## **Tutorial for New Users**

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# Signing Up

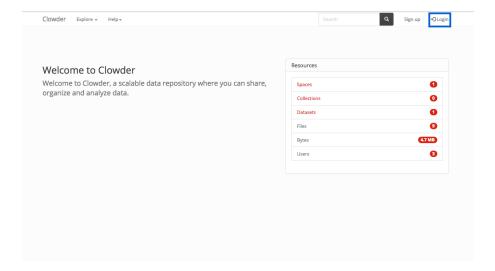
There are 2 ways to login to Clowder. Through a third party application or a local account.

### Signing up with a Third Party App

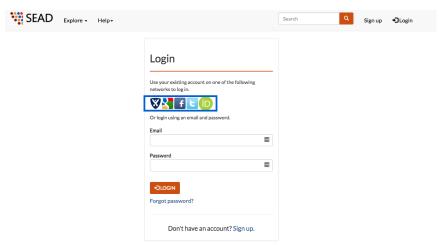
The first one is to use a third-party network, like google, crowd, facebook, twitter, linkedin. They are enabled in some instances on Clowder, and you can ask your Clowder administrator to enable them if they are not.

You need to go to your clowder instance, for example: https://clowder.ncsa.illinois.edu/clowder/

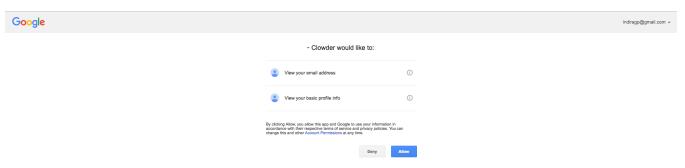
If you want to login using this method, you can click on the Login button in the top-right corner as marked by a green square on Figure 1.



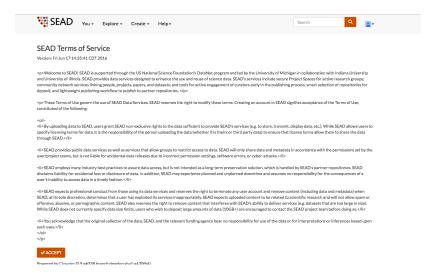
After that, you can click on the icon of the third party app you want to login with. I will use google as an example, but the process is similar for all the 3rd party libraries.



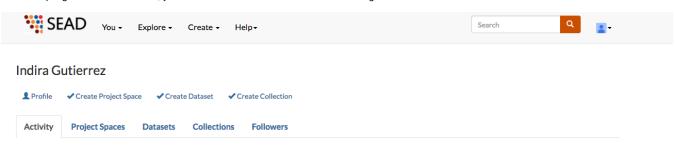
After clicking on the Google link, it will ask you to login for your google account, and on the first time it will ask you for permissions to get your name and email from the google account.



After you click on the Allow button, you will be redirected to the Terms of Service page. Which you must accept before getting access to Clowder.



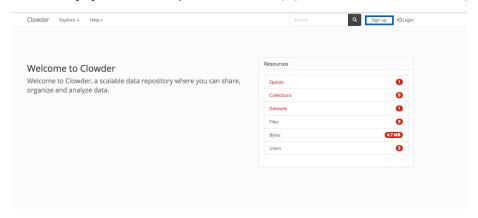
After accepting the terms of service, you will be redirected to the Clowder Home Page.



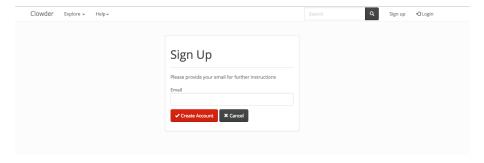
 $You \ can follow \ Users, Project \ Spaces, \ Datasets \ and \ Collections. \ Any \ updates \ on \ your followed \ instances \ will show \ here.$ 

### Signing up through a Local Account

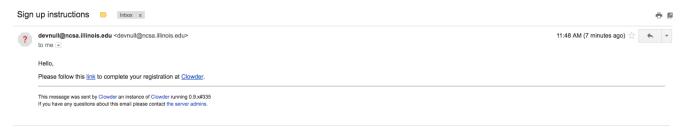
Click on the highlighted link in blue in your Clowder instance (https://clowder.ncsa.illinois.edu/clowder/r)



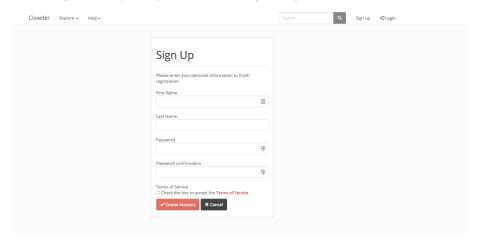
It will ask you for your email



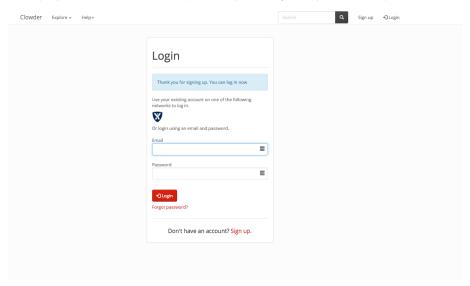
After you input your email and click on create an account, you will receive an email with instructions to continue the signup process

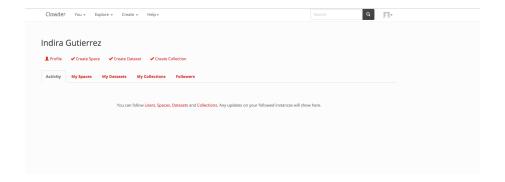


#### After clicking on the link you will get redirected to the sign up page



After input your information, and desired password you can login with your email and password used in the step above





Note: Some instances require users to be approved before being able to use clowder.

## Home Page

The home page is where the site redirects you after logging in. You can navigate back to your home page by clicking on the Clowder link in the top navigation (Left to the you box highlighted in blue).

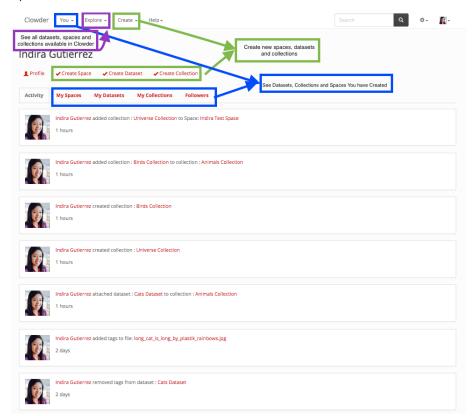
In Clowder, there are 3 main entities for organizing files. They are spaces, datasets, and collections. In your home page, you have easy access to creating new spaces datasets and collections. The same functionality is available anywhere in the application through the top navigation 'Create' dropdown. Both of these are highlighted in green squares on the image below.

You can also see the spaces, datasets and collections that you have created by clicking on the links for the tabs in blue. The same functionality is available in the 'You' dropdown. Also highlighted in blue.

In the home page, you can also go to your profile page by clicking the profile button to the left of the create buttons highlighted in green.

The activity tab displays events on datasets, collections, spaces, files and users that you follow. It displays when someone adds a comment to a file, a dataset to a space, a file to a dataset when you are added and removed from spaces, among others.

In the top navigation, you can also access the listing of all spaces, dataset, collections and users through the 'Explore' dropdown, indicated by a purple square.

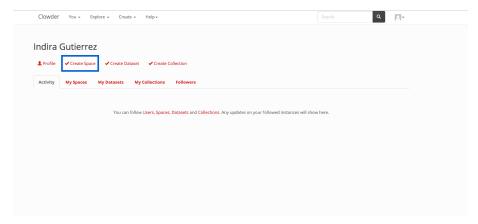


### **Spaces**

A space is a group of collections, data sets, and files with defined user access rights. Spaces are used to share data within datasets and collections with other users. There are different permissions assigned to each role. The 3 most common roles are Admins, Editors, and Viewers. In summary, a viewer can only see the datasets, files and collections within a space. An editor, besides the view privileges can add new datasets and collections to the space, as well as remove them, it can also edit the datasets and collections within the space. An admin can do what an editor does and also edit the space itself, invite and remove people from the space, edit the extractor available. Note: Roles are customizable there is a section below about permissions and roles.

#### Creating a Space

You can create a space from your home page, by clicking on the button in the blue box below



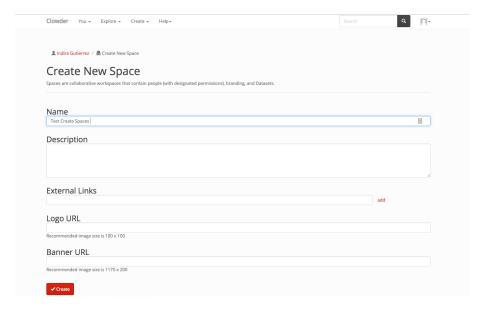
Or using the create dialog in the top navigation. Click on the Create dropdown in the top navigation (in blue on the image below) And then select Spaces (in green in the image below)



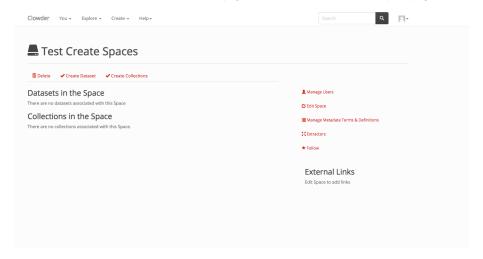
Or within the space list page. Click on the Create button in the top right of the page. (The list spaces page is accessed by clicking on Explore > Spaces)



After starting the create process by either of the 3 methods above you can start creating your space by filling up the information in the next figure (The only required field is the name).

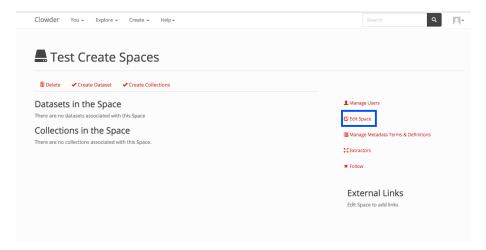


You click on the create button at the end of the page and are then redirected to the space page.

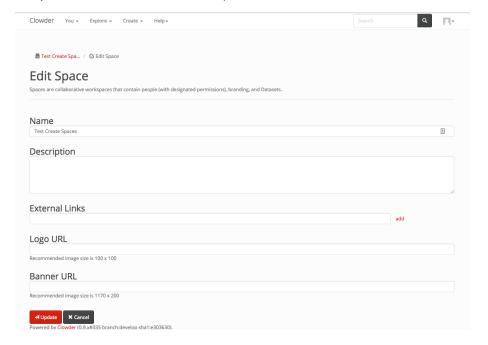


Editing a Space

You can edit the name, description, external links, logo and banner for your space at any time. To do so, click on the Edit Space button highlighted in blue in the figure



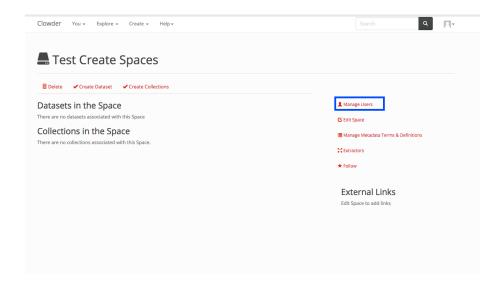
Then you can edit the values and click on the update button in the bottom.



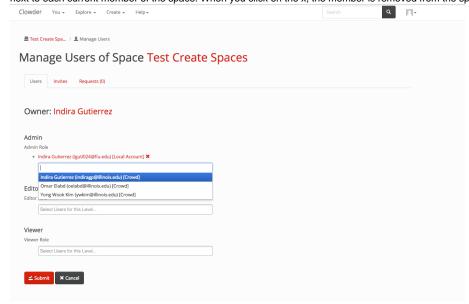
### Inviting Users and Adding users to a Space

When you want to invite users to collaborate in your space, you can invite them by email if they don't have an account on Clowder, and if they have an account on Clowder you can add them to your space.

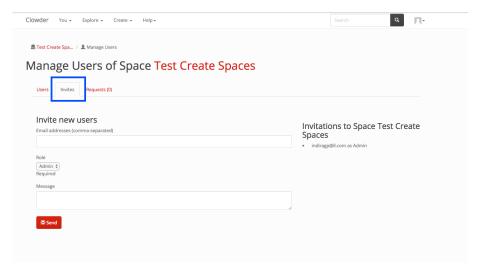
In order to do so, in the space page click on the Manage Users button in the right column, as marked by the blue box in the next figure.



After clicking on the link above, the screen below shows up. You can click on either of the 3 roles select fields, and when you do so, the list of all the members of clowder not in the space show up. You can select them. And after selecting all the people you want in the different roles you click on the submit button at the end of the page. In this page, you can also remove current members, there is an x next to each current member of the space. When you click on the x, the member is removed from the space (no need to click on submit).



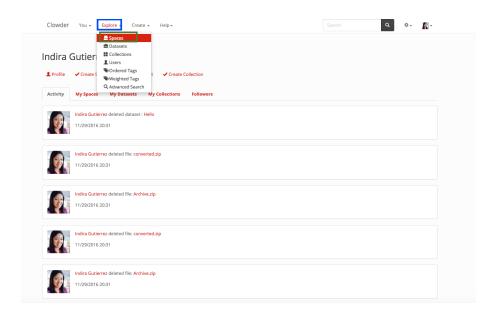
To invite people by email, click on the Invite shown in a blue box in the image below.



You can fill up the emails for the users you want to invite, select the role and an optional message. The people you invite will get a link to register to clowder and will get added to your space once they join clowder. The current invites you have out for people show up in the right with the roles they were invited as.

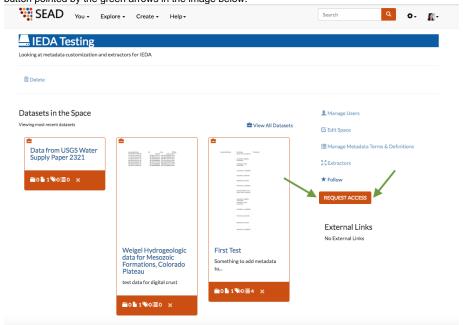
#### List of All Spaces

To access a list of all the spaces, you click on the explore button in the top navigation (in blue in the next screenshot). And then click on the spaces button (in green in the next screenshot). The list of all available spaces in the space will be displayed.



Requesting and Granting Access to a Space

If there is a space that you would like to participate in, but you are not a part of, you can request access to it. In the space page you click on the button pointed by the green arrows in the image below.



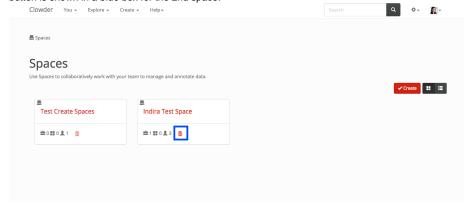
When you submit your request, the admins of the space will get an email and can then accept you to the space.

To accept people that have requested access to one of your spaces. You first go to the space and then click on the Manage Users (as when inviting people above)

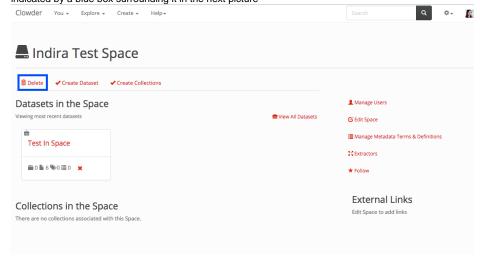
#### Deleting a Space

A space can be deleted within the list of spaces or inside the space itself. If you are also the creator of the space you can delete it from your home page.

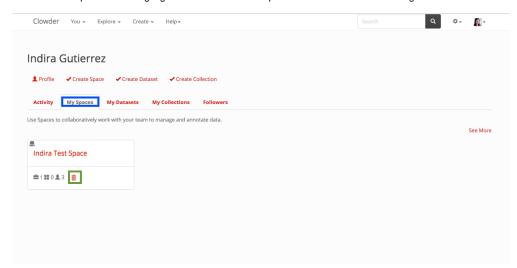
To delete a space from the list of the space. Go to the list of spaces, as indicated above, click on the explore dropdown in the top navigation, then select spaces. If you have the right permissions to delete the space the delete button will be enabled. In the screenshot below the delete button is shown in a blue box for the 2nd space.



You can click on a space within the list of spaces, or the home page and when you are on the space itself, you can click on the delete button indicated by a blue box surrounding it in the next picture



If you are the creator of the space you want to delete, you can go to the home page, click on the my spaces tab and delete like in the first scenario. The spaces tab is highlighted in blue in the next picture and the delete button in green.

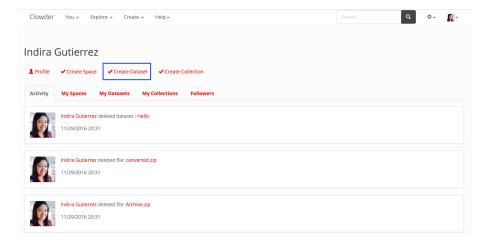


### **Datasets**

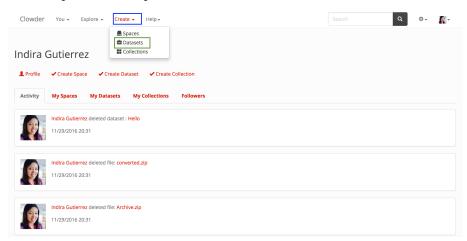
A group of files that through some defined relationship or corresponding metadata are strongly tied together and not representable otherwise by the individual files.

### **Creating Datasets**

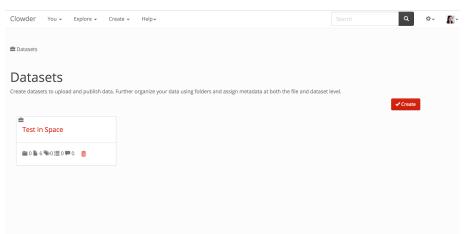
Datasets can be created from the home page, the dataset list page, the top navigation, within a space and within a collection To create a dataset from the home page select the Create Dataset button displayed in a blue box in the next figure.



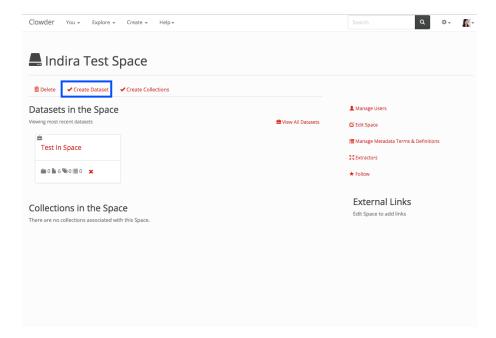
To use the create dialog in the top navigation. First click in the green dropdown button shown in blue in the next figure, and then select Datasets in green in the next figure.



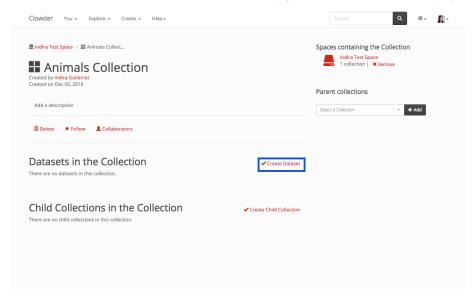
To create within the dataset list page. Click on the Create button in the top right of the page. (The list datasets page is accessed by clicking on Explore > Datasets)



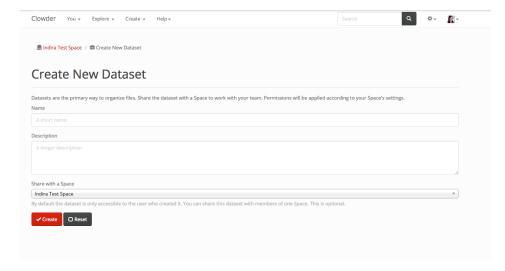
To create a dataset within a space. Go into a space page and selected the Create dataset button displayed in a blue box in the next picture.



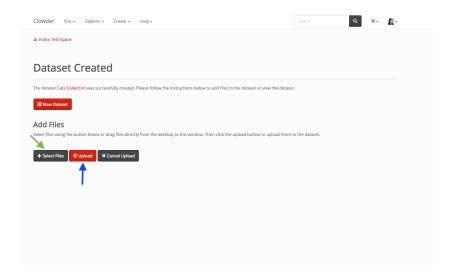
To Create a dataset within a collection. Go into a collection page and select the create button displayed in a blue box in the next picture.



After selecting either of the above methods to create a dataset. The picture below shows up to create the dataset. The dataset only requires a name. You can optionally select a space you want to share the dataset with. If you start the creating process within a space. The space will be preselected, and can be changed or removed. To Create the dataset click on the create button in the bottom of the page

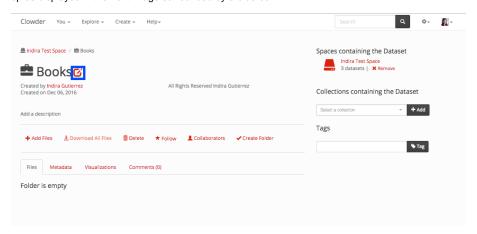


The create dataset is a 2 step process. After adding a name, you can add files to the dataset. This can be done by dragging files to the interface and then selecting the Upload button (pointed by the blue arrow). Or you can click on the Select files button (pointed by the green arrow) which opens a navigation page within your system to select the files you want to upload, and then clicking the upload button.

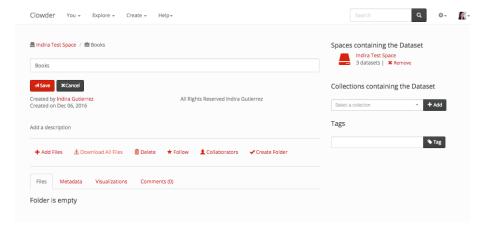


#### **Editing a Dataset**

In a dataset you can edit the name, description and license. In order to edit the dataset name, hover over the name and an edit button will show up as displayed in the next image surrounded by a blue box.



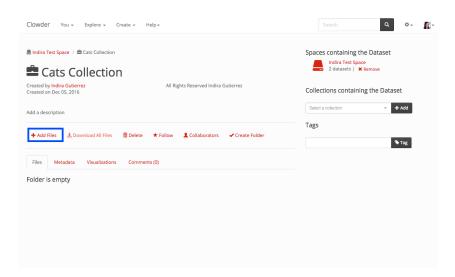
After clicking on the edit button, an input field pre filled with the current name is displayed, you can edit or cancel the name update. The next image shows the input field and the buttons that show up for changing the dataset name



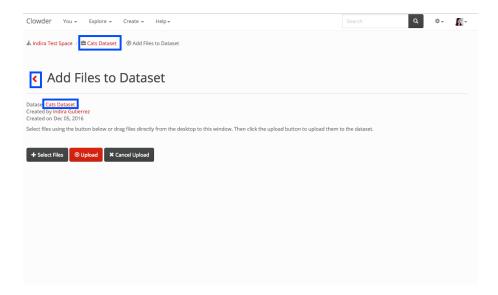
A similar process is used for updating the description and license, by hovering over each of those sections.

#### Adding Files

You can also add files after creating a dataset. Just click on the Add Files button displayed in the picture below within a blue box.

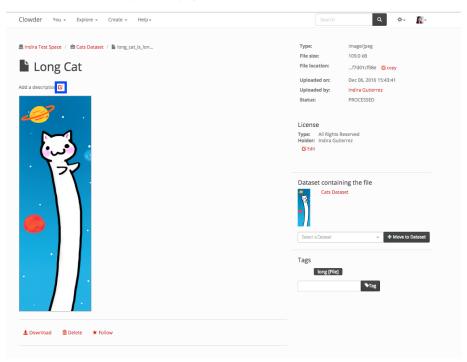


After that a page similar to the 2nd step of creating a dataset is presented. You can drag files or use the 'Select Files' button to look for files in your machine. After that click on the Upload button to upload your files. You can go back to the space page by clicking the left arrow next to the title. The dataset link with the dataset name below the title or in the breadcrumbs. The three ways for going back to the dataset are surrounded by blue boxes in the image below.

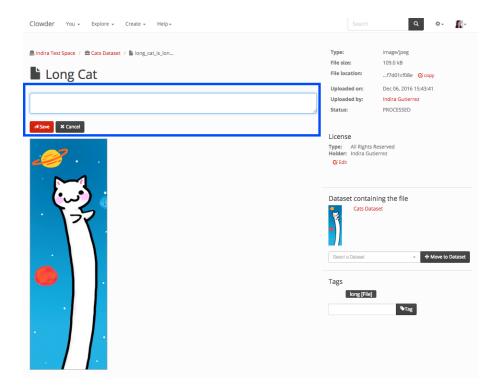


## Editing a File Name

Similarly to a dataset, a file's name, description and license can be edited. In order to do so, hover over the field you want to update. Below the icon that is next to the description is displayed within a blue box

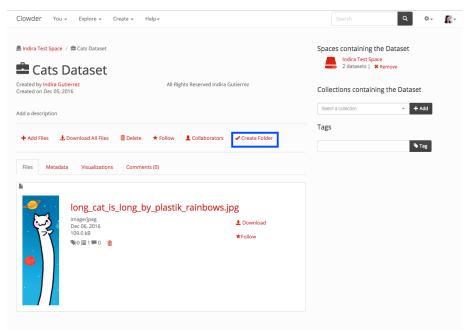


Then an input field and Save and Cancel buttons show up where you can edit the description if one exist, or add one if none exists.

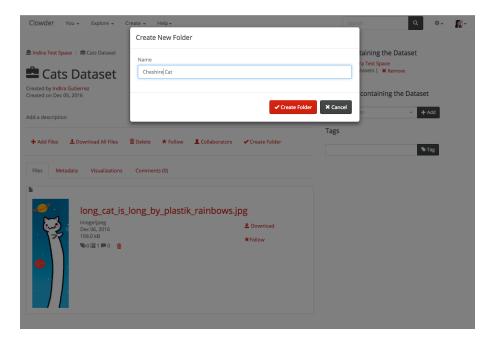


### **Creating Folders**

To create a folder within a dataset, you need to go into a dataset page and click on the Create Folder button displayed within a blue box in the next image.



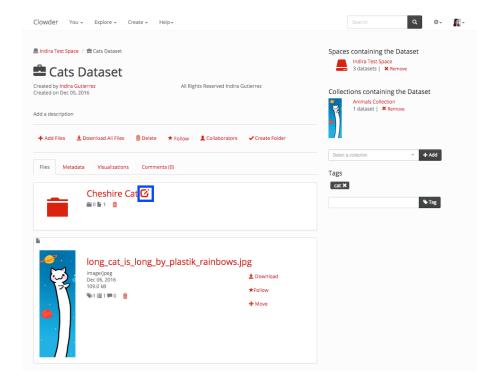
After clicking on the Create Folder button, a popup appears where you can input the name and click again on Create Folder button.



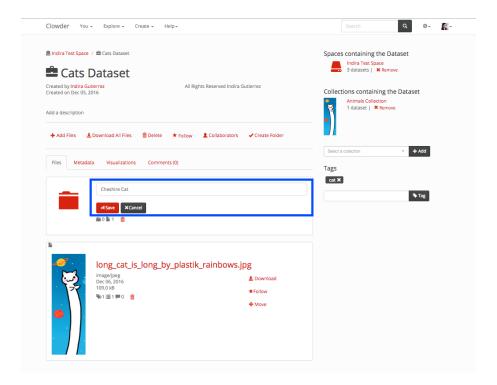
You can add files to a folder by clicking on the folder name, and then clicking on the Add files button as indicated above when adding files to a dataset.

#### Editing a Folder Name

A folder name can be changed by hovering over the folder name an edit icon shows up. The icon is displayed on the next image within a blue box.



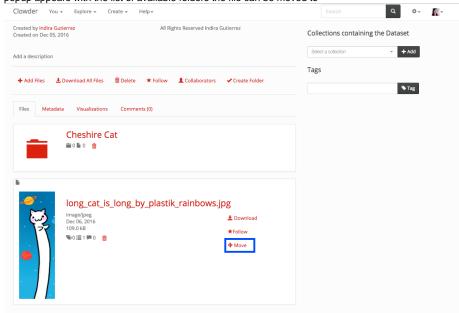
After clicking on the button the folder tile updates to have an input field pre filled with the current folder name and you can change it or cancel the name change.



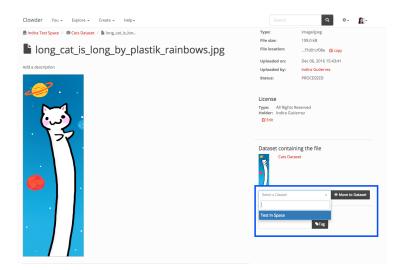
#### Moving Files

A file can be moved to other folders in the dataset, or between datasets.

To move a file within the dataset (to other folder) you click on the Move button in the file tile as indicated in the image below by the blue box. A popup appears with the list of available folders the file can be moved to

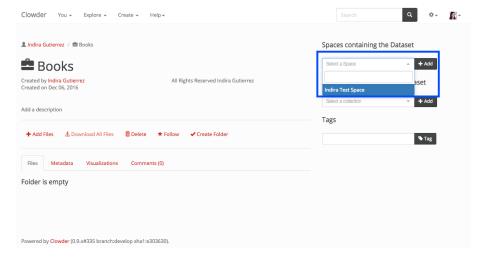


To move a file between datasets, you have to click on the file name to go into the file page. And on the right navigation click on the dropdown in the Datasets Containing the file section, select the dataset you want to move the file to and click on the 'Move to Dataset' button. The section with the dropdown and button is shown within a blue box in the next image.



#### Adding to a Space

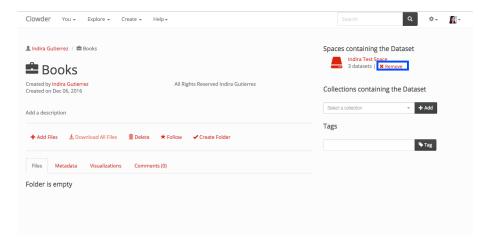
A dataset can be added to a space at the creation of the space. Or it can be added afterwards. For adding a dataset after it has been created. Click on the dropdown in the Spaces containing the dataset section. And a list of the spaces that you have the 'Add dataset to Space' Permission shows up. Select the space you want to add the dataset to and click on the Add button next to the selected space. The section with the dropdown and the button is displayed within a blue box in the next image.



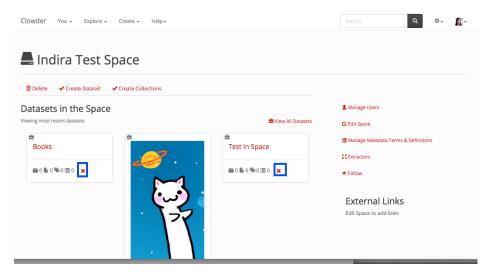
### Removing a dataset from a Space

To remove a dataset from a space you can do it from the space page or the dataset page.

To remove it from the dataset page click on the remove button in the 'Spaces containing the dataset section'. The button is displayed in a blue box in the next image.



Within a space page in the tile for the dataset you want to remove. You can click on the x button to remove it from the space. Note: This does not delete the dataset from Clowder. The x's locations are marked by a blue box on the next image.

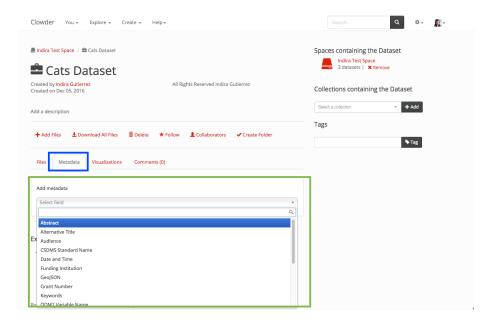


In both of the aforementioned ways there is a popup to confirm that you want to remove the dataset of the space. Where you can cancel or remove the dataset from the space.

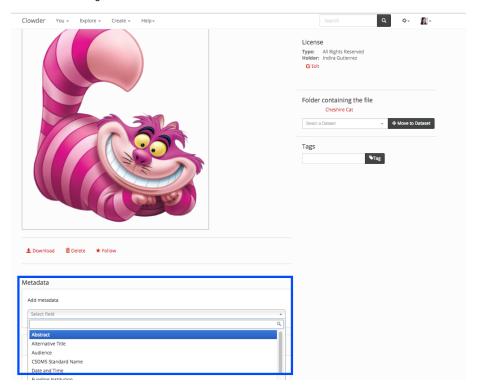
### Adding Metadata

Metadata is simply data about data. Metadata can be added to datasets or individual files.

To add metadata on a dataset click on the metadata tab, indicated by a blue box in the next image. And then click on the dropdown with the available metadata definitions and input the necessary data. The metadata drop down is indicated by a green box in the image below.



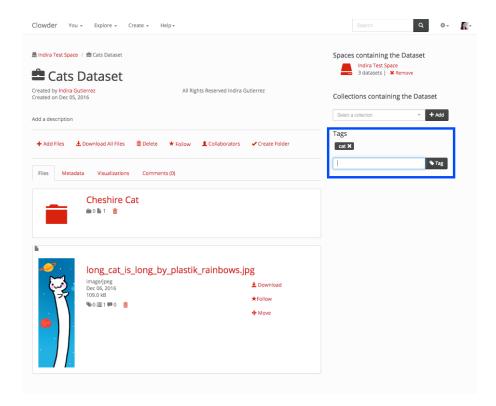
To add metadata to a file. In the file page below the previews section a dropdown similar to the dataset one appears. It is displayed in a blue box in the next image.



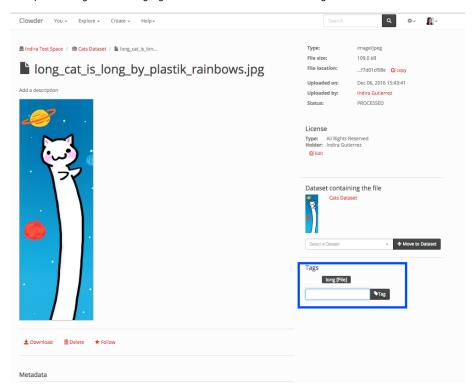
### **Adding Tags**

Tags are a short string, e.g. one or two words, associated with a file or data set used to categorize or index its contents.

To add a tag to a dataset write the tag in the input box in he tags section in the right navigation. To save it press the enter key or click on the tag button next to the input. The tag section is highlighted with a blue box in the next image.



To add tags to files input the tag name in the tag section in the right navigation. To save it press the enter key or click on the tag button next to the input. The tag section is highlighted with a blue box in the next image.



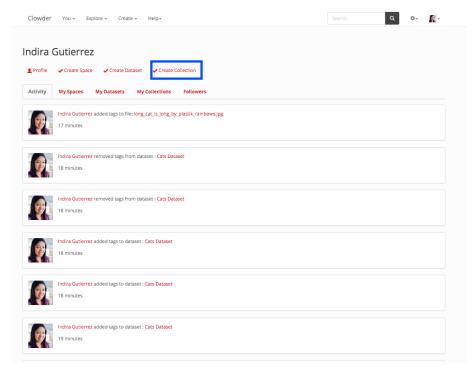
### Collections

Collections are a user defined group of datasets and other collections.

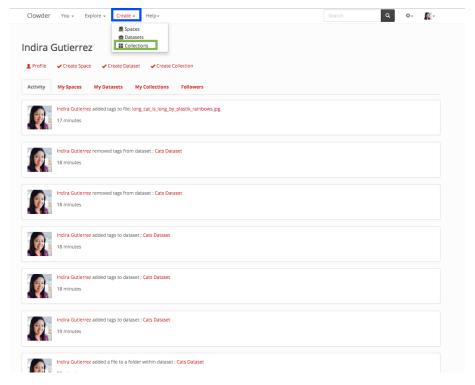
#### Creating a Collection

Similarly as a dataset, a collection can be created from the home page, the top navigation page, within the collection list or within a space.

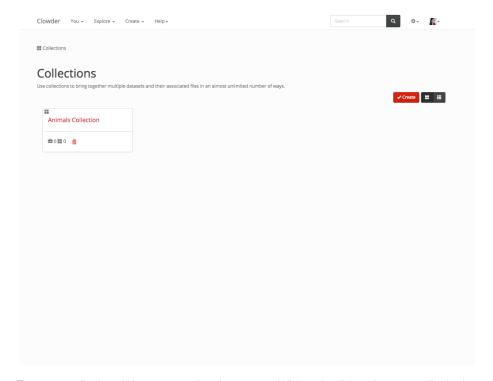
To create a collection from the home page click on the 'Create Collection' button below your name in the links section. Displayed in blue in the next image.



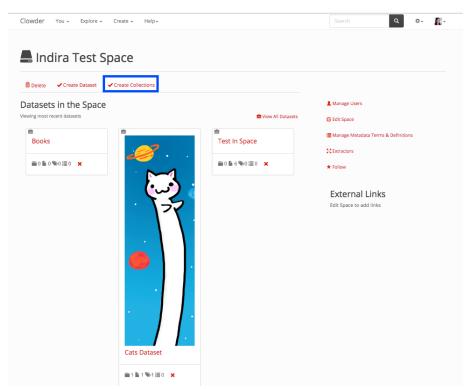
To create a collection from the top navigation. Click in the create dropdown in the top navigation displayed in blue in the next image. Next click in collections displayed in green in the next image.



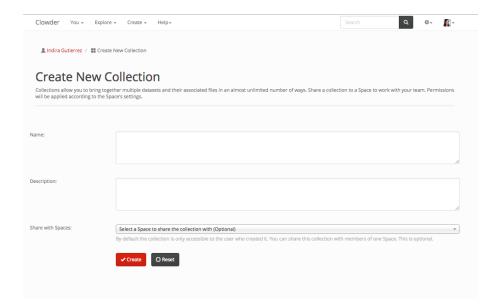
To create a collection from the list of collections page click on the create button in the top right. The list of collections is displayed below.



To create a collection within a space, go into the space and click on the click on the create collection button displayed in the image below within a blue box.

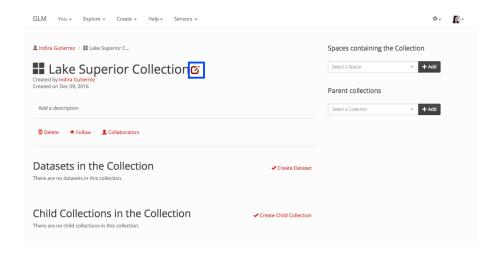


A collection has a name, description and space. The name field is the only required field. After you start the creating process for a collection with any of the above methods. A page like the one in the image is below. Once you have input the information that you want for your space. You can click on the create collection button at the end of the page, and you will be redirected to your new collection page.

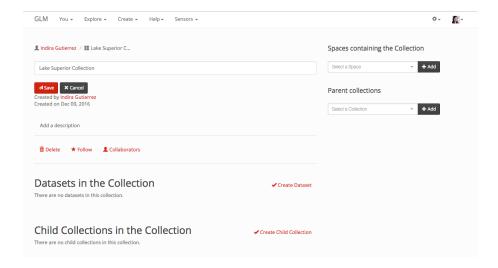


### **Editing a Collection**

In a collection, you can edit the name and the description. In order to do so, hover over the collection name or description and an edit symbol will show up. The button that shows up is displayed within a blue box on the next image.

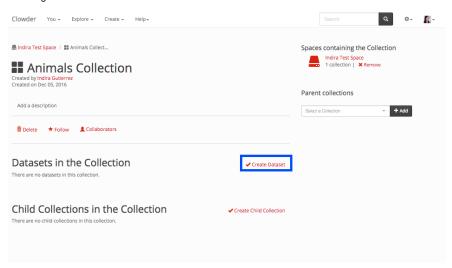


On click it will show an input field with the current name which you can update and then click on the save button. A similar behavior exists for the description field.



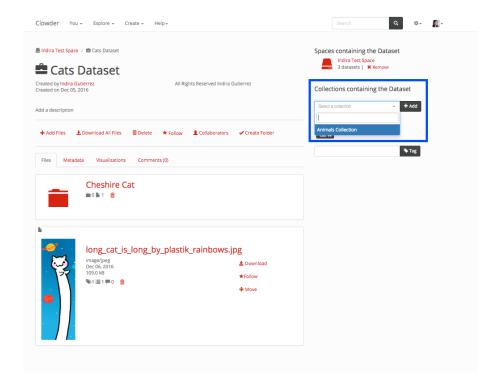
#### Adding Datasets to a collection

If you want to add a new dataset to a collection, you can create it within the collection page by clicking the create dataset button highlighted in the image below.



You can create a dataset as indicated in the instructions on the dataset section.

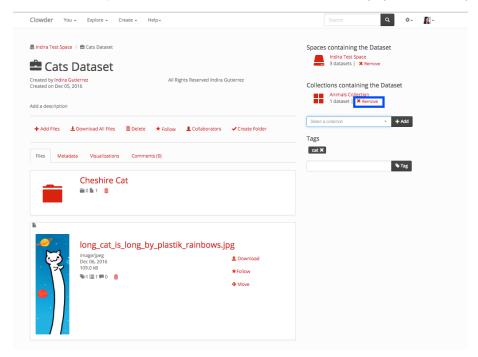
If you want to add an existing dataset to a collection, you need to go into the datasets page. In the right navigation there is a section called 'Collections containing the dataset' where a list of the collections that a dataset is part of will show up, if it is part of a collection. At the end, there is a dropdown that will show the collections you can add the dataset to. You can select one and click on the Add button. The section where you can add a dataset to a collection is highlighted below in a blue box.



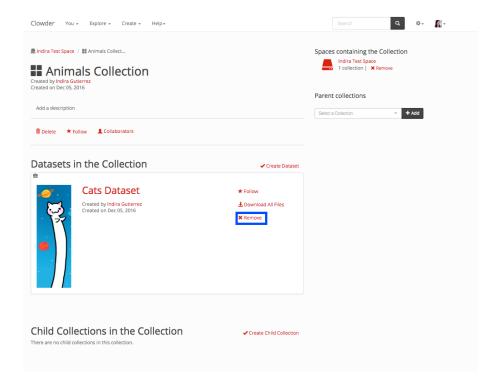
### Removing a dataset from a collection

You can remove a dataset from a collection within the dataset page or within the collection page.

To remove a dataset from the dataset page, In the right navigation in the 'Collections containing the dataset' you can click on the remove button next to the collection you want to remove the dataset from. The remove link is highlighted in the next figure.



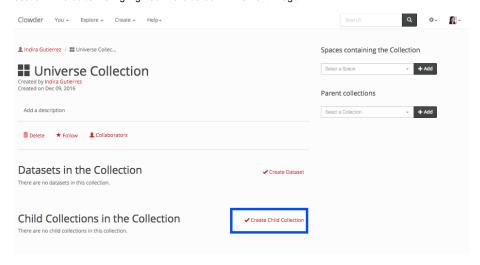
To remove a dataset from the collections page, in the list of dataset, you can click on the remove button in the dataset list item. The button is highlighted in the image below with a blue box.



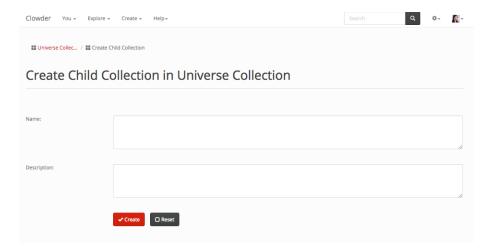
#### Creating Child Collections

Child collections are a way to organize collections in a hierarchical way. You can create new child collections within a collections page. Collections created this way inherit the spaces that the parent collection is currently on. Child collections do not show up on the listing of collections to avoid cluttering, but they do show up as collections that you created in the home page. You can not remove child collections from a space that has been inherited from a parent collection. You can also add existing collections to a parent collection. If the child collection was on a space that the parent collection was not in, you will be able to remove the child collection from that space.

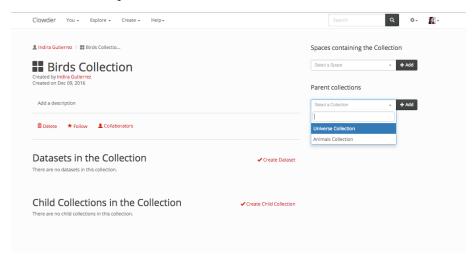
To create a child collection within a collection page. Click on the 'Create Child Collection' button in the Child Collections in the Collection section. The button is highlighted in a blue box in the next image.



The Create Child Collection page looks as below. It is a little different than creating a collection page, because it cannot be added to a space directly. It will inherit the spaces from the parent collection. After adding a name and optional description you can click on the create button in the bottom.

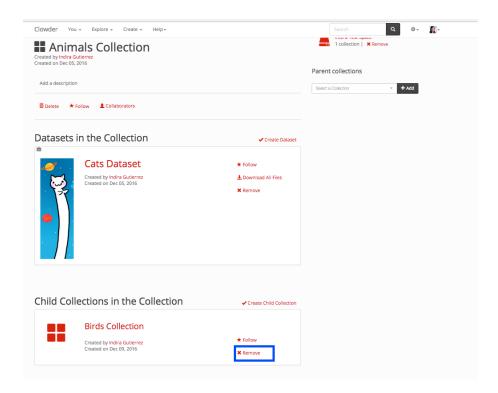


To add an existing collection to a parent collection. You can click in the dropdown in the 'Parent Collections' area in the right navigation of the collection page. After selecting a collection from the dropdown, click on the Add button next to it. The Parent Collections area is highlighted in a blue box in the next image.



### Removing a Child Collection

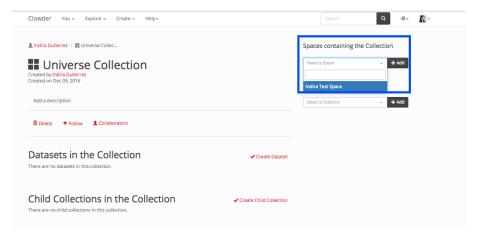
A child collection can only be removed from within the parents collection page. In the listing of Child Collections within the collection page, click on the remove button on the tile for the corresponding collection. In the next image the remove button for the child collection is highlighted.



#### Adding to a Space

You can add an existing collection to a space by going to the collection page and clicking on the dropdown in the 'Spaces containing the Collection' section, selecting the space you want to add the collection to and then clicking on the Add button next to it.

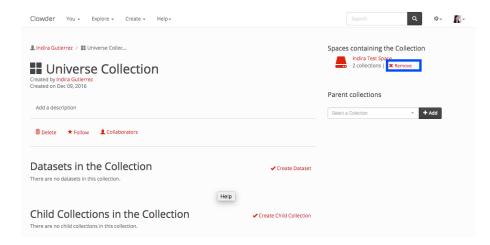
The section where you can add a collection to a space is highlighted by a blue box in the next image.



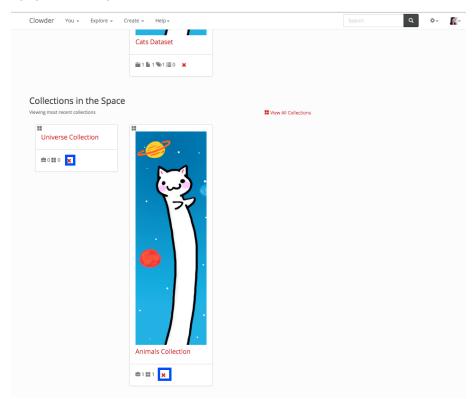
#### Removing from a Space

A collection can be removed from a space within the collection page or within the space page.

To remove the collection within the collection page, click the 'Remove' button next to the space you want to remove it from. This is highlighted in the next image with a blue box.



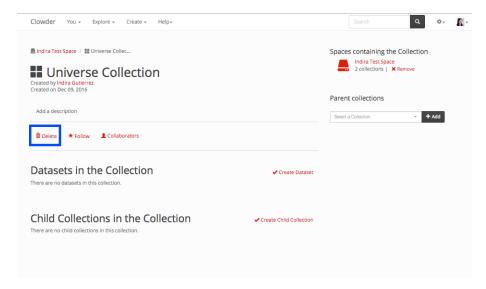
In a space page, go to the collection tile that you want to remove and click on the x button within the tile. The x button's for collections are highlighted in the image below with a blue box.



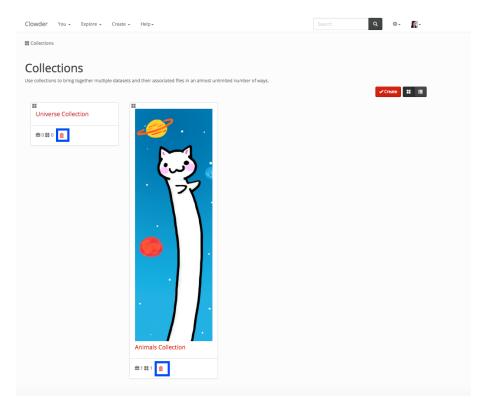
### **Deleting a Collection**

If you want to completely delete a collection from Clowder, you can do so within the collection itself, on the collection list, or if you created the collection from the home page.

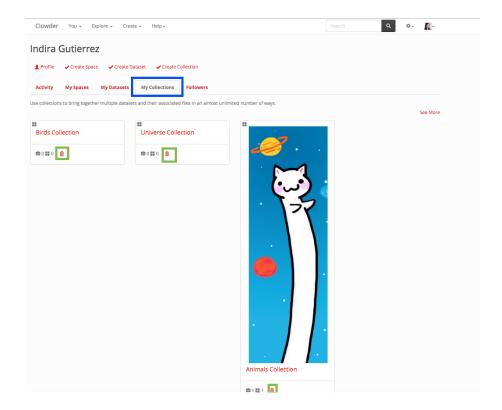
Within the collection, page click on the Delete button displayed below in a blue box.



To delete a collection from the collection list page, click on the trash button within the tiles. They are highlighted below in blue boxes.



If you created a collection, you can delete them from your home page. Go into the 'My Collections' tab displayed below with a blue surrounding box. And then click on the trash can icon in the collection you want to delete, highlighted in green in the image below.



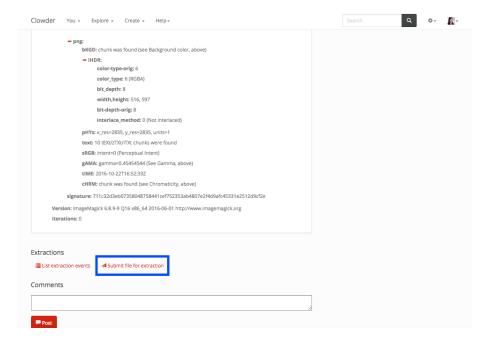
### **Extractors**

A tool which takes a file, section of a file, data set, or collection as input and through some analysis of the contents produces some higher level information, e.g. metadata, or other derived product, e.g. preview, to aid users in searching/organizing data (both automatically and/or manually).

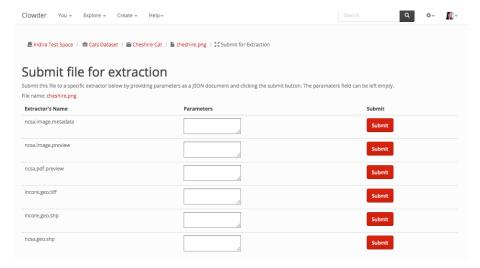
Some of the most used extractors are the image, pdf, geo and office extractors. On upload of these types of files the extractors are run and previews are generated for them. If for any reason, the extractors failed or you want to submit a file for manual extraction you can do so in files and datasets.

#### Manual Extraction of Files

If you want to submit a file for extraction, go into the file itself. Below the metadata (if any exists) there is a button 'Submit file for extraction'. The button is displayed in a blue box in the next image

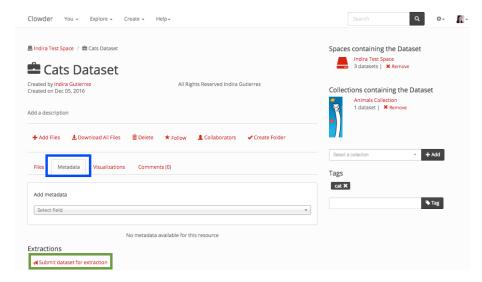


After clicking on the button a list with the available extractors is displayed as shown below. You can add parameters, although most of the extractors don't need any. And just click submit on the row of the extractor you want to execute.

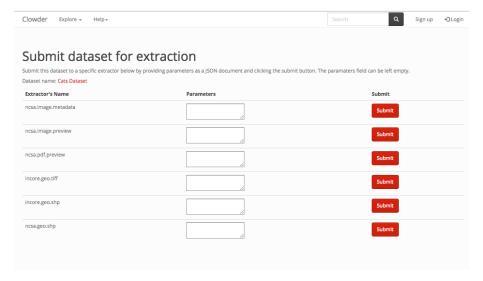


#### Manual Extraction for Datasets

For submitting a dataset for extraction click on the Metadata tab as indicated by the blue box in the next image. And then click on the button at the end of the page 'Submit dataset for extraction' as indicated by the green box.



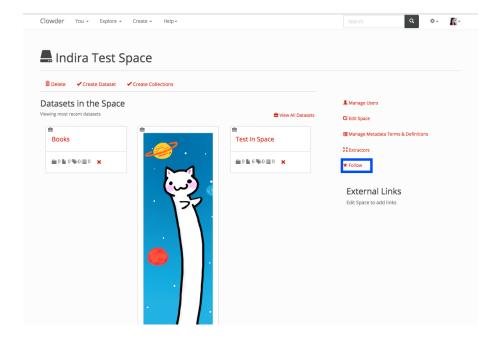
After clicking on the button a list of all the available extractors is displayed and you can input parameters even though most of the times are not needed and click on the Submit button in the row of the extractor you want to execute.



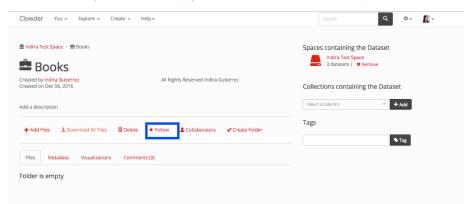
## Following

You can follow spaces, collections, datasets, files and users.

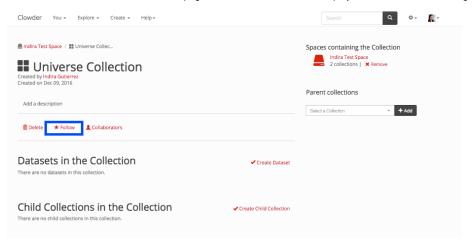
You can follow a space within a space page. The follow button is highlighted in a blue box below. When you are already following the item the location of the unfollow button is the same as the follow button.



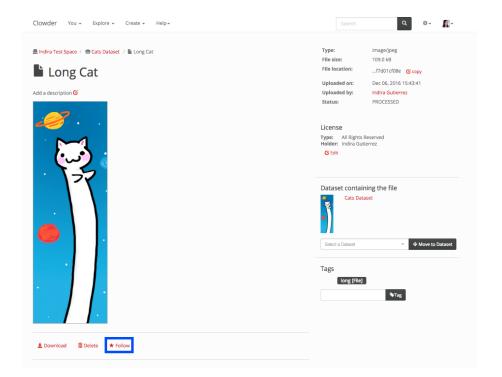
To follow a dataset go within a dataset page and click on the follow button displayed in blue in the next image.



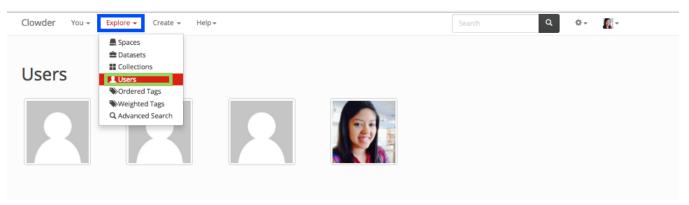
To follow a collection within a collection page click on the follow button displayed in blue in the next image.



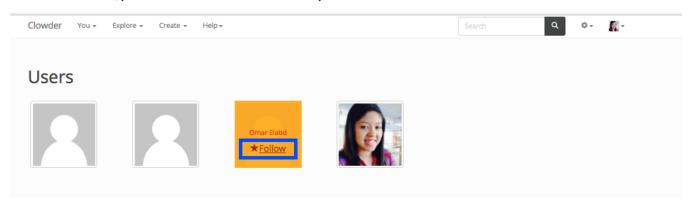
To follow a file within the file page click on the follow button displayed in blue in the next image.



To follow a user, you can go into the listing page of users in by clicking on Explore in the top navigation as indicated in blue in the next image and then users as indicated by the green box.



Then on hover in a user, you can click the follow button as indicated by the blue box



## Search

In Clowder, you can search datasets, collections and files by name and description. To do so, just input the string you want to look for in the search box on the top right. As indicated in the image below with a blue box and click on the search button next to it or click enter. The image below also shows a sample result of a search.

