

# Configuring Restricting Row-Level Access

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## Setting segments

### About this task

To specify segments in the dataset, you can save information from the Filters shelf of a visual as a segment. Follow the steps outlined in our article *Creating Segments from Filter Definitions*.

Alternatively, you can specify the filters in the Dataset Segments interface, as described in *Creating Segments*.

### Procedure

Define the following segments:

**Table 1: Definitions of Segments on the Dataset US County Population**

| Group              | Name       | Filters                               |
|--------------------|------------|---------------------------------------|
| Geographic Regions | California | ([State] in ('California'))           |
| Geographic Regions | Mountain   | ([State] in ('Arizona', 'Nevada'))    |
| Geographic Regions | North West | ([State] in ('Washington', 'Oregon')) |

After you define these segments in your dataset, your Dataset Segments interface should look like this:

The screenshot shows the 'Segments' interface for the 'US County Population' dataset. It features a '+ NEW SEGMENT' button and a table with the following columns: Group, Entity, Name, Apply To New Visuals, Filters, and Actions. The table contains three rows corresponding to the segments defined in Table 1.

| Group              | Entity | Name       | Apply To New Visuals | Filters                               | Actions   |
|--------------------|--------|------------|----------------------|---------------------------------------|---|
| Geographic Regions |        | California |                      | ([State] in ('California'))           | <a href="#">Edit</a> <a href="#">Clone</a> <a href="#">Delete</a> |
| Geographic Regions |        | Mountain   |                      | ([State] in ('Arizona', 'Nevada'))    | <a href="#">Edit</a> <a href="#">Clone</a> <a href="#">Delete</a> |
| Geographic Regions |        | North West |                      | ([State] in ('Washington', 'Oregon')) | <a href="#">Edit</a> <a href="#">Clone</a> <a href="#">Delete</a> |

### Related Information

[Creating segments from filter definitions](#)

[Creating segments](#)

## Creating users and user groups

### Procedure

1. Create a user group for all sales representatives. In the Manage Users & Groups interface, create a user group named Sales Reps.

See, *Creating new user groups*.

After you define this user group, your Manage Users & Groups interface should look like this:

The screenshot shows the 'Manage Users & Groups' interface. It includes buttons for 'NEW USER' and 'NEW GROUP', and tabs for 'Users' and 'Groups'. Below, there is a table with columns for Group, # Members, Members, and Roles. The 'SalesReps' group is listed with 0 members.

| Group     | # Members | Members | Roles |
|-----------|-----------|---------|-------|
| SalesReps | 0         |         |       |

2. Define the following users, with normal user permissions, and assign them to the SalesReps user group:

- AZrep1
- CArep1
- CArep2
- NVrep1
- ORrep1
- WArepl

See, *Creating new user accounts* and *Adding users to user groups*.

After you create these users, your Manage Users & Groups interface should look like this:

Manage Users & Groups

NEW USER NEW GROUP

Users Groups

ADD TO GROUP ADD TO ROLE DELETE

| <input type="checkbox"/> | Username (first last) | Permissions | Date Joined       | Last Login | Member of Group(s) | Roles | Status   |
|--------------------------|-----------------------|-------------|-------------------|------------|--------------------|-------|--|
| <input type="checkbox"/> | AZrep1                | Normal      | a minute ago      | Never      | SalesReps          |       | <span style="color: green;">x</span> <span style="color: blue;">/</span> <span style="color: blue;">□</span> |
| <input type="checkbox"/> | CArep1                | Normal      | a minute ago      | Never      | SalesReps          |       | <span style="color: green;">x</span> <span style="color: blue;">/</span> <span style="color: blue;">□</span> |
| <input type="checkbox"/> | CArep2                | Normal      | a few seconds ago | Never      | SalesReps          |       | <span style="color: green;">x</span> <span style="color: blue;">/</span> <span style="color: blue;">□</span> |
| <input type="checkbox"/> | NVrep1                | Normal      | a few seconds ago | Never      | SalesReps          |       | <span style="color: green;">x</span> <span style="color: blue;">/</span> <span style="color: blue;">□</span> |
| <input type="checkbox"/> | ORrep1                | Normal      | a few seconds ago | Never      | SalesReps          |       | <span style="color: green;">x</span> <span style="color: blue;">/</span> <span style="color: blue;">□</span> |
| <input type="checkbox"/> | WArepl                | Normal      | a few seconds ago | Never      | SalesReps          |       | <span style="color: green;">x</span> <span style="color: blue;">/</span> <span style="color: blue;">□</span> |

### Related Information

[Creating new user groups](#)

[Creating new user accounts](#)

[Adding users to user groups](#)

## Setting roles

### About this task

To enforce row-level access restrictions, it is important to define roles with appropriate privileges and assign them to individual users or user groups.

### Procedure

1. Follow the instructions covered in *Creating segments from filter definitions* and *Editing role assignments*.

For more information about permission sets, see *Role privileges*.

## 2. Define a role with the following specifications:

### Name

See\_Customer\_Data

### Description

Sales Reps can see customer data

The screenshot shows the Cloudera Data Visualization interface. The top navigation bar includes 'HOME', 'SQL', 'VISUALS', and 'DATA'. The main navigation menu has 'Users and Groups', 'Manage Roles', 'Manage URL Aliases', 'Manage API Keys', 'Email Templates', 'Custom Styles', 'Custom Colors', 'Custom Dates', and 'Static Assets'. The 'Manage Roles' page is active, showing the 'Role Detail' for 'See\_Customer\_Data'. The role name is 'See\_Customer\_Data' and the description is 'Sales Reps can see customer data'. Below this, there are tabs for 'Privilege' and 'Members'. The 'Privilege' tab is selected, showing a list of system privileges with checkboxes for each. The privileges listed are: 'Create workspaces', 'View roles and users', 'Manage roles and users', 'Manage settings', 'Manage custom styles', and 'Manage jobs, email templates'. All checkboxes are currently unchecked.

## 3. Configure the role's privileges on the Privileges tab.

### System Privileges

None

### Dataset Privileges

Customer Value Analysis dataset, on the sample connection (this may vary depending on where you loaded the data).

### Permission

View visuals and apps

4. Add the SalesReps group to the role on the Members tab.

#### Users

None

#### Groups

SalesReps

Role: See\_Customer\_Data

The screenshot shows the configuration page for the role 'See\_Customer\_Data'. At the top, there are 'SAVE' and 'UNDO' buttons. Below, the 'Name' field contains 'See\_Customer\_Data' and the 'Description' field contains 'Sales Reps can see customer data'. There are two tabs: 'Privileges' (selected) and 'Members'. Under the 'Members' tab, there are two sections: 'Users' and 'Groups'. The 'Users' section has an 'EDIT USER(S)' button and a table with columns 'Username', 'First Name', and 'Last Name'. A note below the table states: '(these users were explicitly added and are not necessarily part of the added groups)'. The 'Groups' section has a 'Require all groups' checkbox (unchecked) and an 'EDIT GROUP(S)' button. A table below shows the 'SalesReps' group selected.

#### Related Information

[Editing role assignments](#)

[Role privileges](#)

[Creating segments from filter definitions](#)

## Setting filter associations

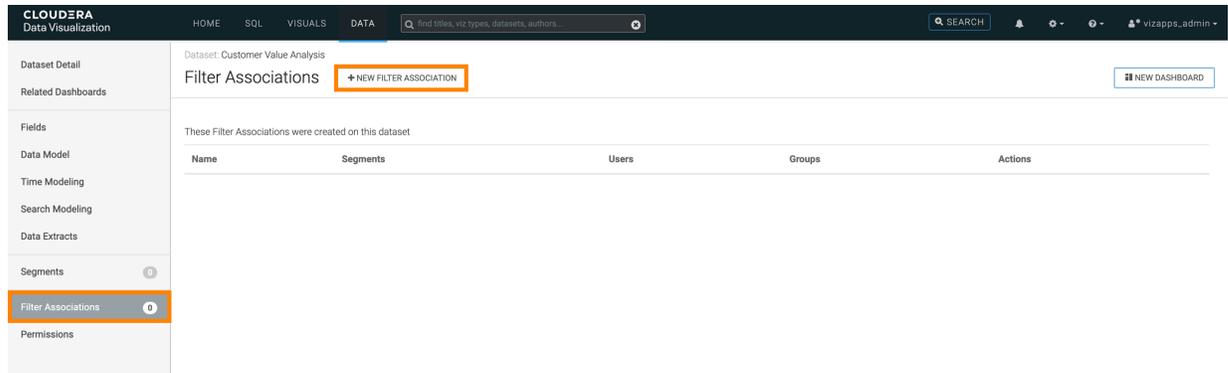
#### About this task

The final task in restricting user or user group access is to specify filter associations.

#### Procedure

1. On the main navigation bar, click DATA.  
The Data view appears, open on the Datasets tab.
2. In the left navigation menu, select your data connection.
3. In the Datasets area, click the dataset that you want to use.  
The Dataset Detail page appears.

4. In the left navigation, select Filter Associations and click New Filter Association.



- 5.** In the Add Filter Association modal window, perform the following actions:
  - a.** Under Filter Association Name, enter CA SalesReps.
  - b.** Under Applied Segments, select is California from Geographic Regions.
  - c.** On the Users tab, select users CArep1 and CArep2, and Add them to the filter association.
  - d.** Click Create.

### Add Filter Association ✕

**Filter Association Name**

**Applied Segments**

**Geographic Regions**

- is California
- is Mountain
- is North West

**Users** **Groups**

---

**Search Users**

Partial groups are shown; please use the search box to search the full list of groups.

| Available to select                        |   | Selected                     |
|--|---|------------------------------|
| <input type="checkbox"/> <b>Select All</b> | <input type="button" value="ADD &gt;&gt;"/> | Select options from the left |
| <input type="checkbox"/> a                 | <input type="button" value="&lt;&lt;"/>     |                              |
| <input type="checkbox"/> aabrahams         |   |                              |
| <input type="checkbox"/> aakulov           |   |                              |
| <input type="checkbox"/> aalmel            |   |                              |
| <input type="checkbox"/> aaron.ho          |   |                              |
| <input type="checkbox"/> aarrieta          |   |                              |

6. Note that the new filter association now appears on the Filter Associations interface.

Dataset: Customer Value Analysis

Filter Associations [+ NEW FILTER ASSOCIATION](#)

These Filter Associations were created on this dataset

| Name         | Segments   | Users          | Groups | Actions                                     |
|--------------|------------|----------------|--------|---|
| CA SalesReps | California | CArep1, CArep2 |        | <a href="#">Edit</a> <a href="#">Delete</a> |

7. Repeat and add two more filter associations, as follows:

**Table 2: Definitions of Segments on the Dataset Customer Value Analysis**

| Filter Association Name | Applied Segment | Users to Include |
|-------------------------|-----------------|------------------|
| Mountain SalesReps      | Mountain        | NVrep1, AZrep1   |
| North West SalesReps    | North West      | ORrep1, WArepl   |

After you define these filter associations in your dataset, your Filter Associations interface should look like this:

Dataset: Customer Value Analysis

Filter Associations [+ NEW FILTER ASSOCIATION](#)

These Filter Associations were created on this dataset

| Name                 | Segments   | Users          | Groups | Actions                                     |
|----------------------|------------|----------------|--------|---|
| CA SalesReps         | California | CArep1, CArep2 |        | <a href="#">Edit</a> <a href="#">Delete</a> |
| Mountain SalesReps   | Mountain   | NVrep1, AZrep1 |        | <a href="#">Edit</a> <a href="#">Delete</a> |
| North West SalesReps | North West | ORrep1, WArepl |        | <a href="#">Edit</a> <a href="#">Delete</a> |

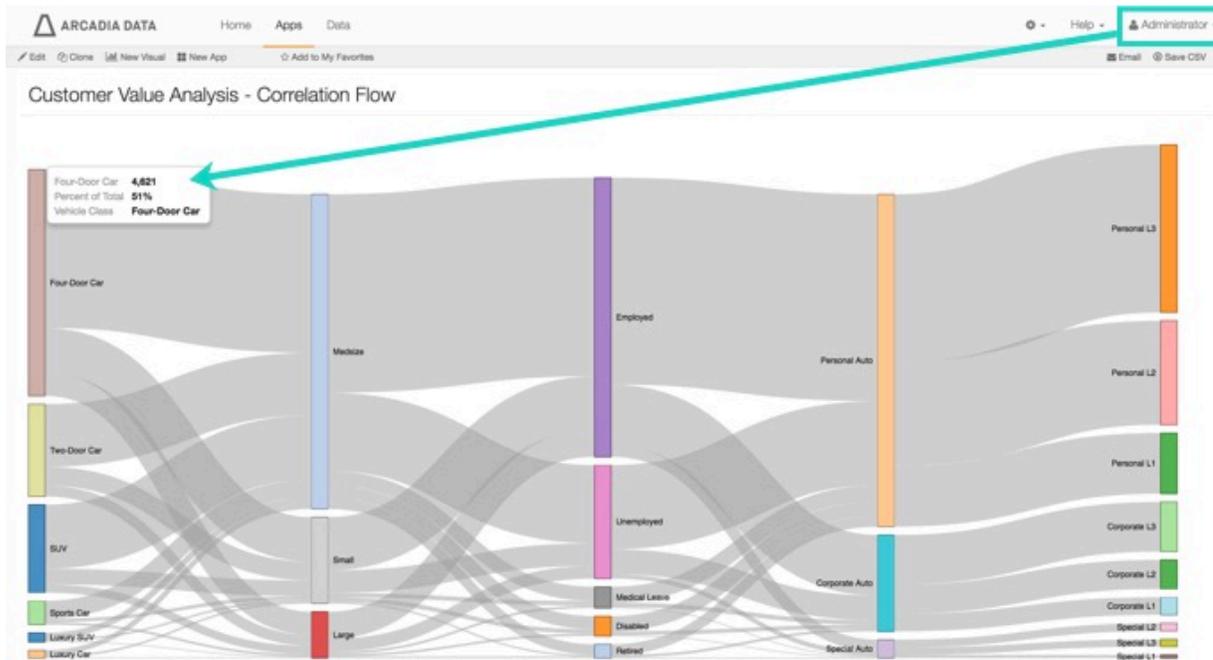
## Verifying access restriction on a visual

### About this task

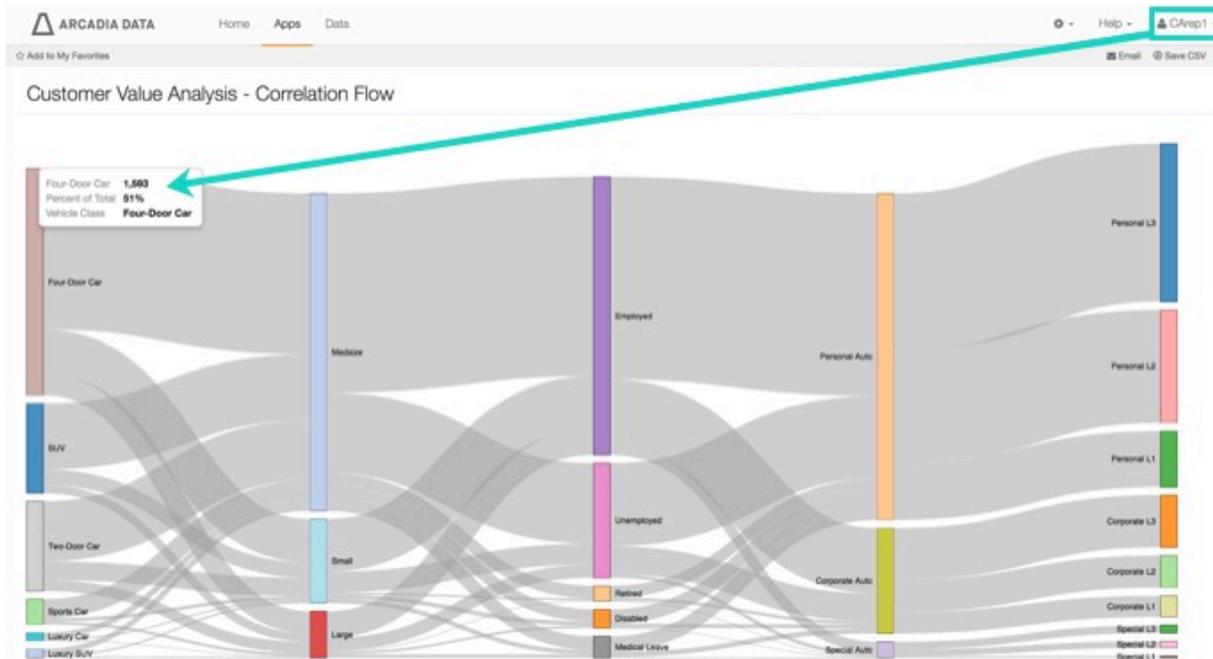
To ensure that we specified the access restrictions correctly, let us view the same visual as an Administrative user, and as a user who is linked to each of the three filter associations declared in the previous section.

**Procedure**

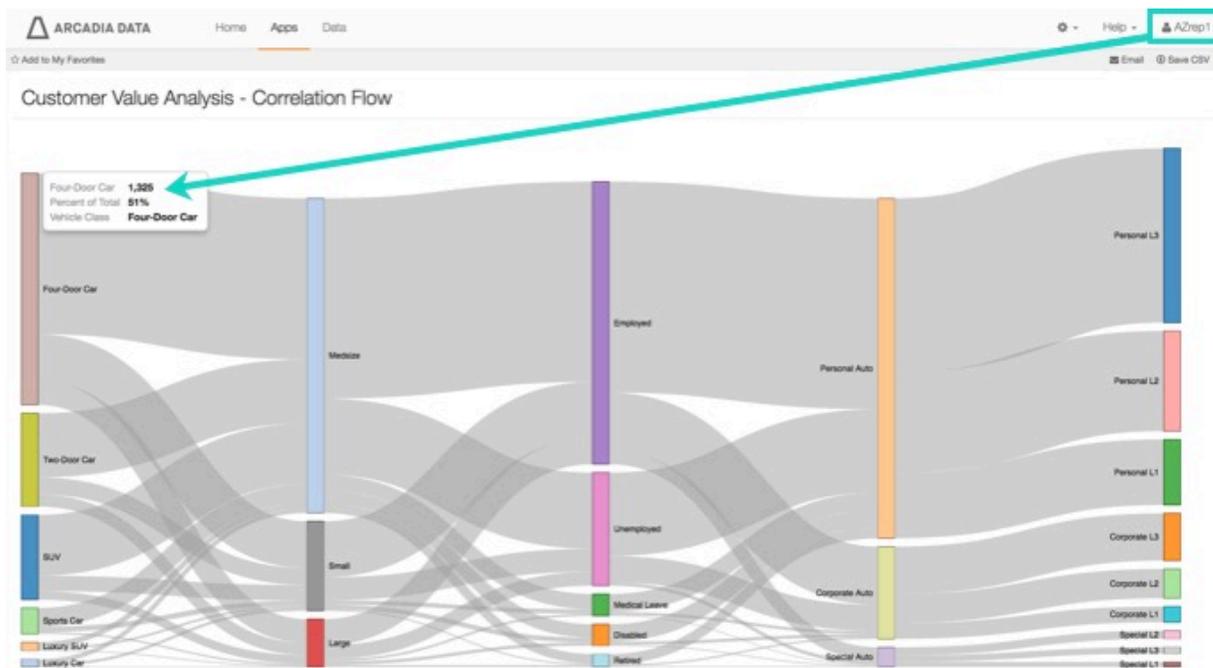
1. Log in as a user with Administrative privileges, and navigate to the application. Notice that the entire dataset appears in the visual; for example, it shows 4,621 Four-Door Cars.



2. Log in as a user associated with the dataset through the CA SalesReps filter association. Such a user, in this case CArep1, can only see records available for the state of California. For example, when you navigate to the application, you can only see 1,593 records for Four-Door Cars.



- If you log in as AZrep1, a user associated with the dataset through the Mountain SalesReps filter association, you could only see records available for the states of Arizona and Nevada. For example, when you login as AZrep1 and navigate to the application, you can see only 1,325 records for Four-Door Cars.



- Finally, if you log in as WArepl, a user associated with the dataset through the North West SalesReps filter association, you would see records available for the states of Oregon and Washington, but none of the others. For example, when you login as WArepl and navigate to the application, you see 1,703 records for Four-Door Cars.

