1. The service group in Mausoleum

1.1.In brief

Depending on the institute where you are using the Mausoleum, mouse work can be organized in different ways. In one institute the individual groups are doing all the necessary work by themselves whereas in other institutes the mouse work is performed by a specialized service unit. In the first mode every group has its own data and no member from another group can see or manipulate them. But if you are using shared resources as in the second mode the individual groups have to share to some extent informations about rooms, racks, cages and mice.

To meet these requirements there is a special group in Mausoleum called "service". This group will be automatically created. The service group contains the information of shared resources. These resources are rooms and racks which are shared between individual groups.

If two groups share a rack it is necessary for them to know which spots are occupied from the other group. They do not need to know what is in the cages but they must not put their cage at a spot where already a cage from the group sits. To achieve this, the shared rack has to be under the control of the service unit.

The next figure tries to illustrate the way how this is organized in Mausoleum. We have our two groups called "**Group A**" and "**Group B**". They share a Rack called "**Rack 1**" which sits in a room called "**Room A**".



You see that that both groups have an object for the rack and the room. Because they want to share this rack, it is also defined in the service group. In addition there is a link established between the racks what makes it possible to bring together the necessary data. What is in these racks is not contained in the service group. All the cages, mice, lines, strains etc. is private property of the groups. For the service group the only important thing is that it can correlate the information contained in the group's data with its rack and room objects. After a rack is under control of the service group its attributes (like name or the

room where it is located) cannot be altered. It also cannot be deleted from the group's guru. All that is possible only for a user with the role **HEAD OF SERVICE** in the service group.

Another point here is that caretakers of the service group must handle all cages within a room regardless of the group to which they belong. For them all cages and mice within this room are visible. The next table shows what the rack display looks like in a rack which is shared between Group A and Group B in the different groups.

		Gı	oup	Α			Group B		S	Servi	ce G	Grou	р	
394	393	199	A	129	21	2 <mark>0</mark>	154	394	393	199	154	129	21	2 <mark>0</mark>
236	15	53	108	79	376	16	the the	23 <mark>6</mark>	15	53	108	79	376	16
135	231	22	86	223	153	105	THETH	135	231	22	86	223	153	105
50	59	4	218	280	185	411		56	59	4	218	280	185	411
290	18	288	57	404	403		131	290	<mark>-18</mark>	288	57	404	403	131
102	112	122	254	61	130	357		102	112	122	254	61	130	357
101	<mark>41</mark> 0	6	206	308	200	272	89	10 <mark>1</mark>	<mark>41</mark> 0	6	206	308	89	272
72	64	291	340		27	27	212 77	72	64 ⁻	291	340	212	27	77

Logged in as a user of either Group A or Group B you can see only the cages from your group. But via the link metioned above Mausoleum knows that other groups are also using this rack and can determine where cages from other groups are placed. These occupied spots in the rack are shown as dark shaded empty spots. You cannot see which cage from another group is sitting there nor do you have acces to the content of these cages. On the other hand if you are logged in as a caretaker of the service group you can see all the cages within that rack and you can see all the mice and their attributes and can – within the limits of your privileges – modify them.

These features are only usable if the respective rack is maintained by the service group. If a group has additional racks which are not under the supervision of the service unit, only members of this group have access to these racks and to the data of the contained objects. Being logged in as a member of a normal group you can easily detect whether a given rack is under the supervision of the service group. These racks are shown with an "**[S]**" as prefix whereas the racks which are not included in the service unit don't show any prefix. In the situation shown here

Rack1	-
Rack1	
[S] Rack2	

Rack1 is a rack which only belongs to this group whereas **Rack2** is controlled by the service group and therefore is shown as "**[S] Rack2**". This nomenclature is also used for the shared rooms where the racks of the service group are located.

1.2. Users categories of the service group

In this group there only two possible kinds of users:

HEAD OF SERVICE: This user is the main user of the service unit. This user can create new racks and rooms and is responsible for the distribution of these objects to the groups. In addition this user can create reports for the groups and for the whole service unit.

SERVICE CARETAKER: This user is the one working with the mice and cages within one room. He or she can see and modify the attributes of all the mice within the room regardless of the group to which they belong.

1.3.Working as Head of Service

1.3.1.Logging in

In the Login dialog you type in the login data.

The Mausoleu	m Login	
Username	head	YES
Group	service	
Password	****	NO

The Head of Service user has to be created by the Mausoleum Administrator. In the Administration window there is a function to define these users and their login credentials. In case you don't know the credentials you have to ask your Mausoleum administrator.

1.3.2.Visible objects

The objects which are controlled by the service group are

- Rooms
- Racks
- Users
- Mail

In addition the head of the service group also sees the groups which are defined within this Mausoleum installation. The head of service can neither create nor delete groups. This is only possible for the Mausoleum administrator.

There are no mice, cages, lines, strains etc. present in the service group. Only the rooms and racks are controlled by this group. All other objects still belong to the individual groups. Only the use of the shared racks from the service group make these objects available for the service group.

After logging in the Mausoleum inspector appears and as in the regular Mausoleum clients you select the type of object you are interested in the top element of the Inspector window:

USOLEUM 5.0 B	1 <head></head>	_
Racks	Rooms	Mail
lisers	Groups	in an

1.3.3.Rooms

The first type of objects which have to be defined within the service unit are the rooms. You cannot define new racks without specifying in which room they are positioned. Also for the caretakers of the service group the room definitions are essential because their session are connected to one room of the service unit. That means that a service caretaker has to specify the room he or she will work.

The individual groups will gain access to a room if they have access to a rack which is located within that room. Therefore the access of groups to a given room does not need to be defined from the service group. It is automatically determined by the access to racks.

1.3.3.1.The Room table

As in all other Mausoleum tables you can select the content you want to see in this table by right mouse click within the table and selecting "Arrange columns" in the context menu:

Copy table
Print table
Count objects
Arrange columns
Filter values

You will get the dialog for selecting the columns you want to use.



In the shown example the name of the room, the name of the groups having access to this room and the security level (with colour coding) will be shown in the room table.

М				
Racks	Rooms Gr	oups Users	The Alter	At an A an A an
Name	381	Say NEV	Groups	Security level
Room1				Unknown
ingeniere		the second		
			the second second	and the second s

1.3.3.2.The Room inspector

Upon selection of a room from the list the rooms inspector will show the name the security level and a description of the room. The racks placed in the room are listed.

Lo M.	Rooms
New	Remove Set
Attributes Documen	ts
Attributes	a for the for
Name	Room 1
Se	curity level: unknown
Description	Racks
New description	Rack 1
new description	

1.3.3.3.Creating a new room

In order to create a new room you click on the "**New**"-button in the room inspector.

MAUSOLEUM 5.0	B1 <head></head>	_ 🗆 🔀
all all	Rooms	de l'élie
New	Remove	Set

You will be asked for the name of the new room

NO

After clicking the "Yes"-button the new room will be created.

1.3.3.4.Removing a room

Removal of a room in the service unit is only possible if no racks are in this room and therefore no groups have access to this room. You see that the "**Remove**"-button in the Room-inspector is only enabled if you select a room in the room table which matches this condition.



If you click the "**Remove**"-button you will be asked whether you are really want to proceed. If you answer this with "**Yes**" the room will be removed from the service group.

1.3.3.5.Renaming a room

If you want to change the name of a room you select the room in the room table and type in the desired name in the **Name** field in the room inspector. After hitting the [return] or [enter] key the name will be set.

Cor h	Rooms	all the
New	Remove	Set
tributes	Documents	

You are neither allowed to set an empty name ("") nor to use a name which is already given to another room.

If "**Edit in table**" is set to "**On**" in the Preferences you can also click in the Name column of the room table and type in the new name in the dialog.

Request		$\overline{\mathbf{X}}$
Enter Value	Room 1	
Y	ES	NO

Hitting the [return] or [enter] key or preesing the "YES"-button sets the new name for the room. The general limitations for room also apply here.

1.3.3.6.Setting the security level of a room

Rooms can have different security levels (like SPF). This is relevant if you want to control cage traffic between rooms of different security levels. There are three defined security levels for rooms:

- Low
- Medium
- High

The security level is shown in the "Security level"-button in the room inspector:

	Rooms	
New	Remove	Set
tributes Docur	nents	24
ame	Room1	and the second

To change it you click on this button and will get this dialog:

Request		
Security level	NAX Y	A A
	Unknown	
M. AN	Low	IF COM
NY NE	Medium	
24.7	High	
L.	NO	Sale
Long	Lo la	Lo

Clicking on of the top four buttons sets the value for the security level. Clicking the "**NO**"-button leaves the security level unchanged.

The security level of a room has consequences for mouse handling. The following lines are not applicable for the head of the service group because this user cannot transfer mice. They are relevant for regular users or for caretakers of the service group.

Mouse transfers between rooms with a defined security level are not recommended. If you want to transfer mice from one room with a defined security level to another room which also has a defined security level you will get informed by the mouse pope that you shouldn't do that. If the security level of the target room is lower or equal to the security level of the source room you will get this alert:

Thus quoth the	mouse pope 🛛 🔀
	M ice should not be moved to another room. If you proceed a mail will be sent to all responsible persons! Do you want to proceed anyway?
N. N	NO YES

If you proceed by clicking "**YES**" a mausoleum mail with the details of this transfer will be sent to the gurus of the group and – if the service group is involved – to the head of the service group.

If the security level of the target room is higher than the security level of the target room you will a get an even harsher mouse pope alert:



If you proceed by clicking "**YES**" you have to give an explanation for this transfer which is then added to the mail which also will be sent to all responsible persons.

1.3.3.7. Changing the room description

You can give a description for the rooms. In order to edit this description you type in the description in the Description-field. Upon change this field will turn red.

Cold 1.	Rooms	6-19
New	Remove	Set
ributes Docum	nents	
Attributes	to fight	1
lame	Room1	A CONTRACTOR
and a second	Security level: unknown	
escription	Racks	
lew description	1340	Mar 1

Because there is no clear end-signal (descriptions might contain paragraphs an evene empty lines) you have to press the blue "**Set**"-button to enter your description into the database.

1.3.4.Racks

If you have defined rooms within the service unit you can start defining the racks which are located in these rooms. Racks in Mausoleum are assumed to have a regular grid with spots each of them capable of containing exactly one cage (or double cage). Racks can be either single- or double sided.

The access of the groups to the service unit is (with one exception see below) controlled by the racks to which the groups have access to.

1.3.4.1.The rack table

As in all other Mausoleum tables you can select the content you want to see in this table by right mouse click within the table and selecting "Arrange columns" in the context menu:

Copy table
Print table
Count objects
Arrange columns
Filter values

You will get the dialog for selecting the columns you want to use.

olumns [Number of columns] nd [The end date of the object] oreign key [Foreign ID from other system] roup (Group name] D [The technical ID]	Name [Name of the rack] Room [The room in which the racks is located] Cages [Number of cages] Groups [Name of groups using this rack]
ws [number of rows] des [Number of sides] art [The start date of the object]	

In the shown example the name of the rack, the room in which the rack is in, the number of cages in the rack and number of spots in the rack and the name of the groups having access to this rack will be shown in the rack table.

М				
Racks Rooms Group	s Users	A ANA	LAND AN	4
Name	Room	Cages	Groups	-
Den 1. d	Room 1	0 / 98		
каск 1	Koom i	0730		

1.3.4.2.Creating a new rack

In order to create a new rack you select "**Racks**" in the top element of the Inspector window and press the blue "**New**"-button in the rack inspector. Please remember that rack creation is only possible if at least one room is already defined in the service group. Because in this group all the racks have to have a defined location.

	Racks	
New	Remove	Set

In the following dialog you will be asked for the name and the dimensions of the rack:

Request				×
Name	Rack 1		VES	K
sides	2	-	TES	P
rows	7	-	NO	P
columns	7	-	NO	

You are neither allowed to set an empty name ("") nor to use a name which is already given to another rack. For the dimensions of the rack you have here the following options

- **sides**: 1 for single- or 2 for double-sided racks
- **rows**: 4 to 15
- **columns**: 4 to 15

Clicking "**YES**" brings up the dialog which lets you specify the date when this rack was added to the service unit.

6 7 8 9 10 11 12 April 200 13 14 15 16 17 18 19 June 200 20 21 22 23 24 25 26 August 200 20 21 22 23 24 25 26 August 200 27 28 29 30 31 September 2010		2	1 2	3	4	5	January	2005
o 7 8 9 10 11 12 April 200 13 14 15 16 17 18 19 May 200 20 21 22 23 24 25 26 August 200 207 28 29 30 31 October October 201	e .	7 1	0 0	10	44	40	March	2006
13 14 15 16 17 18 19 May 200 20 21 22 23 24 25 26 July 200 20 21 22 23 24 25 26 July 200 27 28 29 30 31 Cather Cather 201	0	1 0	0 9	10	11	12	April	2007
20 21 22 23 24 25 26 July 200 27 28 29 30 31 September 201	13 1	14 1	15 16	17	18	19	May June	2008
27 28 29 30 31 August 201	20 2	21 2	22 23	24	25	26	July	2009
27 20 23 30 31 October 000	27 2	20 2	20 30	31	-		September	2010
	21 2	20 2	23 30	131			October	2011
November December 201	Kill						November December	2012

Clicking "**YES**" brings up the next dialog which asks for the room where the new rack is located. You have the choice between the defined rooms of the service unit. This choice will be presented as dropdown list or as buttons if less than 5 items are available.

Request	
Select the room for the new rack	
Room 1	10 million
Room 2	S
NO	121

1.3.4.3.Removing a rack

Removal of a rack in the service unit is only possible if no cages are in this. You see that the "**Remove**"-button in the rack inspector is only enabled if you select a rack in the rack table which matches this condition.



If you click the "**Remove**"-button you will be asked whether you are really want to proceed. If you answer this with "**YES**" the rack will be removed from the service group.

1.3.4.4.Renaming a rack

If you want to change the name of a rack you select the room in the room table and type in the desired name in the **Name** field in the rack inspector. After hitting the [return] or [enter] key the name will be set.

	Racks	
New	Remove	Set
ttributes		
me	16 64	D.

You are neither allowed to set an empty name ("") nor to use a name which is already given to another rack.

If "**Edit in table**" is set to "**On**" in the Preferences you can also click in the Name column of the rack table and type in the new name in the dialog.

Request		×
Enter Value	Rack 1	
Y	ES	NO

Hitting the [return] or [enter] key or preesing the "**YES**"-button sets the new name for the rack. The general limitations for room also apply here.

1.3.4.5.Moving a rack

Although in your daily work you won't change the location of a rack you can (e. g. if you entered a wrong room) change the room where the rack is located. In order to do so you select the rack in the rack table and presse the "**Move**"-button in the rack inspector. This button is active only if there are additional rooms present in the service group.

	Mi	ove
11	Open acce	ss for group
77	Disbar acce	ess for group
Rep	ort	Preferences
Inda	Pode	Sleen Inf

In the following dialog you will be asked to which room the rack should be transferred.

Request	X
Move	
Room 2	-
VES	NO

Clicking "**YES**" trensfers rack into the selected room in the database. All groups which have access to that rack will also gain access to the new room you selected.

1.3.4.6.Giving a group access to a rack

If you want to allow the access of a group to a rack of the service group you select the rack of interest in the rack tabel and click the button "**Open access for group**" in the rack inspector.

the states	M	ove
W	Open acce	ss for group
111	Disbar acce	ess for group
Rep	oort	Preferences
Undo	Redo	Sleep Info

In the following dialog you have the choice between the groups which have no access to the selected rack at the moment. This choice will be presented as dropdown list or as buttons if less than 5 items are available.

Request		×
Select group	A CAN	
D)	tester	
Mr / st	tester2	ny .
	tester3	17
	tester4	
	NO	
Lot	here here	100

1.3.4.7.Removing the access to a rack

You can disbar the access of a group to a given rack whenever you need to. If you select a rack in the rack table which is accesible from at least one group you will find that the button "**Disbar access for group**" is enabled.

Actions -		
11 1	Move	
	Open access for group	8.5-
	Disbar access for group	

After clicking this button you have the choice between the groups which have access to the selected rack at the moment. This choice will be presented as dropdown list or as buttons if less than 5 items are available.

Request	
Select group	
A MARTIN	tester3
N/ATA	tester
Sen 11	NO

A little problem arises if you want to stop the access for a group which still has at least one cage in the selected rack. If this happens you will get a dialog in which you are informed about this fact and you are asked if you agree that those cages will be removed from the rack in the selected group.

1.3.5.Groups

The groups shown in the groups table of the service group client are all regular groups which are defined in the Mausoleum installation. Groups can be created or removed by the Mausoleum Administrator only. So even as Head of the service group you cannot create new groups or remove existing ones.

1.3.5.1.The group table

After selecting "**Groups**" in the top element of the Inspector window the group table appears showing the names of the defined groups in this Mausoleum installation.

M													_ 🗆 🔀
Racks	Rooms	Groups	Users	AX	-23-	XX	-	AN	-25-	A	-	-	N-a-
Name	1	NY STATE	SA	and the second	1	1308	1.19	0.4	N. Maryy		and the second	No. 10	Part and a second
tester													
tester2	!												
tester3	1												
tester4	l I												
1	The g	C/	A	47	- A	1 and	AL	1	1	14	1	· Jorg	her -

1.3.5.2.The group inspector

Upon selection of a group from the list the group inspector will show the name of the group which cannot be edited. The racks of that group are listed.



In this example you see that this group has no rack in the service unit because no Rack shows the "**[S]**" as prefix. If one rack (e. g. rack "**number3**") would be part of the service unit this list would like this:

New Remove Set Attributes Rester 3 Racks [S] number 3 number 1 number 2	aller they	Groups	6-151
Attributes Vame tester3 Racks [5] number3 number1 pumber2	New	Remove	Set
Racks lester 3 Racks lester 3 IS] number 3 number 1 number 2	Attributes		
Racks	Name	tester3	2.20
[S] number3 number1 number2	- Racks		1 12
number1 number2	[S] number3		
number2	number1		
	number2		

Now you can see that only the rack "**number3**" shows the "**[S]**" as prefix indicating that this that rack is now under the control of the service group and accessible for caretakers of the service group.

1.3.5.3. Importing a rack to the service group

Above the usual way was shown how racks were defined in the service group and groups gained access to this rack. But if the groups have already defined and worked with racks which now should be imported to the service group another procedure can be used.

You first select the group in the group table. Then the racks of this group are listed in the group inspector. After selecting a rack which is not yet part of the service group (indicated by the missing "[S]" prefix) in the "Racks" field of the group inspector you will notice that the button "Import rack in Service Group" becomes active.



Clicking this button brings up a dialog which lets you choose the details of this import. There are two main options. The easy option is to import the rack as it is and put it into a room of the service unit. This option is always available in the tab "**Create new service rack**" in the dialog. Here you specify the room where the rack is located and you can also change the name of the rack and thereby apply the nomenclature guidelines of the service group.



But if two groups already used the same rack without the service group and they somehow agreed not to use the same spots for their cages and they do not want to loose the information where the cages sit you want to use a different strategy. In this case you prefer to mix the information from two or more groups. In the first step you will import the respective rack from the first group as it is like mentioned above. Then you select the corresponding rack from the second group and incorporate this rack into the one already present in the service group. To do so you select the tab "**Incorporate into existing service rack**" of the dialog. This option is available and therefore the tab only present if at least one rack with the same dimensions (sides, row and columns) as the selected rack is defined in the service group which is not already shared with the select group.

Request			Σ
You can either import group will be created. rack'. The other poss existing service rack. existing service rack'.	t the rack as a v If you want to c sibility is to inco If you want to	whole. Then a new r lo that please click 'C proorate the racks o do this please click	ack in the service Create new service f this rack into an C Incorporate into
Create new service rack	Incorporate into exis	ting service rack	1 AL
Rack	number	2	A
T	YES	NO	20
2 N	The factor	A A	

You find a selection box where the possible racks of the service group are shown. After selection of the appropriate rack of the service group you click "**YES**" in this tab. Now a problem can arise. It is possible that some spots which are used in the group rack are already occupied in the rack of the service rack. If this happens a dialog shows these conflicts. You see a graphical representation of the rack where the spots occupied in the service group only are shown in green, those occupied in the selected group only in yellow and the conflicting spots which are occupied in both groups are shown in red.



If you proceed by clicking "**YES**" the cages of the rack in the selected group which are at spots already occupied in the rack of the service group will be removed from the rack and you will find them afterwards in the transfer area.

1.3.5.4. Removing a rack from the service group

You can also remove a rack of the selected group from the service group. If you do this the rack is still present in both the service group and the selected group. But it is no shared anymore. Therefore the respective rack in the service group will no longer contain the cages of the selected group and in the selected group you cannot see the occupied spots from other groups. In addition the cages of the selected group which are in this rack will not be accessible for the caretakers of the service group.

You first select the group in the group table. Then the racks of this group are listed in the group inspector. After selecting a rack which is already part of the service group (indicated by the "**[S]**" prefix) in the "**Racks**" field of the group inspector you will notice that the button "**Remove rack from Service Group**" becomes active.



After clicking this button the rack is removed from the service group and in all groups which share this rack the information about occupied spots etc. is updated.

1.3.5.5.Getting reports for the groups

As head of the servcie group you can produce detailed reports for all the groups. These reports show the number of mice, cages and matings listed by rack, by room and by license. To get these reports you select

in the group table the groups you are interested in and press the right mouse button. In the context menu you select the item "**Show fact sheet**"



The window with the fact sheets will appear and you receive the group report for the selected groups.

Mausoleum G	roup repo	rt ort		X		a	J.	X	La L	-	
Fact sheet fo	r group tes	ter2		75		7					-
27. Dec 2040.4	2.08.24					0	2	т		matings	1
Z7. Dec 2010 1	5:00:24				95	¥ 104	r 63	252	cages 1/3	matings 21	Ĵ
bylicense						104		LUL	140		
none Antidepressant tre	atment /Autopl	hagy			79 6	104	63	246 6	74 3	21	
by rack none BfAtM_107_Rack Caesar_218_Rack Poppelsdorf	1 <1				40 34 11	60 44	2 37 24	2 137 102 11	41 32 3	10 11	15 M
by room none					85	104	63	252	76	21	1
60- 50- 30- 20- 10-	2 4		é	1 - I	10	n t:	2	14	16	18 (months)	
60- 50- 40-											
30- 20-											1
10-				_				_			
10- 0	2		4			3	_	8	,	0 [micz]	

You see below the table with the statistical information diagrams which show

- age structure of colony: The height of the columns represent the number of mice in that colony having the same age in months.
- cage occupancy in colony: This diagram tells you how many cages are present in the colony with a given number of mice within.

The reports can be printed and the numbers can be transferred to other programs (e. g. Excel) for further analysis. To select data from fact sheets to the system clipboard you just drag the mouse with pressed left mouse button over the data you want to copy.

X Mausoleum Group report	A 10-	4	
Fact sheet for group tester2			
27. Dec 2010 13:06:24	ď	Ŷ	Γ
Total	85	10.	
by license none Antidepressant treatment /Autophagy	79	10.	
by rack none BfAMd_107_Rack1 Caesar_218_Rack1 Poppelsdorf	40 34 11	6) 4 1	
by room	05	40	

After releasing the left mouse button the data which can be transferred to the system clipboard is shown with individual frames aorund every detected data element.

Mausoleum Group report	11-	4	P	5	4
Fact sheet for group tester2					
27. Dec 2010 13:06:24	ď	Ŷ	?	т	oages
Total	85	104	63	252	143
by license none Antidepressant treatment /Autophagy	79	104	63	246 6	74 3
by rack none 8/ArM 107 Rack1 Caesar 218 Rack1 Poppelsdorf	40 34 11	60 44	2 37 24	2 137 102 11	41 32 3
ALERT age structure of cor 70 60 50 50 50 50 10 20 10 10 10 10 10 10 10 10 10 1	ant to value pboar	co es te d?	py o th	the	

If you select "**OK**" in the dialog the data elements are transferred to the system clipboard in a way that they are available for the paste operation in other programs (e. g. Excel)

N	Microsoft Excel - Mappe1							
	🖻 🖬 🎒	🗟 쁓 🐰 🛛	à 🛍 💅 🔺	າ 🗝 👻 🍓	Σ			
	Datei Bearbeiten Ansicht Einfügen Format Extras Daten Een							
	A1 Fact sheet for group tester2 							
	A	В	С	D				
1	Fact sheet for	r group tester2	2					
2	27. Dec 2010	ð	ç	?				
3	Total	85	104	63				
4	by license							
5	none	79	104	63				
6	Antidepressa	6						
7	by rack							
8	none			2				
9	BfArM_107_F	40	60	37				
10	Caesar_218_	34	44	24				
11	Poppelsdorf	11						
12					T			

1.3.6.Users

In the service group you also have defined users as in the other groups in your Mausoleum installation. But the users roles in this group are quite restricted. In this group there only two possible kinds of users:

HEAD OF SERVICE: This user is the main user of the service unit. This user can create new racks and rooms and is responsible for the distribution of these objects to the groups. In addition this user can create reports for the groups and for the whole service unit.

SERVICE CARETAKER: This user is the one working with the mice and cages within one room. He or she can see and modify the attributes of all the mice within the room regardless of the group to which they belong.

1.3.6.1.The User table

As in all other Mausoleum tables you can select the content you want to see in this table by right mouse click within the table and selecting "Arrange columns" in the context menu:

Copy table
Print table
Count objects
Arrange columns
Filter values

You will get the dialog for selecting the columns you want to use.



In the shown example the color, the name, the status/user role and the email of the user will be shown in the user table.

ſ	М				X
ſ	Racks Rooms	Groups Users	LANDAN	and and the	-
	C	Name	Status	Email	
		head	HEAD OF SERVICE		
Π		care	SERVICE CARETKAER		-

1.3.6.2.The user inspector

Upon selection of a user from the user table the user inspector will show the attributes of the selected user.

New	
	Remove Set
Attributes Privileges	1244
lame	care
assword	Change Password
Status	SERVICE CARETKAER
anguage	English
Email	N 100 31/10
Color	

As usual you can edit the fields shown in yellow by clicking or editing the content.

1.3.6.3.Creating a new user

You creat new users by clicking the "New" button in the user inspector.

MAUSOLEUM 5.0	B1 <head></head>	
600	Users	S. C.
New	Remove	Set

A dialog will appear in wgich you will specify the name, password and status/user role of the new user. As mentioned above in the service group there are only two different user roles:

HEAD OF SERVICE: This user is the main user of the service unit. This user can create new racks and rooms and is responsible for the distribution of these objects to the groups. In addition this user can create reports for the groups and for the whole service unit.

SERVICE CARETAKER: This user is the one working with the mice and cages within one room. He or she can see and modify the attributes of all the mice within the room regardless of the group to which they belong.

Mama		
Name	care	
Password	••••	2
Status	HEAD OF SERVICE	-
	HEAD OF SERVICE	-
YES	S SERVICE CARETKAER	le la

If you confirm the data using the "**YES**" button you will be asked to reenter the password thus completing the input.

Request	\mathbf{X}
Verify Password	••••
YES	NO
1 million	1 and

1.3.7. Getting the report for the whole service unit

The head of the service group can also produce a report for the whole service unit. The focus of this report is a bit different compared to the reports for individual groups. In this reports the number of cages within the whole unit, each room of the service unit and the racks therein is shown for each group and in total as well as the unused space for each element. In oreder to get this report you click the "**Report**" button in the Mausoleum inspector.

Rep	port	Preferences	
Undo	Redo	Sleep	Info

You will get a report for the service unit with tables containing information about the number of cages per group and a graphical representation of these numbers first for the whole unit and details for each room and below for each room with details for each rack.

ervice report	Not P	NA.	A A	
Service report: 27.	Dec 2010 14:30:54			F 71.80
•				
Vhole unit				
'otal				
			1	
Room: Room 1				
Room: Room 2				
Room	Group	Cages	Percent	
Room 1	tester		3	0,61%
	tester4		170	34,69%
	Free space		207	42,24%
Room 2	tester4		51	85.00%
	Free space		9	15,00%
7-4-1	Total		60	0.66%
Iotal	tester tester3		110	20,00%
	tester4		221	40,18%
	Total		550	39,21%
iotal				
Rack: Rack 1				
Rack: number3				
Rack: Rack1				
Pack: Pack?				
Rack: number2				
Back	Group	Cages	Percent	
Rack 1	Free space	Jages	98	100,00%
	Total		98	
number3	tester3 Free snace		54	96,43%
	Total		56	0,01 8
Rack1	tester4		71	50,71%
	Free space		69	49,29%
Rack2	tester4		99	70.71%
	Free space		41	29,29%

The colors are given for each group in the graphical representation and in the tables containing the numbers.

The reports can be printed and the numbers can be transferred to other programs (e. g. Excel) for further analysis. To select data from fact sheets to the system clipboard you just drag the mouse with pressed left mouse button over the data you want to copy.

	and the second sec	The second second		
Service report	: 27. Dec 2010 14:30:54			-
Manta unit				
whole drift				
otal				
u				
Room: Roor	m1			
Room: Roor	m 2			
		I		
Room	Group	Cages	Percent	
Room Room 1	Group tester	Cages	Percent	0,61%
Room Room 1	Group tester tester3 tester4	Cages	Percent 3 110	0,61% 22,45% 34.69%
Room Room 1	Group tester tester3 tester4 Free space	Cages	Percent 3 110 170 207	0,61% 22,45% 34,69% 42,24%
Room Room 1	Group tester tester3 tester4 Free space Total	Cages	Percent 3 110 170 207 490	0,61% 22,45% 34,69% 42,24%
Room Room 1 Room 2	Group tester tester3 tester4 Free space Total tester4	Cages	Percent 3 110 170 207 430 61	0,61% 22,45% 34,69% 42,24%
Room Room 1 Room 2	Group tester tester3 tester4 Free space Total tester4 Free space	Cages	Percent 3 110 170 207 430 61 9	0,61% 22,45% 34,69% 42,24% 85,00% 15,00%
Room 1 Room 1 Room 2	Group tester tester3 tester4 Free space Total tester4 Free space Total	Cages	Percent 3 110 170 207 430 51 9 60	0,61% 22,45% 34,69% 42,24% 85,00% 16,00%
Room 1 Room 2 Total	Group tester testerd testerd Total tester4 Free space Total tester	Cages	Percent 3 110 107 207 430 51 9 60 3	0,61% 22,46% 34,69% 42,24% 85,00% 16,00% 0,55%

After releasing the left mouse button the data which can be transferred to the system clipboard is shown with individual frames aorund every detected data element.

Service report			a A
Service report: 27. f	Dec 2010 14:30:54		
whole drift			
rotal			
u			
Room: Room 1			
Room: Room 2			
Room	Group	Cages Pi	ercent
Koom 1	tester3	110	22,45%
	tester4	170	34,69%
	Total	490	92,29.6
Room 2	tester4	51	85,00 %
	Free space	9	15,00 %
Total	tester	3	0.55%
	tester3	110	20,00 %
	Free space	211	39,27%
	Total	550	
Room: Room 1			ſ
	ALE	RI	
Fotal .			
U		Do you want to	copy the
		selected value	s to the
Rack: Rack 1			
Rack: Rack 1 Rack: number3		Selected value	10
Rack: Rack 1 Rack: number3		clipboar	d?
Rack: Rack 1 Rack: number3 Rack: Rack1		clipboar	d?
Rack: Rack 1 Rack: number3 Rack: Rack1 Rack: Rack2		clipboar	d?
Rack: Rack 1 Rack: number3 Rack: Rack1 Rack: Rack2 Rack: number2		clipboar	d?
Raok: Raok 1 Raok: number3 Raok: Raok1 Raok: Raok2 Raok: number2		clipboar	d?
Raok: Raok 1 Raok: number3 Raok: Raok1 Raok: Raok2 Raok: number2	Group	clipboar	d?
Rack: Rack 1 Rack: number3 Rack: Rack1 Rack: Rack2 Rack: number2 Rack Rack 1	Group Free space	clipboar	d?
Rack: Rack 1 Rack: number3 Rack: Rack1 Rack: Rack2 Rack: number2 Rack Rack 1	Group Free space Total	clipboar	d?
Raok: Raok 1 Raok: number3 Raok: Raok1 Raok: Raok2 Raok: number2 Raok 1 number3	Group Free space Total tester3	clipboar	d?
Rack: Rack 1 Rack: number3 Rack: Rack1 Rack: Rack2 Rack: Rack2 Rack Rack 1 number3	Group Free space Total Vesterô Free space	clipboar	d?
Rack: Rack 1 Rack: number3 Rack: Rack1 Rack: Rack2 Rack: Rack2 Rack 1 number3 Rack1	Group Free space Total tester4	clipboar	d? Cancel

If you select "**OK**" in the dialog the data elements are transferred to the system clipboard in a way that they are available for the paste operation in other programs (e. g. Excel)

Kicrosoft Excel - Mappe1									
0	D 😂 🖬 🎒 🔕 💖 👗 🖻 🛍 💅 🗠 + 🗠 - 🍓 :								
	Batei Bearbeiten Ansicht Einfügen Format Extras Daten Fe								
	A1 💌 = Room								
	Α	В	С	D					
1	Room	Group	Cages	Percent					
2	Room 1	tester	3	0,61%					
3		tester3	110	22,45%					
4		tester4	170	34,69%					
5		Free space	207	42,24%					
6		Total	490						
7	Room 2	tester4	51	85,00%					
8		Free space	9	15,00%					
9		Total	60						
10	Total	tester	3	0,55%					
11		tester3	110	20,00%					
12		tester4	221	40,18%					
13		Free space	216	39,27%					
14		Total	550						
AF									

1.4. Working as Caretaker of the Service group

1.4.1.Logging in

During the automatic creation of the service group no caretaker is created for the service group. These users have to be added by the head of the service group as described earlier.

In the Login dialog you type in the login data.



There is a big difference to the login procedure of users from regular groups. After login in regular groups all the active objects are fetched from the server and used by the client. This is not possible for the service group because the service group has no mice, cages and so on. Rather the caretaker of the service group has to use the objects from different groups. This would lead to a big problem because this would mean that in this case all objects from all groups would have to be transferred to the client. Therefore Mausoleum uses a different approach. The caretaker has to specify during login which room will be used for this session. This is done using a dialog offering the choice between the rooms which are defined in the service group at the moment. This choice will be presented as dropdown list or as buttons if less than 5 items are available.

Request		×
Please selec	the room for your session	
Tos	Room 1	
24	Room 2	24
	NO	24
	2 1 1 2 1 1	

After selecting the room, all the active objects necessary for work in this room are collected from the regular groups and the service group and the usual startup procedure is performed.

The client will get informed about all changes which are affecting the data in the selected room as you are used to. Also the users of a regular groups will get notified upon every change of their data which is invoked by the caretaker of the service group. Data from other rooms will not be presented in this client.

1.4.2.Differences to regular Mausoleum clients

The work in the client of a caretaker of the service group is very similar to the work in a client from a regular Mausoleum client. There are certain differences though.

Only one room: One difference was mentioned in the previous paragraph. A craetaker of the service group always sees only the objects (mice, cages) which are located in the room the user defined at the beginning of the session.

More than one group: Another general difference is that the caretaker of the service group can see objects from different groups if they have mice or cages in the room of the session. You can see this behaviour clearly in this representation of a rack which is shared between groups A and B

User of group A					Α		User of group B	Caretaker of service group						
394	393	199	T	129	21	2 <mark>0</mark>	154	394	393	199	154	129	21	2 <mark>0</mark>
23 6	15	53	108	79	376	16	it it it	23 <mark>6</mark>	15	53	108	79	376	16
135	231	22	86	223	153	105	TATAT	135	231	<u>2</u> 2	86	223	153	105
50	59	43	218	280	185	411		50	59	4	218	280	185	411
290	18	288	57	404	403	123	131	290	18	288	57	404	403	131
102	112	122	254	61	130	357		102	112	122	254	61	130	357
101	<mark>41</mark> 0	6	206	308	27	272	89	101	<mark>41</mark> 0	6	206	308	89	27 <mark>2</mark>
72	64	291	340	27	27	27	212 77	72	6 <mark>4</mark>	291	340	212	27	77

The users of the regular groups can see only the cages of their group. They see that certain spots of the rack are occupied by cages of another group but they cannot see the contents of those cages. The

caretaker of the service group however has full access to all the data of the cages which are located in the racks in the sepcified room.

Setting of attributes: Because the caretaker of the service group has access to the mice of different groups there can arise certain conflicts if attributes of the mice are going to be changed. E. g. the line of a mouse can be set only to a line of the group the mouse belongs to. Therefore the caretaker cannot set the line if mice from different groups are selected. The same is true for setting the strain, genotype or license. These attributes can only be set if objects from one single regular group are selected.

Adding tasks: A similar difference is present if you want to add a task to mice from different groups. You can do so but you can only select from the Mausoleum-defined standard procedures. If the mice do not belong to a single regular group, none of the special standard procedures defined in a group can be used. This is only possible if all the selected mice belong to a single regular group.

Dragging of mice and cages: The caretaker of the service group - as usual - can drag cages or mice to the graphical representation of the rack in the rack window thereby defining a new position for the selected cage or the new cage for the mice. But there aere a few restrictions.

One major obvious restriction is that in one cage there can be only mice from one single regular group. Therefore dragging of mice is only possible if all the selected mice belong to a single regular group. Otherwise no target can be selected. They can be dragged only the pool area which does not lead to any consequences for the data.

Another restriction is that a cage from one group can be dragged only to a rack which is available for this group. This can happen if more than one rack is present in the room selected for the session and the group of the cage hasn't got access to all of them. If the caretaker of the service group now tries to drag the cage or mice to a rack which is not available for the respective group, the display of the rack changes indicating that dragging isn't possible:



Creating new mice: The service group doesn't contain any mice. All mice belong to one of the regular groups which have access to the room of the actual session. Therefore if the caretaker of the service group creates new mice the group to which these mice belong have to be specified. The dialog has therefore a selection field on top where the group has to be chosen.

Reque	st										
Group	-			tester							
1 Mo	ise		-	Share mice with all users							
T		1	T	1 2		January February	2006				
3	4	5	6	7	8	9	March April	2007			
10	11	12	13	14	15	16	May June	2009			
17	18	19	20	21	22	23	July August	2010			
24	25	26	27	28	29	30	September October	2011			
31	10						November December	2013			
	Z	YE	s	3			NO	97			

Creating new cages: The service group also doesn't contain any cages. All cages belong to one of the regular groups which have access to the room of the actual session. Therefore also if the caretaker of the service group creates new cages the group to which these cages belong have to be specified. The dialog has therefore a selection field on top where the group has to be chosen.

F	leque	st									
X	Group				tester						
	Choos	se cag	je typ	е	Normal cage						
						1	2	2006			
	3	4	5	6	7	8	9	March April	2007		
	10	11	12	13	14	15	16	May June	2009		
	17	18	19	20	21	22	23	July August	2010		
	24	25	26	27	28	29	30	September October	2011		
	31	1						November December	2013		
		I. F.	YE	s	dar v		NO	3			