# **Filters and Parameters**

Date published: 2020-10-30 Date modified: 2022-09-21



## **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**

Filters and parameters	4	
Actions for dashboard controls	4	
Filter scope	5	
Filter shelves	6	
Click behavior between visuals	6	
Filter widgets on dashboards	7	

## Filters and parameters

Implicit and explicit filtering, click behavior, parameters.

uses filters and parameters to change the analysis criteria at run-time, by specifying filters and parameters that define the data selected for the visuals. has a broad range of filtering options, based either on the native dataset fields, or on user-defined custom dimensions.

- Filter shelves on page 6
- Click behavior between visuals on page 6
- Filter widgets on dashboards on page 7

### **Actions for dashboard controls**

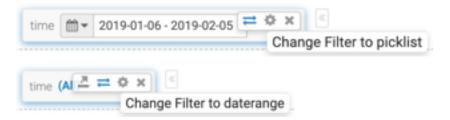
has several options for configuring the appearance of the application control element. These differ depending on the relative location of the application control. It can be on the filter area or on the grid area of the application.

#### Filter area actions for application control

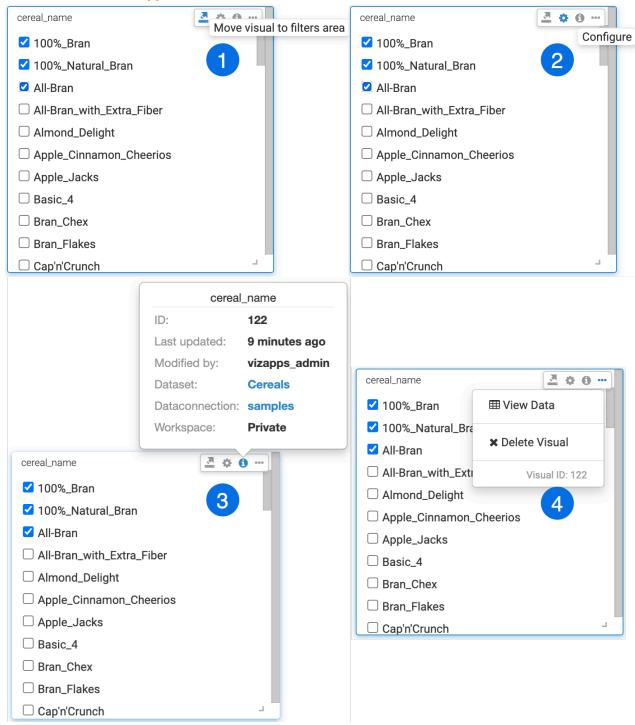


- 1. Clicking the Move icon moves the filter to the grid area.
- 2. Clicking the Gear icon opens the Settings modal window that allows you to configure the filter.
- **3.** Clicking the Cross icon removes the filter.

If you use a date type field as a filter, you can also change the display from the default date range to a picklist of dates and switch back to date range if needed:



### Grid area actions for application control



- 1. Clicking the Move icon moves the filter to the filter area.
- 2. Clicking the Gear icon opens the Settings modal window that allows you to configure the filter.
- 3. Clicking the Information icon provides you with information about the visual and the dataset.
- 4. Clicking the Ellipsis icon gives you the options to view the data or to delete the filter.

# Filter scope

Filter scope in has the following three options:

- explicit
- dataset
- app

#### **Explicit scope**

Explicit scope is defined when a dashboard or visual sends out parameters to other visuals, and the visuals accepts these parameters in their Filters shelf. This can be enabled at the level of each visual. See, *Using parameters with explicit scope*.

This is expected to be used sparingly for a small number of visuals in each dashboard that represent a high level look at a metric and that should not be filtered by visible filters.



**Note:** Explicit Scope overrides Dataset Scope.

The scope of Click behavior is explicit.



**Tip:** If you want visuals to be updated based on selected elements, make sure to explicitly place these columns in the filter shelf of the target visuals.

#### **Dataset scope**

Dataset scope filter applies to all visuals in a dashboard that do not have explicit scope turned on. Filters with dataset scope apply to all visuals in the dashboard that are using the same dataset. This is the default for new filters.



**Tip:** Dataset Scope filters continue to use the parameter passing mechanism, and these parameters may be used within visuals in many ways for example: in the title, within expressions

#### App scope

App scope automatically filters all dashboards in the app.

#### **Related Information**

Setting explicit scope for filters Setting dataset scope for filters Setting app scope for filters

### Filter shelves

To exclude or include specific dimension values, or to filter for specific measurements, CDP Data Visualization uses the Filters shelf in the Visual Designer interface. In a visual, you can specify the filters by one of the following methods:

- · Selecting discrete values on filter shelves
- Selecting a range of number values on filter shelves
- Selecting a string pattern for values on filter shelves
- Selecting a range of dates on filter shelves
- Selecting values by using an expression on filter shelves

### Click behavior between visuals

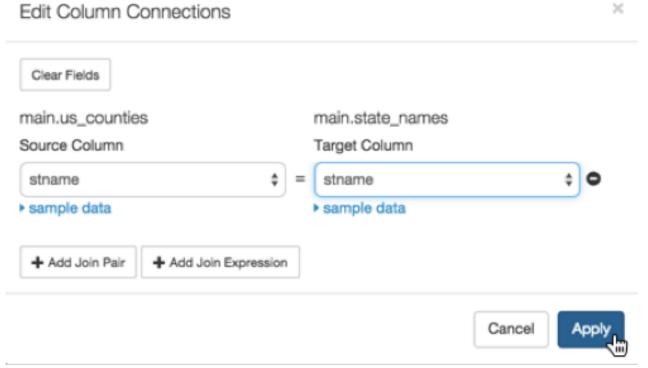
In , you can have one (source) visual act as a filter that controls the behavior of the target visual, inside the same application.

You can see an example of this in *Shelves for URLs*: depending on what column (country) you click on the control visual, the target (link) visual loads the Wikipedia page for that country.

This section demonstrates the general steps for enabling click behavior over any visual type.

- 1. Creating the Control Visual
- 2. Creating the Target Visual
- 3. Creating the Application and Enabling Click
- 4. Enabling Click Receive on the Target Visual
- **5.** Exploring the Click Behavior

We use both the US State Population Over Time and the US County Population dataset.



#### **Related Information**

Shelves for URLs

Creating the Control Visual

Creating the Target Visual

Creating the Application and Enabling Click

Enabling Click Receive on the Target Visual

Exploring the Click Behavior

# Filter widgets on dashboards

In , you can configure filters after adding them to a sheet in a dashboard.

You can create following types of filters:

· Creating dataset filters on dashboards

- Creating custom filters on dashboards
- Creating date and time filters on dashboards
- Moving filter widgets in dashboards

Dashboard filter configuration options fall into the following categories:

- Configuring ranges on dashboard filters
- Configuring values of dashboard filters
- Configuring data options for dashboard filters
- Configuring display settings for dashboard filters
- Configuring custom styles for dashboard filters