

Sharing Data in OMERO

Introduction

Groups are used in OMERO to enable sharing of data between users. Groups are created by the OMERO administrator and usually have one or more group owners. Group owners and admins can add or remove users.

There are three levels of group permissions allowing members different degrees of interaction with the data owned by other users in the group. In all groups, you retain ownership of your own data, and there are no limitations on the operations and actions you can perform on your own data.

As group permissions are set at a server level, they apply to OMERO.insight, OMERO.web or any other application or script being used to access the data.

User Roles

There are three levels of role in any group:

Member - the level most users will be at

- can always see and interact fully with their own data in any type of group
- how much they can see and interact with data belonging to other group members depends on the type of the group

Owner - typically used by laboratory or research group leaders

- groups can have more than one owner
- can add members to, or remove them from, a group
- permissions level on a group can be increased by an owner
- can view and annotate data belonging to other members in the group
- other interactions with data belonging to other group members depends on group type

Admin - this role is typically reserved for the OMERO server administrator

- practically speaking, Admins can do anything they like to any user's data, anywhere

Group Types

There are three types of group in OMERO:

Private - **only you and group owners can see or interact with your data**

- a group owner can view your data, change rendering settings and draw their own ROIs, but these will not be saved
- they can also edit the names of your images and remove any ROIs or annotations you have added to your data

Read-Only - **all other members of can see and interact with your data on a read-only basis**

- all other members can see and interact with your data in a way which doesn't change anything you've saved
- a group owner can do anything they like with your data except delete it or move it out of the group
- the group owner's rendering settings will be saved under their name and will not affect any rendering settings you have saved

- Read-Annotate** - all other members of the group can see and interact with your data
- other members' rendering settings are saved under their names and don't affect your settings, although you can view them if you wish
 - they can draw ROIs and add annotations such as tags, attachments and comments
 - they cannot edit the names of your images or change or delete ROIs and annotations added by you or users other than themselves
 - other members of the group cannot delete your data or move it out of the group
 - an owner of a Read-Annotate group can do anything to any member's data except delete it or move it out of the group

The main points can be summarised as:

- you always retain ownership of your data
- your rendering settings cannot be over-written by any other user
- changes to rendering settings made by another user will be saved under their name and you can view them
- you can remove any tags, attachments, comments or ROIs added by other users
- no other user can move your data between groups or delete it, except an Admin user

Tables Summarising the Roles and Permissions in Groups

Private Group

Action on Other Users Data	Private Group		
	Member	Owner	Admin
View data, view and draw ROIs	X	✓	✓
Annotate, create and save ROIs, render	X	X	X
Delete, de-annotate, delete ROIs	X	✓	✓
Edit name	X	✓	✓
Move data between groups	X	X	✓
Remove annotations made by others on your data	X	✓	✓

Read-Only Group

Action on Other Users Data	Read-Only		
	Member	Owner	Admin
View data, view and draw ROIs	✓	✓	✓
Annotate, create and save ROIs, render	X	✓	✓
Delete, de-annotate, delete ROIs	X	✓	✓
Edit name	X	✓	✓
Move data between groups	X	X	✓
Remove annotations made by others on your data	X	✓	✓

Read-Annotate Group

Action on Other Users Data	Read-Annotate		
	Member	Owner	Admin
View data, view and draw ROIs	✓	✓	✓
Annotate, create and save ROIs, render	✓	✓	✓
Delete, de-annotate, delete ROIs	X	✓	✓
Edit name	X	✓	✓
Move data between groups	X	X	✓
Remove annotations made by others on your data	X	✓	✓

Note: Permission levels on groups can be changed by group Owner or Admin users. There is a danger however, that some annotations such as tags and attachments associated with data in the group might be lost if the permission levels are changed. This is particularly pertinent to changing a group from Private to a higher level of access.

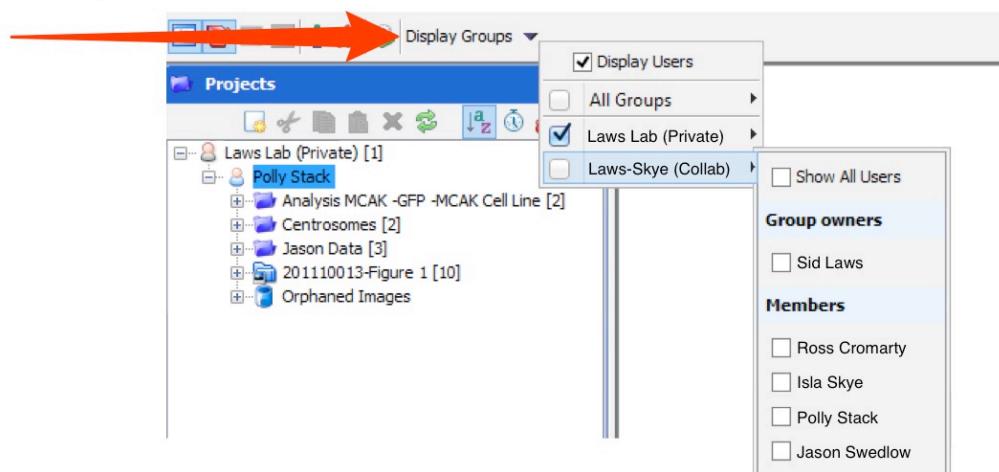
Viewing Data by Groups

If you are a member of more than one group, your default group shows in the data tree on start-up (left hand panel).

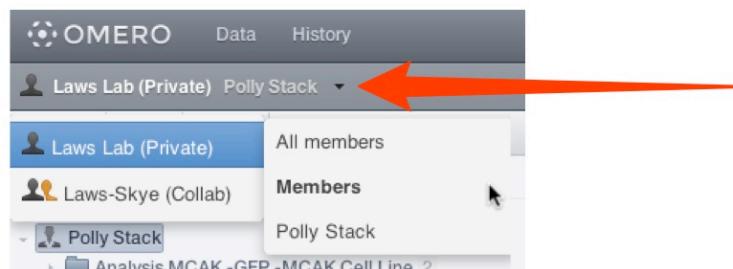
Click on the **Display Groups** menu to select another group.

In OMERO.insight more than one group can be displayed at a time.

OMERO.insight



OMERO.web

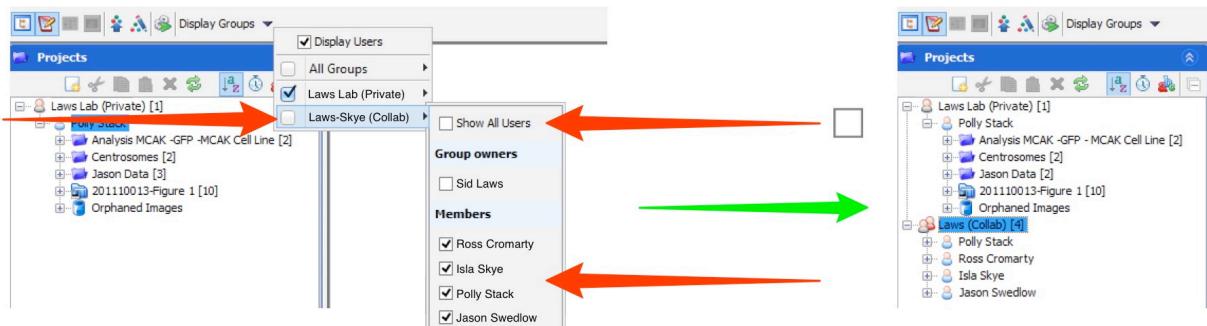


In OMERO.insight:

Select a group in the first tier of the menu to display your data in that group in the data tree.

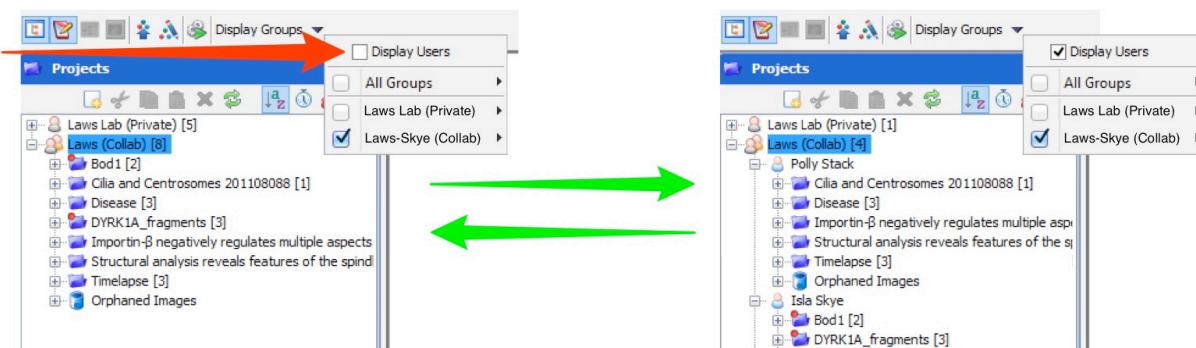
Select **Show All Users** to display all users in the group in the data tree.

Select individual users to display or hide their data in the data tree.



Use the **Display Users** checkbox to see the group's data irrespective of owner.

Checking **Display Users** shows the data according to owner.

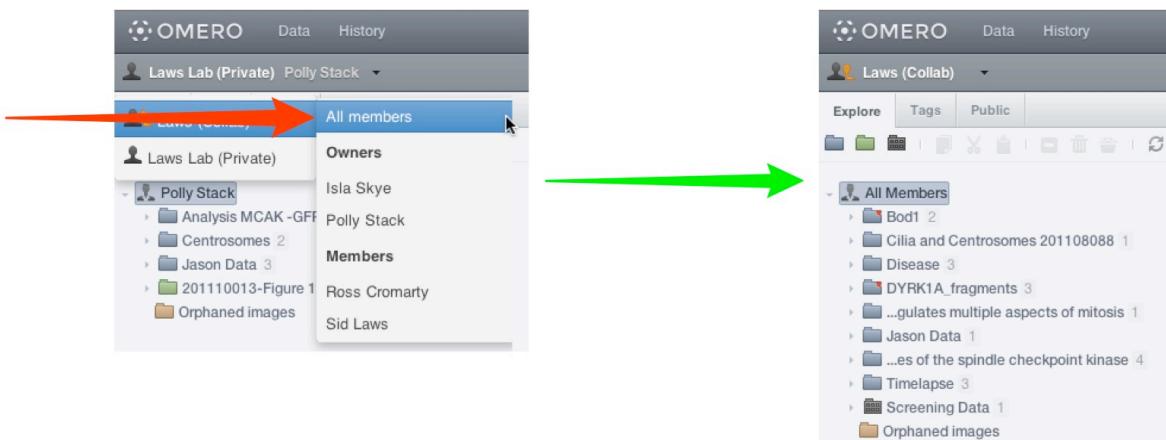


In OMERO.web:

Select an individual user to view their data in the data tree.



Select **All members** to display all the data from all users in that group.



Group and User Selection Version 4 and Version 5

Note: The Group selection menu shown for OMERO.insight above are from version 4.4.x. The 5.x version of OMERO.insight has a slightly different appearance, and the interaction has been improved.

Moving Data Between Groups

If you are a member of more than one group, you can move data between groups.

Right-click on a project, dataset or one or more images and select **Move to** from the menu.

Select the destination group from the options.

Select an existing project and/or dataset as the destination.

Click **OK** when done.

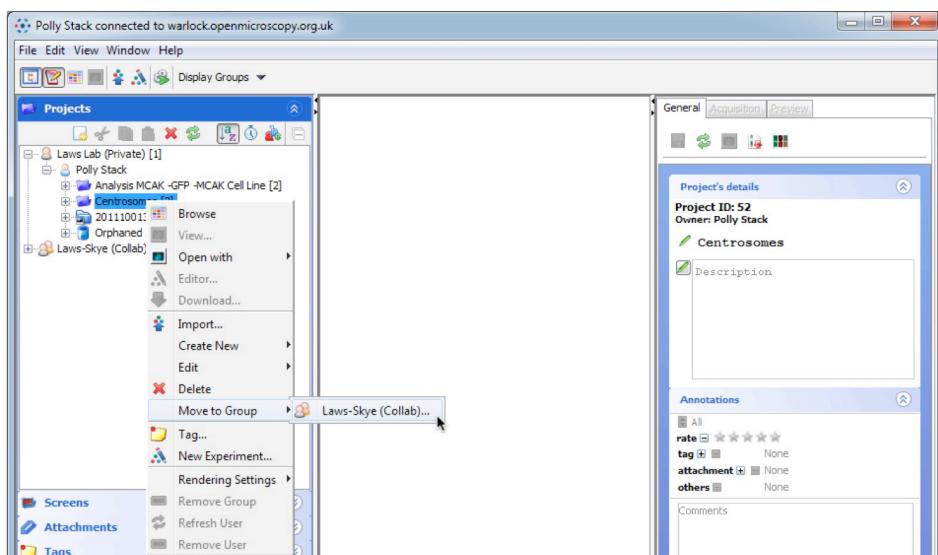
If no destination is selected the images will be placed in **Orphaned** in the destination group.

Warning!

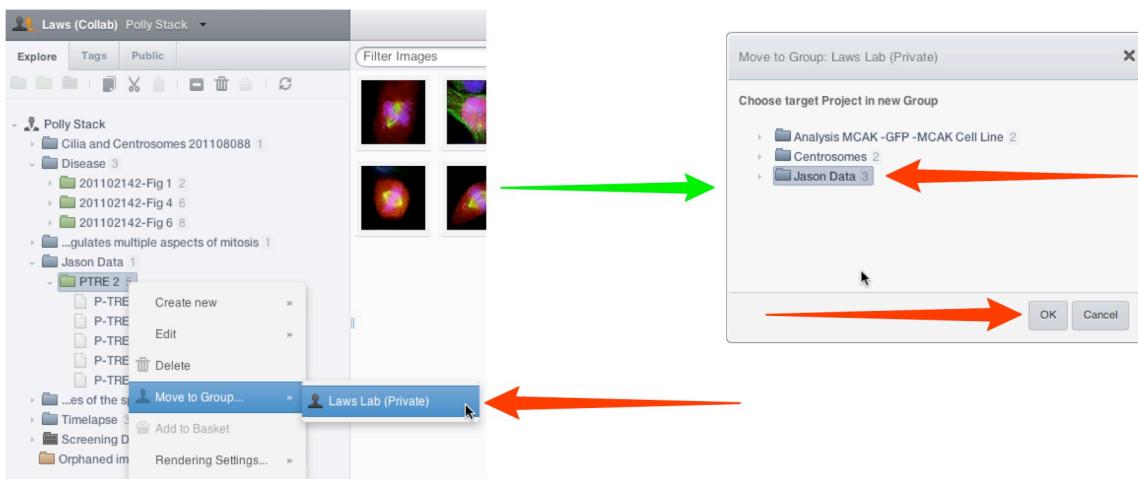
There is a danger that some annotations such as tags and attachments on data being moved between groups could be lost if:

- the groups have different permission levels or
- the owners of the annotations are in the one group but not the other.

OMERO.insight



OMERO.web



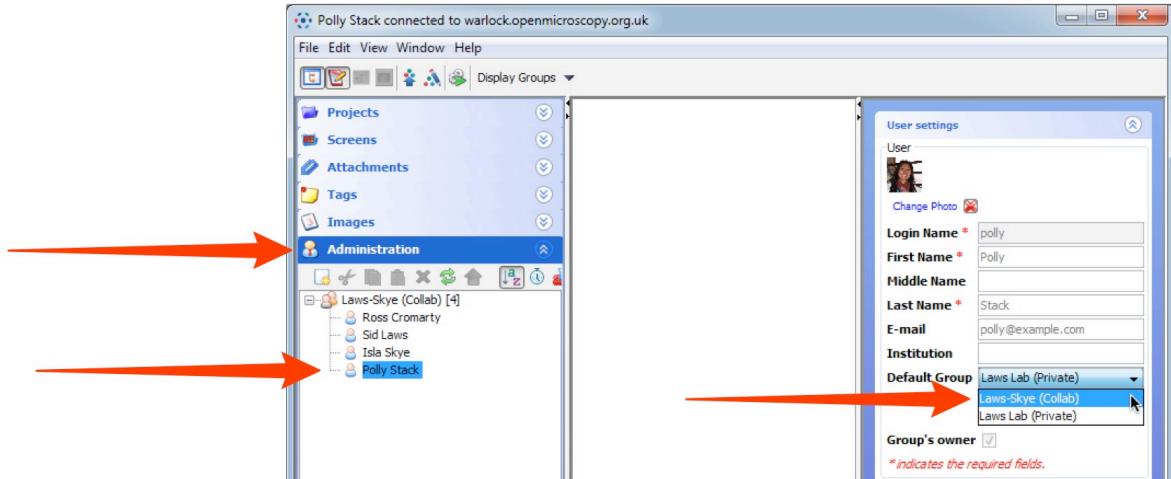
Admin Tasks

To change your default group, go to your user settings.

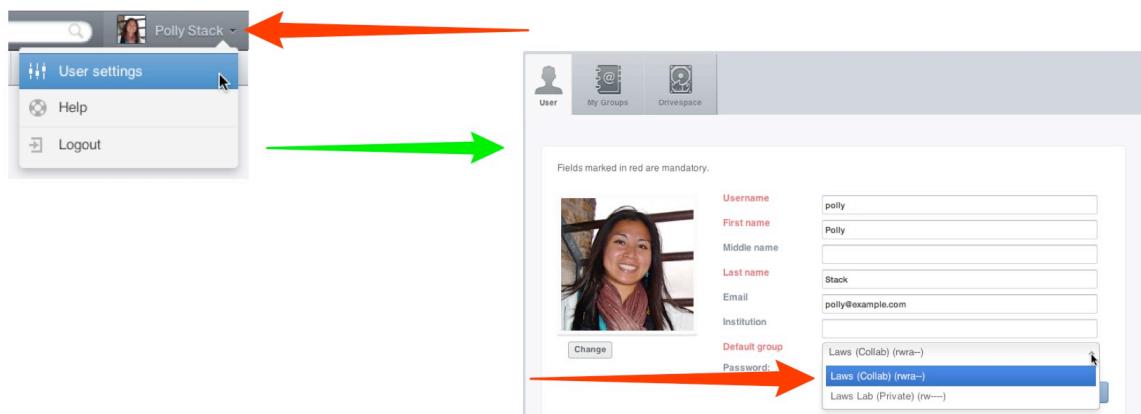
In the **User Settings** select the new default group from the drop-down list.

In OMERO.web, click **Save**.

OMERO.insight



OMERO.web



Note. The points described below apply only if you are an **Administrator**.

1 OMERO.web offers the best interface for Administrative tasks.

Download the latest version of ImageJ for your platform from the website:

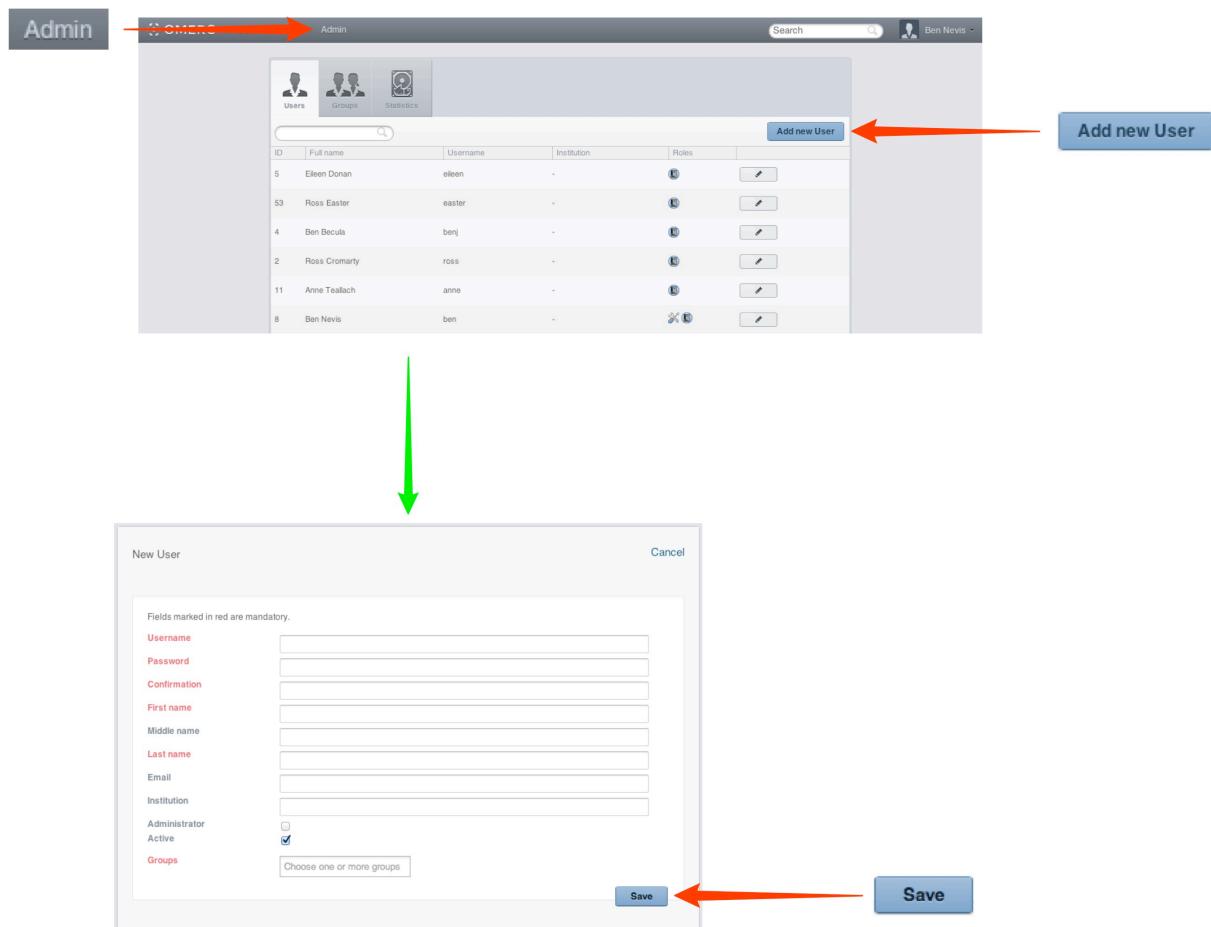
Click on the **Admin** button on the left in the top toolbar.

To create a new user, select the **Users** tab.

Click on **Add New User** to bring up the new user form.

Fill in the details and add the groups you wish the user to be in to the **Groups** box.

After completing click **Save**.



To create a new group, click on the **Group** tab.

Click on the **Add New Group** button.

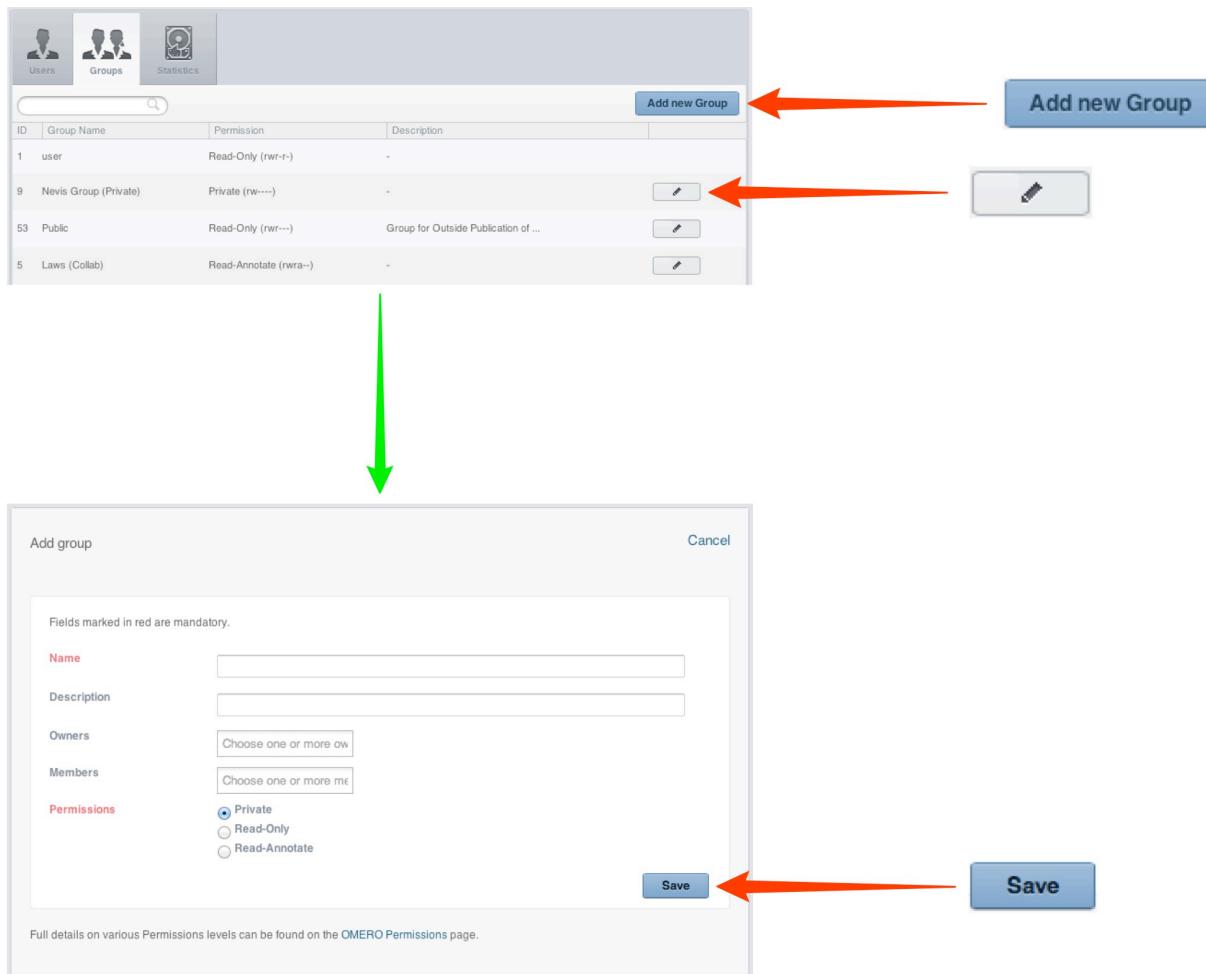
Enter the details of the group.

Add any users to be owners to the **Owners** box.

Add any users to be members to the **Members** box.

To add a user to an existing group, click on the **Edit** icon and add users as above.

Individual members can also be added to an existing group via their user details page.



Click on the **Statistics** tab to see the disc usage for all users on the OMERO server.

