
AniShare Documentation

Release 1.5

Holger Dinkel, Fabian Monheim

Jul 23, 2018

Contents:

1	Introduction	1
2	Contact	2
2.1	Sitemap	2
2.2	Main user interface	2
2.2.1	Animals	2
2.2.2	Organs	3
2.2.3	RSS Feed	4
2.3	Main animal manager tasks	4
2.3.1	Add Animals manually	4
2.3.2	Animals import	6
2.3.3	Add Organs manually	8
2.3.4	Organs import	9
2.3.5	Duplicating entries	10
2.4	Main administrator tasks	10
2.4.1	Organs used	11
2.4.2	Animals	11
2.4.3	Labs	11
2.4.4	Locations	12
2.4.5	Persons	12
2.4.6	Make a user an animal manager	13
2.4.7	Anishare change history	13

Chapter 1

Introduction

anishare is a webservice for research institutes to share animals with the goal to re-use animals and thus minimize total animal usage.

It has been developed at the [Leibniz institute for aging research](#) in Jena. This django app is meant to be used by researchers who want to share research animals with their colleagues. The basic idea is that animals are bred for experiments; however, sometimes, not all parts of the animal are used or sometimes an experiment gets cancelled for whatever reason. By sharing animals within the institute, less animals in total have to be sacrificed for research.

Anishare is a simple database of animals offered for reuse and a easy way to claim an animal with automatic generation of email messages as well as an RSS feed for updates.

AniShare

Animals

Organs

Logged in as: fmoenheim

Add Animal

Add Organ

Logout

?

AniShare Animals

Filter

Animal type:

Sex:

Line:

Location:

Licence number:

Responsible person:

Search

Show

10

entries

Search:

ID	#	Type	Sex	Date of Birth	Age (w)	Available From/To	Line	Mutations	Location	License#	Lab ID	Comment	Resp. Person	Added By	New Owner
4113	4	fish	?	11.09.2017	44	20.07.2018 01.01.2019	MZCS-08/122	None	Anlage Zucht	§11 J-003798	009276	2. fisch mit au1 seit 22.2.18, angeboten am 15.05.18, zb14, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!
4112	3	fish	♀	07.08.2017	49	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 4 - Anlage 21	§11 J-003798	009601	angeboten am 31.5.2018, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!
4111	1	fish	♀	07.08.2017	49	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 4 - Anlage 21	§11 J-003798	009232	angeboten am 11.5.18, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!

At the moment, the software/database is geared towards handling of mice, however, it can be adjusted to handle any kind of research animal.

This documentation can also be downloaded as pdf file: [Anishare Documentation](#)

Contact

Technical and application support: Fabian Monheim, fabian.monheim@leibniz-fli.de, 03641-65-6872

Content support: mouse@leibniz-fli.de, fish@leibniz-fli.de

2.1 Sitemap

- Start: <https://anishare.leibniz-fli.de>
- Animal: <https://anishare.leibniz-fli.de/animals>
- Organ: <https://anishare.leibniz-fli.de/organs>
- Animal and organ feed: <https://anishare.leibniz-fli.de/animals/feed>
- Administration: <https://anishare.leibniz-fli.de/admin>
- Macros: <https://anishare.leibniz-fli.de/macros>
- Change history: <https://anishare.leibniz-fli.de/changehistory>
- Change history feed: <https://anishare.leibniz-fli.de/changehistory/feed>

2.2 Main user interface

2.2.1 Animals

The main user-facing site is the list of animals to be shared. A user can browse this list, sort it via the headers or search for a term using the search bar.

AniShare Animals														
<div> AniShare Animals Organs </div> <div> Logged in as: fmonheim Add Animal Add Organ Logout ? </div>														
<div> Filter </div> <div> Animal type: Sex: Line: Location: Licence number: Responsible person: </div> <div> Show 10 entries </div> <div> Search: </div>														
ID	#	Type	Sex	Date of Birth	Age (w)	Available From/To	Line	Mutations	Location	License#	Lab ID	Comment	Resp. Person	New Owner
4113	4	fish	?	11.09.2017	44	20.07.2018 01.01.2019	MZCS-08/122	None	Anlage Zucht	§11 J-003798	009276	2. fisch mit au1 seit 22.2.18, angeboten am 15.05.18, zb14, zu3	Beate Hoppe (False Lab)	Fabian Monheim Claim!
4112	3	fish	♀	07.08.2017	49	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 4 - Anlage 21	§11 J-003798	009601	angeboten am 31.5.2018, zu3	Beate Hoppe (False Lab)	Fabian Monheim Claim!
4111	1	fish	♀	07.08.2017	49	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 4 - Anlage 21	§11 J-003798	009232	angeboten am 11.5.18, zu3	Beate Hoppe (False Lab)	Fabian Monheim Claim!

If a user is interested in an animal, they should click on the button “Claim” which will bring up another page (see below) in which they can review their claim before finally submitting. When they click on “Yes, I want to claim this!”, then they will be entered as *new owner* of this animal and an email will be sent to them as well as the responsible/contact person informing them about this transaction. Further steps might need to be necessary such as transferring the animal in the LIMS (eg. PyRat).

Note: If more than one animal is available, the user can adjust the number they want to claim. The remaining animals will still be available for claim. Because of uniqueness it’s only possible to offer exactly one mouse per dataset. In contrast fishes can be offer in a group.

AniShare Animals														
<div> AniShare Animals Organs </div> <div> Logged in as: fmonheim Add Animal Add Organ Logout ? </div>														
<div> Near Fabian Monheim, do you really want to claim the following animal for yourself? </div>														
ID	#	Type	Sex	Entry Date	Date of Birth	Age (w)	Available From	Available To	Line	Mutations	Location	License#	ext. Info	Comments
4113	4	fish	?	20.07.2018	11.09.2017	44	20.07.2018	01.01.2019	MZCS-08/122	None	Anlage Zucht	§11 J-003798	008441 009276	2. fisch mit au1 seit 22.2.18, angeboten am 15.05.18, zb14, zu3
<div> By clicking on the button, an email will be sent from fabian.monheim@leibniz-fl.de to Beate Hoppe (beate.hoppe@leibniz-fl.de), informing that you take responsibility for 4 out of 4 animals from entry 4113. They will make the necessary adjustments in the database. </div> <div> Yes, I want to claim this! </div>														
AniShare														
ID	#	Type	Sex	Entry Date	Date of Birth	Age (w)	Available From	Available To	Line	Mutations	Location	License#	ext. Info	Comments
4113	4	fish	?	20.07.2018	11.09.2017	44	20.07.2018	01.01.2019	MZCS-08/122	None	Anlage Zucht	§11 J-003798	008441 009276	2. fisch mit au1 seit 22.2.18, angeboten am 15.05.18, zb14, zu3
<div> By clicking on the button, an email will be sent from fabian.monheim@leibniz-fl.de to Beate Hoppe (beate.hoppe@leibniz-fl.de), informing that you take responsibility for 4 out of 4 animals from entry 4113. They will make the necessary adjustments in the database. </div> <div> Yes, I want to claim this! </div>														
AniShare														
ID	#	Type	Sex	Entry Date	Date of Birth	Age (w)	Available From	Available To	Line	Mutations	Location	License#	ext. Info	Comments
4113	4	fish	?	20.07.2018	11.09.2017	44	20.07.2018	01.01.2019	MZCS-08/122	None	Anlage Zucht	§11 J-003798	008441 009276	2. fisch mit au1 seit 22.2.18, angeboten am 15.05.18, zb14, zu3

2.2.2 Organs

There exists an individual page for animal organ share. It is very similar to the animal page, however only individual organs are for offer. The entry at the column *Organ used* (used) indicates all organs which can not be claimed. Also there is no availability period, but a day at which the animal gets sacrificed. The person responsible for sacrifice the animal will be informed via email if anybody claims some of the available organs. The entry will remain available to others (as they might want to claim other organs).

Organ index view:

AniShare Organs														
<div> Filter </div> <div> Show 10 entries </div> <div> Search: 115 </div>														
ID	Type	Organ used	Sex	Date of Birth	Date of Death	Sacrifice Method	Euthanasia performed by	Age (w)	Line	Mutations	Location	License#	Lab ID	Comment
6	mouse		♂	09.05.2016	27.07.2018	other	fabian.monheim@leibniz-fl.de	115	HRASG12Vgeokip21-ko	HRASG12Vgeokip21-ko	Mauscontainer	123	108	None
5	mouse		♂	09.05.2016	27.07.2018	CO2	fabian.monheim@leibniz-fl.de	115	HRASG12Vgeokip21-ko	HRASG12Vgeokip21-ko	Mauscontainer	123	107	None

Organ claim view:

Dear **Fabian Monheim**, do you really want to claim an **organ** of the following animal for yourself?

ID	Type	Organ (used)	Sex	Date of Birth	Date of Death	Sacrifice Method	Euthanasia performed by	Age (w)	Line	Mutations	Location	License#	ext. Info	Comment	Added By
6	mouse		♂	09.05.2016	27.07.2018	other	fabian.monheim@leibniz-fl.de	115	HRASG12Vgeo-kp21-ko	HRASG12Vgeo-ki p21-ko	Mauscontainer	123	CIR-000504108		Fabian Monheim

By clicking on the button, an email will be sent from
 fabian.monheim@leibniz-fl.de to
 fabian.monheim@leibniz-fl.de
 informing that you are interested in the following organs/parts
 [enter organs you want] from the entry above.
 They will get in touch with you.
 Yes, I want to claim this!

2.2.3 RSS Feed

An RSS feed containing the latest ten animals and organs is automatically generated and can be found at </animals/feed>. Users can subscribe (Most email clients allow the subscription to RSS feeds) to this feed to stay up-to-date with the animal catalogue. By clicking on a link in the feed, they are directed to the claim page of the individual animal/organ.

Anishare animal feed

Updates on animals to share.

[10 unknown fish, some line id:3 \[2018-05-06\]](#)

id:248962, lab_id:LAB648, available:2018-06-01-2018-06-30, location:Fish Facility, mutations:

[2 female mouse, ko/ko id:4 \[2018-03-01\]](#)

id:695968, lab_id:LAB3584, available:2018-05-01-2018-05-16, location:Animal House 2, mutations:

[2 male mouse, ko/ko id:1 \[2018-01-01\]](#)

id:274628, lab_id:LAB648, available:2018-05-29-2018-06-30, location:Animal House 1, mutations:

[1 female mouse, ki/ki id:2 \[2018-03-01\]](#)

id:159758, lab_id:LAB3584, available:2018-05-29-2018-06-29, location:Animal House 2, mutations:

2.3 Main animal manager tasks

An *animal manager* can add animals and organs to the database on two ways. First, it is possible to add entries manually. Secondly, it is possible to import an Excel sheet. At the FLI Jena there are two databases to manage animals. Now the databases are not connected. To transfer more than one or two datasets to anishare it's recommend to use the export function of *PyRAT* or *tick@lab* and the import function of anishare. To use the export/import process please read the topic **Animals import** or **Organs import**.

Welcome to AniShare

ANIMALS		
Animals	+ Add	✎ Change
Organs	+ Add	✎ Change
Persons		✎ Change

2.3.1 Add Animals manually

Click on **Animals** -> **Add** to add an animal.

Add animal

Amount:	<input type="text" value="1"/>	
	How many animals? (eg. fish in tank)	
Animal type:	<input type="text" value="mouse"/>	
Organ type:	<input type="text" value="spleen"/>	
Day of birth:	<input type="text" value="01.03.18"/>	Today
Available from:	<input type="text" value="30.05.18"/>	Today
Available to:	<input type="text" value="30.06.18"/>	Today
Sex:	<input type="radio"/> male <input checked="" type="radio"/> female <input type="radio"/> unknown	
	Select "unknown" if multiple animals.	
External id:	<input type="text" value="946283"/>	
External lab id:	<input type="text" value="LAB3418"/>	
Line:	<input type="text" value="ko-/ko-"/>	
Location:	<input type="text" value="Animal House 1"/>	
	Where is the animal housed?	
Responsible person:	<input type="text" value="Roger Roger (Lab B Lab)"/>	
	Person who is responsible in the lab for dealing with the animals	
Licence number:	<input type="text" value="#182938"/>	

All fields in bold **need** to be filled in, the others are optional.

After adding several animals, the main (index) view should look like this:

From PyRAT

Animals

Stud males

Apply filter

Print

QS

More ▾

1 / 124

Res Filter

Sort

WR ID ▾

Lab ID

P

<input type="checkbox"/>	CIR-000592	149	
<input type="checkbox"/>	CIR-000593	150	
<input type="checkbox"/>	CIR-000594	153	
<input type="checkbox"/>	CIR-000596	147	
<input checked="" type="checkbox"/>	CIR-000604	156	
<input checked="" type="checkbox"/>	CIR-000605	157	
<input checked="" type="checkbox"/>	CIR-000606	158	
<input checked="" type="checkbox"/>	CIR-000608	160	
<input checked="" type="checkbox"/>	CIR-000609	162	
<input type="checkbox"/>	CIR-000610	174	
<input type="checkbox"/>	CIR-000612	178	
<input type="checkbox"/>	CIR-000614	168	
<input type="checkbox"/>	CIR-000615	171	

Quick Select - Choose action | 5 animals selected

Apply

☐ Add procedure: Behavioural test: Elevated Beam
(More procedures might be available for individual animals)

Comments:

☐ Set as studs

☐ Set plug date: 12/07/2018

☐ Isolate embryos: 0

Cell stage: Unknown

Origin: internal

Owner: Default

Line / Strain: Set Line / Strain

Discarded embryos: 0 (Incubated embryos: 0)

☐ Isolate sperm: 0

Origin: internal

Owner: Default

Line / Strain: Set Line / Strain

☐ Assign these animals to the foster mother pool

☐ Remove these animals from the foster mother pool

☐ Assign these animals to the oocyte donor pool

☐ Remove these animals from the oocyte donor pool

☐ Set pregnancy: Pregnant

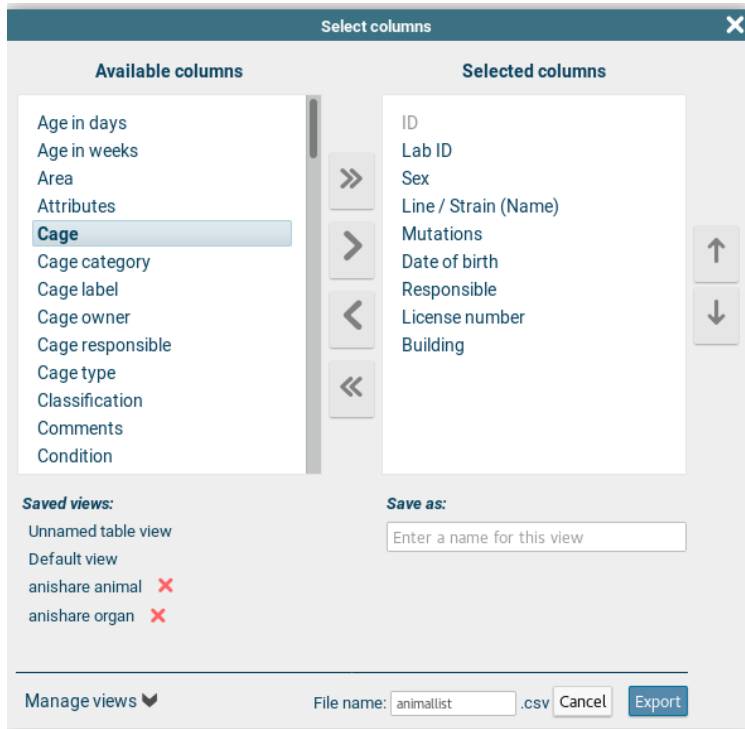
☐ Print stickers: Genotyping Stickers (Herma 4211, 7x16)

☒ Export this list to Excel

2.3. Main animal manager tasks

Responsible, License number, Building

It's possible to save the selected columns as a Manage View for reuse (fold out Manage View on the left side of the File name)



After downloading the file it's necessary to edit the file because the columns **Animal type**, **Available from**, **Available to** are missing. Please add the mentioned columns (wherever) and fill it out. As **Animal type** the two values `mouse` or `fish` are possible. Please use the same date format for the columns **Available from**, **Available to** like at the exported column **DOB** (Date of birth). To simplify this process there are macros for LibreOffice and MS Office. The macros automatically add the missing columns and add the values `mouse` (Animal type), `Current Date` (Available from), `Current Date + 14 days` (Available to). Please refer to the [macro site](#) to downloading the macros and further informations.

Note: It's possible to add more than one entry at the field **Organ used**. Please use a comma as separator like `brain, bladder`.

After adding the missing columns the file can be saved, for example as `xlsx` file. Now go to the anishare admin interface to `Home > Animals > Animals` and click the button **IMPORT** (above the filter). Select the file and choose the file format. Upload the file. After submitting all datasets will show to the user if all requirements match.

From *tick@lab*

First login to *Tick@lab* and open the population site. All visible entries can be exported with the button *Export to Excel*. It isn't yet possible to export only selected animals. Therefore use the filter option.



To import the file it's necessary to do a lot of changes to the structure of the data. So please use the macro which do the changes automatic. Please refer to the [macro site](#) to downloading the macro and further informations.

2.3.3 Add Organs manually

Click on Organs -> Add to add an organ.

Add organ

Amount:	<input type="text" value="1"/>	How many organs?
Animal type:	<input type="text" value="mouse"/>	
Sex:	<input type="radio"/> male <input type="radio"/> female <input type="radio"/> unknown Select "unknown" if multiple animals.	
Organ type:	<input type="text" value="-----"/>	
Day of birth:	<input type="text"/>	Today
Day of death:	<input type="text"/>	Today
Method of killing:	<input type="text" value="-----"/>	
Killing person:	<input type="text"/>	Email address of the person who is responsible for killing the animal
Database id:	<input type="text"/>	ID of animal in eg. PYRAT
Lab id:	<input type="text"/>	ID of lab in eg. PYRAT
Line:	<input type="text"/>	genetic trait of animal
Location:	<input type="text" value="-----"/>	Where is the animal housed?

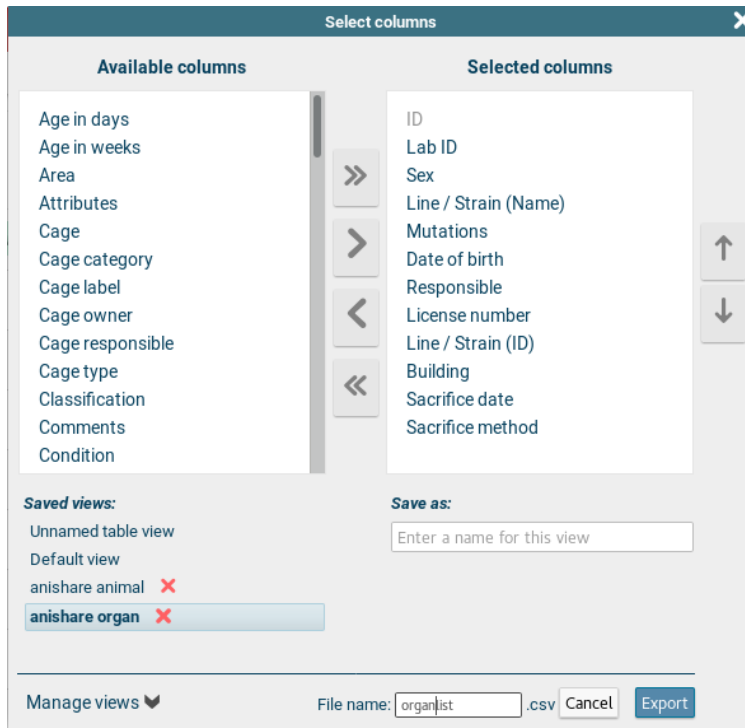
All fields in bold **need** to be filled in, the others are optional.

2.3.4 Organs import

From PyRAT

First login to PyRAT and switch to the english version of PyRAT if it is no preset. Then select the animals which should be import to anishare. Click on **QS (Quick Select)** and activate the option **Export this list to Excel**. Push the button **Apply**.

Now it's important to select all mandatory fields: **ID, Lab ID, Sex, Line / Strine (Name), Mutations, Date of birth, Responsible, License number, Building, Sacrifice date, Sacrifice method**



It's possible to save the selected columns as a **Manage View** for reuse (fold out **Manage View** on the left side of the **File name**)

After downloading the file it's necessary to edit the file because the columns **Animal type**, **Available from**, **Available to** are missing. Furthermore the headings and the format of the column **Responsible** needs to be adapt. To simplify this process there are macros for LibreOffice and MS Office. The macros automatically add the missing columns and add the values **mouse** (**Animal type**), **Current Date** (**Available from**), **Current Date + 14 days** (**Available to**). Please refer to the [macro site](#) to downloading the macros and further informations.

After adding the missing columns the file can be save, for example as **xlsx** file. Now go to the anishare admin interface to **Home > Animals > Animals** and click the button **IMPORT** (above the filter). Select the file and choose the file format. Upload the file. After submitting all datasets will show to the user if all requirements match.

From *tick@lab*

Because we expect only a small quantity of importing organs from *tick@lab* it's only possible to add entries manually.

2.3.5 Duplicating entries

For input of multiple similar entries, it is possible to duplicate an animal or organ entry. For this, select one or more entries in the list (see figure below) and select “*copy animal*” from the dropdown menu and click “Go”.

Select animal to change

Search

Action: ☒ 1 of 100 selected

Go

Delete selected animals
Clear claim
Copy animal

AM	BIRTH	AGE (W)	AVAILABLE FROM	AVAILABLE TO	LINE	SEX	LOCATION	LICENCE NUMBER
<input checked="" type="checkbox"/> 1	06.06.2018	01.01.2018	22	01.06.2018	01.07.2018	ko/ko	male	BIZ #007

Another option is to edit an existing animal and click on “*Save as new*”. This will save the currently edited animal as a new instance:

Change animal

HISTORY VIEW ON SITE >

Delete Save as new Save and continue editing SAVE

Amount: 1
How many animals? (eg. fish in tank)

Animal type: mouse

Day of birth: 01.01.18 Today

Available from: 01.06.18 Today

Available to: 01.07.18 Today

Sex: ☒ male ☐ female ☐ unknown
Select "unknown" if multiple animals.

Database id: ext. ID 123
ID of animal in eg. PYRAT

Lab id: LAB123
ID of lab in eg. PYRAT

Line: ko/ko
genetic trait of animal

2.4 Main administrator tasks

The administrator can edit more objects in the admin interface, namely not just animals and organs but also labs, locations and persons:

Welcome to AniShare

ANIMALS	
Animals	+ Add Change
Labs	+ Add Change
Locations	+ Add Change
Organs	+ Add Change
Persons	+ Add Change

2.4.1 Organs used

These organs are standard values for the field **Organ used**.

2.4.2 Animals

The main category to administer are animals to share. Here, several filters (such as “sex”, “location”, etc.) are available to search for any set of animals.

Select animal to change

ADD ANIMAL +

Action: ----- 0 of 5 selected

<input type="checkbox"/>	AMOUNT	ENTRY DATE	DAY OF BIRTH	AGE (W)	AVAILABLE FROM	AVAILABLE TO	LINE	SEX	LOCATION	LICENCE NUMBER	RESPONSIBLE PERSON	ADC
<input type="checkbox"/>	1	31.05.2018	01.01.2018	21	01.06.2018	01.07.2018	ko/ko	male	Outside	#007	Roger Roger (Lab B Lab)	test
<input type="checkbox"/>	2	30.05.2018	01.03.2018	10	01.05.2018	16.05.2018	ko/ko	female	Animal House 2	#154253	Mike Smith (Lab A Lab)	test
<input type="checkbox"/>	10	30.05.2018	06.05.2018	3	01.06.2018	30.06.2018	some line	unknown	Fish Facility	#154634	Fishy McFishface (Fish Lab)	test
<input type="checkbox"/>	1	29.05.2018	01.03.2018	13	29.05.2018	29.06.2018	ki/ki	female	Animal House 2	#900238	Roger Roger (Lab B Lab)	test
<input type="checkbox"/>	2	29.05.2018	01.01.2018	21	29.05.2018	30.06.2018	ko/ko	male	Animal House 1	#900238	Mike Smith (Lab A Lab)	test

5 animals

FILTER

By amount

All

1

2

10

By sex

All

male

female

unknown

By responsible for lab

All

Lab A Lab

Lab B Lab

Fish Lab

By location

All

Animal House 1

Outdoors

Animal House 2

Fish Facility

Outside

Note: in order to remove a claim (thus making the animal available again), either click on an animal and remove the email address from the field “new owner”, or select one or multiple animals and select the “clear claim” *Action* and click “Go”.

Note: Once created, an animal cannot be deleted, except by the administrator.

2.4.3 Labs

Labs are research labs/research groups and need to have at least one responsible/contact person each

Select lab to change

Action: 0 of 3 selected

<input type="checkbox"/>	NAME	RESPONSIBLE PERSON
<input type="checkbox"/>	Fish	Fishy McFishface
<input type="checkbox"/>	Lab B	Roger Roger
<input type="checkbox"/>	Lab A	Mike Smith

3 labs

Note: Only *administrators* are allowed to see and change Labs

2.4.4 Locations

Locations are where animals are stored. Usually something like room numbers or “animal house” or “fish facility”.

Select location to change

Action: 0 of 5 selected

<input type="checkbox"/>	NAME
<input type="checkbox"/>	Outside
<input type="checkbox"/>	Fish Facility
<input type="checkbox"/>	Animal House 2
<input type="checkbox"/>	Outdoors
<input type="checkbox"/>	Animal House 1

5 locations

Note: Only *administrators* are allowed to see and change Locations

2.4.5 Persons

Persons responsible for the animals. Could be a vet or similar. Every animal needs to have a responsible person associated to them. This person then gets an email when the animal is being claimed.

Select person to change

Action: 0 of 3 selected

<input type="checkbox"/>	NAME	EMAIL	RESPONSIBLE FOR LAB
<input type="checkbox"/>	Fishy McFishface	fishymcfishface@nowhere.com	Fish Lab
<input type="checkbox"/>	Mike Smith	mike.smith@nowhere.com	Lab A Lab
<input type="checkbox"/>	Roger Roger	roger.roger@nowhere.com	Lab B Lab

3 persons

Note: Only *administrators* are allowed to see and change Persons

2.4.6 Make a user an animal manager

The *administrator* is also responsible for user/rights management. In order to be able to add/edit animals, a user has to be in the group *animal manager* and have *staff status* in the django admin interface. For this, an *administrator* has to go to the [user management](#) in the admin interface by clicking “Home” -> “Authentication and Authorization” -> “Users”. Here, they can make a *user* an *animal manager*, by setting these values (*staff* and group *animal manager*):

Permissions

☒ Active
Designates whether this user should be treated as active. Unselect this instead of deleting accounts.

☒ Staff status
Designates whether the user can log into this admin site.

☐ Superuser status
Designates that this user has all permissions without explicitly assigning them.

Groups:

Available groups

Filter

Chosen groups

animal manager

Remove all

Choose all

The groups this user belongs to. A user will get all permissions granted to each of their groups. Hold down "Control", or "Command" on a Mac, to select more than one.

2.4.7 Anishare change history

New functions and bugfix at the system should be documented. So users can be informed about changes on the system. All changes are visible to authenticated users. Please refer to the site [AniShare Change History](#) to see all changes. Furthermore it's possible to subscribe to the [Anishare Version Feed](#) to stay informed.