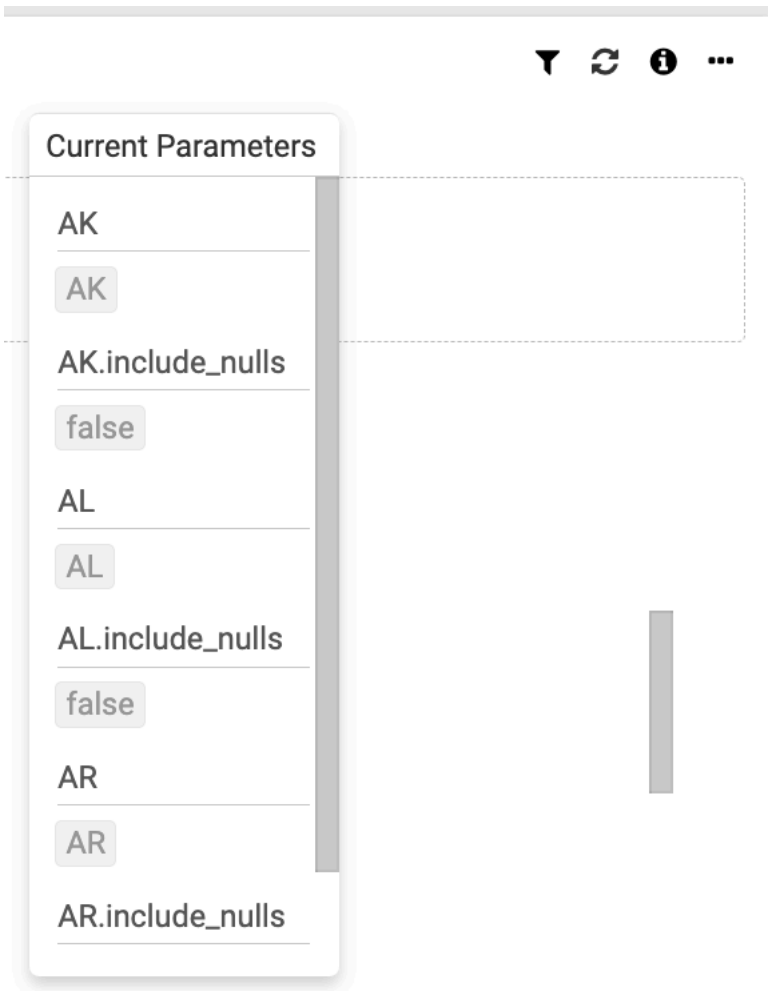
   Note: From Base Field is set to state by default. Do not change this setting!
7. Click APPLY.
8. In the state filter, click Select and chose the following:
   - AK
   - AL
   - AR

9. In the top right corner of the application, hover over to review the current filter parameters.

   This reports the current filtering parameters. The output parameter is correctly named stname, and the filtering conditions applied earlier are displayed.



   If the Emit distinct parameters for each item selected option is selected on the Display Settings tab, the filter reports each selection as distinct key/value pairs. By default, the label for each key is derived from its value. However, if labels are specified (for example, when using optional parameters), they will be displayed instead.



Configuring ranges on a date/time filter

In Cloudera Data Visualization, you can easily configure real-time filters that enable you to navigate across visuals built on time series. Both historical data and ongoing data feeds are supported.

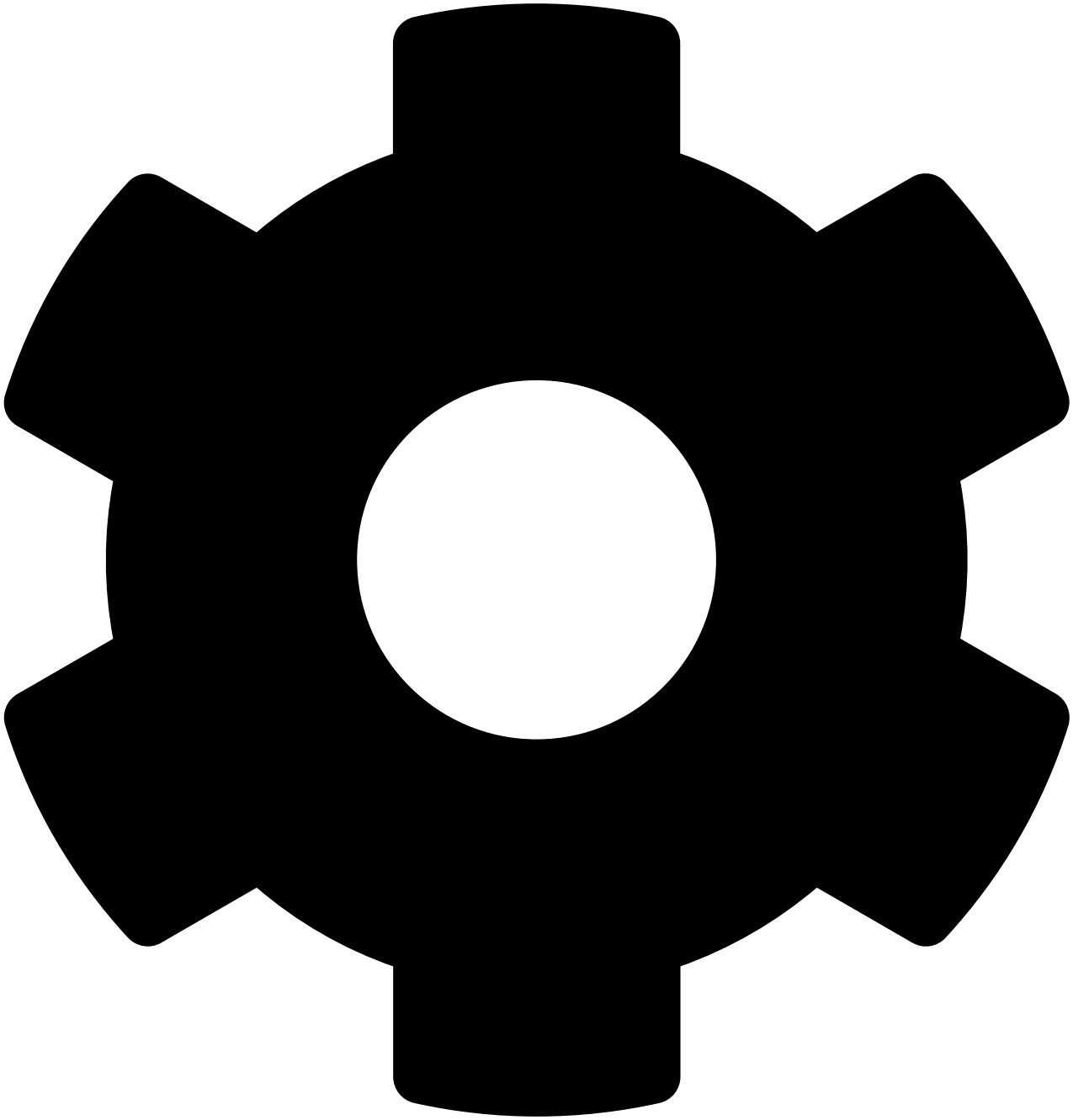
Before you begin

You have created a date/time filter widget. For instructions, see Creating date/time filters on a dashboard.

Procedure

1. Open the dashboard in Edit mode.

2. Hover over the upper right corner of the filter and click



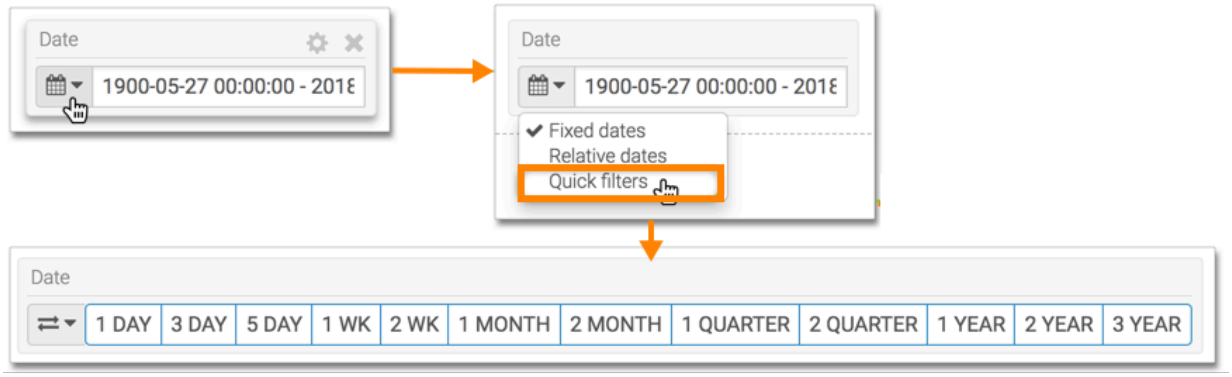
to configure the filter.

The Settings modal window opens on the Basic tab.

3. Select the option Permit selection of time range.
4. Click the Ranges tab and select the the appropriate range.
5. Click APPLY.

6. On the filter, click the Calendar icon and select the Quick filters option from the menu.

   The appearance of the filter changes to show the set of defined date ranges.



   For instructions on how to use the quick filter, see *Using quick filters*.

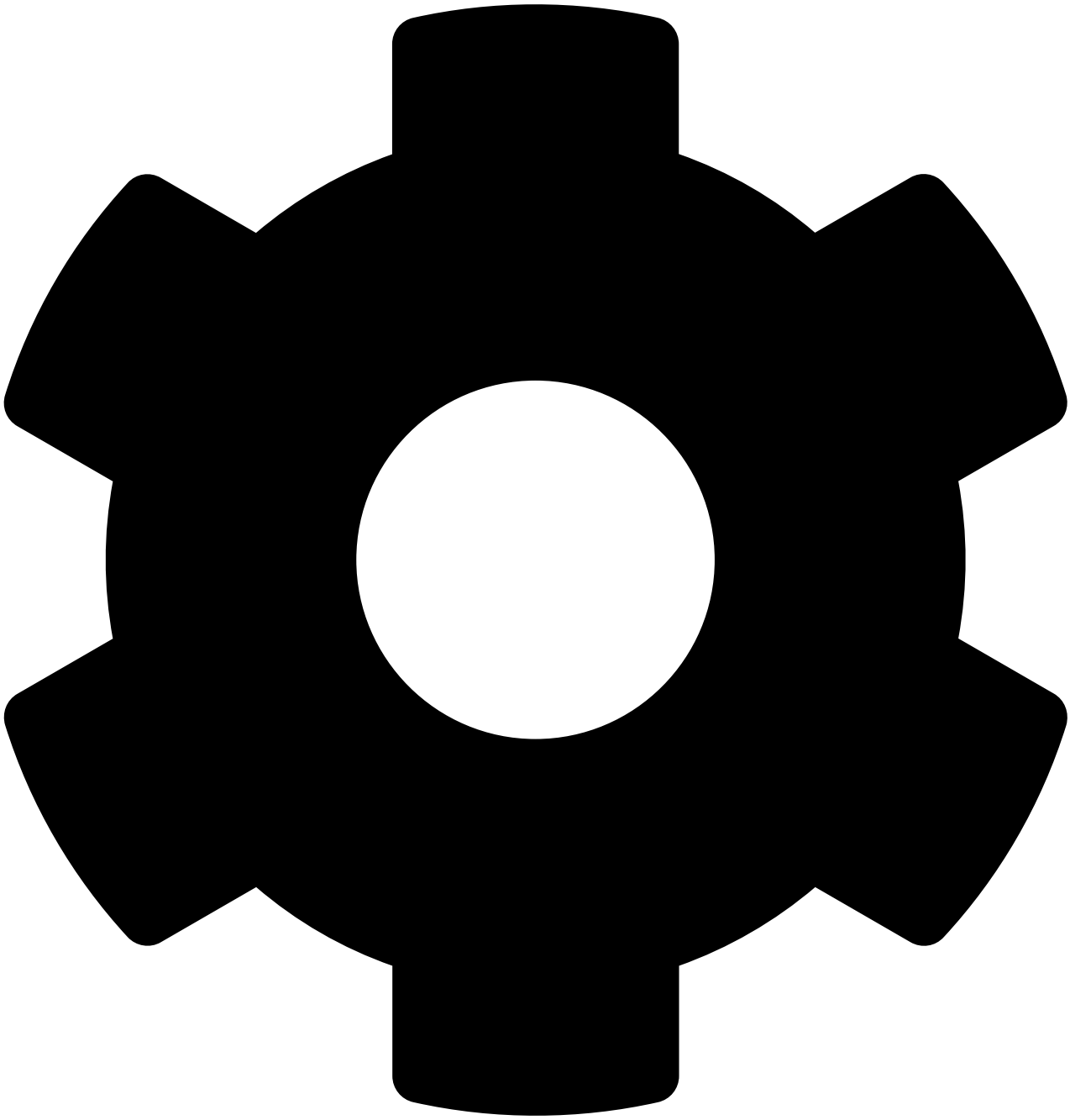
Related Information

Using quick filters

Configuring data options for a dashboard filter

Cloudera Data Visualization allows you to configure data options of a newly created field-based or custom filter in a dashboard.

Procedure

1. Click  on the filter widget.

   The Settings modal window opens on the Values tab.
2. Click the Data tab.
3. Configure the following settings.

Changing number of initial options in dashboard filters

In a dashboard filter, you can control the number of initial options that appear in the dashboard filter at loading time. This limits the display of options for datasets with a very large variability.

Procedure

1. Enter a value in the Maximum default number of values displayed.
   The default is 1000.
2. Click APPLY.

Changing number of options in search output of dashboard filters

In a dashboard filter, you can change the maximum number of options that appear during search. This limits the display of options for datasets with a very large variability.

Procedure

1. Enter a value in the Maximum number of search results displayed.
   The default is 1000.
2. Click APPLY.

Disabling incremental queries in filters

Cloudera Data Visualization allows you to disable incremental queries at the level of the dashboard filter. Incremental queries return preliminary results quicker and paints the visuals on the dashboard, and then adjusts the level of detail as more results are incorporated into the calculations. Disabling this feature delays the painting of the visuals until all results are in.

Procedure

1. Select the Disable incremental queries, overriding field-based-level setting option.
2. Click APPLY.

Configuring sort order in filter values

Cloudera Data Visualization allows you to select the sort order of filter values. There are different sort order options available on field-based filters and custom filters.

Procedure

1. Select the Filter Options Sort Order option.

   Sort Order of Filter Widget Values on Field-based Filters

   For a field-based filter, there are two sort options available under the Filter Options Sort Order setting:

   - Ascending
   - Descending

   By default, filter widget values are displayed in ascending order (image on the left). In this example, to see the most recent population of Australia first, select the Descending option (image on the right).

   By default, filter widget values are displayed in ascending order. In our example, to see the most recent population of Australia first, select the Descending option.

   Sort Order of Filter Widget Values on Custom Filters

   For a custom filter, there are three sort options available under the Filter Options Sort Order setting:

   - Ascending
   - Descending
   - Default

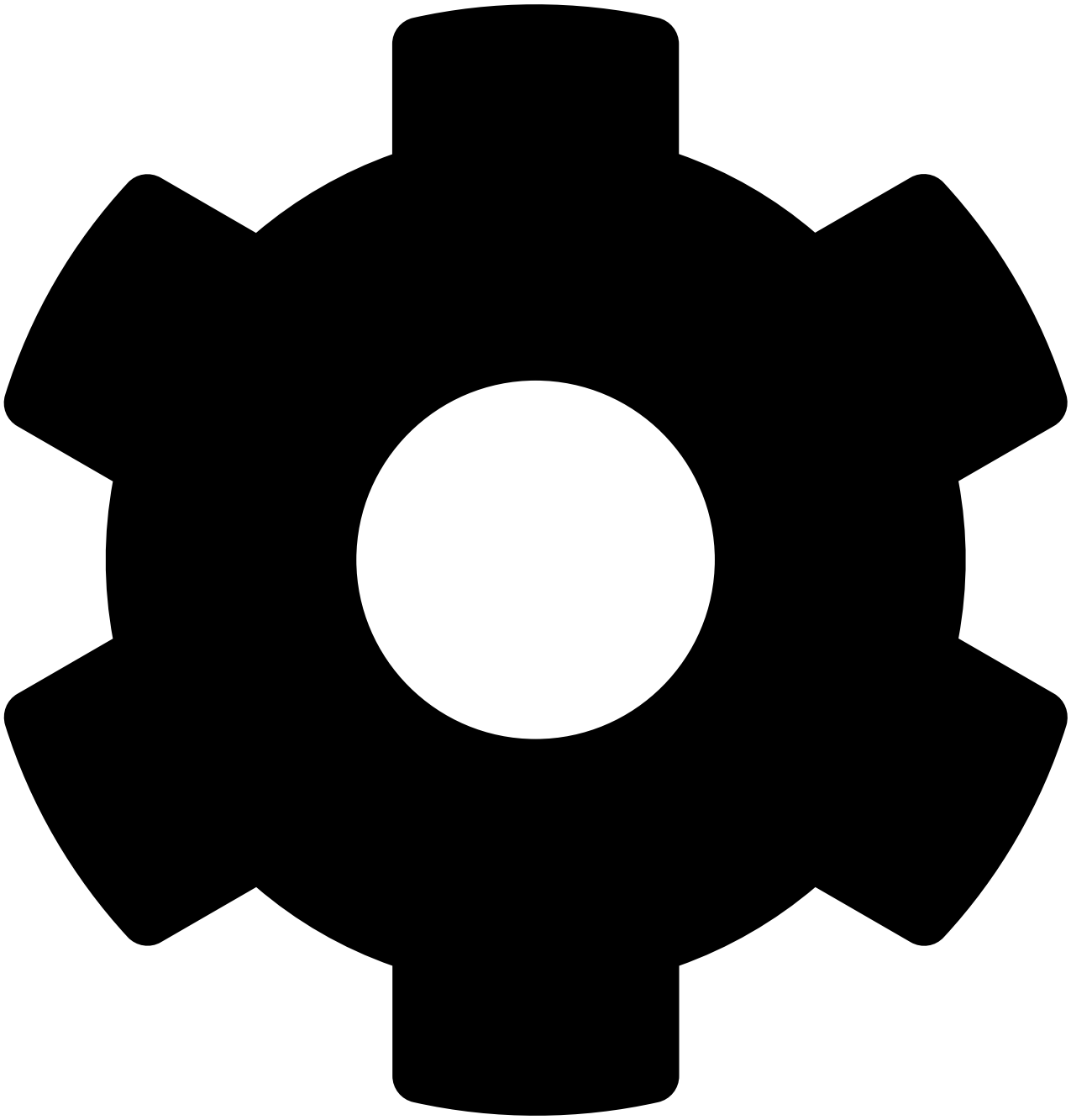
   The default setting of the sort order in a custom filter is Default. In the following image, notice that the default sort order in the filter widget is the same as the lables of the custom filter added in the Values tab: Country, Year, Region, and GDP.

   You can select the Ascending option to change the sort order to country, GDP, Region, and Year, or select the Descending option to change the sort order to Year, Region, GDP, and Country.
2. Click APPLY.

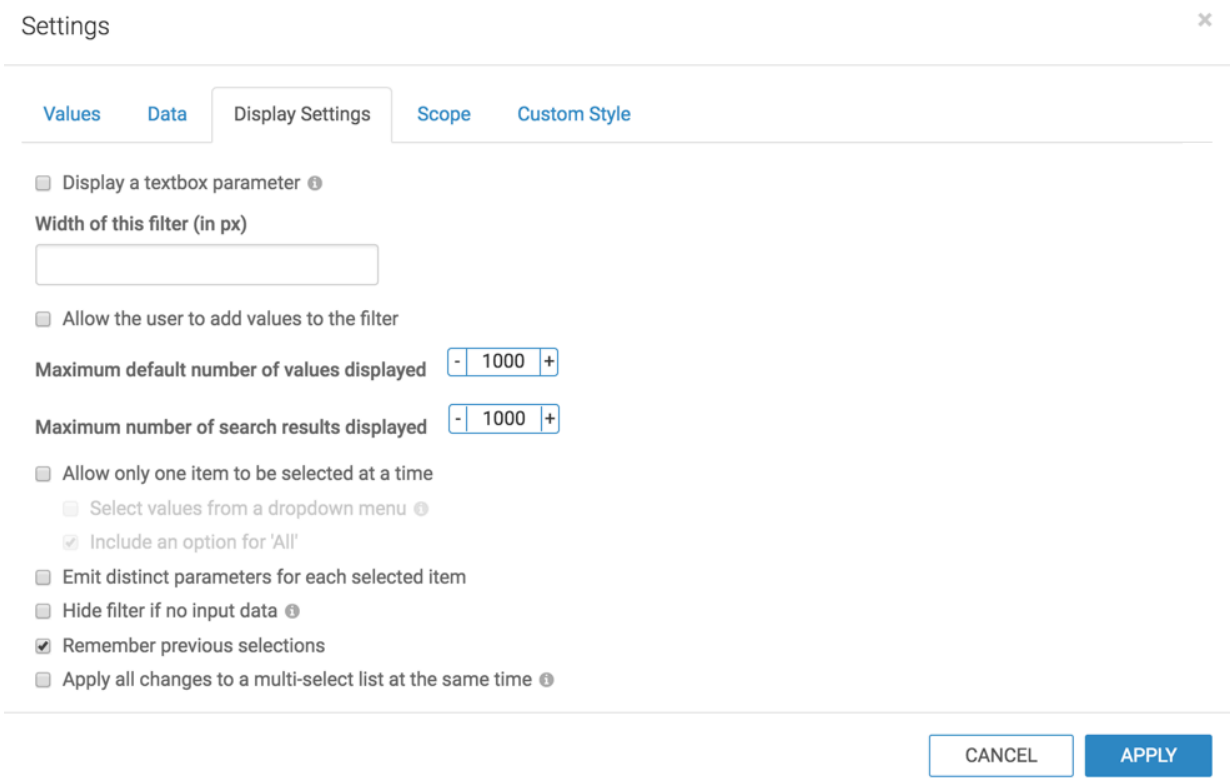
Configuring display settings for a dashboard filter

Cloudera Data Visualization enables you to specify display settings of a custom filter in the dashboard.

Procedure

1. Click  on the filter widget.

2. In the Settings modal window, click the Display Settings tab to examine the available options:



Displaying a textbox parameter

This option allows you to add a customizable parameter text box in a dashboard filter, enabling users to enter or search for specific values during runtime.

About this task

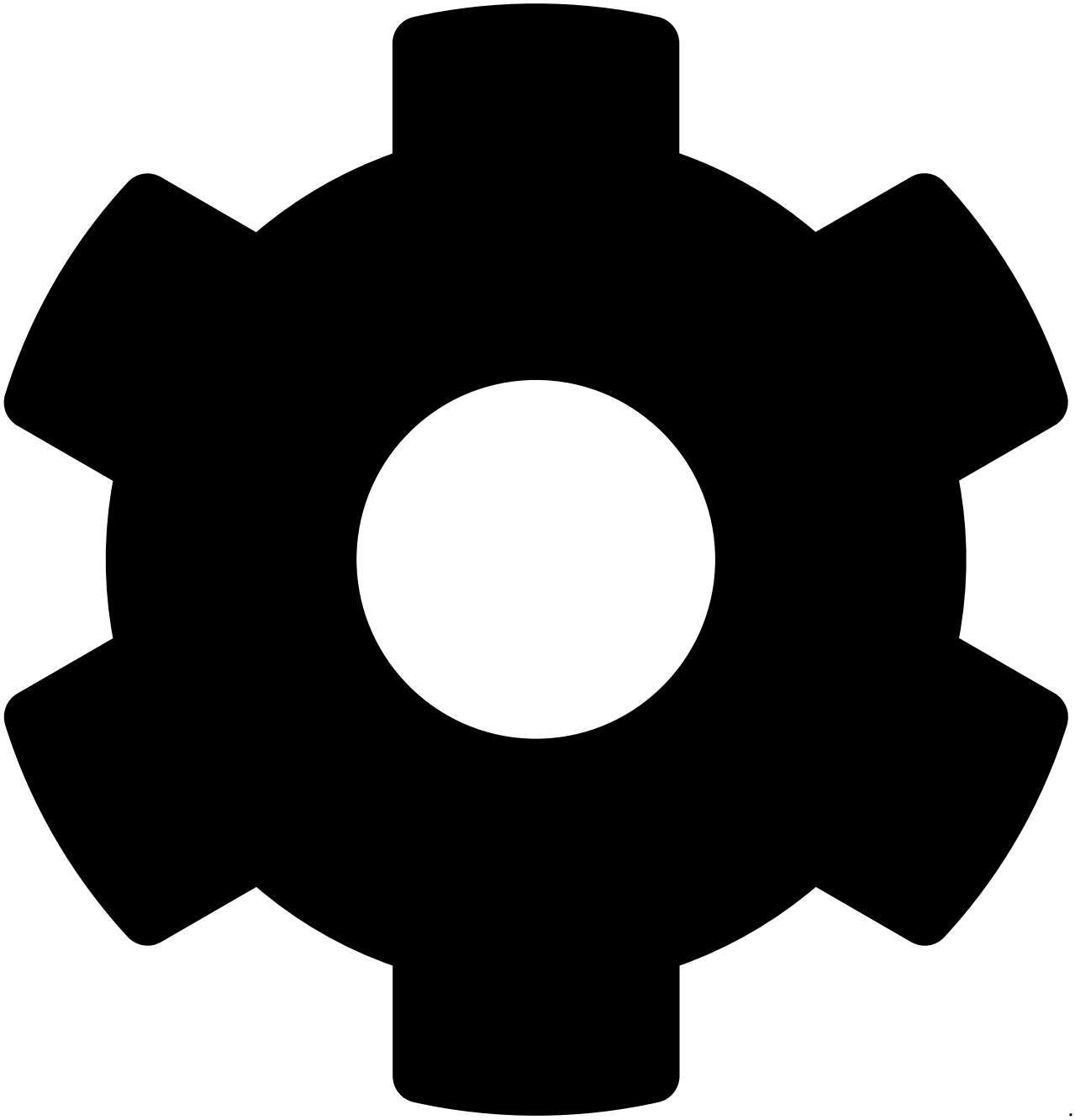
When enabled, the Display a text box parameter option overrides all predefined values included in the Specified values option on the Values tab of the Settings modal window. Instead of selecting from a list, you can enter a parameter value that you want to use at runtime, or search for data that matches certain values. It creates a simple search box filter.

Before you begin

You have added a filter widget to your dashboard.

Procedure

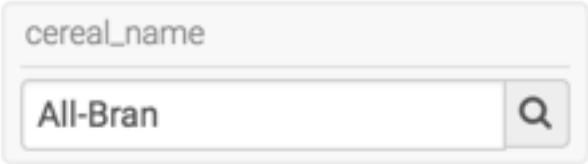
1. Open the dashboard in Edit mode.

2. Hover over the filter and click  .

   The Settings modal window appears.
3. Go to the Display Settings tab and check the Display a text box parameter option.
4. Click APPLY.

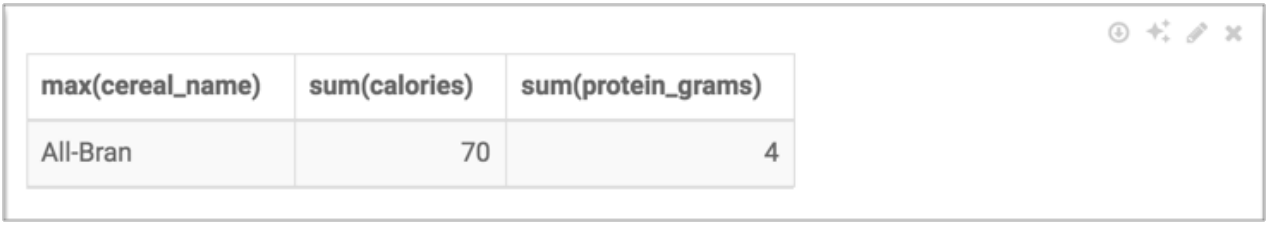
   A parameter filter textbox appears as a filter.

5. Enter a value in the textbox.
   In this example All-Bran is added.



Results

The visual automatically gets updated and displays data related only to All-Bran.



max(cereal_name)	sum(calories)	sum(protein_grams)
All-Bran	70	4

Changing the width of the filter text box

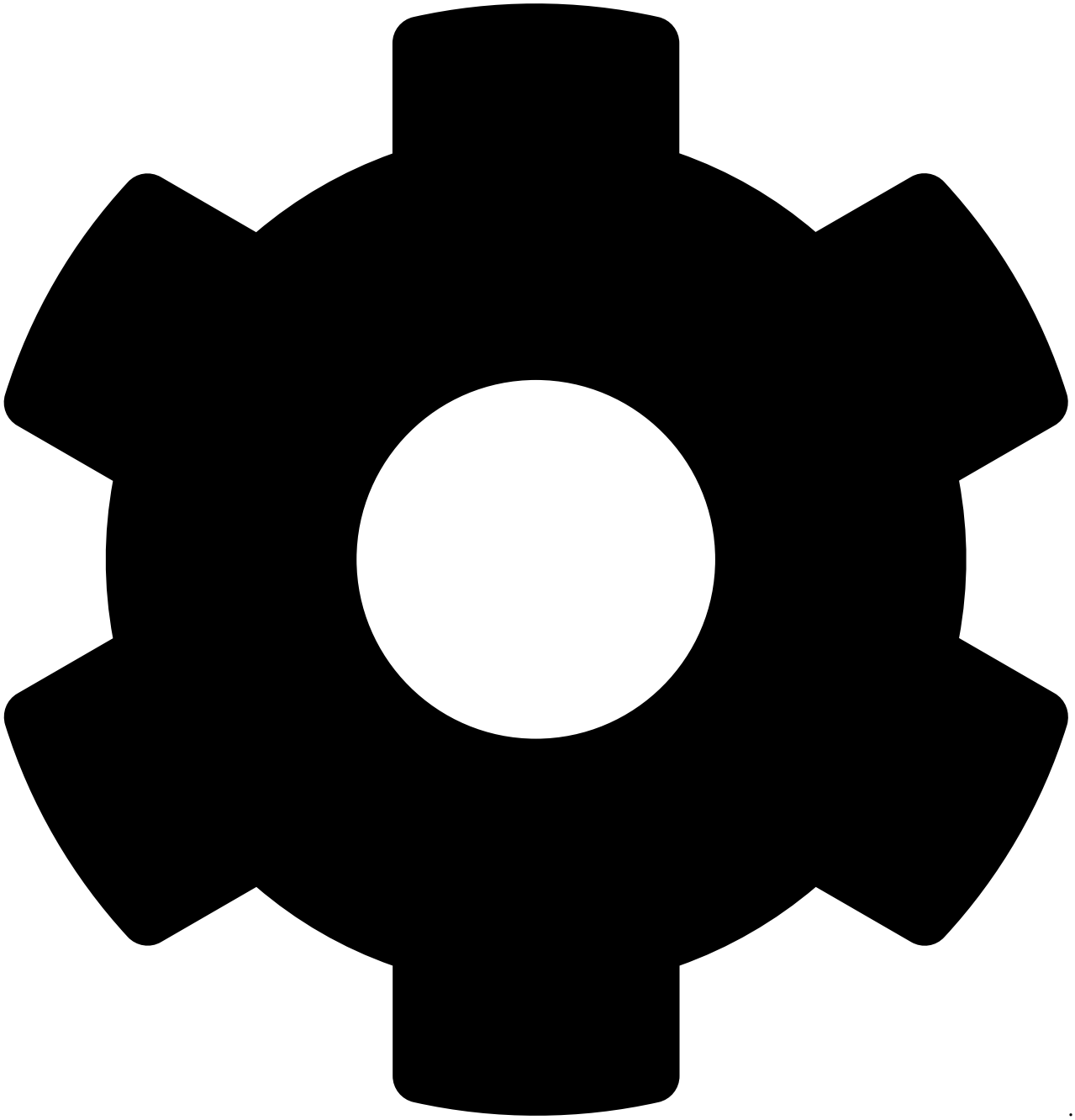
This option allows you to change the width of the filter text box in a dashboard filter.

Before you begin

You have added a filter widget to your dashboard.

Procedure

1. Open the dashboard in Edit mode.

2. Hover over the filter and click  .

   The Settings modal window appears.
3. Click Display Settings and enter a value in the Width (in filter mode) box to change the width of the filter box.
4. Click APPLY.

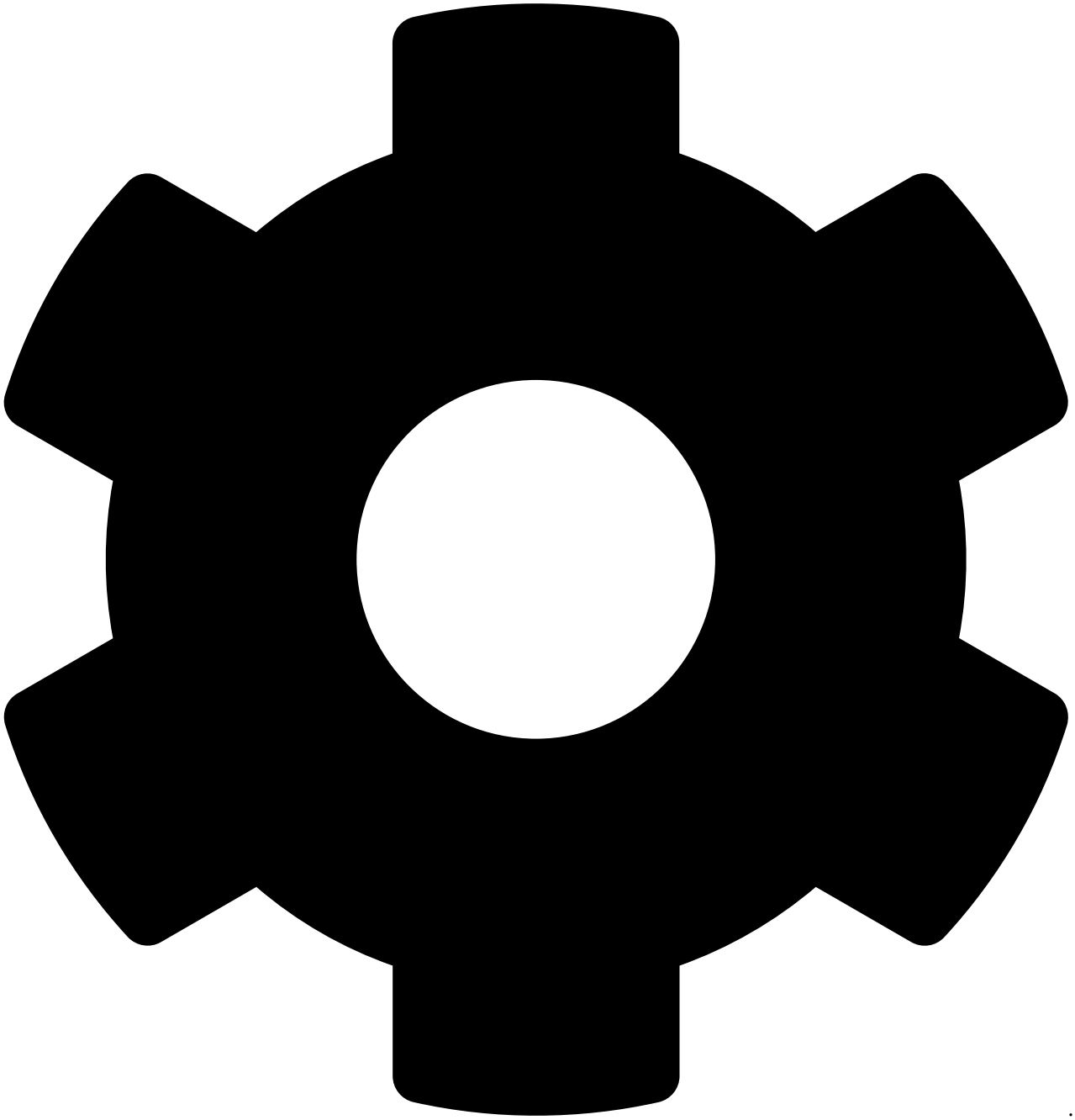
Entering values manually

This option allows you to change the display settings of a custom filter in a dashboard. You can select multiple values in bulk, instead of selecting them individually from a menu. For instance, you can copy multiple values from a table and paste them in a text box.

Before you begin

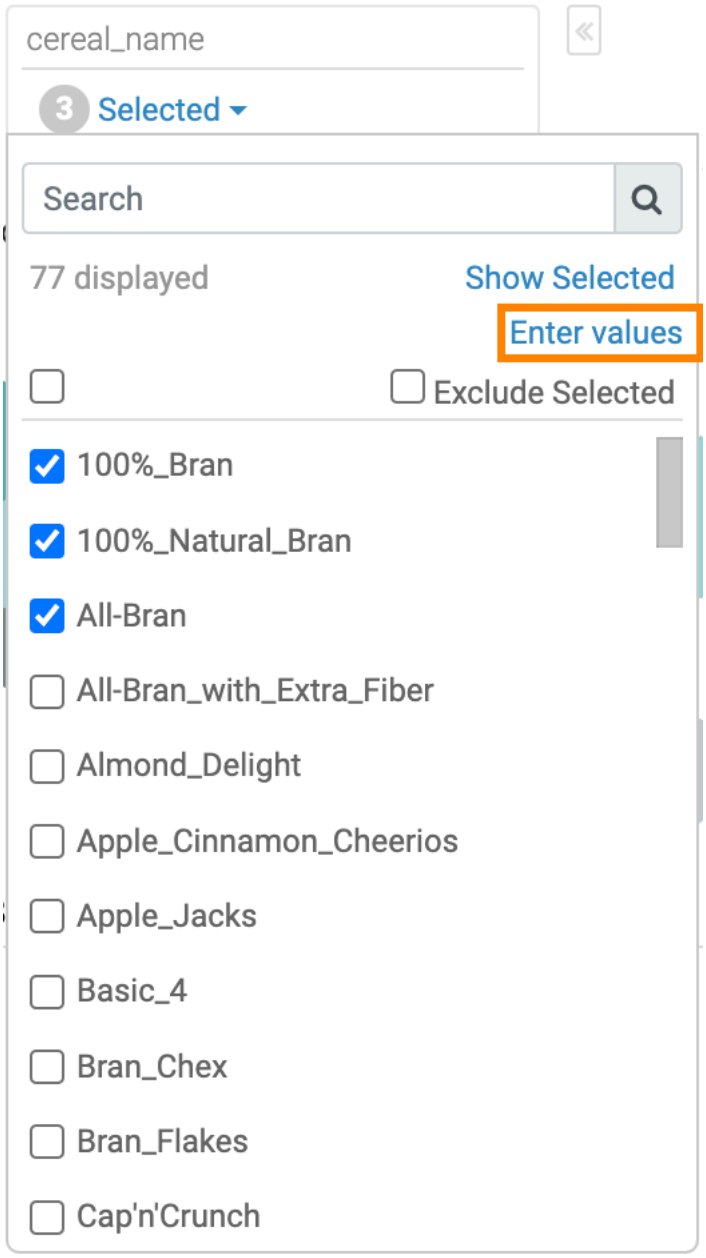
You have added a filter widget to your dashboard.

Procedure

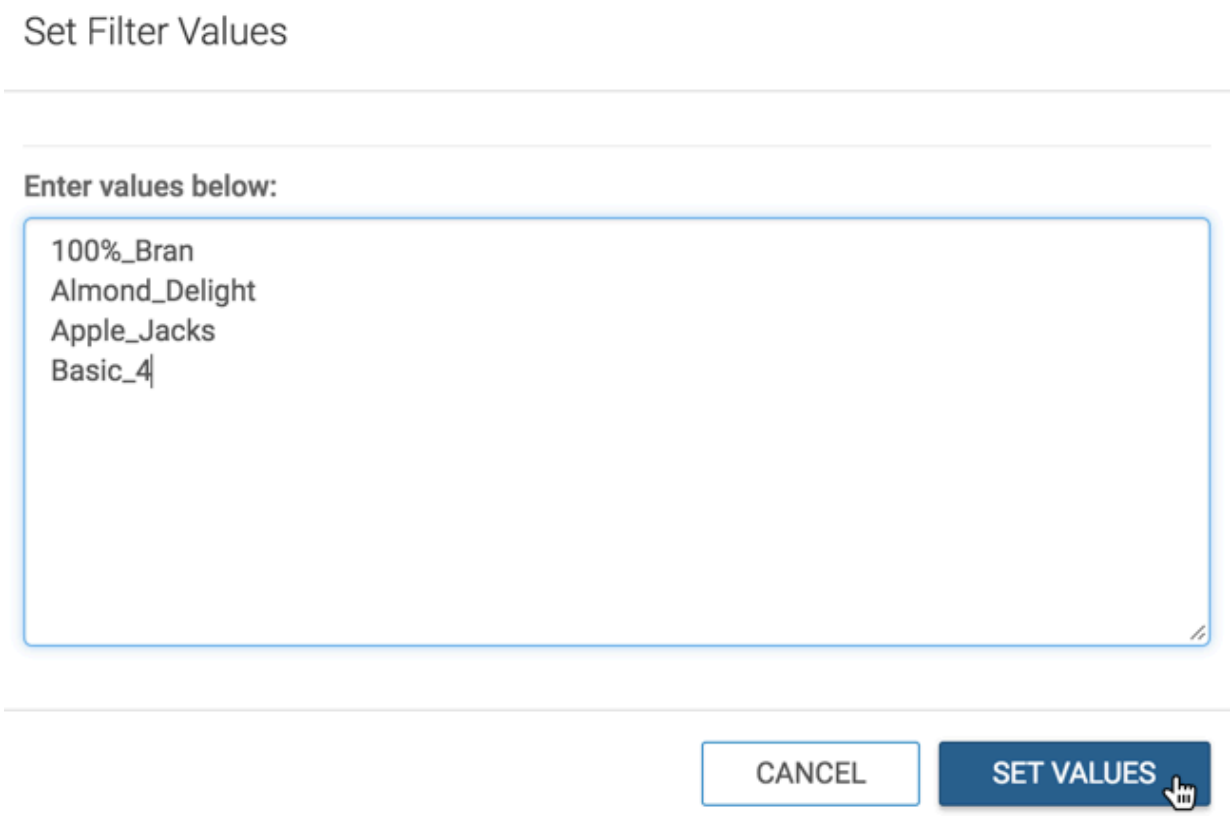
1. Open the dashboard in Edit mode.
2. Hover over the filter and click  .

   The Settings modal window appears.
3. Click the Display Settings tab and check the Allow the user to add values to the filter option.

4. Click APPLY.
   The Enter values link appears.



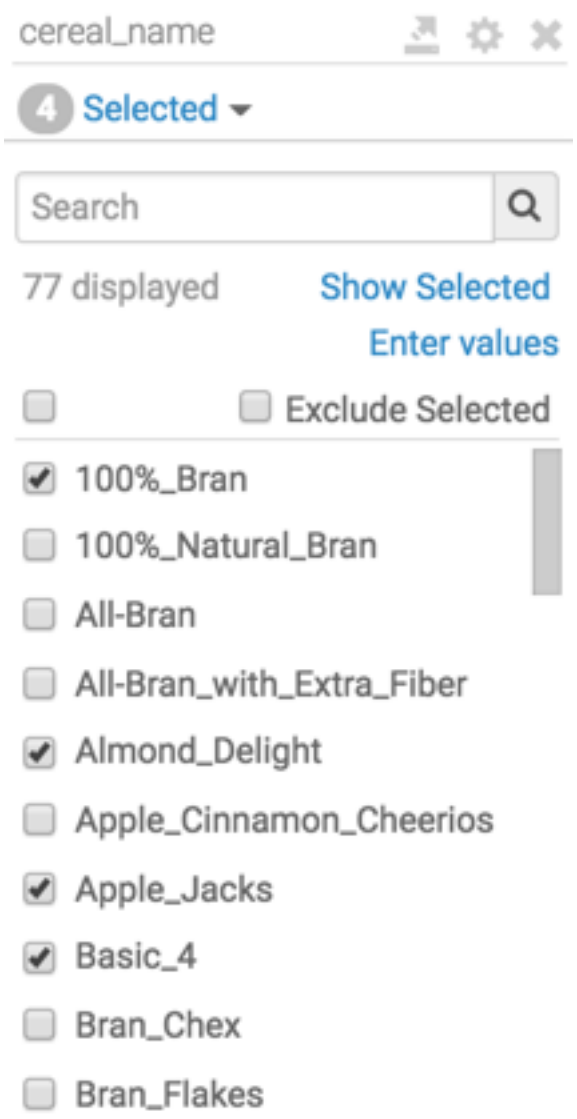
5. Click Enter Values.
   The Set Filter Values modal appears.



6. Enter values manually in the text box.
7. Click SET VALUES.

Results

All four values that were entered manually in the text box are selected.



Using single value mode with radio buttons

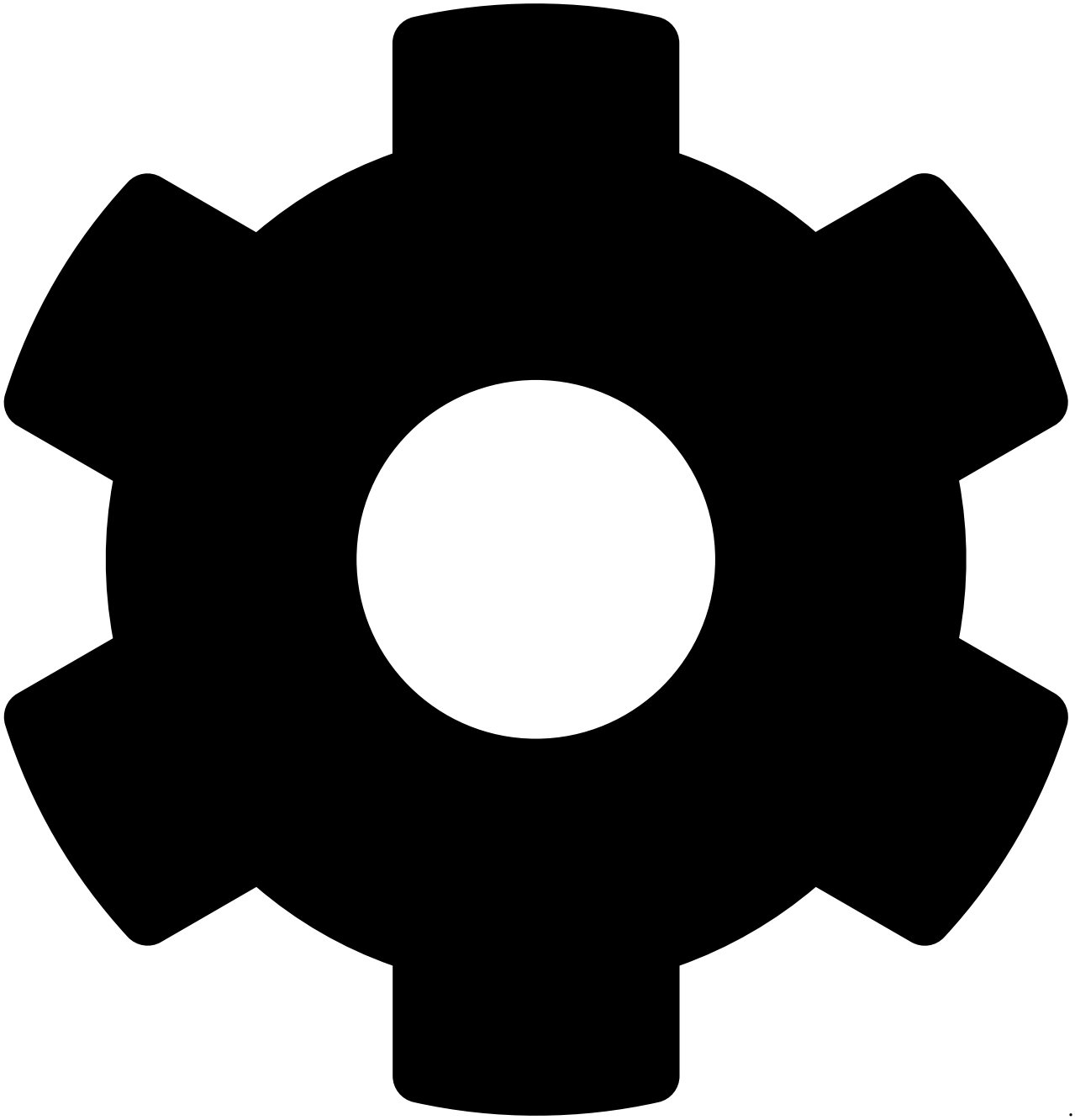
The single value mode allows you to select a single value from the menu in a dashboard filter. This mode of dashboard controls uses radio button choices to let the user select a single value.

Before you begin

You have added a filter widget to your dashboard.

Procedure

1. Open the dashboard in Edit mode.

2. Hover over the filter and click  .

   The Settings modal window appears.
3. Click Display Settings tab and check the Allow only one item to be selected at a time option.
4. Click APPLY.

Selecting all values

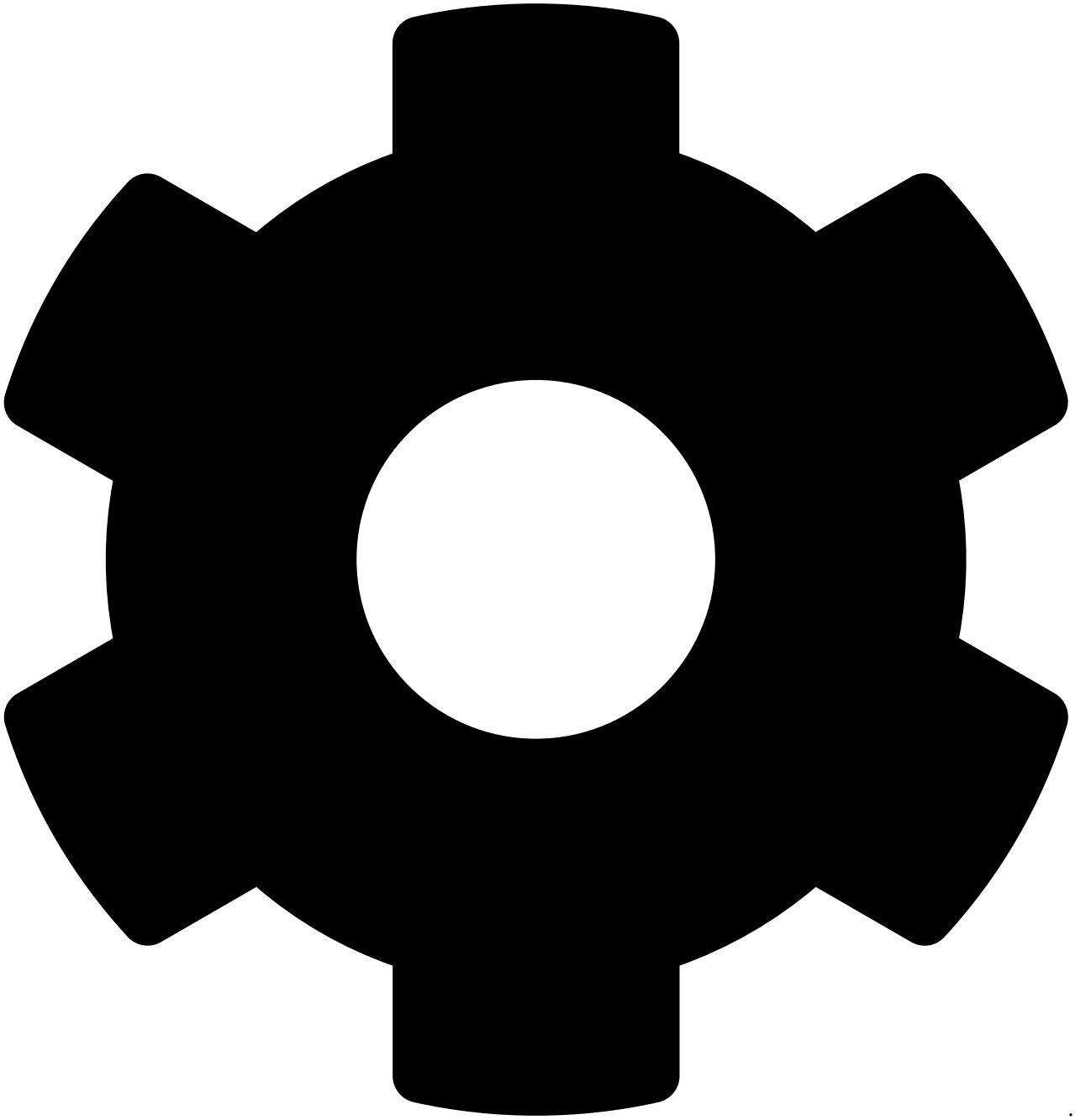
This option allows you to ensure that all data may be examined at once in a dashboard filter. For example, in single select mode on a cereal name filter, you can only look at details of one cereal. It may be interesting to look at information of all cereals at the same time.

Before you begin

You have added a filter widget to your dashboard.

Procedure

1. Open the dashboard in Edit mode.
2. Hover over the filter and click



The Settings modal window appears.

3. Click the Display Settings tab, then check the Allow only one item to be selected at a time option and the Include an option for '(All)' sub-option.
4. Click APPLY.

Results
The All option appears in the filter box.

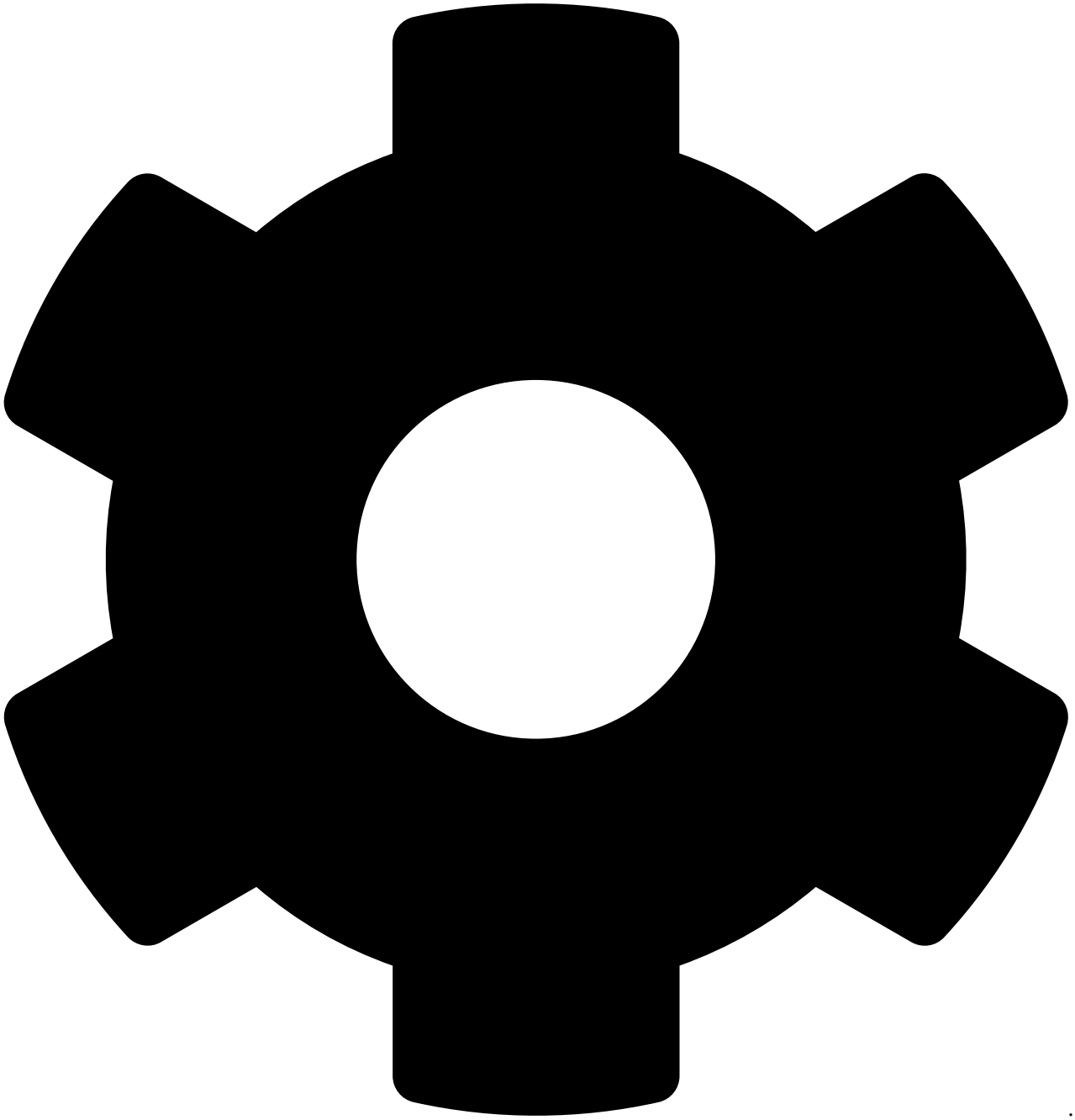
Using single value with dropdown menu

You can use this option to select a single value from a dropdown menu in a dashboard filter.

Before you begin
You have added a filter widget to your dashboard.

Procedure

1. Open the dashboard in Edit mode.

2. Hover over the filter and click  .

   The Settings modal window appears.
3. Click the Display Settings tab, then check the Allow only one item to be selected at a time option and the Select values from a dropdown menu sub-option.
4. Click APPLY.

Displaying distinct parameters

You can use this option to ensure that parameters show a distinct 'key':'value' pair in a dashboard filter.

About this task

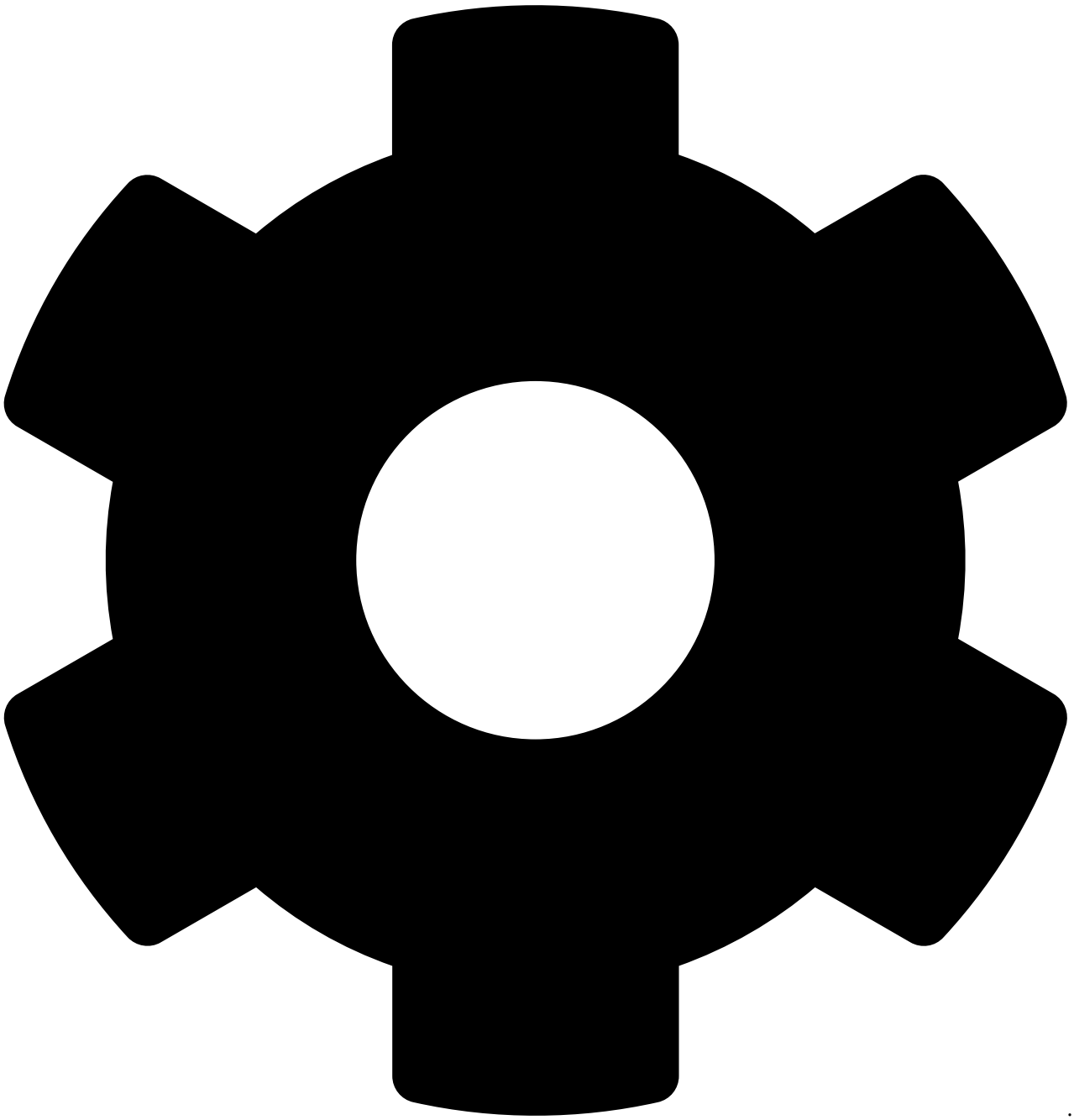
This option ensures that each selection is processed by the filter as a distinct 'key':'value' pair. By default, the selections are passed as a 'key':'list of values'. It enables a single filter to be potentially used for multiple purposes.

Before you begin

You have added a filter widget to your dashboard.

Procedure

1. Open the dashboard in Edit mode.
2. Hover over the filter and click



.

   The Settings modal window appears.
3. Click the Display Settings tab and check the Emit distinct parameters for each item selected option.

4. Click APPLY.

Hiding filters

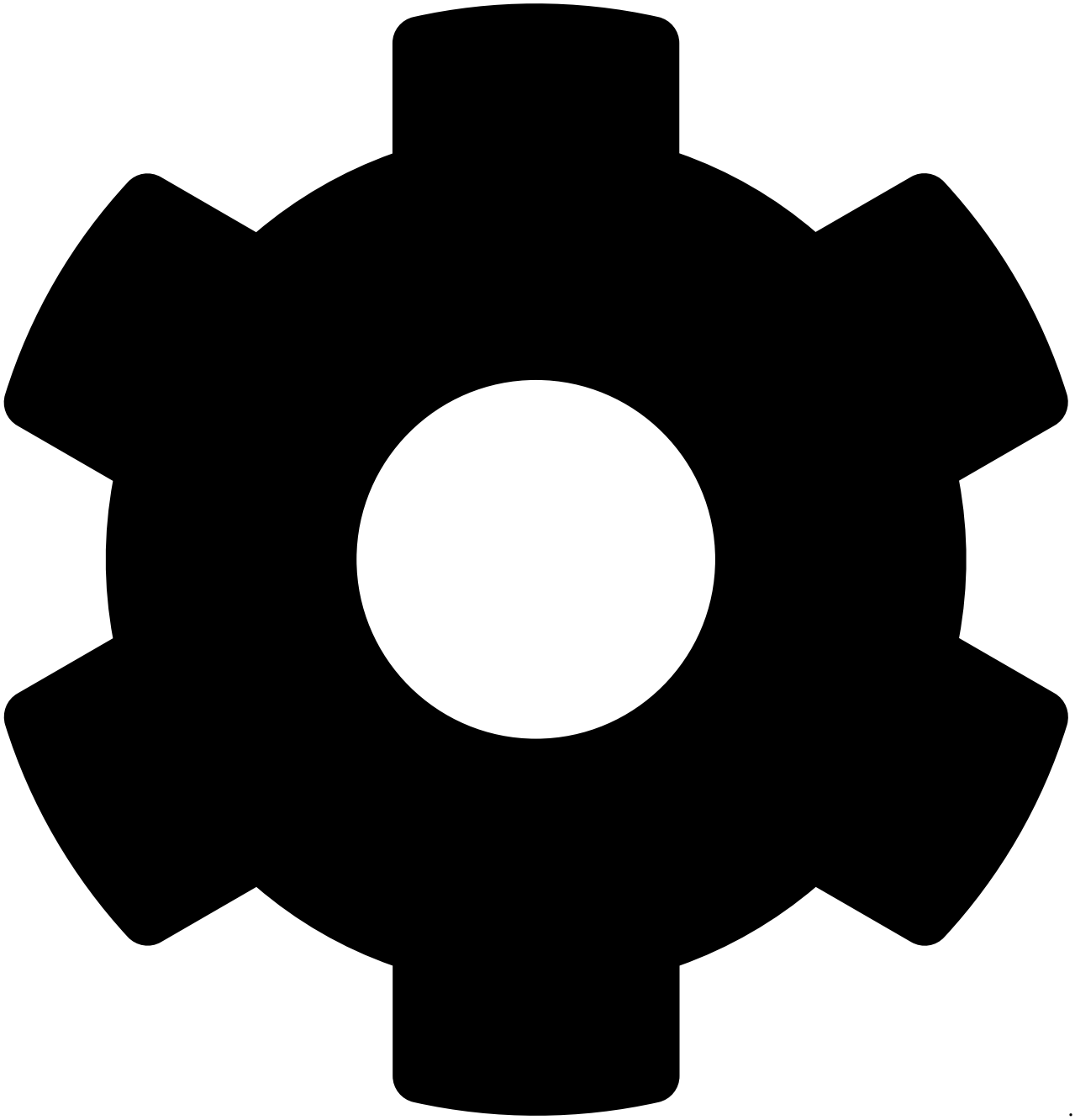
This option allows you to hide the custom filter in a dashboard. If no viable selection data exists, this option hides the filter in View mode.

Before you begin

You have added a filter widget to your dashboard.

Procedure

1. Open the dashboard in Edit mode.

2. Hover over the filter and click  .

   The Settings modal window appears.
3. Click the Display Settings tab and check the Hide filter if no input data option.
4. Click APPLY.

Remembering previous selections on dashboard filters when searching

This option allows you to view previous selections when searching for a new value in a dashboard filter.

About this task

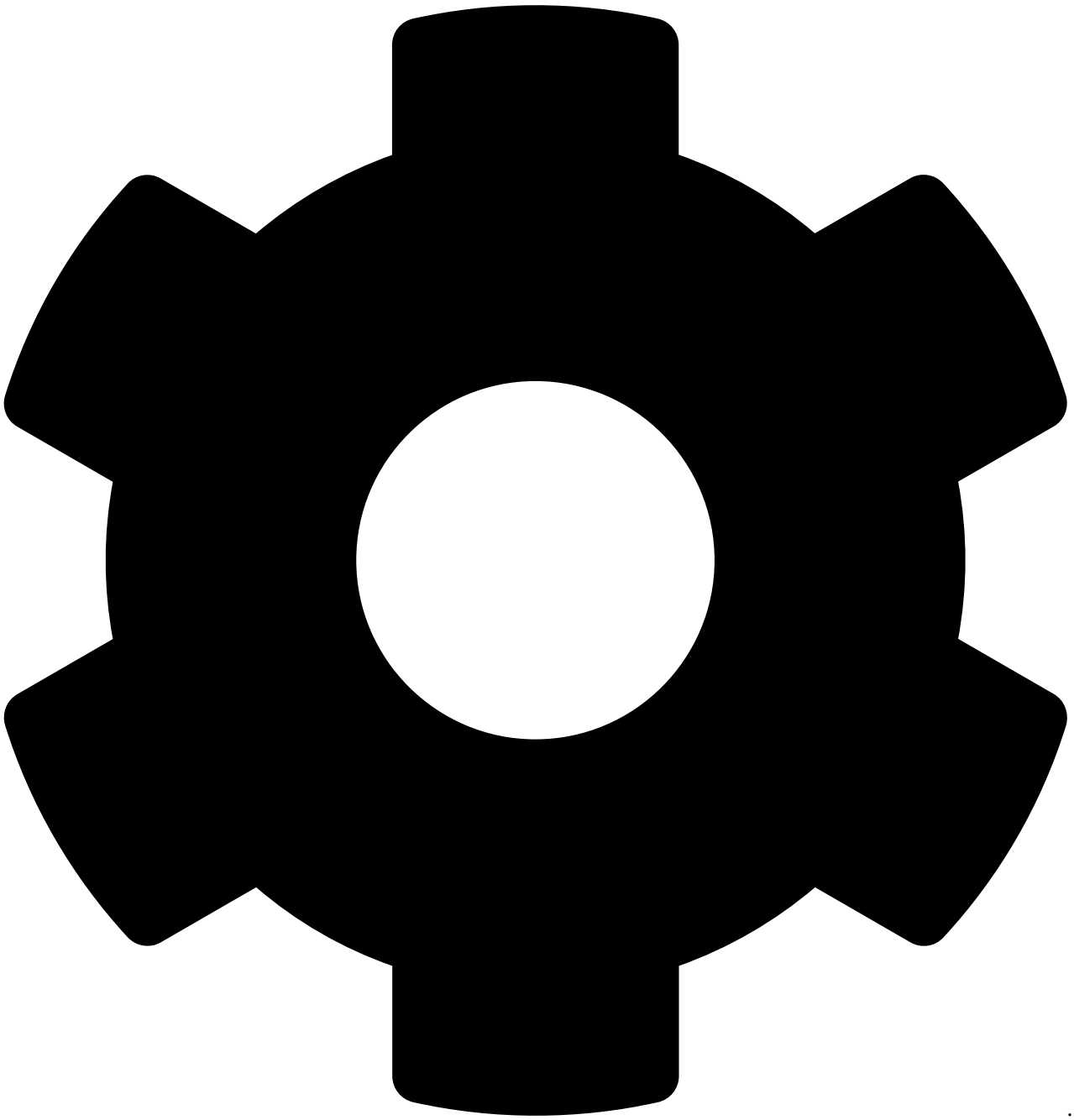
This option is on by default.

The following examples show you how to enable or disable the option and how the filter behaves at run time both with and without the option.

Before you begin

You have added a filter widget to your dashboard.

Enabling 'Remember previous selections when searching'

1. Open the dashboard in Edit mode.
2. Hover over the filter and click  .

   The Settings modal window appears.
3. Click the Display Settings tab and select the Remember previous selections option. By default, it is turned on.
4. Click APPLY.
5. Save the changes to the dashboard.

Using Filters with 'Remember previous selections when searching'

Compare this with the next section, *Using Filters Without 'Remember Previous Selection'*. For this option, a dashboard based on Cereals dataset and a dashboard filter based on the dataset field cereal_name are used.

1. Select 'All-Bran' and 'Almond-Delight' from the dropdown menu.
2. Enter Basic_4 in the search box, and click the Search icon to find the value.
3. Click Basic_4 to confirm the selection.
4. Click the Show Selected option.

Using Filters Without 'Remember previous selections when searching'

When this option is disabled, you are unable to see the previous selections. In this example the same dashboard and filter on cereal_name are used as in the *Using Filters with 'Remember Previous Selection'* section, but with the option disabled. To use the filter without the option, follow these steps:

1. Select 'All-Bran' and 'Almond-Delight' from the dropdown menu.
2. Enter Basic_4 in the search box, and click the Search icon to find the value.
3. Click Basic_4 to confirm the selection.
4. Click Show Selected.

   Note that the top bar and the list at the bottom shows only the last selection, Basic_4.

Using multi-select mode

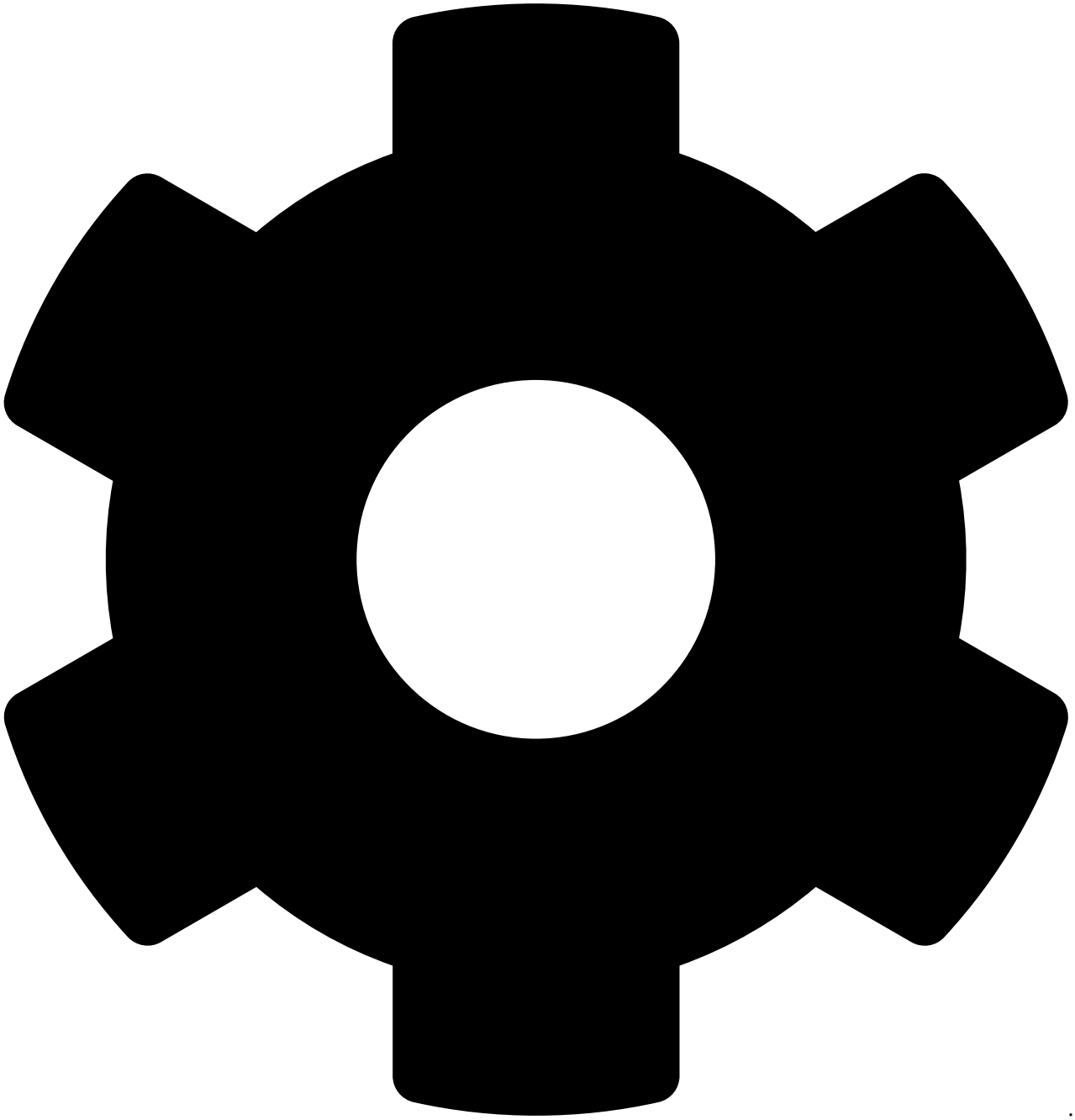
This option allows you to select multiple options in the dropdown, then apply all changes to the filter together by clicking outside the table. This collapses the list. For multi-select list, this is a recommended option as it minimizes the query refresh time. It is the default mode for application controls.

Before you begin

You have added a filter widget to your dashboard.

Procedure

1. Open the dashboard in Edit mode.

2. Hover over the filter and click  .

   The Settings modal window appears.
3. Click the Display Settings tab and select Apply all changes to a multi-select list at the same time.
4. Click APPLY.

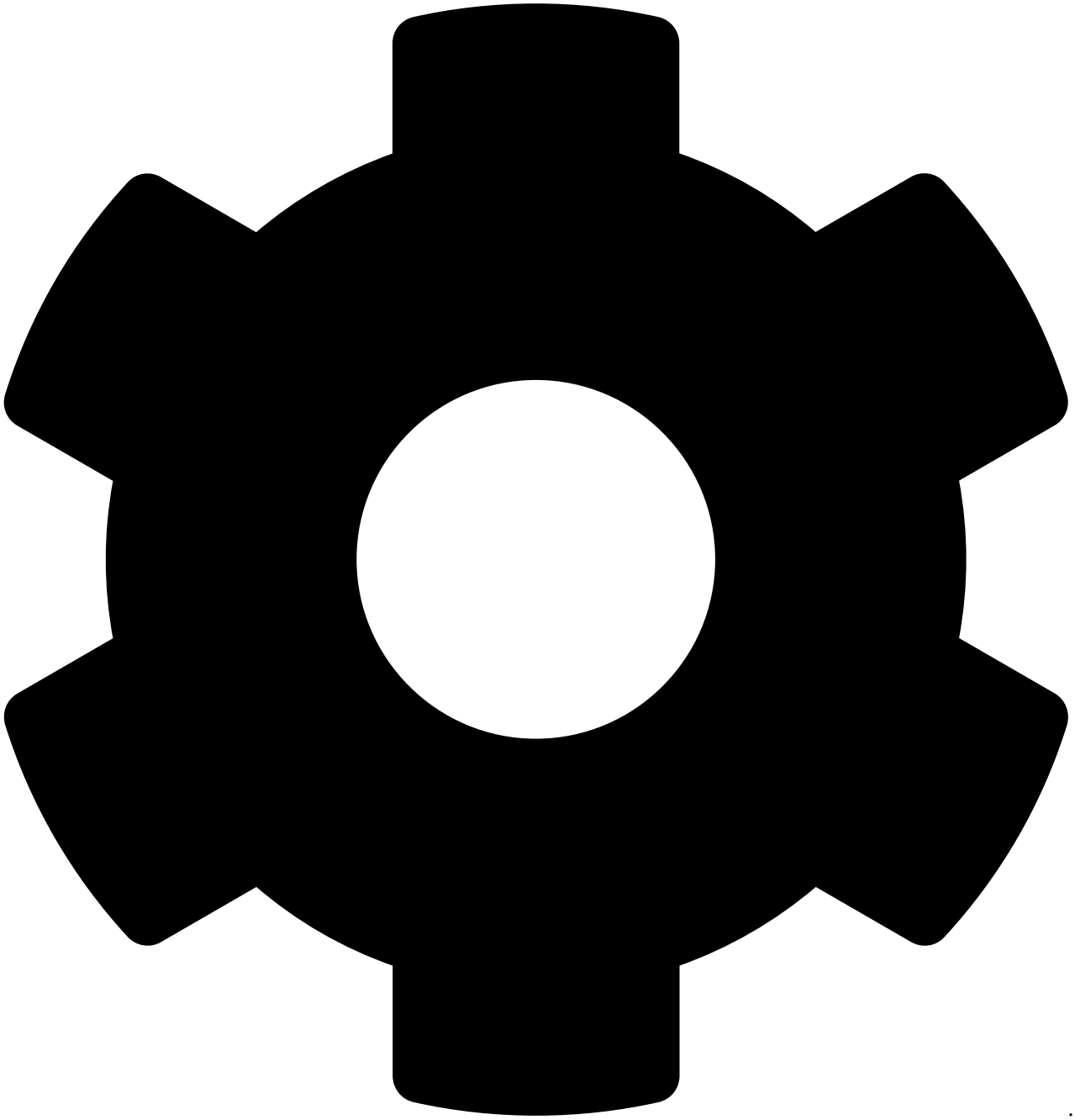
5. If you want to edit the filter widget, click to display the available choices.
   The application control expands.
   - In the Search box, enter your search term and click .
   - To view only the selected values, click Show Selected located just below the search bar. This option toggles with Show All to switch between selected values and the entire list.
   - To include all selections, click the unlabeled check box in the top left corner.
   - To exclude specific selections, check the Exclude Selected box in the top-right corner.
6. In the filter, click Select.
   The application control expands in multi-select mode.

Configuring dashboard filter scope

In Cloudera Data Visualization, you must specify the scope of a newly created custom filter after adding it to a sheet in a dashboard.

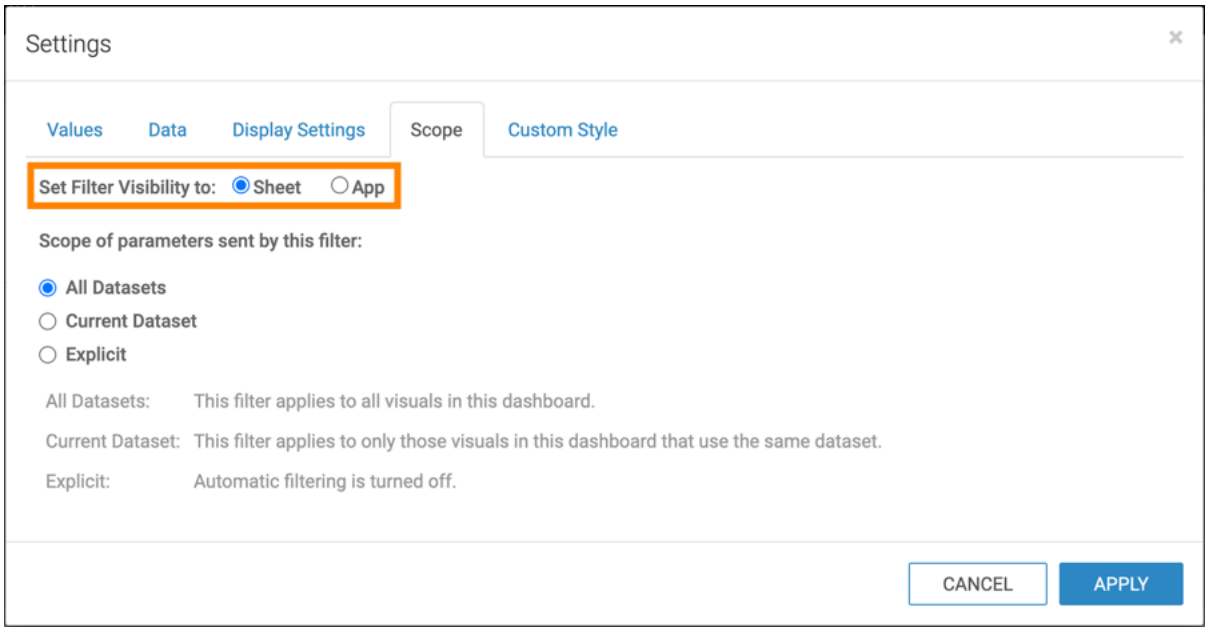
Procedure

1. Open the dashboard in Edit mode.

2. Hover over the filter you want to update and click  .

   The Settings modal window appears.
3. Select the Scope tab.

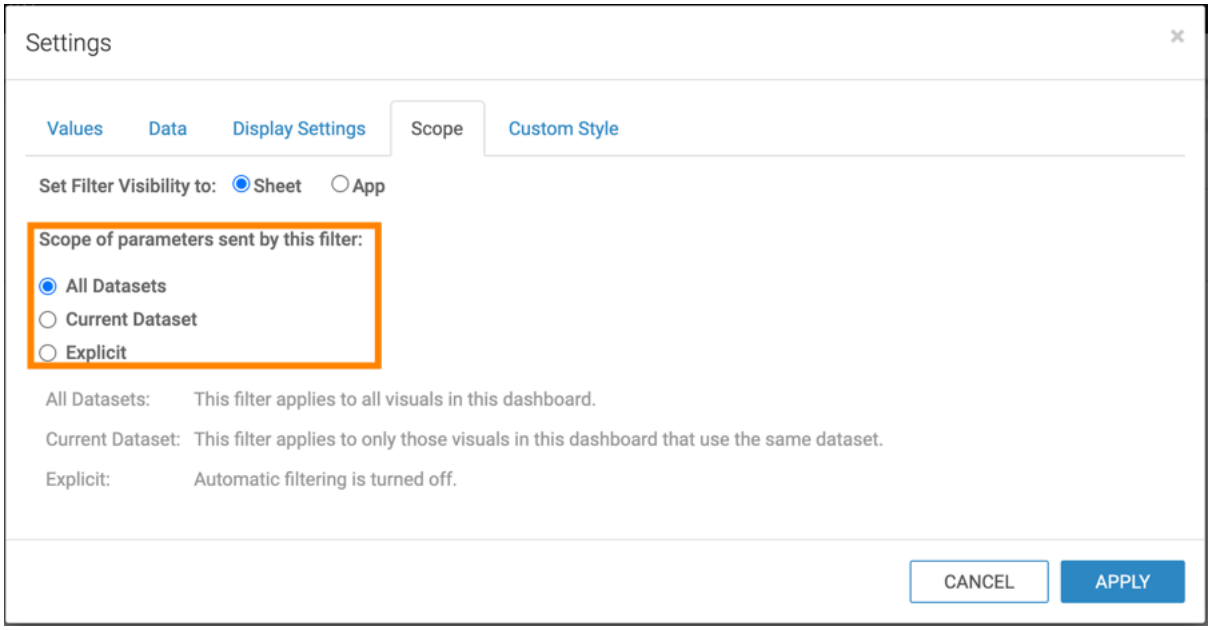
4. Select the desired filter visibility.



Note:

If App scope is selected all apps that contain the dashboard and all sheets in the dashboard also inherit the selections and behavior of this filter. When you select this option in Edit mode, the filter widget on the dashboard displays a gray triangle on the top left corner of the filter. Hover over the triangle to view the tooltip.

5. Select the desired scope of the filter.



All Datasets

The filter applies to all visuals in this dashboard.

Current Datasets

This filter applies to only those visuals in this dashboard that use the same dataset.

Explicit

Automatic filtering is turned off.

6. Click APPLY.

Configuring custom style for a dashboard filter

Cloudera Data Visualization enables you to apply custom styles to a newly created filter in a dashboard.

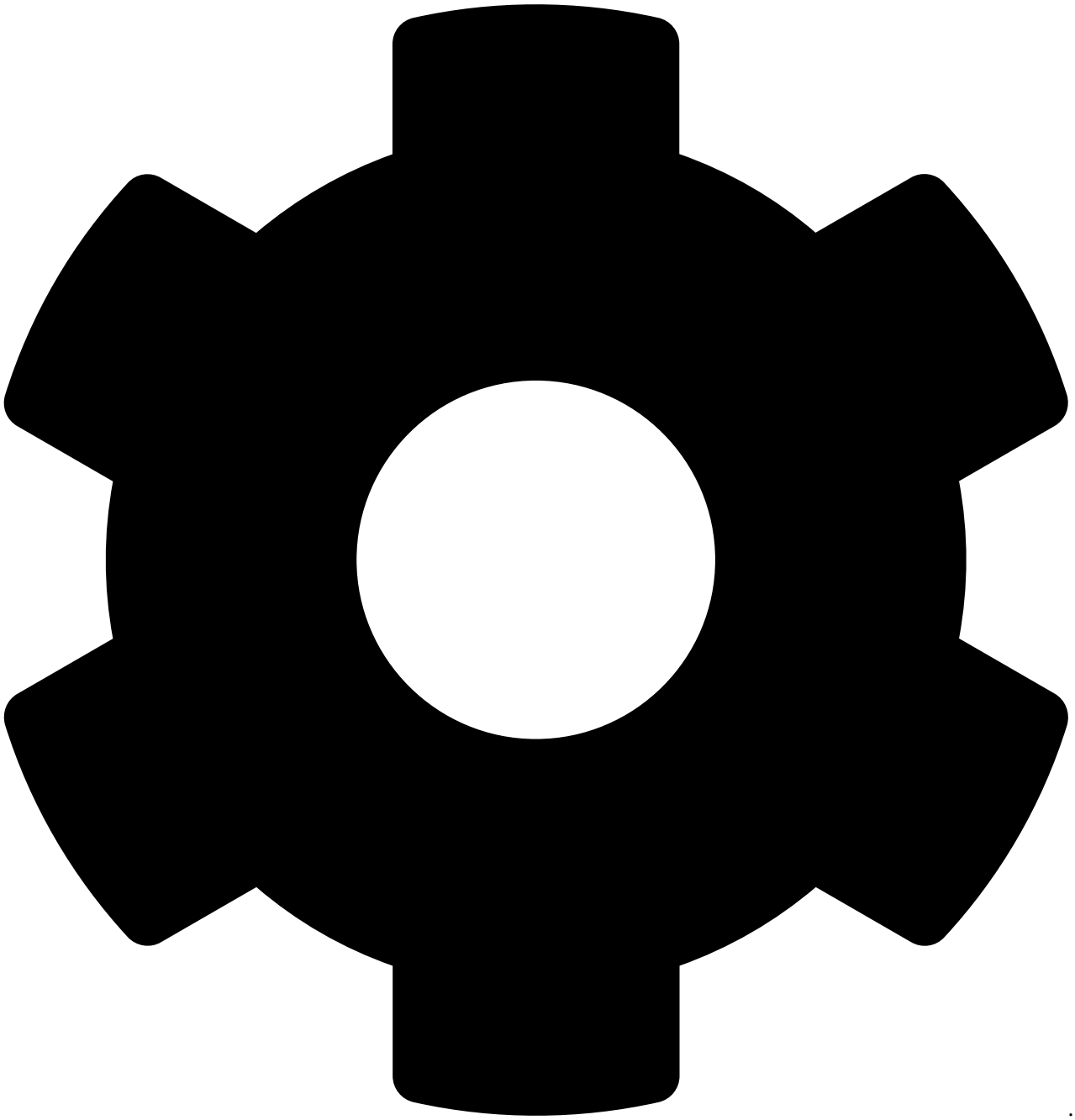
About this task

When applying custom styles, there are several approaches. For information on setting styles for a visual or at the dashboard level, see Adding custom styles to visuals. For information on setting styles for a dashboard filter, see the instructions below.

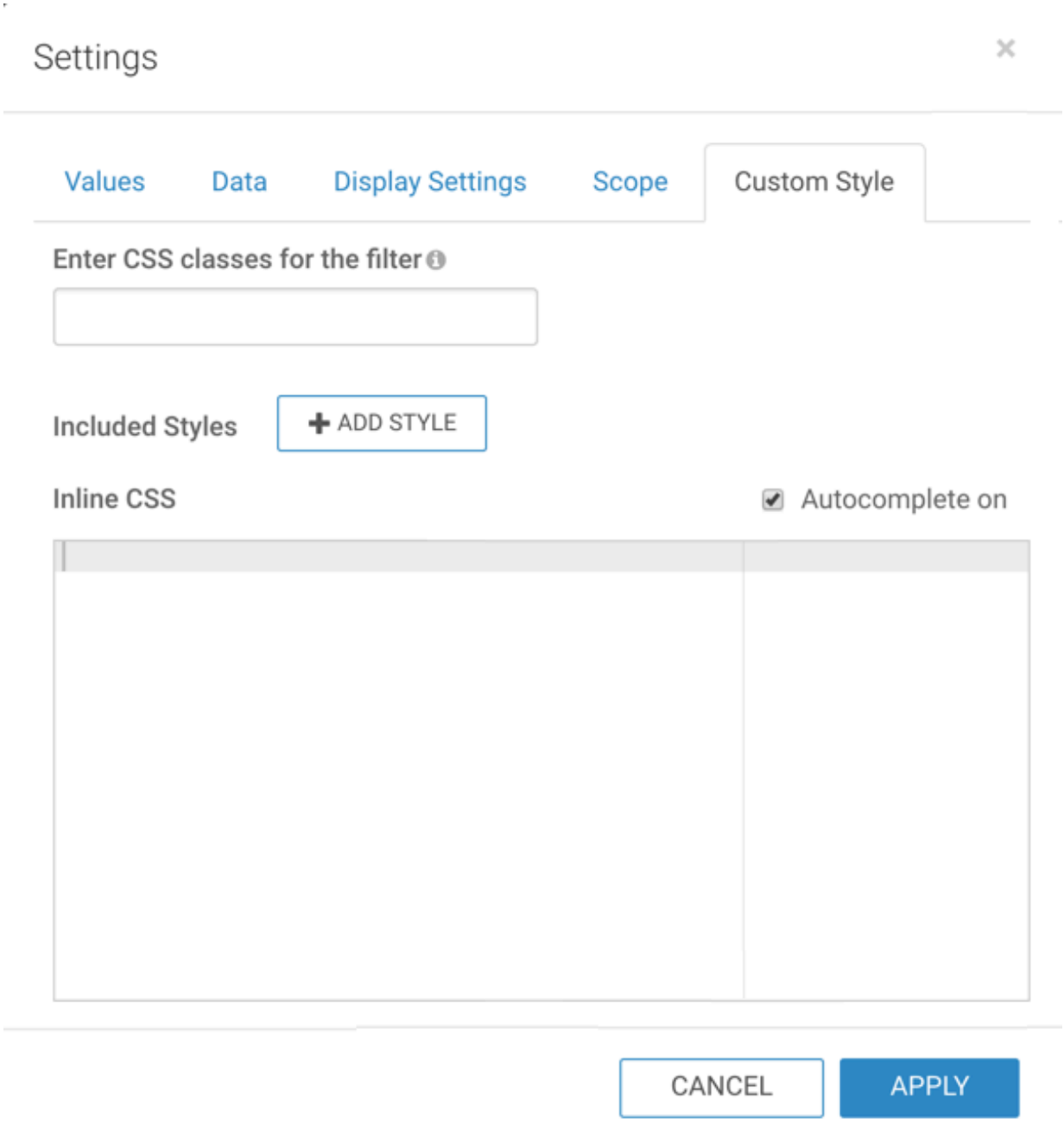
Before you begin

By default, the Custom Styling option is disabled. Only users with administrative privileges can enable it.

Procedure

1. Hover over the filter you want to update and click  .
2. In the Settings modal window, navigate to the Custom Style tab.

3. Review and apply the available styling options as needed.



Related Information

Adding custom styles to visuals

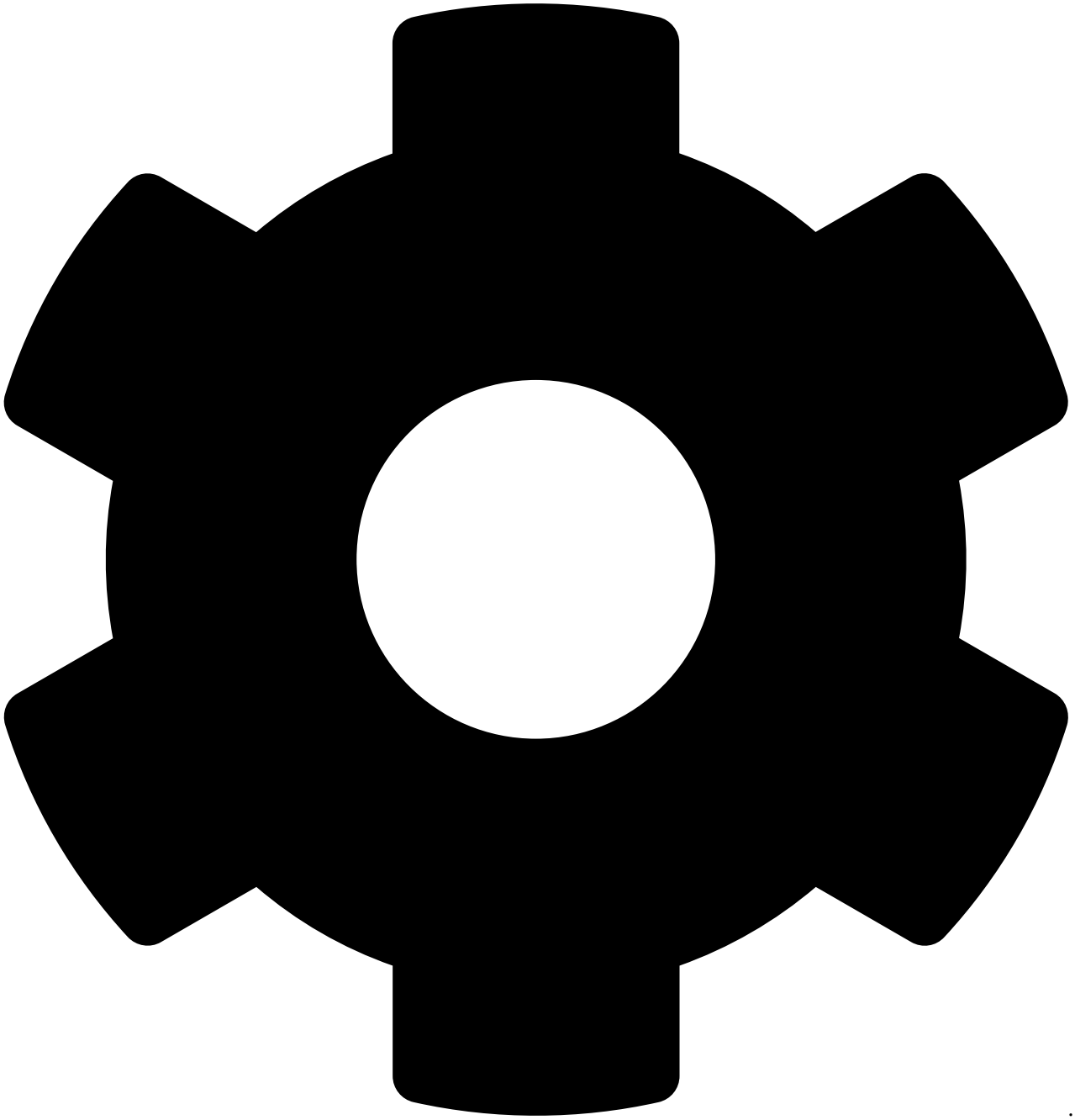
Adding included styles to dashboards

Configuring custom style using CSS code

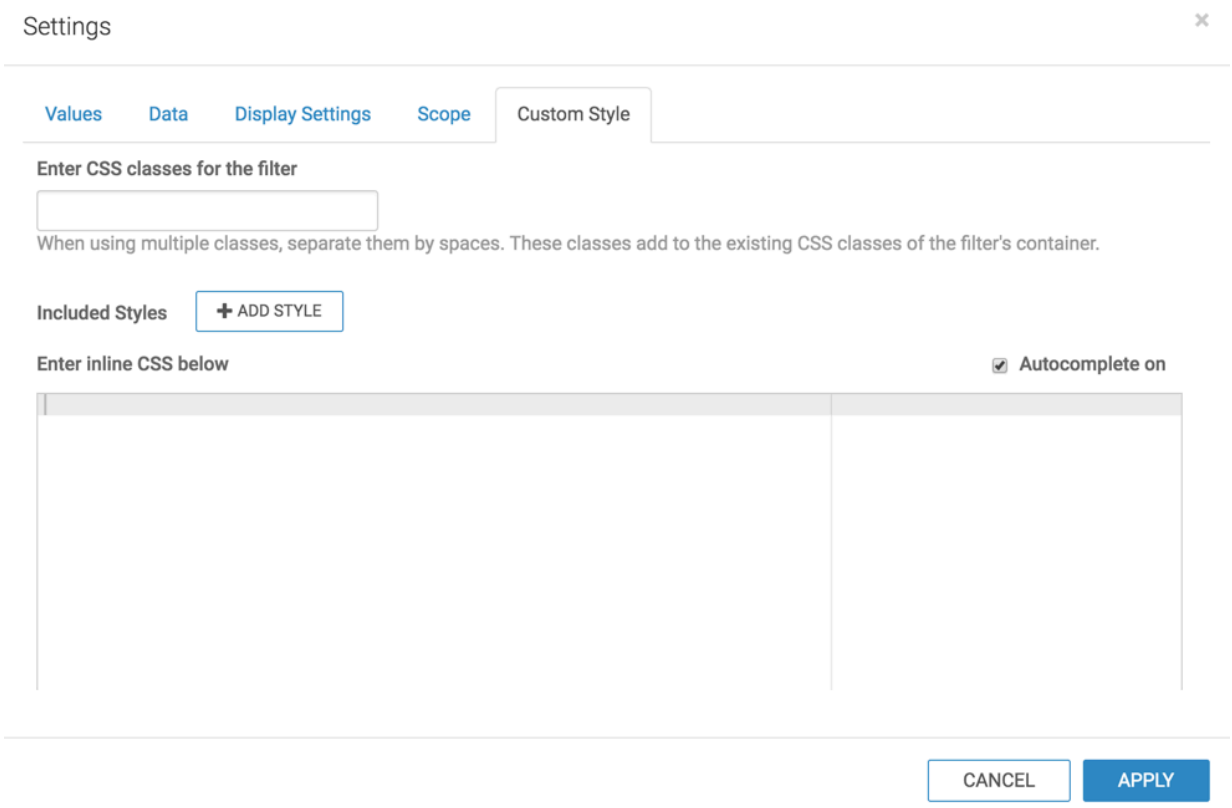
In Cloudera Data Visualization, you can customize the appearance of application filters by applying custom CSS. This allows you to enhance the visual styling of filters to match your dashboard design preferences.

Procedure

1. Open an existing or new application in Edit mode that has an application filter.

2. Hover over the filter and click  .

The Settings modal window appears.



3. In the Settings modal window, navigate to the Custom Styling tab.
4. Set CSS class for visual to list-larger-font.
5. Enter the following code in the Enter inline CSS rules here to text box:

```
.list-larger-font .picklist-list li {
                        font-size:14px;
                        padding:3px;
                        border-bottom:dotted 1px #ddd;
                        }
```

6. Click APPLY.
7. Click SAVE to save the application.

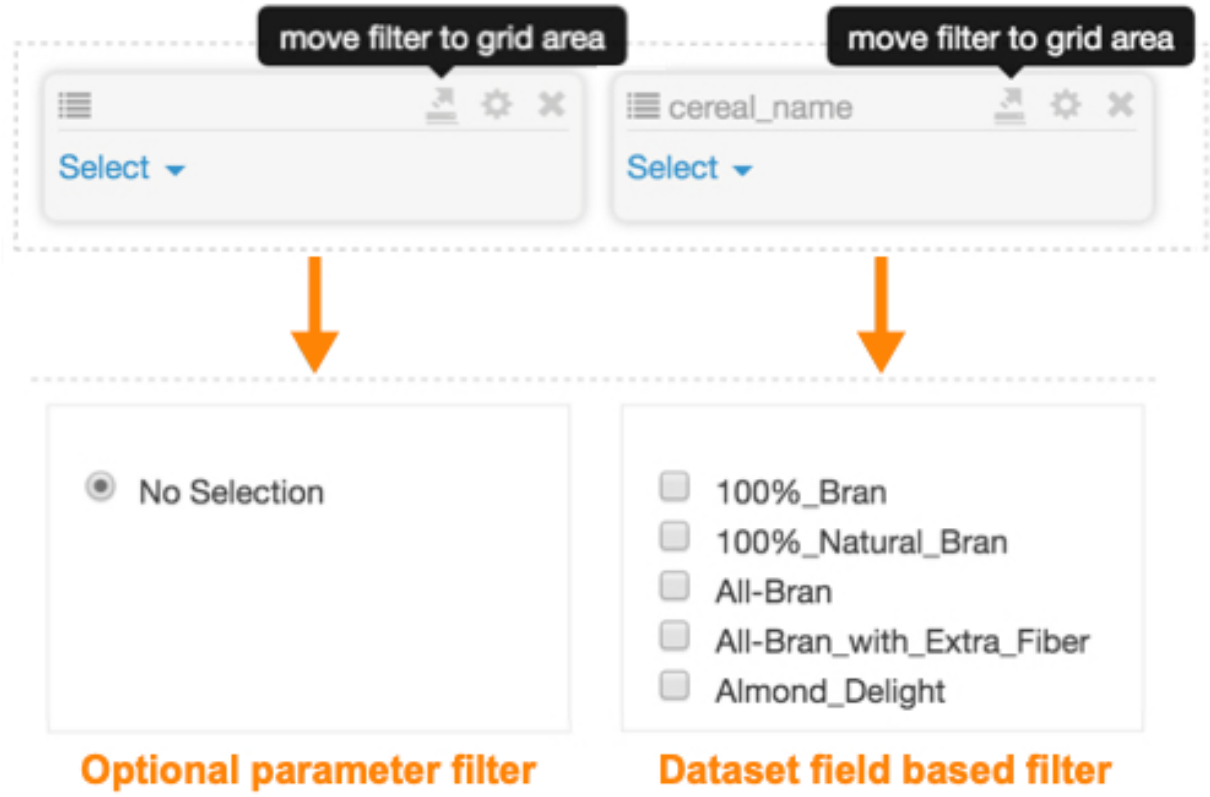
Moving filter widgets on a dashboard

Cloudera Data Visualization displays dashboard filters across the top of the dashboard by default, but you can move them around as needed.

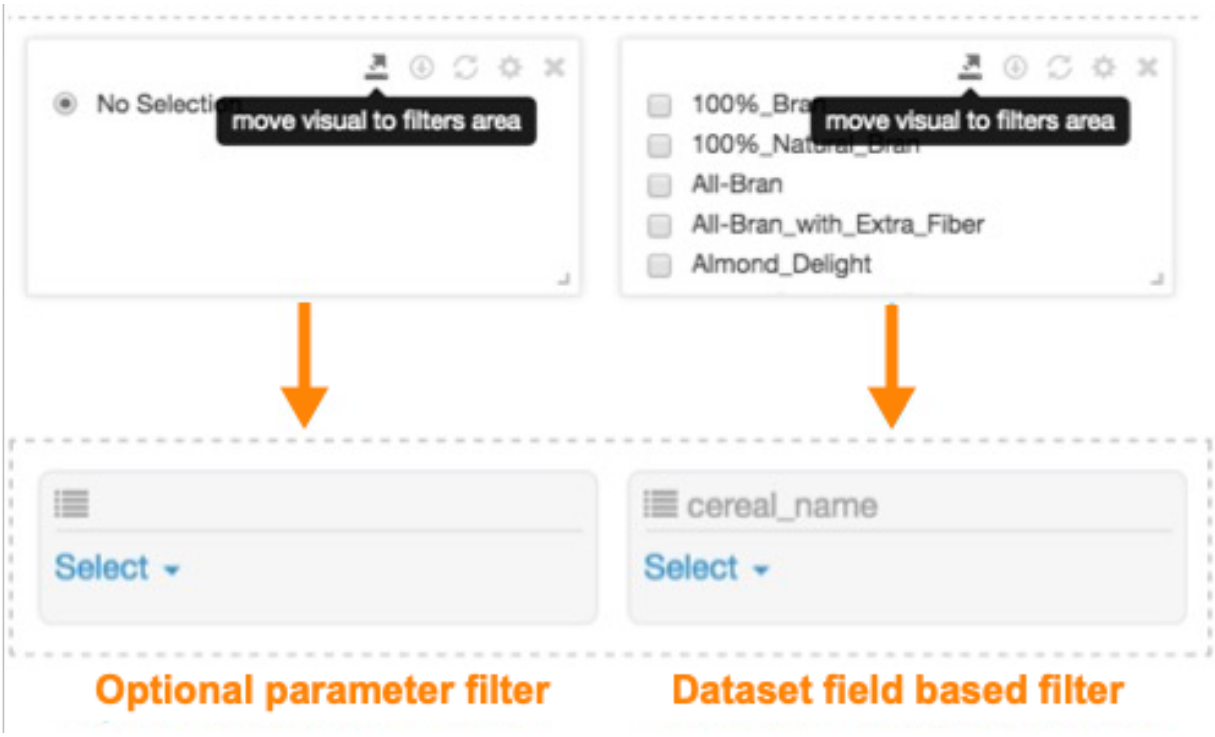
Moving dashboard filters from filter area into main grid area and back

1. Hover over the filter. When the configuration options appear, click the Move icon to move the filter to the grid area of the dashboard.

   The filter is now available among the other visuals of the dashboard. The appearance of the filter has changed significantly. It is represented as a simple white rectangle without search options.



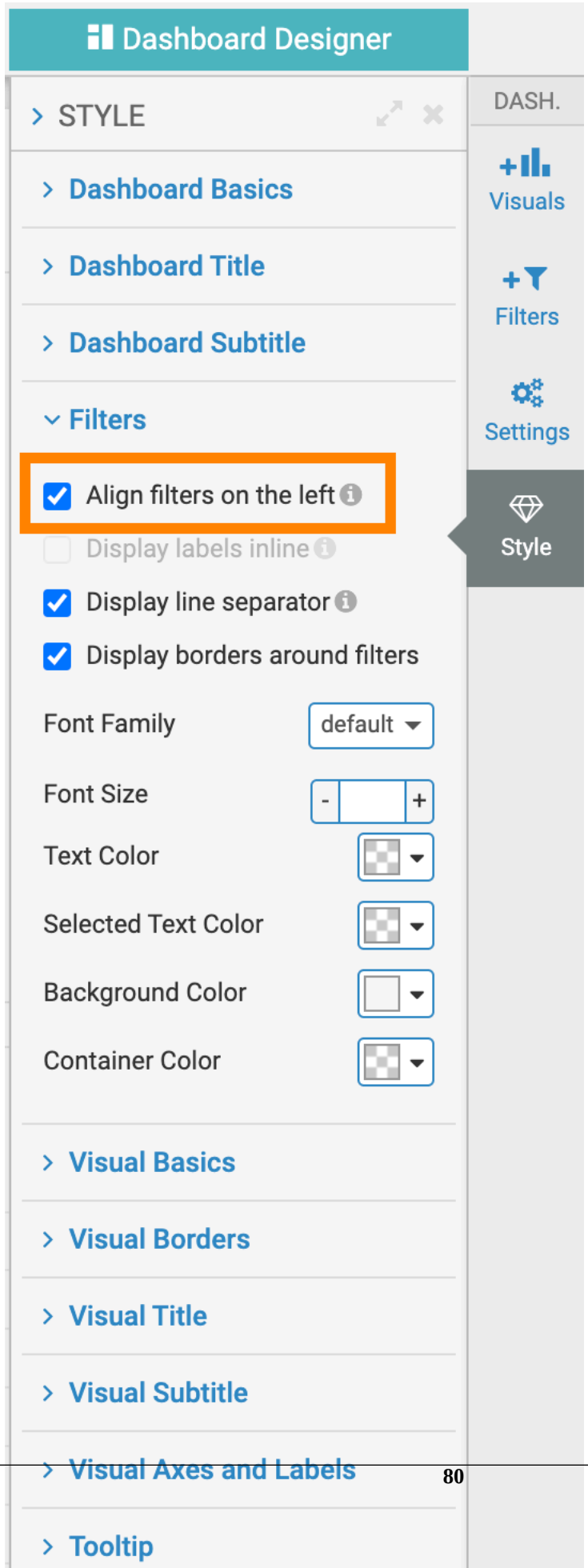
2. To return the filter to the filter area, hover over the filter. When the configuration options appear, click the Move icon to move the filter onto the filter area of the application.



Moving dashboard filters from the top to the left of the dashboard

1. On the right side of the Dashboard Designer, click Style Filters .

2. Select Align filters on the left.


Dashboard Designer
STYLE
DASH.
Dashboard Basics
Dashboard Title
Dashboard Subtitle
Filters
Visuals
Filters
Settings
Style
Align filters on the left
Display labels inline
Display line separator
Display borders around filters
Font Family
default
Font Size
Text Color
Selected Text Color
Background Color
Container Color
Visual Basics
Visual Borders
Visual Title
Visual Subtitle
Visual Axes and Labels
Tooltip

To return the filters to the top, deselect this option.

Results

The visual on the left has filters across the top, and the visual on the right has filters on the left side.