

Lotus Root

tracking sequencing data

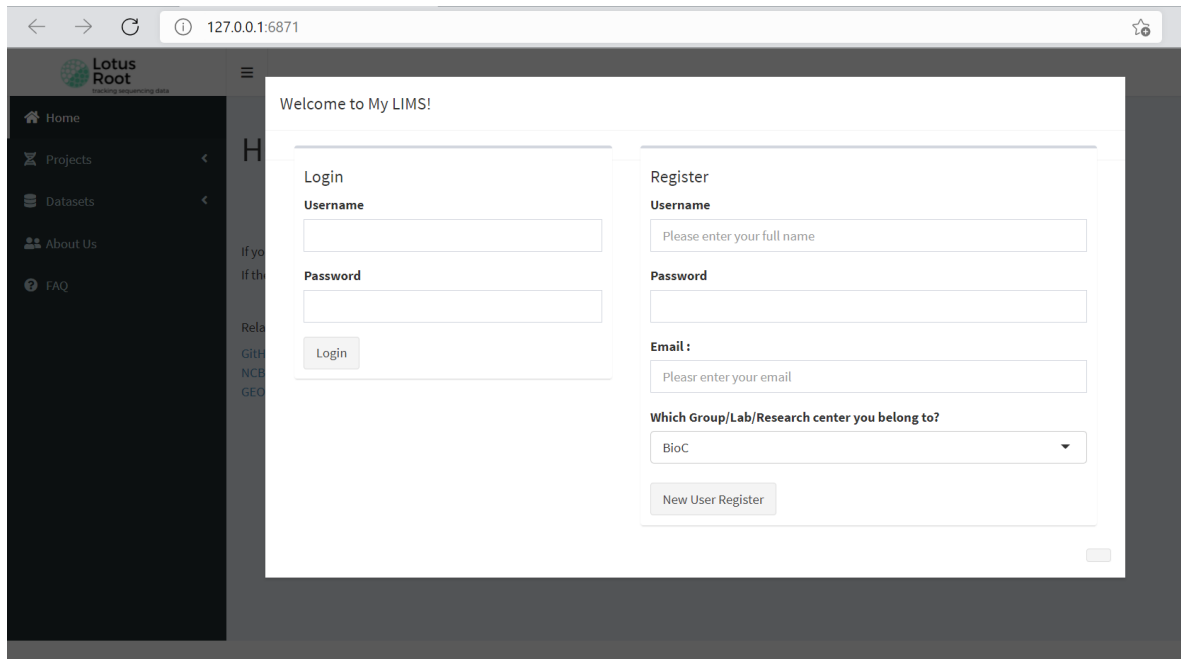
LotusRoot Manual

XU Mingyu

Login & Register

New users need to register first.

The right side of this page is the registration page. You need to enter “Username”, “Password”, and “Email” and choose which group/lab/research center you belong to.



The screenshot shows a web browser window with the address bar displaying '127.0.0.1:6871'. The page has a dark sidebar on the left with the Lotus Root logo and navigation links: Home, Projects, Datasets, About Us, and FAQ. The main content area is titled 'Welcome to My LIMS!' and contains two forms: 'Login' and 'Register'.

Login Form:

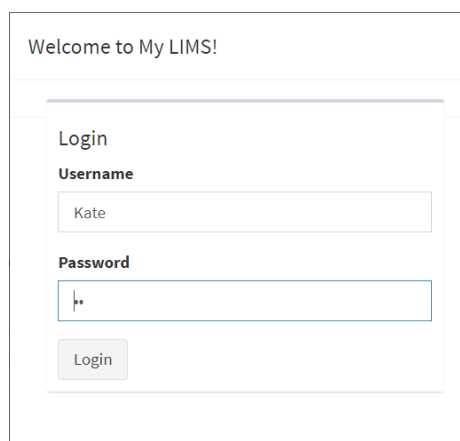
- Username:
- Password:
- Login button

Register Form:

- Username:
- Password:
- Email:
- Which Group/Lab/Research center you belong to? (Dropdown menu with 'BioC' selected)
- New User Register button

On the left side of the page is the log in part. Enter correct username and password to login.

If you forget your password, please contact your administrator to reset it.

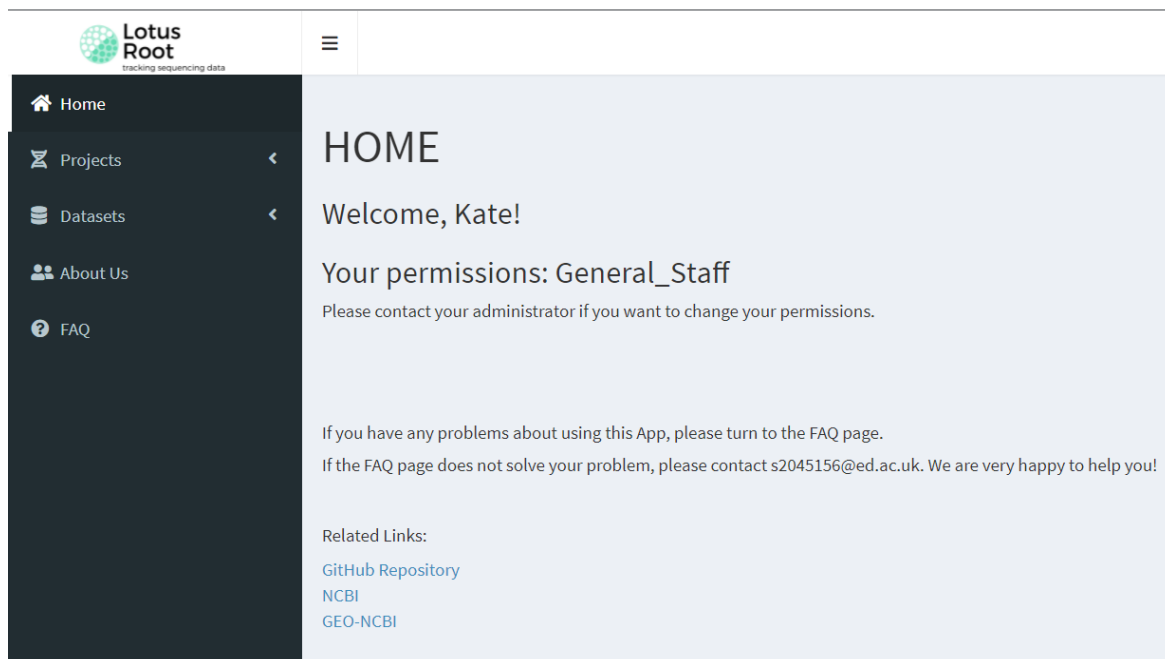


This is a close-up of the 'Login' form. It shows the 'Username' field containing the text 'Kate' and the 'Password' field containing a masked password 'p*'. The 'Login' button is visible below the password field.

Login Form:

- Username:
- Password:
- Login button

Home



You can see your permissions at the Home page.

We divided the permissions into four: General_Staff, Project_Supervisor, Data_Administrator, System_Maintenance.

All new users only have minimum permissions (General_Staff). Please contact your administrator if you want to change your permissions.

Table 1. Permissions introduction

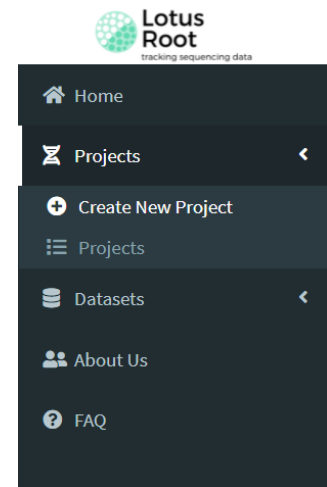
Permissions	General_Staff	Project_Supervisor	Data_Administrator	System_Maintenance
Search	✓	✓	✓	✓
Add/Edit/Delete projects		✓		✓
Add/Edit/Delete datasets			✓	✓
Manage project options		✓		✓
Manage dataset options			✓	✓
Manage User Information				✓

At the bottom of home page, there are some hyperlinks such as GitHub Repository of LotusRoot, NCBI and GEO-NCBI.

Projects

This part is divided into two parts. One is “Create New Project” and the other is “Projects”. The former is used to add new projects. The latter is used to search for projects and project-related datasets.

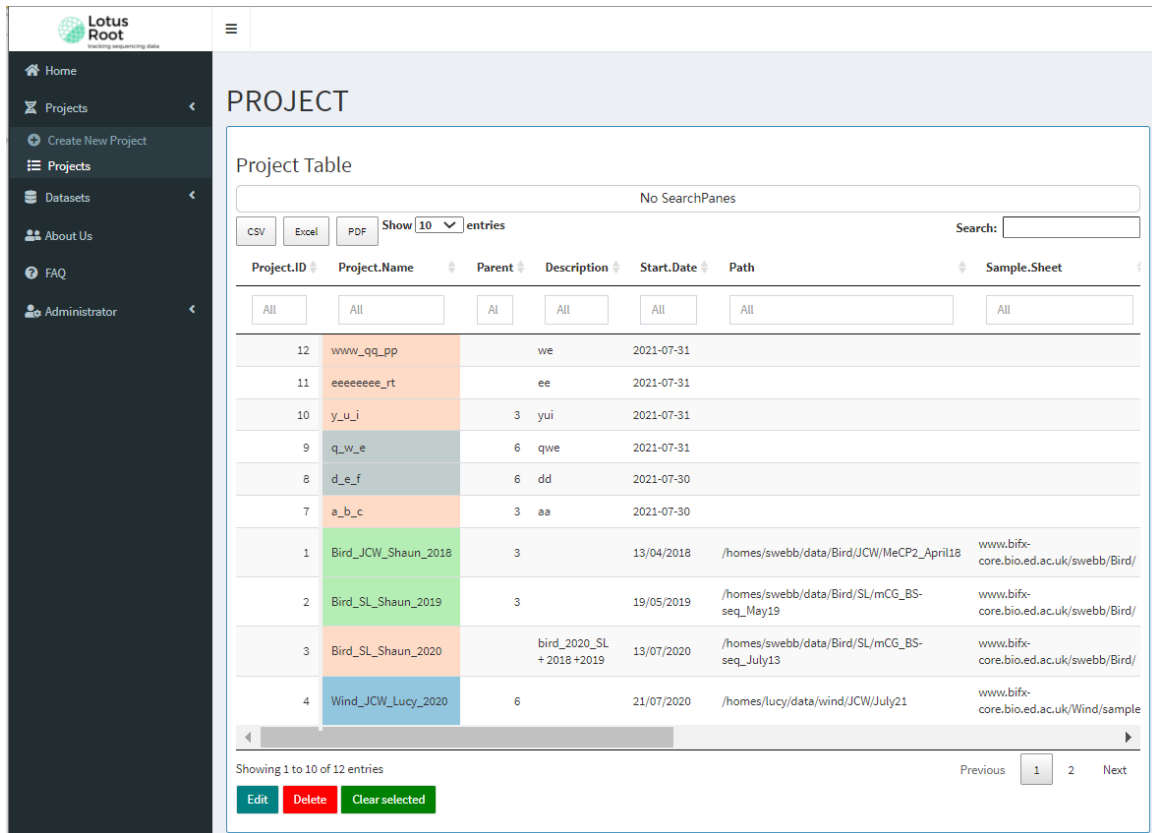
Only System_Maintenance and Project_Supervisor have the right to add, edit and delete projects. Others only can search projects and related datasets.



Create new project

- Project ID is generated by the system automatically.
- You can input other information in input boxes.
- Click the ‘Add’ button when your input is complete. Then you will see the successfully added message.
- Then you can go to “Projects” page to do some search.

Projects



PROJECT

Project Table

No SearchPanes

CSV Excel PDF Show 10 entries Search:

Project.ID	Project.Name	Parent	Description	Start.Date	Path	Sample.Sheet
12	www_qq_pp	we		2021-07-31		
11	eeeeeeee_rt	ee		2021-07-31		
10	y_u_i	3	yui	2021-07-31		
9	q_w_e	6	qwe	2021-07-31		
8	d_e_f	6	dd	2021-07-30		
7	a_b_c	3	aa	2021-07-30		
1	Bird_JCW_Shaun_2018	3		13/04/2018	/homes/swebb/data/Bird/JCW/MeCP2_April18	www.bifx-core.bio.ed.ac.uk/swebb/Bird/
2	Bird_SL_Shaun_2019	3		19/05/2019	/homes/swebb/data/Bird/SL/mCG_BS-seq_May19	www.bifx-core.bio.ed.ac.uk/swebb/Bird/
3	Bird_SL_Shaun_2020	bird_2020_SL + 2018 + 2019		13/07/2020	/homes/swebb/data/Bird/SL/mCG_BS-seq_July13	www.bifx-core.bio.ed.ac.uk/swebb/Bird/
4	Wind_JCW_Lucy_2020	6		21/07/2020	/homes/lucy/data/wind/JCW/July21	www.bifx-core.bio.ed.ac.uk/Wind/sample

Showing 1 to 10 of 12 entries

Previous 1 2 Next

Edit Delete Clear selected

In “Project Table”, all the projects are listed. You can search, **Edit**, **Delete** projects here.

The different colours you see represent the different states of the projects. We set up four states: **Ongoing**, **On Hold**, **Published**, and **Complete**.

If you want to deselect all the selected projects, you can click on “**Clear selected**” button.

There are 3 buttons in the upper left corner. You can export this table as csv, excel, and pdf file.

The number in the column named “Parent” means the ID number of its parent project. For example, the Project ID below is 1. And it has a parent project with the Project ID 3. In other words, Project 1 is a sub-project of Project 3 and Project 3 is the parent-project of Project 1.

Project.ID	Project.Name	Parent	Description	Start.Date	Path
All	All	All	All	All	All
1	Bird_JCW_Shaun_2018	3		13/04/2018	/homes/swebb/data/Bird/

How to search projects

Each column in the table has a search box. There is also a search box in the upper right corner. You can enter keywords to search. Parts that match the keywords will be highlighted.

Here, I searched “jcw” in Project.Name search box. And it listed all the matched projects.

Project Table

CSV

Excel

PDF

Show 10 entries

Project.ID ▲	Project.Name	Parent	Description
All	<input type="text" value="jcw"/>	All	All
1	Bird_JCW_Shaun_2018	3	
4	Wind_JCW_Lucy_2020	6	
5	Wind_JCW_Emma_2021	6	
6	Wind_JCW_David_2021		wind_2020_JCW +2021

Showing 1 to 4 of 4 entries (filtered from 12 total entries)

Edit

Delete

Clear selected

Click the column name can sort the column alphabetically.

How to search related datasets

1. Click one (or more) project in the "Project Table".
2. If it is a parent project which contains several sub-projects:
"Related Datasets" will display all the datasets that belong to all the parent and sub projects.
"Related Projects" will display the parent project and its sub projects.
3. If it is a sub-project:
"Related Datasets" will display all the datasets that belong to this sub project.
"Related Projects" will only display this sub projects.

Here is an example.

Select Project 3 in the "Project Table".

Project Table

No SearchPanels

CSV Excel PDF Show 10 entries

Project.ID	Project.Name	Parent	Description	Start.Date	Path
All	All	All	All	All	All
1	Bird_JCW_Shaun_2018	3		13/04/2018	/homes/swebb/data/
2	Bird_SL_Shaun_2019	3		19/05/2019	/homes/swebb/data/seq_May19
3	Bird_SL_Shaun_2020		bird_2020_SL + 2018 +2019	13/07/2020	/homes/swebb/data/seq_July13
4	Wind_JCW_Lucy_2020	6		21/07/2020	/homes/lucy/data/wi

It is a parent project which contains several sub-projects.

So, “Related Datasets” shows all the datasets that belong to all the parent and sub projects.

Related Datasets

Show 10 entries

Data.ID	Related.ProjectID	Data.Name	Description	Date	Path
4	2	mCG_BS_WT2	mCG_BS_WT	14/05/2018	/library/Bir
3	2	mCG_BS_WT1	mCG_BS_WT	13/05/2018	/library/Bir
2	1	MeCP2_ChIP_2	MeCP2_ChIP	13/04/2018	/library/Bir
1	1	MeCP2_ChIP_1	MeCP2_ChIP	13/04/2018	/library/Bir

Showing 1 to 4 of 4 entries

And “Related Projects” displays the parent project itself and its sub projects.

Related Projects

Show 10 entries

Project.ID	Project.Name	Parent	Description	Start.Date	Path
1	Bird_JCW_Shaun_2018	3		13/04/2018	/homes/swe
2	Bird_SL_Shaun_2019	3		19/05/2019	/homes/swe seq_May19
3	Bird_SL_Shaun_2020		bird_2020_SL + 2018 +2019	13/07/2020	/homes/swe seq_July13

If you select one row in “Related Projects”, you will see the related datasets to this project in the “Datasets for One Project” table below.

Here, I select the Project 1. And it shows all the datasets related to Project 1 in “Datasets for One Project” table.

Related Projects

Show entries

Project.ID	Project.Name	Parent	Description	Start.Date	Path
1	Bird_JCW_Shaun_2018	3		13/04/2018	/homes/swebb/data/Bir
2	Bird_SL_Shaun_2019	3		19/05/2019	/homes/swebb/data/Bir seq_May19
3	Bird_SL_Shaun_2020		bird_2020_SL + 2018 +2019	13/07/2020	/homes/swebb/data/Bir seq_July13
7	a_b_c	3	aa	2021-07-30	
10	y_u_i	3	yui	2021-07-31	

Showing 1 to 5 of 5 entries

Select one sub-project here then you will see the related datasets of this project in the below 'Datasets for One Project'

Datasets for One Project

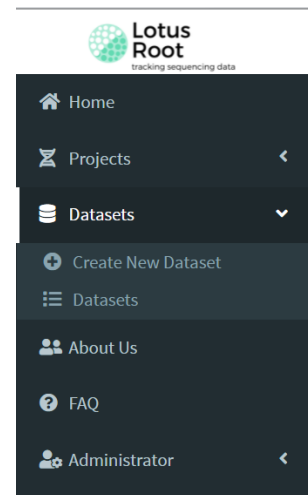
Show entries

Data.ID	Related.ProjectID	Data.Name	Description	Date	Path
2	1	MeCP2_ChIP_2	MeCP2_ChIP	13/04/2018	/library/Bird/JCW/MeCP2/
1	1	MeCP2_ChIP_1	MeCP2_ChIP	13/04/2018	/library/Bird/JCW/MeCP2/

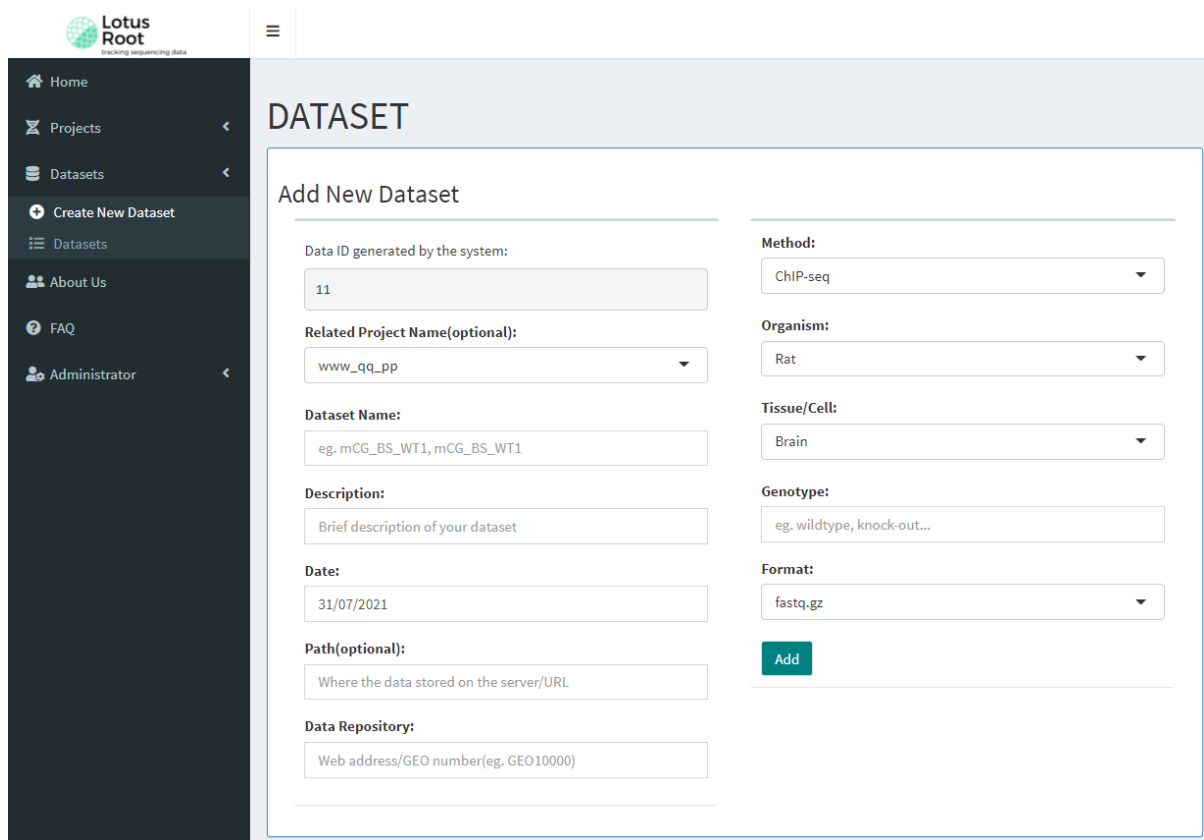
Datasets

This part is divided into two parts. One is “Create New Dataset” and the other is “Datasets”. The former is used to add new datasets. The latter is used to search for datasets and dataset-related projects.

Only System_Maintenance and Data_Administrator have the right to add, edit and delete datasets. Others only can search datasets and related projects.



Create new dataset



Lotus Root
tracking sequencing data

DATASET

Add New Dataset

Data ID generated by the system:
11

Related Project Name(optional):
www_qq_pp

Dataset Name:
eg. mCG_BS_WT1, mCG_BS_WT1

Description:
Brief description of your dataset

Date:
31/07/2021

Path(optional):
Where the data stored on the server/URL

Data Repository:
Web address/GEO number(eg. GEO10000)

Method:
ChIP-seq

Organism:
Rat

Tissue/Cell:
Brain

Genotype:
eg. wildtype, knock-out...

Format:
fastq.gz

Add

- Dataset ID is generated by the system automatically.
- You can input other information in input boxes.
- Click the ‘Add’ button when your input is complete. Then you will see the successfully added message.
- Then you can go to “Datasets” page to do some search.

Datasets

CSV

Excel

PDF

Show 10 entries

Data.ID	Related.ProjectID	Data.Name	Description	Date	Path	Data.Repository
All	All	All	All	All	All	All
10	5	Hum_2_3	human2	26/05/2021	/library/Wind/SL/Hum/A3.fq	GEO:GSM600
9	5	Hum_2_2	human2	26/05/2021	/library/Wind/SL/Hum/A2.fq	GEO:GSM601
8	5	Hum_2_1	human2	26/05/2021	/library/Wind/SL/Hum/A1.fq	GEO:GSM602
7	4	Hum_1_3	human1	26/07/2019	/library/Hill/SL/Hum/003.fq	GEO:GSM700
6	4	Hum_1_2	human1	26/07/2019	/library/Hill/SL/Hum/002.fq	GEO:GSM701
5	4	Hum_1_1	human1	15/05/2019	/library/Hill/SL/Hum/001.fq	GEO:GSM702
4	2	mCG_BS_WT2	mCG_BS_WT	14/05/2018	/library/Bird/SL/mCG/B2.fq	GEO:GSM1500
3	2	mCG_BS_WT1	mCG_BS_WT	13/05/2018	/library/Bird/SL/mCG/B1.fq	GEO:GSM1501
2	1	MeCP2_ChIP_2	MeCP2_ChIP	13/04/2018	/library/Bird/JCW/MeCP2/0002.fq.gz	GEO:GSM1300
1	1	MeCP2_ChIP_1	MeCP2_ChIP	13/04/2018	/library/Bird/JCW/MeCP2/0001.fq.gz	GEO:GSM1301

Showing 1 to 10 of 10 entries

Edit

Delete

Clear selected

In “Dataset Table”, all the datasets are listed. You can search, **Edit**, **Delete** datasets here.

If you want to deselect all the selected datasets, you can click on “**Clear selected**” button.

There are 3 buttons in the upper left corner. You can export this table as csv, excel, and pdf file.

The number in the column named “Related.ProjectID” means the ID number of its related project. For example, the Data.ID below is 10. And it has a related project with the Project ID 5. In other words, Dataset 10(named ‘Hum_2_3’) is used in Project 5.

Data.ID	Related.ProjectID	Data.Name	Description	Date	Path
All	All	All	All	All	All
10	5	Hum_2_3	human2	26/05/2021	/library/Wind/

How to search datasets

Each column in the table has a search box. There is also a search box in the upper right corner. You can enter keywords to search. Parts that match the keywords are highlighted in yellow.

Here, I searched “human” in Description search box. And it listed all the matched projects.

Data.ID	Related.ProjectID	Data.Name	Description	Date	Path
All	All	All	human	All	All
10	5	Hum_2_3	human2	26/05/2021	/library/V
9	5	Hum_2_2	human2	26/05/2021	/library/V
8	5	Hum_2_1	human2	26/05/2021	/library/V
7	4	Hum_1_3	human1	26/07/2019	/library/t
6	4	Hum_1_2	human1	26/07/2019	/library/t
5	4	Hum_1_1	human1	15/05/2019	/library/t

Showing 1 to 6 of 6 entries (filtered from 10 total entries)

Edit Delete Clear selected

Click on the column name to sort it alphabetically.

How to search related projects

1. Click one (or more) dataset in the “Dataset Table”.
2. ‘Related Projects’ table will display all the projects that contain the dataset.

Here is an example.

Select the dataset named “mG_BS_WT2” in the “Dataset Table”.

Data.ID	Related.ProjectID	Data.Name	Description	Date	Path
All	All	wt	All	All	All
4	2	mG_BS_WT2	CG_BS_WT	14/05/2018	/library/Bird/St
3	2	mG_BS_WT1	CG_BS_WT	13/05/2018	/library/Bird/St

Showing 1 to 2 of 2 entries (filtered from 10 total entries)

Edit Delete Clear selected

Then “Related Projects” table displays the project related to “mG_BS_WT2” dataset.

Related Projects

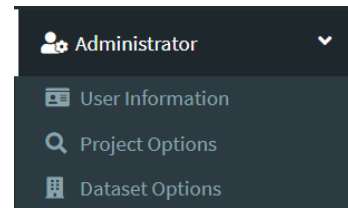
Show entries

Project.ID	Project.Name	Parent	Description	Start.Date	Path
2	Bird_SL_Shaun_2019	3		19/05/2019	/homes/swebb seq_May19

Showing 1 to 1 of 1 entries

Administrator/System Management

If you login as a system administrator, you can manage user information, user permissions, project input options and dataset input options.



User Information

You can **Add/Delete** user information here.

You cannot see the passwords here. So, if someone want to reset his/her password, you need to delete his/her information first and ask him/her to re-register.

Datasets

About Us

FAQ

Administrator

User Information

Project Options

Dataset Options

User Information

Username

Please enter full name

Password

Email :

Group

BioC

User Permissions:

General_Staff

Add

CSV

Excel

PDF

Show 10 entries

Search:

Name	Email	Group,Lab.Center	Permissions
All	All	All	All
xmy	123@ed.ac.uk	Hill	System_Maintenance
a	emma@ed.ac.uk	Wind	System_Maintenance
Bobby	bb@gmail.com	Bird	Project_Supervisor
Lucy	ee@ed.ac.uk	Wind	Project_Supervisor
Ying	ying@ed.ac.uk	Cat	General_Staff
Debby	debby@ed.ac.uk	Dog	General_Staff
Kate	kk@ed.ac.uk	Hill	General_Staff
zz	zz@ed.ac.uk	Bird	Data_Administrator
David	David@ed.ac.uk	Bird	Data_Administrator
Emma	emma@ed.ac.uk	Dog	Data_Administrator

Showing 1 to 10 of 10 entries

Previous

1

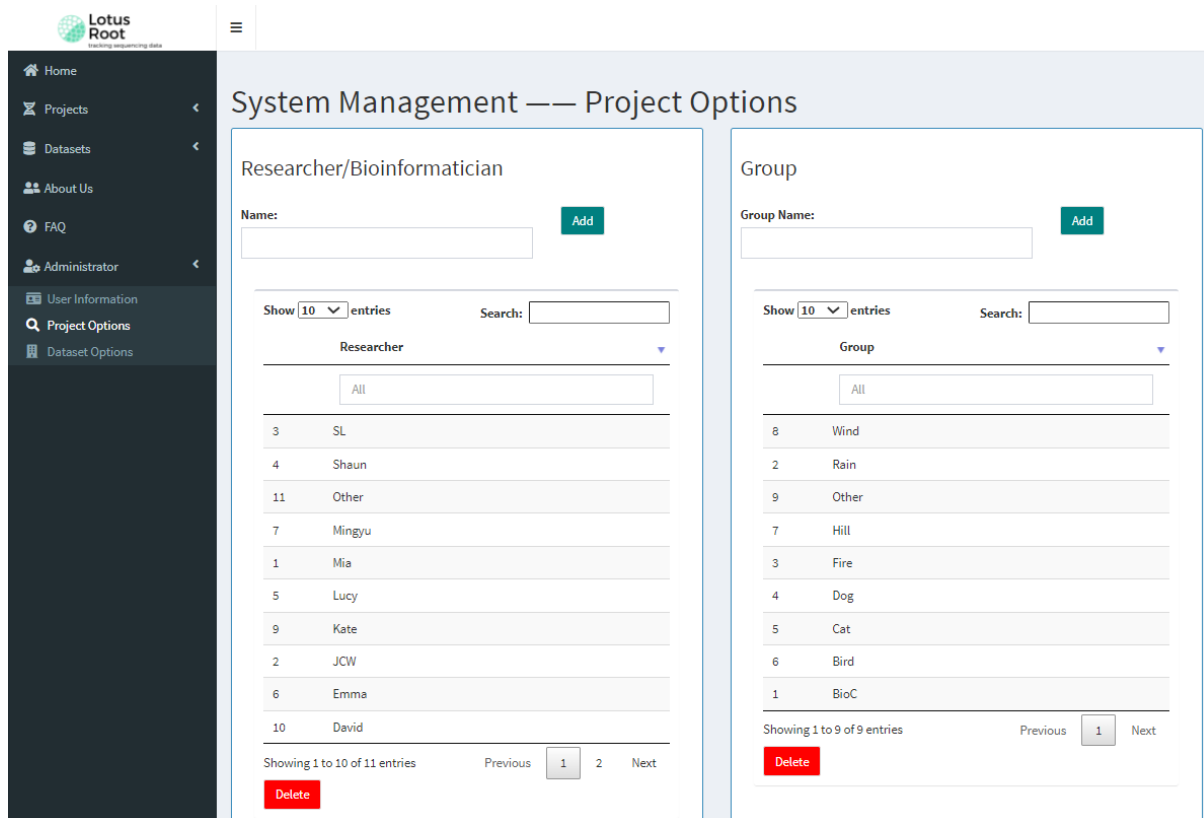
Next

Delete

Project Options

You can **Add/Delete** project options here. It contains 2 tables (Researcher/Bioinformatician and Group).

This section is associated with the 'Create New Project' input boxes. The content in the input box changes as you add or delete options here.



System Management — Project Options

Researcher/Bioinformatician

Name: **Add**

Show **10** entries Search:

Researcher

3	SL
4	Shaun
11	Other
7	Mingyu
1	Mia
5	Lucy
9	Kate
2	JCW
6	Emma
10	David

Showing 1 to 10 of 11 entries Previous **1** 2 Next

Delete

Group

Group Name: **Add**

Show **10** entries Search:

Group

8	Wind
2	Rain
9	Other
7	Hill
3	Fire
4	Dog
5	Cat
6	Bird
1	BioC


Showing 1 to 9 of 9 entries Previous **1** Next

Delete

Dataset Options

You can **Add/Delete** dataset options on this page. It contains 4 boxes (Method, Organism, Tissue/Cell, and Format).

This section is associated with the "Create New Dataset" input boxes. The content in the input box changes as you add or delete options here.



tracking sequencing data

- Home
- Projects
- Datasets
- About Us
- FAQ
- Administrator
- User Information
- Project Options
- Dataset Options

System Management — Dataset Options

Method

Method: Add

Show entries Search:

Method	
	<input type="text" value="All"/>
1	ChIP-seq
2	BS-seq
3	Other

Showing 1 to 3 of 3 entries Previous Next

Delete

Organism

Organism Name: Add

Show entries Search:

Organism	
	<input type="text" value="All"/>
1	Rat
2	Horse
3	Pig
4	Human
5	Mouse
6	E. coli
7	Dog
8	Zebrafish
9	Rhesus Monkey
10	Cat

Showing 1 to 10 of 13 entries Previous 2 Next

Delete

Tissue/Cell

Tissue/Cell Name: Add

Copy Excel CSV PDF Print Show entries

Search:

Tissue.Cell	
	<input type="text" value="All"/>
1	Brain
2	Lung
3	Epithelial cells
4	Liver
5	Kidney
6	Heart
7	Neuron
8	Other

Showing 1 to 8 of 8 entries Previous Next

Delete

Format

Format Name: Add

Show entries Search:

Format	
	<input type="text" value="All"/>
1	fastq.gz
2	fastq
3	fasta
4	BED
5	BAM
6	SAM

Showing 1 to 6 of 6 entries Previous Next

Delete