Cloudera Data Visualization 7.2.8

Segments

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

CLOUDERA

Legal Notice

Contents

Creating segments

Cloudera Data Visualization lets you easily create a new segment definition.

Procedure

1. On the main navigation bar, click DATA.

   The Data view appears.
2. Open the Datasets tab.
3. Find the dataset in the list of datasets, either by scrolling or by using search, and click it.

   Dataset side navigation appears, open at Dataset Detail view.

   In this example, the dataset Flight Delays is used, which is based on data previously imported into Cloudera Data Visualization from a data file. Some additional data files are also used.
4. In the side navigation menu, click Segments.
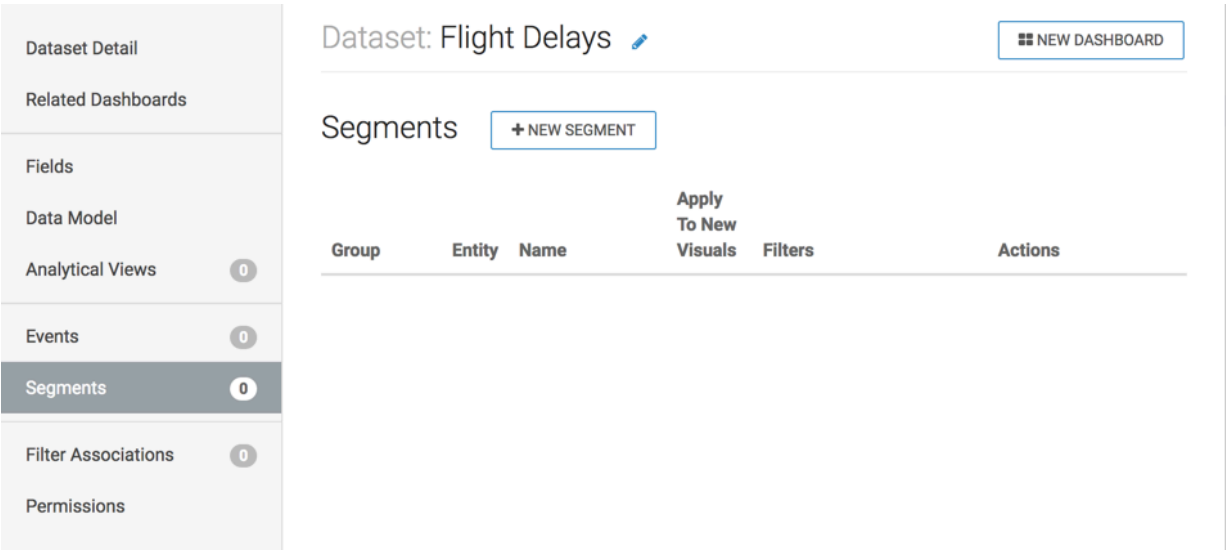
   The Segments view appears.
5. In the Segments interface, click New Segment.

   The Add Segment modal window appears.

6. Make the following entries:

- Under Segment Name, enter Delayed Flights.
- Under Segment Group, enter Delay Status.
- Under Filters, click the text box to open the Filter Expression modal window.

Add Segment   ✕

Segment Name

> Enter segment name

Segment Group

> Enter a group that links segments of the same type together

☐ **Apply as a filter to new visuals**

Filters

You can enter multiple filters and they will automatically have an "AND" logic between them

> Click to update in SQL expression editor

ADD FILTER

Entity to extract (only necessary for behavior based segments)

> Click to update in SQL expression editor

ADD ENTITY

CANCEL   **SAVE**

7. In the Filter Expression modal window, enter the following expression to show flights that are delayed.

```
[airtime] IS NOT NULL AND [depdelay] > 0
```

8. Click Validate Expression to verify correctness.

9. Click APPLY to save the filter and return to the Add Segment modal window.

The new filter appears under Filters.

10. Click SAVE.

Add Segment   ✕

Segment Name

Delayed Flights

Segment Group

Delay Status

☐ Apply as a filter to new visuals

Filters

You can enter multiple filters and they will automatically have an "AND" logic between them

[airtime] IS NOT NULL AND [depdelay] > 0

ADD FILTER

Entity to extract (only necessary for behavior based segments)

Click to update in SQL expression editor

ADD ENTITY

CANCEL   SAVE

The new segment definition appears in the Segments interface.

Note: The actions available for this segment: Edit, Clone, and Delete.

To view how segments work in a visual, see Using Segments in Visuals.

Using segments in visuals

Cloning segments

Cloudera Data Visualization lets you clone an existing segment definition.

Procedure

1. On the main navigation bar, click DATA.
2. Select Flight Delays dataset.

   Dataset side navigation appears, open at Dataset Detail view.
3. In the side navigation menu, click Segments.
4. In the Segments list, find the segment to clone, and click Clone.

   In this example, Delayed Flights will be cloned to create a new segment On-Time Departure.

A pre-populated Add Segment modal window appears named Copy of Delayed Flights.

5. Edit the Add Segment modal window by changing its entries.

- Change Segment Name, to On-Time Departure.
- Leave Segment Group as is.
- Under Filters, click the text box to open the Filter Expression modal window.

Add Segment   ✕

Segment Name

On-Time Departure

Segment Group

Delay Status

☑ Apply as a filter to new visuals

Filters

You can enter multiple filters and they will automatically have an "AND" logic between them

[airtime] IS NOT NULL AND [depdelay] > 0   ⊖

Click to update in SQL expression editor   ⊖

ADD FILTER

Entity to extract (only necessary for behavior based segments)

Click to update in SQL expression editor

ADD ENTITY

CANCEL   SAVE

6. Replace the filter expression. In our example, we are adding the following expression:

```
[airtime] IS NOT NULL AND [depdelay] < = 0
```

7. Click Validate Expression to verify correctness.

8. Click Apply to save the filter and return to the Add Segment modal window.

9. Under Filters, notice the new filter expression.

10. Click Save.

Add Segment ✕

Segment Name

On-Time Departure

Segment Group

Delay Status

☑ Apply as a filter to new visuals

Filters

You can enter multiple filters and they will automatically have an "AND" logic between them

[airtime] IS NOT NULL AND [depdelay] < = 0 ⊖

Click to update in SQL expression editor ⊖

ADD FILTER

Entity to extract (only necessary for behavior based segments)

Click to update in SQL expression editor

ADD ENTITY

CANCEL SAVE

11. The new segment definition appears in the Segments interface.

Note the similarity in the definition of the two filters, Delayed Flights and On-Time Departure.

Editing segments

Cloudera Data Visualization allows you to edit an existing segment definition.

Procedure

1. On the main navigation bar, click DATA.

2. Select Flight Delays dataset.

Dataset side navigation appears, open at Dataset Detail view.

3. In the side navigation menu, click Segments.

4. In the Segments list, find the segment to edit, and click Edit.

In our example, let's edit the segment Delayed Flights to change the segment name from Delayed Flights to Delayed Departure.

A pre-populated Edit Segment modal window appears.

5. Change the entries in Edit Segment modal window.

- Change Segment Name from Delayed Flights to Delayed Departure.
- Leave all other fields 'as is'.

6. Click SAVE.

The renamed/edited segment appears in the Segments interface.

Creating entity segments

Entity segments are a more advanced use of segments, where the extraction of an entity enables cohort analysis.

Procedure

1. On the main navigation bar, click DATA.

2. Select Flight Delays dataset.

Dataset side navigation appears, open at Dataset Detail view.

3. In the side navigation menu, click Segments.

4. In the Segments list, find the segment to clone, and click Clone.

In this example, to make our task simpler, the Delayed Departure segment that was created in Cloning Segments will be cloned.

A pre-populated Add Segment modal window appears.

5. Edit the Add Segment modal window by changing its entries.

- Change Segment Name to Delayed Airlines.
- Leave other fields 'as is'.
- Under Entity to extract, click the text box to open the Entity Expression modal window.

Add Segment   ✕

Segment Name

Delayed Airlines

Segment Group

Delay Status

☐ **Apply as a filter to new visuals**

Filters

You can enter multiple filters and they will automatically have an "AND" logic between them

[airtime] IS NOT NULL AND [depdelay] > 0   ⊖

Click to update in SQL expression editor   ⊖

ADD FILTER

Entity to extract (only necessary for behavior based segments)

Click to update in SQL expression editor

ADD ENTITY

CANCEL   SAVE

6. In the Entity Expression modal window, enter the following expression.

```
[airlineid]
```

7. Click Validate Expression to verify correctness.

8. Click APPLY to save the expression and return to the Add Segment modal window.

9. In the Add Segment modal window, notice the new expression in the Entity to extract field.

10. Click SAVE.

The new segment definition appears in the Segments interface. The segment Delayed Airlines has an entry in the Entity column, airlineid.

To view how segments work in a visual, see Using Segments in Visuals .

Related Information

Cloning segments

Using segments in visuals

Deleting segments

Cloudera Data Visualization lets you easily delete dataset segment definition.

Procedure

1. On the main navigation bar, click DATA.
2. Select Flight Delays dataset.

   Dataset side navigation appears, open at Dataset Detail view.
3. In the side navigation menu, click Segments.
4. In the Segments list, find the segment to delete, and click Delete.

   In this example, we are deleting Short Flights.

5. Click DELETE in the confirmation modal window.

Results

The segment Short Flights no longer appears in the Segments interface.

Creating segments from filter definitions

Besides creating segments in the dataset detail view, Cloudera Data Visualization also lets you create segments from a filter definition of a visual.

About this task

See the following topics to create a new segment from a filter in a visual, then edit the filter to add another segment, and finally update an existing segment.

- Creating the first segment
- Adding the second segment
- Viewing the defined segments
- Adding values to an existing segment

Follow these steps to create a new data segment, Mountain from a filter definition.

Procedure

Creating the first segment

1. Start a new visual based on dataset Flight Delays, based on data previously imported into Cloudera Data Visualization from a data file.

For more information, see Creating a visual.

2. Add originstate to the Filters shelf.

3. In the Filter for originstate window modal, select CO and WY, and click APPLY.

4. Click the Save Down icon to the left of the Filters shelf.
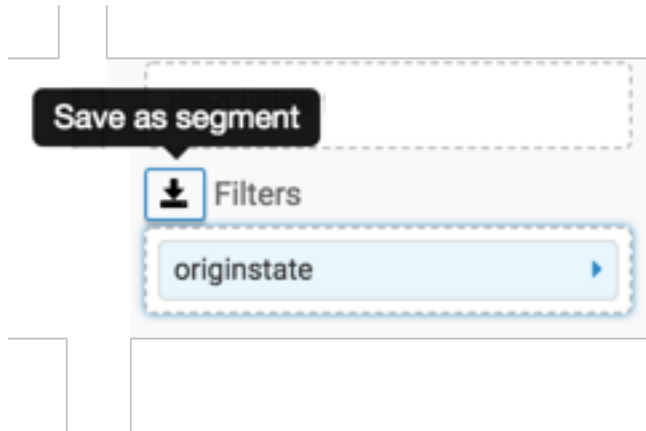
5. From the menu, select Create New Segment.
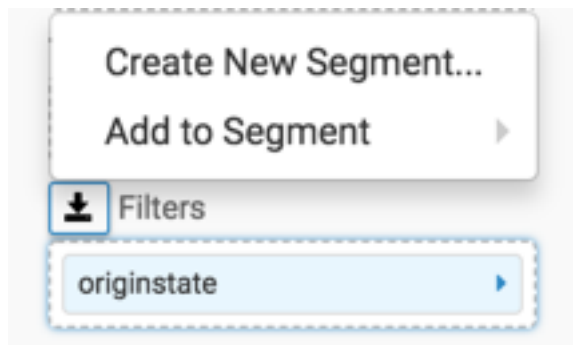
6. In the Add Segment window modal, specify the following:

- Under Segment Name, enter Mountain.
- Under Segment Group, enter Geographic Region.
- Under Filters, notice the new filter expression, [originstate] in ('CO', 'WY').
- Leave Entity to Extract field empty.

7. Click SAVE.

Add Segment   ✕

Segment Name

Mountain

Segment Group

Geographic Region

☐ Apply as a filter to new visuals

Filters

You can enter multiple filters and they will automatically have an "AND" logic between them

[originstate] in ('CO','WY')

ADD FILTER

Entity to extract (only necessary for behavior based segments)

Click to update in SQL expression editor

ADD ENTITY

CANCEL   SAVE

The new segment definition appears in Segments section on the right navigation menu.

Adding the second segment

Let's edit the filter defined in the first segment and create a second segment.

8. On the Filters shelf, at the right of the originstate filter, click the Down icon to open the Filter Properties menu.

9. From the Filter Properties menu, select Clear values.
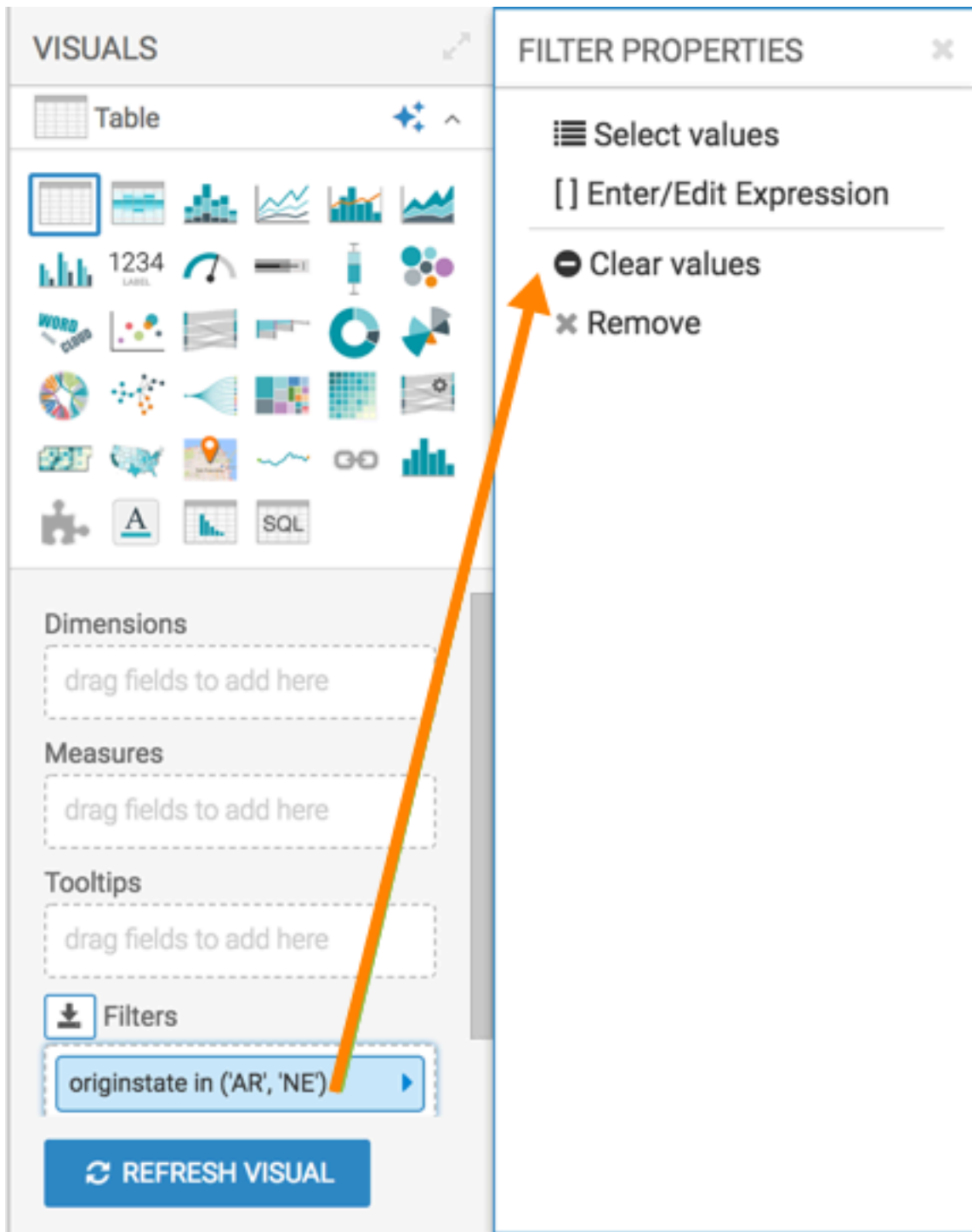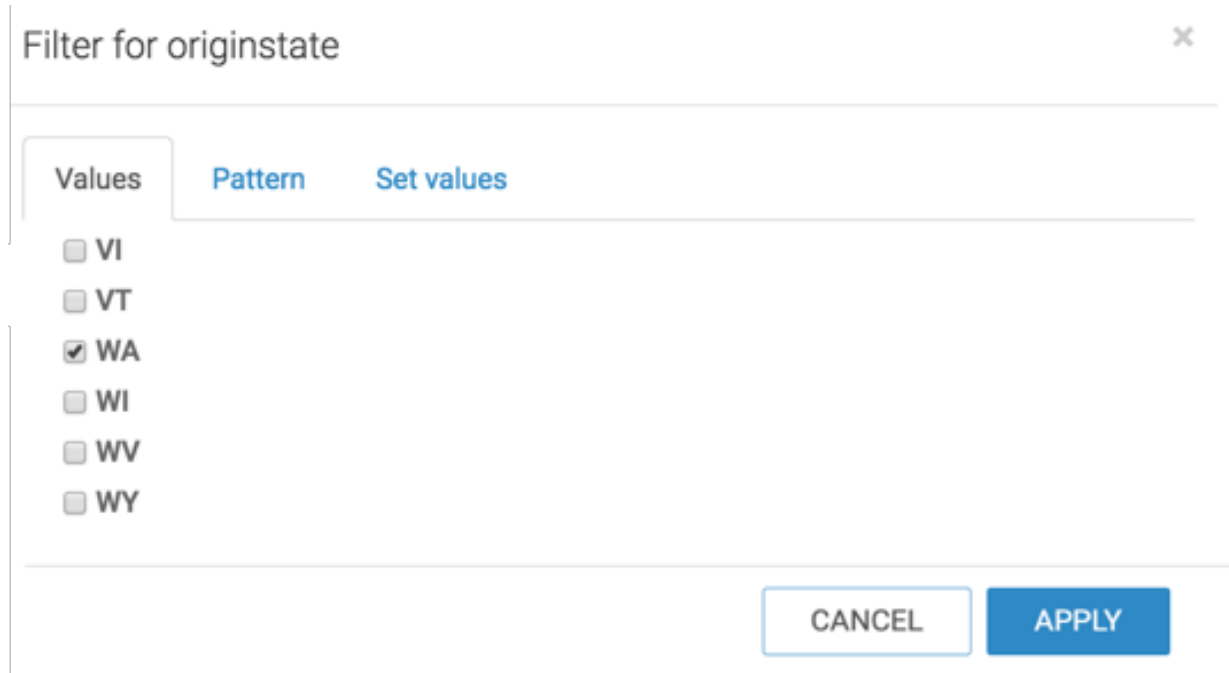
10. Click the Down icon to the right of the originstate filter to open the Filter Properties menu.

11. From the Filter Properties menu, select Select values.
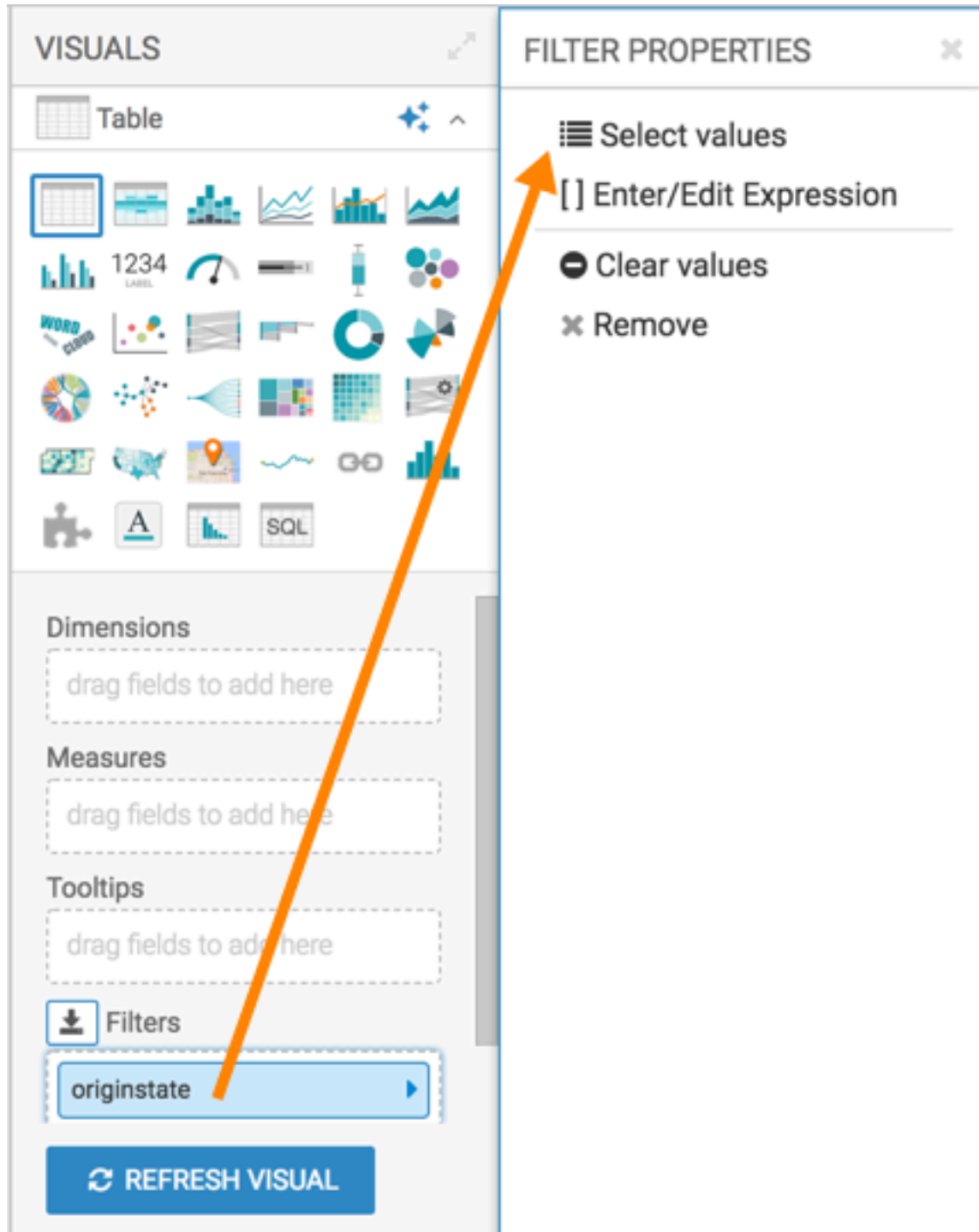
12. In the Filter for originstate window modal, select WA.

13. Click APPLY.

Filter for originstate   ×

| Values | Pattern | Set values |

☐ VI
☐ VT
☑ WA
☐ WI
☐ WV
☐ WY

CANCEL   **APPLY**

14. To define the next segment, select Create New Segment from the Save as Segment menu.

Create New Segment...
Add to Segment   ▸

± Filters
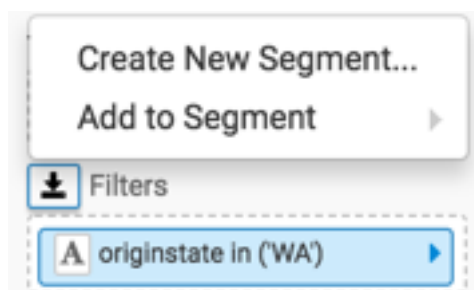
Ⓐ originstate in ('WA')   ▸

15. In the Add Segment modal window, specify the following:

- Under Segment Name, enter North West.
- Under Segment Group, enter Geographic Region that you used earlier.
- Under Filters, notice the new filter expression, [originstate] in ('WA').
- Leave Entity to Extract field empty.

16. Click Save.

Add Segment   ✕

Segment Name

North West

Segment Group

Geographic Region

☐ Apply as a filter to new visuals

Filters

You can enter multiple filters and they will automatically have an "AND" logic between them

[originstate] in ('WA')   ⊖

Click to update in SQL expression editor   ⊖

ADD FILTER

Entity to extract (only necessary for behavior based segments)

Click to update in SQL expression editor

ADD ENTITY

CANCEL   SAVE

Viewing the defined segments

17. In the side navigation bar of the visual interface, click Segments.

Notice that the two segments (and the segment group) you just defined appear in the Segments menu.

Filter for arc_segment   ×

Values

Delay Status
☐ is Delayed Airline
☐ is Delayed Departure
☐ is On-Time Departure
Geographic Region
☐ is Mountain
☐ is North West

CANCEL   APPLY

Adding values to an existing segment

Let's add a new state, OR, to our existing segment North West.

18. Click inside the Filter shelf to open the Field Properties menu.

19. Click Clear values.

20. Click Select values.

21. Select OR in the Filter for originstate window modal.

22. Click APPLY.

Filter for originstate   ×
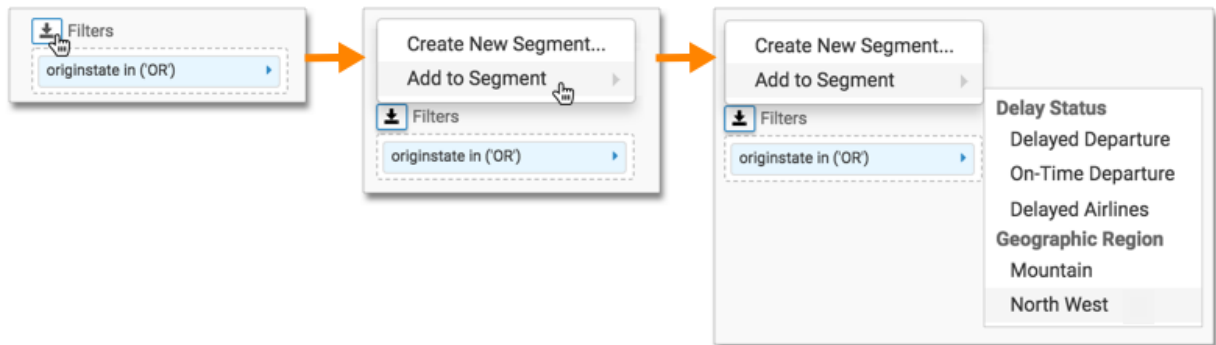
Values   Pattern   Set values

☐ OK
☑ OR
☐ PA
☐ PR

CANCEL   APPLY

23. To add the new selection to an existing segment, do the following:

- Click Filters.
- In the menu, select Add to Segment from the Save as Segment menu.
- In the secondary menu, under Geographic Regions, select North West.

Notice that when the Edit Segment modal window appears, it shows the existing configuration for the segment North West.

However, its Filters specification now includes Oregon: [originstate] in ('WA', 'OR').

24. Click Save to finish adding the specification to the segment.

To view how segments work in a visual, see *Using segments in visuals*.

Related Information

Using segments in visuals

Creating a visual

Using segments in visuals

This article demonstrates how segments work in a visual.

About this task

After creating segments in the Dataset Segments user interface, or creating segments from filter definitions of a visual, you can view this segmented data in a visual.

Procedure

1. Click Data in the side navigation bar of the visual interface.

The segments (and the segment group) that you defined earlier appear in the Segments menu.

Filter for arc_segment   ×

Values

Delay Status
☐   is   Delayed Airline
☐   is   Delayed Departure
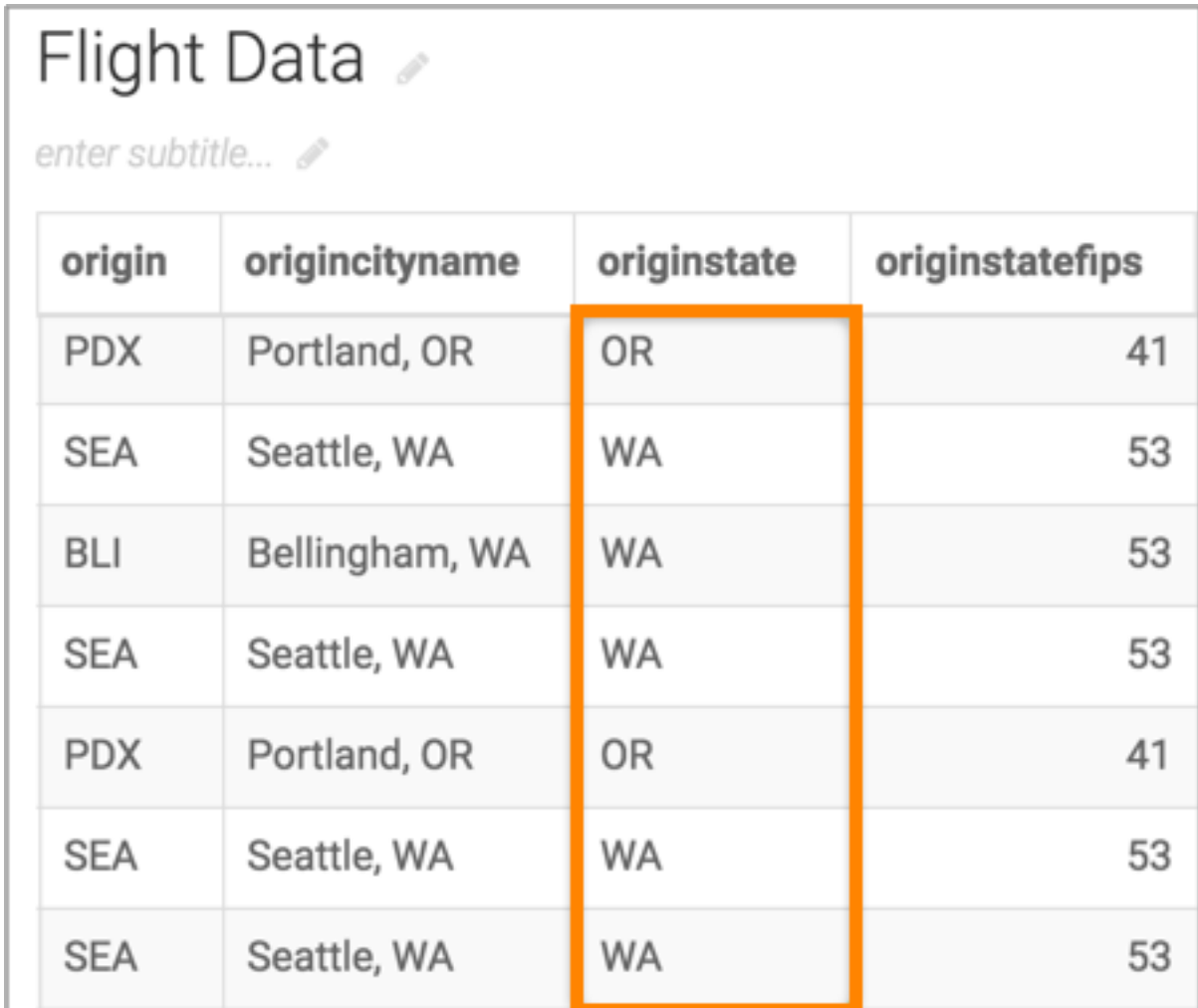☐   is   On-Time Departure
Geographic Region
☐   is   Mountain
☑   is   North West

CANCEL   APPLY

2. Select one of the segments, and click REFRESH VISUAL.

In this example, North West has been selected.

The visual only shows the rows that match the segment criteria. In this example, the states WA and OR.

Flight Data ✎

enter subtitle... ✎

origin	origincityname	originstate	originstatefips
PDX	Portland, OR	OR	41
SEA	Seattle, WA	WA	53
BLI	Bellingham, WA	WA	53
SEA	Seattle, WA	WA	53
PDX	Portland, OR	OR	41
SEA	Seattle, WA	WA	53
SEA	Seattle, WA	WA	53

Related Information

Creating segments

Creating segments from filter definitions