

Configuring Restricting Row-Level Access

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The Cloudera logo is displayed in a bold, orange, sans-serif font. The word "CLOUDERA" is written in all caps, with the letter 'E' in "CLouDERA" featuring a stylized horizontal line through its center.

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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 dataset 'US County Population'. 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'))	Edit Clone Delete
Geographic Regions		Mountain		([State] in ('Arizona', 'Nevada'))	Edit Clone Delete
Geographic Regions		North West		([State] in ('Washington', 'Oregon'))	Edit Clone Delete

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		Active
<input type="checkbox"/>	CArep1	Normal	a minute ago	Never	SalesReps		Active
<input type="checkbox"/>	CArep2	Normal	a few seconds ago	Never	SalesReps		Active
<input type="checkbox"/>	NVrep1	Normal	a few seconds ago	Never	SalesReps		Active
<input type="checkbox"/>	ORrep1	Normal	a few seconds ago	Never	SalesReps		Active
<input type="checkbox"/>	WArepl	Normal	a few seconds ago	Never	SalesReps		Active

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 includes '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 the role details, 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

SAVE UNDO

Name: See_Customer_Data

Description: Sales Reps can see customer data

Privileges Members

Users (3) EDIT USER(S)

Username	First Name	Last Name
(these users were explicitly added and are not necessarily part of the added groups)		

Groups (1) Require all groups EDIT GROUP(S)

Group Name
SalesReps

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.

Before you begin

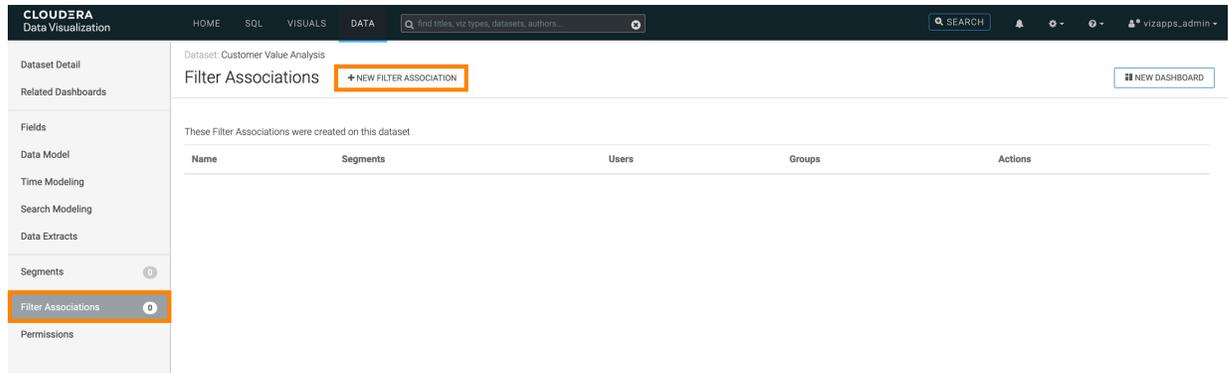
Make sure that either of the listed requirements is fulfilled:

- You have Manage roles and users permission.
- You have View roles and users permission and `MANAGE_DS_FA = True` has been added to the Advanced Site Settings.

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.



The screenshot shows the Cloudera Data Visualization interface. The top navigation bar includes 'HOME', 'SQL', 'VISUALS', and 'DATA'. The left sidebar contains navigation options: 'Dataset Detail', 'Related Dashboards', 'Fields', 'Data Model', 'Time Modeling', 'Search Modeling', 'Data Extracts', 'Segments', 'Filter Associations', and 'Permissions'. The 'Filter Associations' option is highlighted with an orange box. The main content area displays 'Dataset: Customer Value Analysis' and 'Filter Associations' with a '+ NEW FILTER ASSOCIATION' button highlighted in orange. Below this, a table lists filter associations with columns for 'Name', 'Segments', 'Users', 'Groups', and 'Actions'. The table is currently empty.

Name	Segments	Users	Groups	Actions
------	----------	-------	--------	---------

- 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"/> Select All	<input type="button" value="ADD >>"/>	Selected Select options from the left
<input type="checkbox"/> a	<input type="button" value="<<"/>	
<input type="checkbox"/> aabrahams		
<input type="checkbox"/> aakulov		
<input type="checkbox"/> aalmel		
<input type="checkbox"/> aaron.ho		
<input type="checkbox"/> aarrieta		

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		Edit Delete

6. Repeat the steps above to add two more filter associations as described in the following table:

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, WArep1

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		Edit Delete
Mountain SalesReps	Mountain	NVrep1, AZrep1		Edit Delete
North West SalesReps	North West	ORrep1, WArep1		Edit Delete

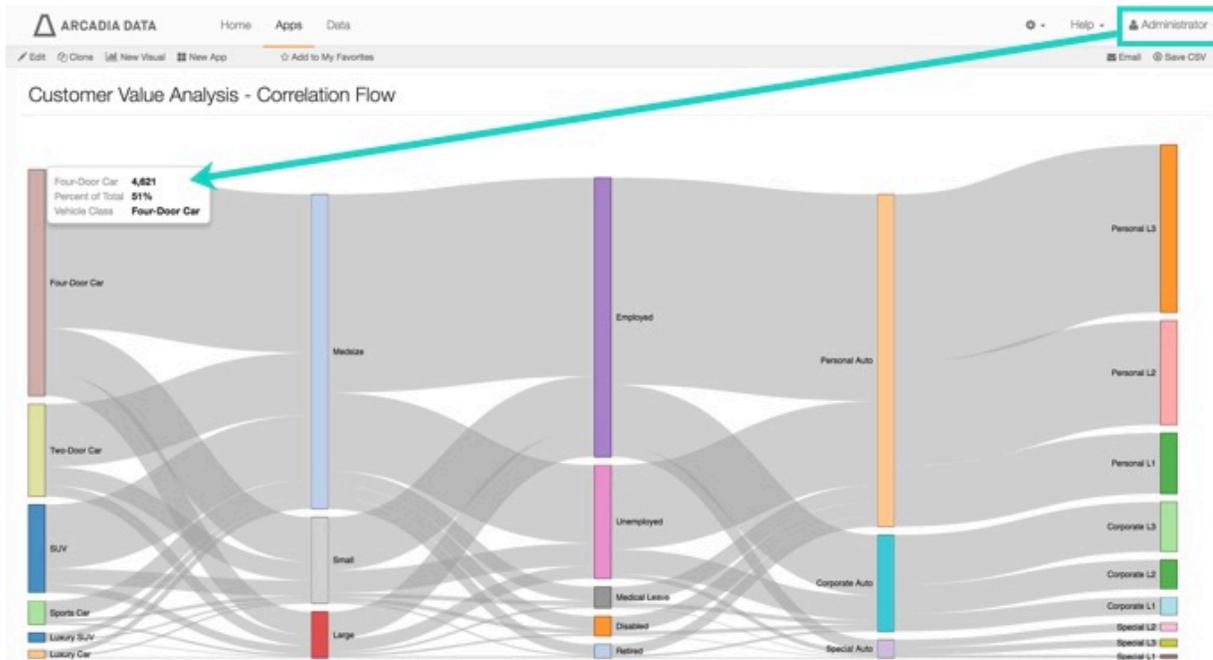
Verifying access restriction on a visual

About this task

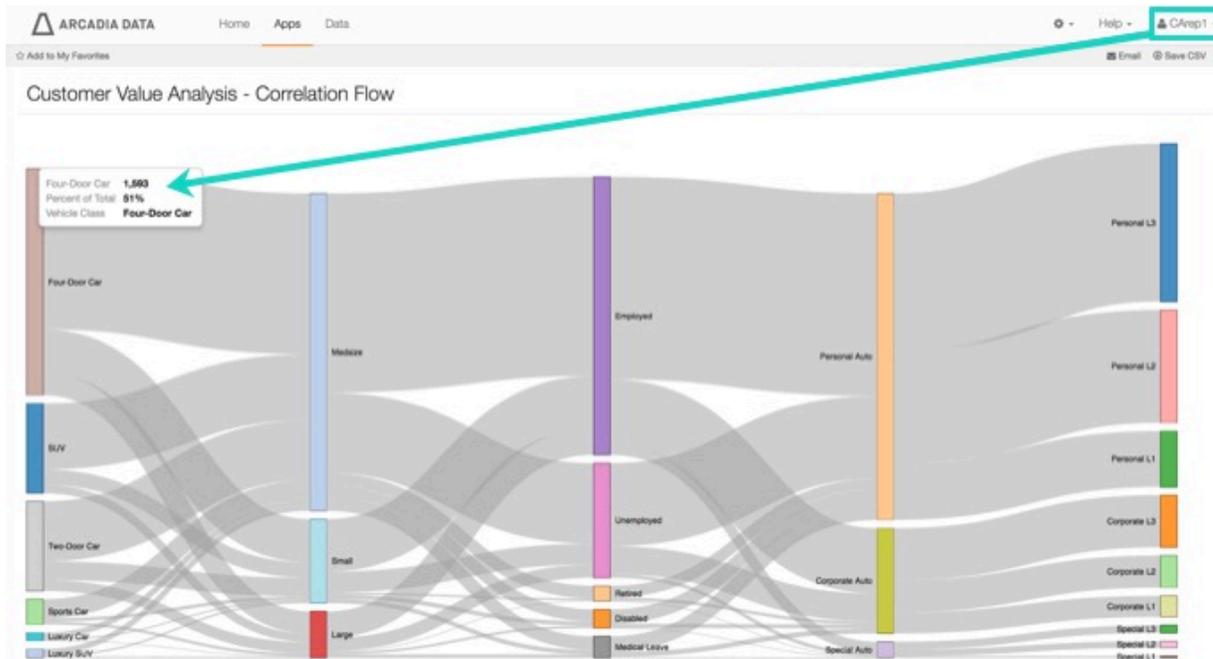
To ensure that we specified the access restrictions correctly, let us view the same visual as an Administrative user, and as a user who is linked to each of the three filter associations declared in the previous section.

Procedure

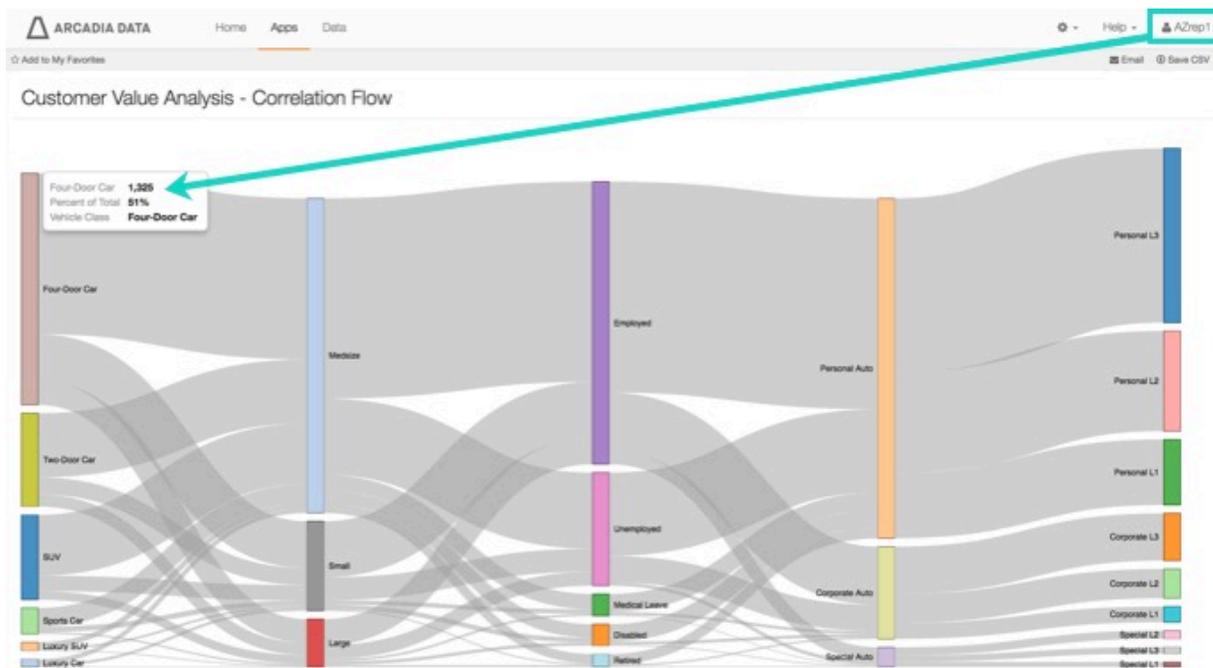
1. Log in as a user with Administrative privileges, and navigate to the application. Notice that the entire dataset appears in the visual; for example, it shows 4,621 Four-Door Cars.



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.

