# **Publishing Datasets**

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## Setting the dataset recipient roles

#### About this task



#### **Notice:**

For more information on possible permissions, see RBAC permissions.

In this discussion, we demonstrate how to set up Dataset Recipient roles. Members can receive dataset access at one or more of the following levels:

- Manage dataset
- Manage dashboards
- · View dashboards

Let us create three dataset roles: Data Admin, Analyst, and Visual Consumer for each for the three organization groups: Marketing, Sales, and Operations.

#### **Restriction:**

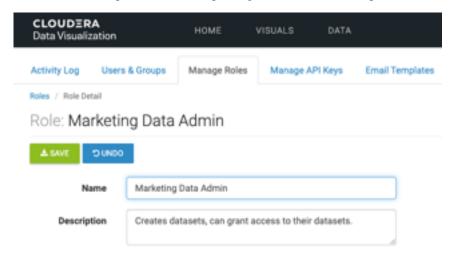
This task is for users with Manage roles and users privileges.

The steps for creating the role Marketing Data Admin.

#### **Procedure**

- 1. On the main navigation bar, click the Gear icon, and select Manage Roles.
- 2. In the Roles interface, start the new role by clicking New Role.
- **3.** In the Role definition interface, enter the following information:
  - Name: Marketing Data Admin
  - Description: Creates datasets, can grant access to their datasets.

At a later time, we plan to define the privileges and the membership of the role.



- 4. Click Save.
- **5.** generates a success message.

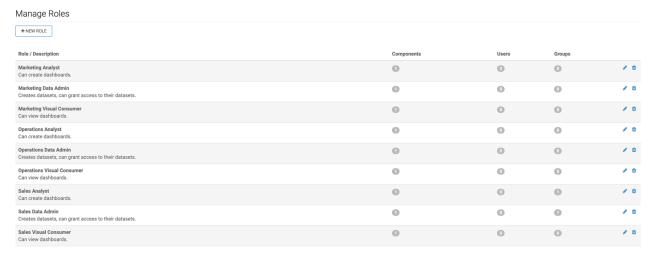
6. Repeat the previous steps to generate a total of 9 (nine) new roles, with the following names and descriptions:

Table 1: Roles that receive access to new datasets

| Role Name                  | Description   |
|----------------------------|---|
| Marketing Data Admin       | Creates datasets, can grant access to their datasets. |
| Marketing Analyst          | Can create dashboards.                                |
| Marketing Visual Consumer  | Can view dashboards.                                  |
| Sales Data Admin           | Creates datasets, can grant access to their datasets. |
| Sales Analyst              | Can create dashboards.                                |
| Sales Visual Consumer      | Can view dashboards.                                  |
| Operations Data Admin      | Creates datasets, can grant access to their datasets. |
| Operations Analyst         | Can create dashboards.                                |
| Operations Visual Consumer | Can view dashboards.                                  |

#### **Results**

After completing these steps, the list of roles should appear similar to this:



#### **Related Information**

**RBAC** permissions

# **Publishing datasets**

### About this task



## **Notice:**

For more information on possible permissions, see *RBAC permissions*.

When a user creates a new dataset, that dataset is private by default. To share, user must explicitly grant others access to the new dataset.

In principal, anyone with Manage roles and users privileges can grant dataset access to others. However, we choose to restrict this privilege to a small number of people in the organization, typically system administrators. This is because

role editing is very powerful and role editors have full access to the entire system and can update any role to grant any permission to any user.

As a result, most dataset creators do not ordinarily have the Manage roles and users permission, and must place a service request so that system administrators add new datasets to the desired roles. In large organizations with multiple teams that consist of users with different responsibilities (dataset creators, dashboard creators, and dashboard viewers), access management becomes a laborious task.

Our RBAC security approach gives dataset creators an opportunity to 'publish' or share their datasets through a set of grants based on roles. They can grant access to specific roles though the Grant manage dataset, Grant manage dashboards, and Grant view dashboards permissions.

The following workflow is established to ensure that dataset creators can grant access to their datasets without having to rely on system administrators.



**Note:** Only users with Manage roles and users role privileges, typically system administrators, can set up the roles and permissions, and define users and user groups.

Before a dataset creator, Data Admin, can publish a dataset, they must have appropriate RBAC permissions, and the roles have to be assigned correctly to the members of each team. To understand how to configure the required permissions, roles, groups, and users, read RBAC setup for dataset publishing, which contains the following topics:

- Setting the dataset recipient roles
- Setting the dataset publisher role
- Defining groups for teams and access levels
- Assigning groups to roles
- Assign users to groups

After making all necessary adjustments to the dataset, a user with a Data Admin role can publish the dataset.

#### **Restriction:**

This workflow is intended for users with Data Admin role privileges.

This feature is only available after completing RBAC setup for dataset publishing.

Follow these steps to publish a dataset to the intended users.

### **Procedure**

- 1. Log in as a user with Data Admin privileges. Here, we log in as user John\_Marketing.
- 2. Navigate to the dataset you plan to publish. In our case, we plan to publish the Modified Iris Data dataset.
- **3.** Click the Permissions option in the left navigation.

At this stage, the Permissions interface for the Modified Iris Data dataset appears. In this example, it contains the default matrix for roles and privileges for the three Data Admin roles for All datasets on the Arcadia Enterprise connection (Manage dataset, Manage dashboards, and View dashboards).

You can publish the dataset through one of the following actions:

| D |  |  |
|---|--|--|
|   |  |  |
|   |  |  |

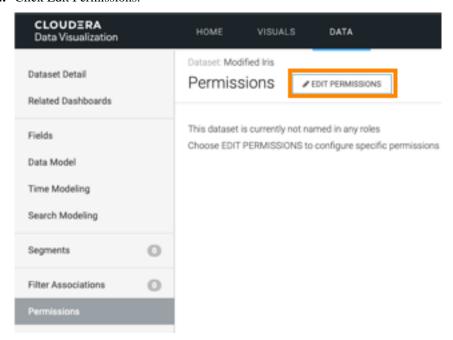
**Publish**Makes the dataset publicly visible to the already enabled roles. You can stop here.

Edit Permissions

Allows the user to grant additional access permissions on the dataset. This is only available to users with Role permissions. If you choose this option, continue to the

next step.

4. Click Edit Permissions.

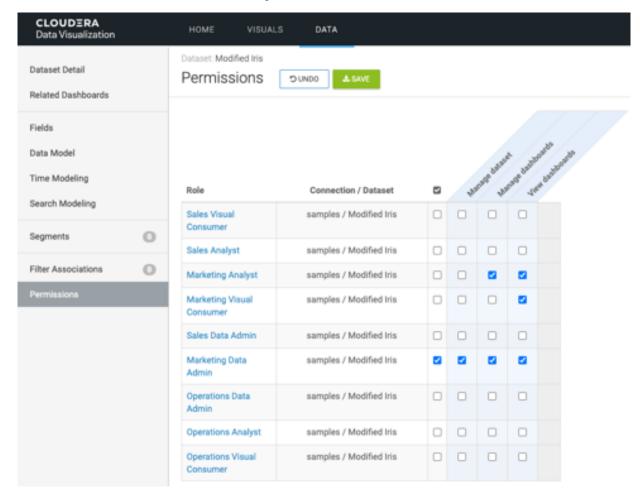


The full Permissions matrix appears.

- **5.** To grant the available privileges to the Modified Iris Data to the Marketing group, click the check boxes for the appropriate grants for the Data Admin, Analyst, and Visual Consumer roles defined in the Marketing group.
  - In this example, we granted all possible privileges. However, it is feasible that you may initially select only the Data Admin role, to involve others who have that role in testing the dataset and building preliminary dashboards. You can subsequently use this interface to grant access to other roles and users, such as Analysts who build more sophisticated dashboards, and postpone Visual Consumer access to a later time.

#### 6. Click Save.

This action makes the dataset available to all specified roles.



## **Related Information**

**RBAC** permissions

RBAC setup for dataset publishing

Setting the dataset recipient roles

Setting the dataset publisher role

Define groups for teams and access levels

Assign groups to roles

Assign users to groups

## Setting the dataset publisher role

#### About this task



#### Note:

For more information on possible permissions, see RBAC permissions.

For the sake of this discussion, members of the Dataset Publisher Role have the privileges to grant dataset access to other users. This access is available in three forms:

- Grant manage dataset
- · Grant manage dashboards
- · Grant view dashboards

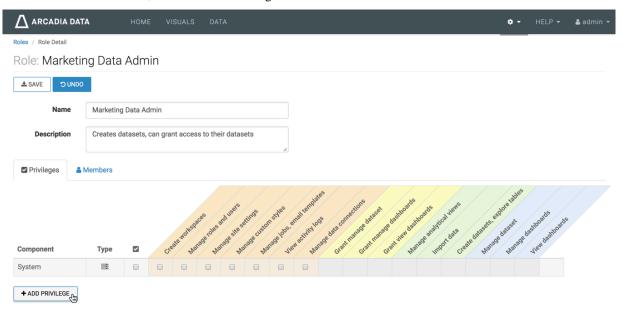
The granter must have the Grant manage dataset permissions on the target dataset.

We already created three (3) dataset publishing roles (data admins) in *Setting the dataset recipient roles*, one each for the three organization groups: Marketing, Sales, and Operations. These are Marketing Data Admin, Sales Data Admin, and Operations Data Admin, respectively. We also created the roles for the recipients of the grants, the analysts and the visual consumers.

Here are the steps for specifying the role Marketing Data Admin:

#### **Procedure**

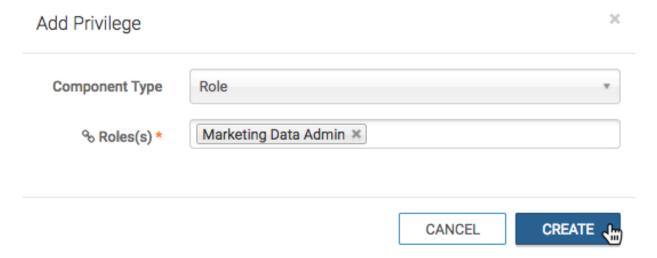
- 1. In the Roles interface, click either the name of the role, Marketing Data Admin, or the Edit icon on its role.
- 2. In the Role Detail interface, click the Add Privilege button.



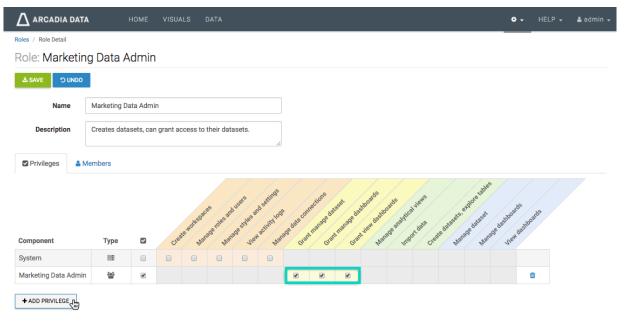
The Add Privilege modal window appears.

- **3.** Create the following privilege:
- **4.** Under Component Type, select Role.
- **5.** From Roles(s), select Marketing Data Admin, a role we defined previously.

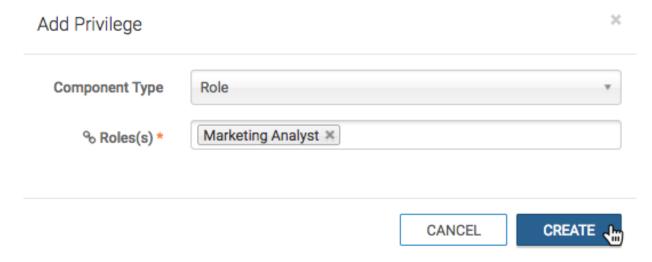
Note that this enables individuals with the Marketing Data Admin role to grant privileges to others with the same role.



7. Leave this privilege with all options on, and click the Add Privilege button to add the next privilege.



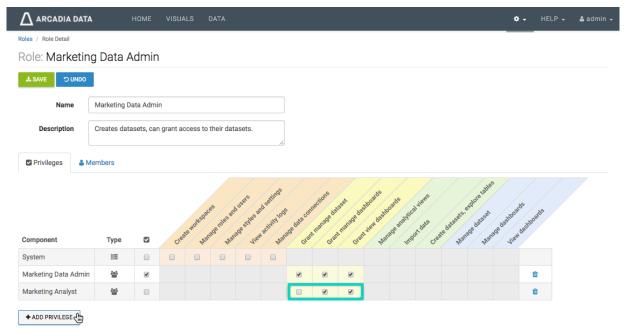
- **8.** Under Component Type, select Role.
- **9.** From Roles(s), select Marketing Analyst, a role we defined previously.



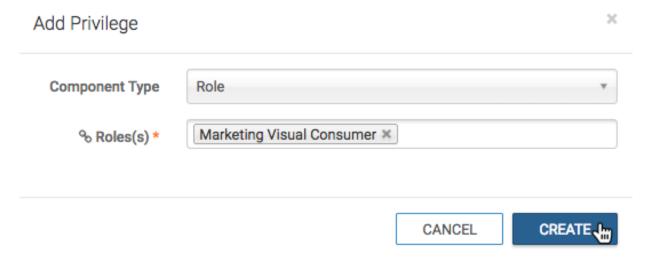
11. Deselect the Grant manage dataset option for this privilege.

This is because analysts should not be altering the dataset.

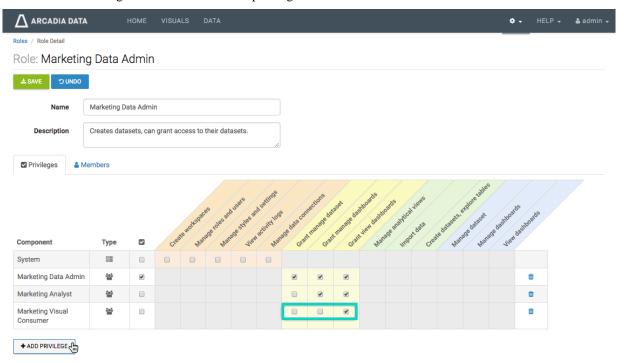
12. Click the Add Privilege button to add the next privilege.



- 13. Under Component Type, select Role.
- **14.** From Roles(s), select Marketing Visual Consumer, a role we defined previously.

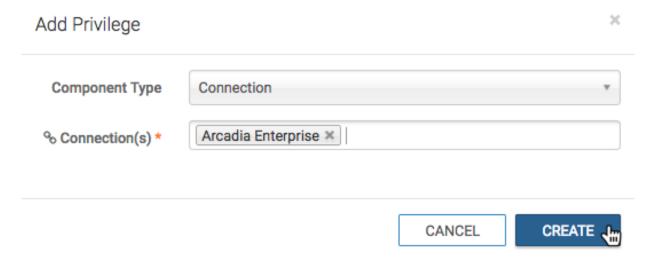


- **16.** Unselect the Grant manage dataset and Grant manage dashboards options for this privilege. This is because visual consumers can only view dashboards, and should not be altering the dataset or creating new dashboards. Therefore, this line contains only the Grant view dashboards option.
- 17. Click the Add Privilege button to add the next privilege.

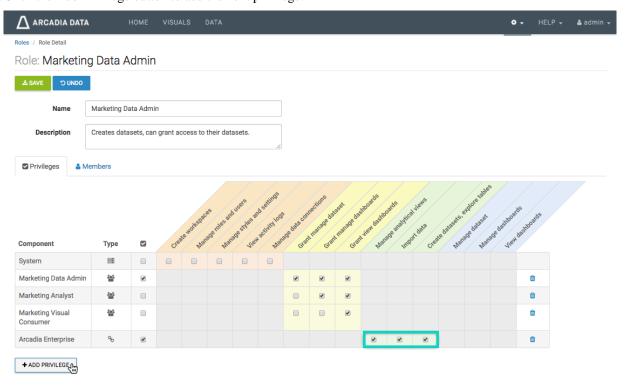


This time, let us declare connection-level privileges so that the Marketing Data Admin can access connected data, build datasets, and import supplemental data. Depending on the operational structure, we may also let the users with this role manage analytical views.

- **18.** In the Add Privilege modal window, create the connection-level privileges necessary for the Marketing Data Admin user. This particular privilege enables access to all data available through the specified connection:
- 19. Under Component Type, select Connection.
- 20. From Connection(s), select Impala.

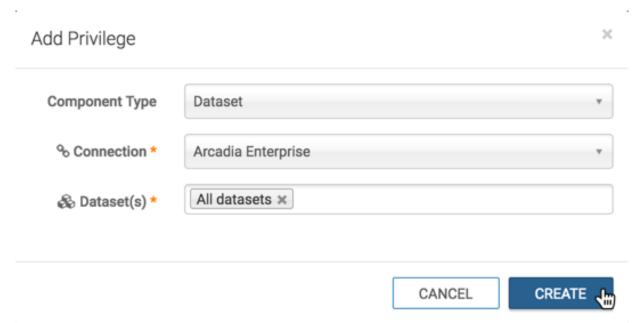


- **22.** Leave this privilege with all options on (Manage analytical views, Import data, and Create datasets, explore tables).
- 23. Click the Add Privilege button to add the next privilege.

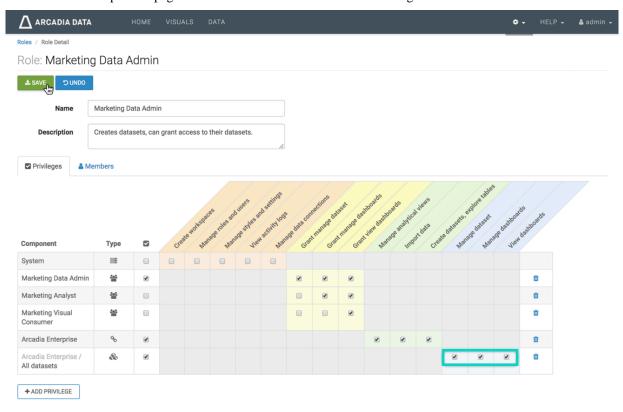


Finally, we declare dataset-level privileges. We can choose previously declared connections and limit access to a few of its datasets, or select a new connection, or choose all datasets on a connection. Here, we simply let members of the Marketing Data Admin role access all existing datasets on the Arcadia Enterprise connection.

- **24.** In the Add Privilege modal window, create the connection-level privileges necessary for the Marketing Data Admin user. This particular privilege enables access to all data available through the specified connection.
- **25.** Under Component Type, select Dataset.
- **26.** From Connection(s), select Arcadia Enterprise.
- **27.** From Dataset(s), select All datasets.



- 29. Leave this privilege with all options on (Manage dataset, Manage dashboards, and View dashboards)
- 30. Click Save at the top of the page to save the new definition of the Marketing Data Admin role.



**31.** Repeat the previous steps to add privileges to the roles of the Sales Data Admin and Operations Data Admin. Each of these roles should have a privilege matrix that is similar to privileges assigned to the Marketing Data Admin role.

Table 2: Privileges assigned to the Data Admin roles

| Role Name             | Component                                 | Permission  |
|-----------------------|---|---|
| Marketing Data Admin  | Role: Marketing Data Admin                | <ul><li> Grant manage dataset</li><li> Grant manage dashboards</li><li> Grant view dashboards</li></ul> |
|                       | Role: Marketing Analyst                   | Grant manage dashboards     Grant view dashboards   |
|                       | Role: Marketing Visual Consumer           | Grant view dashboards   |
|                       | Connection: Arcadia Enterprise            | <ul><li>Manage analytical views</li><li>Import data</li><li>Create datasets, explore tables</li></ul>   |
|                       | Dataset: Arcadia Enterprise, All Datasets | Manage dataset     Manage dashboards     View dashboards  |
| Sales Data Admin      | Role: Sales Data Admin                    | <ul><li> Grant manage dataset</li><li> Grant manage dashboards</li><li> Grant view dashboards</li></ul> |
|                       | Role: Sales Analyst                       | Grant manage dashboards     Grant view dashboards   |
|                       | Role: Sales Visual Consumer               | Grant view dashboards   |
|                       | Connection: Arcadia Enterprise            | <ul><li>Manage analytical views</li><li>Import data</li><li>Create datasets, explore tables</li></ul>   |
|                       | Dataset: Arcadia Enterprise, All Datasets | Manage dataset     Manage dashboards     View dashboards  |
| Operations Data Admin | Role: Operations Data Admin               | <ul><li> Grant manage dataset</li><li> Grant manage dashboards</li><li> Grant view dashboards</li></ul> |
|                       | Role: Operations Analyst                  | Grant manage dashboards     Grant view dashboards   |
|                       | Role: Operations Visual Consumer          | Grant view dashboards   |
|                       | Connection: Arcadia Enterprise            | <ul><li>Manage analytical views</li><li>Import data</li><li>Create datasets, explore tables</li></ul>   |
|                       | Dataset: Arcadia Enterprise, All Datasets | Manage dataset     Manage dashboards     View dashboards  |

## **Results**

After completing these steps, the list of roles shows that the number of components on the Data Admin roles increased to 6 (six):

# ARCADIA DATA

## Roles

+ NEW ROLE

| Role / Description  | Components | Users | Groups |   |
|---|------------|-------|--------|---|
| Marketing Data Admin Creates datasets, can grant access to their datasets.  | 6          | 0     | 0      | î |
| Marketing Analyst Can create dashboards.                                    | 0          | 0     | 0      | î |
| Marketing Visual Consumer Can view dashboards.                              | 0          | 0     | 0      | î |
| Sales Data Admin Creates datasets, can grant access to their datasets.      | 6          | 0     | 0      | î |
| Sales Analyst Can create dashboards.  | 0          | 0     | 0      | î |
| Sales Visual Consumer Can view dashboards.                                  | 0          | 0     | 0      | î |
| Operations Data Admin Creates datasets, can grant access to their datasets. | 0          | 0     | 0      | î |
| Operations Analyst Can create dashboards.                                   | 0          | 0     | 0      | î |
| Operations Visual Consumer Can view dashboards.                             | 6          | 0     | 0      | î |

## **Related Information**

Setting the dataset recipient roles

**RBAC** permissions

# Define groups for teams and access levels

#### **Procedure**

- 1. Create the groups of users by organizational team, and by level of required access.
  - There are three distinct access levels across the organization: Data Admins, Analysts, and Visual Consumers.
  - There are three teams: Marketing, Sales, and Operations.

The following steps demonstrate how to create the necessary user groups in Data Visualization. Note that depending on your architecture, this definition may happen at the LDAP layer, with the groups visible to Data Visualization.

- 2. On the main navigation bar, click the Gear, and select Users & Groups.
- 3. In the Manage Users & Groups interface, click New Group.
- **4.** In the New Group window modal, create a new group Data\_Admins.
- 5. [Optional] You may choose to add users to the group at this point, but we plan to do this at a later stage.
- 6. Click Save.
- 7. Repeat these steps to create additional new user groups: Analysts, Visual\_Consumers, Marketing, Sales, and Operations.

# Assign groups to roles

#### About this task

Now we must correctly assign the membership groups to roles.

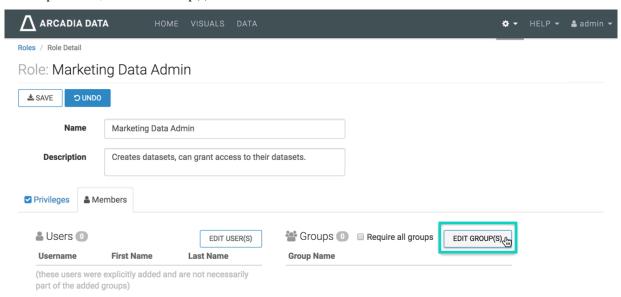
- There are three distinct access levels across the organization: Data Admins, Analysts, and Visual Consumers.
- There are three teams: Marketing, Sales, and Operations.

The following steps demonstrate how to create the necessary user groups in ArcViz. Note that depending on your architecture, this definition may happen at the LDAP layer, with groups visible to Data Visualization.

#### **Procedure**

- 1. On the main navigation bar, click the Gear icon, and select Manage Roles.
- 2. In the Roles interface, click either the name of the role, Marketing Data Admin, or the Edit icon on its role.
- 3. In the Role Detail interface, select the Members tab.

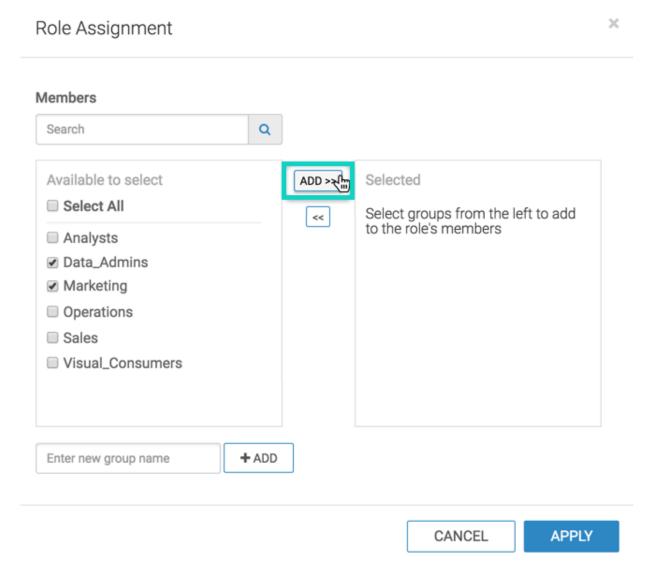
**4.** In Groups section, click Edit Group(s).



The Role Assignment modal window appears.

- 5. Select the groups Data\_Admins and Marketing.
- 6. Click Add.

## **7.** Click Apply.

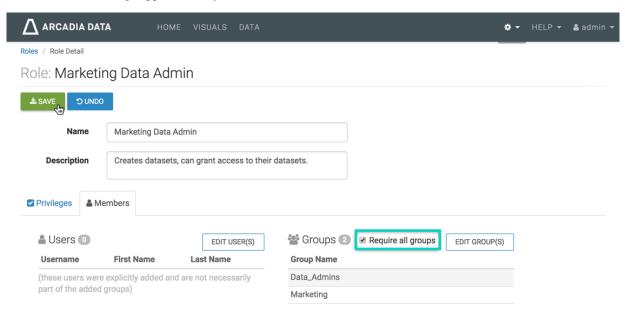


The Groups list now contains Data\_Admins and Marketing.

**8.** Select the Require all groups option.

## 9. Click Save.

A confirmation message appears briefly.



**10.** Repeat the previous steps to assign groups to the rest of the roles, according to the following information. Remember that you must use the Require all groups option.

Table 3: Roles and their group assignments

| Role Name                  | Assigned groups                                       |
|----------------------------|---|
| Marketing Data Admin       | Data_Admins     Marketing                             |
| Marketing Analyst          | Analysts     Marketing                                |
| Marketing Visual Consumer  | Visual_Consumers     Marketing                        |
| Sales Data Admin           | Data_Admins     Sales                                 |
| Sales Analyst              | Analysts     Sales                                    |
| Sales Visual Consumer      | Visual_Consumers     Sales                            |
| Operations Data Admin      | Data_Admins     Operations                            |
| Operations Analyst         | <ul><li>Analysts</li><li>Operations</li></ul>         |
| Operations Visual Consumer | <ul><li>Visual_Consumers</li><li>Operations</li></ul> |

#### What to do next

After completing these steps, the list of roles shows that the number of groups for each role is now 2 (two):

# ARCADIA DATA

## Roles

◆ NEW ROLE

| Role / Description  | Components | Users | Groups |   |
|---|------------|-------|--------|---|
| Marketing Data Admin Creates datasets, can grant access to their datasets.  | 6          | 0     | 2      | î |
| Marketing Analyst Can create dashboards.                                    | 0          | 0     | 2      | ŵ |
| Marketing Visual Consumer Can view dashboards.                              | 0          | 0     | 2      | î |
| Sales Data Admin Creates datasets, can grant access to their datasets.      | 6          | 0     | 2      | ŵ |
| Sales Analyst Can create dashboards.  | 0          | 0     | 2      | î |
| Sales Visual Consumer Can view dashboards.                                  | 0          | 0     | 2      | ŵ |
| Operations Data Admin Creates datasets, can grant access to their datasets. | 0          | 0     | 2      | î |
| Operations Analyst Can create dashboards.                                   | 0          | 0     | 2      | î |
| Operations Visual Consumer Can view dashboards.                             | 6          | 0     | 2      | î |

# **Assign users to groups**

## **About this task**

Depending on your installation/migration scenario and security configuration, you may already have the required users, and they may already be assigned to the correct groups.

To continue our example, we show how to create new users and assign them to the groups. Appropriate group membership automatically endows the user with the required role.

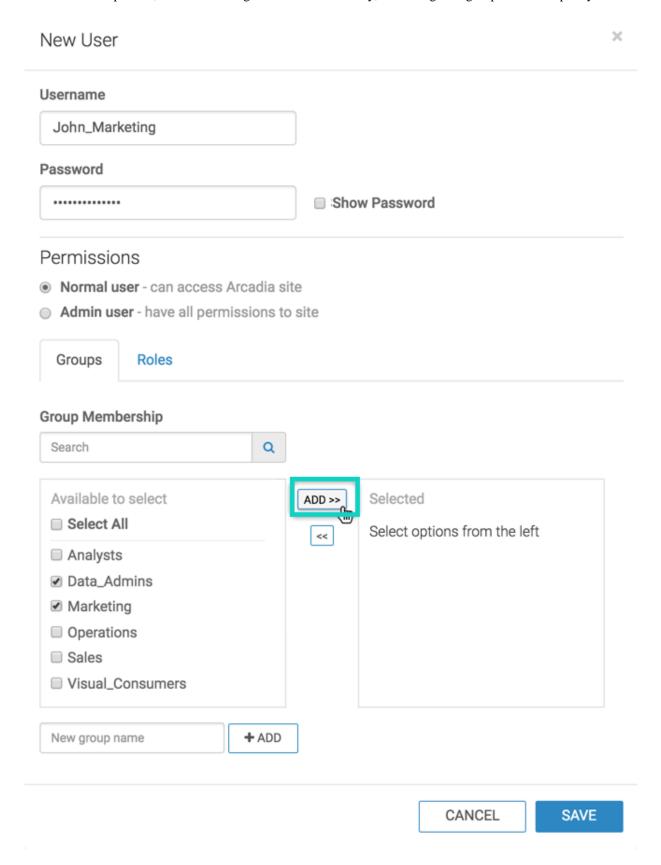
The following steps demonstrate how to create the necessary users and assign them to user groups in Data Visualization.

## **Procedure**

- 1. On the main navigation bar, click Gear the icon.
- 2. Select Users & Groups
- 3. In the Manage Users & Groups interface, click New User.
- **4.** In the New User modal window, enter the following information:
  - Name: John\_Marketing
  - Password: password of your choice.
  - Permissions: Select Normal user.
  - Under Groups tab, select Data Admin and Marketing.

5. Click Add to move these groups to the right column, and then click Save.

Note that in this process, we will not assign users to roles directly, but through the group membership only.



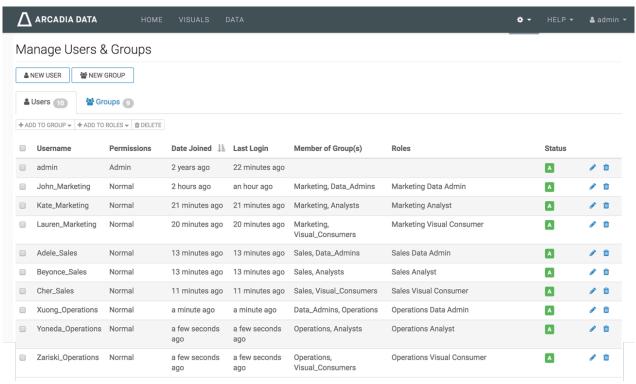
**6.** Repeat the previous steps to create new users and assign groups to them, according to the following information. This is a minimal set of users that 'populates' each role. We can have multiple users assigned to the same groups.

Table 4: Users and their group assignments

| Role Name          | Assigned groups                                       |
|--------------------|---|
| John_Marketing     | Data_Admins     Marketing                             |
| Kate_Marketing     | Analysts     Marketing                                |
| Lauren_Marketing   | Visual_Consumers Marketing                            |
| Adele_Sales        | Data_Admins     Sales                                 |
| Beyonce_Sales      | Analysts     Sales                                    |
| Cher_Sales         | <ul><li>Visual_Consumers</li><li>Sales</li></ul>      |
| Xuong_Operations   | Data_Admins     Operations                            |
| Yoneda_Operations  | <ul><li>Analysts</li><li>Operations</li></ul>         |
| Zariski_Operations | <ul><li>Visual_Consumers</li><li>Operations</li></ul> |

## What to do next

After completing these steps, check the list of users, and notice that it shows the assigned roles. This is because we completed the group-role mapping already, as described in *Assigning groups to roles*.



**Related Information** 

Assign groups to roles