



This walkthrough script is designed to guide you through loading the SwarmDemo “**School of Science**” demonstration dataset.

The data files used below, other guides and a copy of this script are available from:

<http://swarm.support.switchsystems.co.uk>

Please now log into your “development” swarm installation – this is an area completely separate from everyone else, allowing you to play around with the data in your own sandbox.

If you have problems logging in or accessing these sites, please let me know.



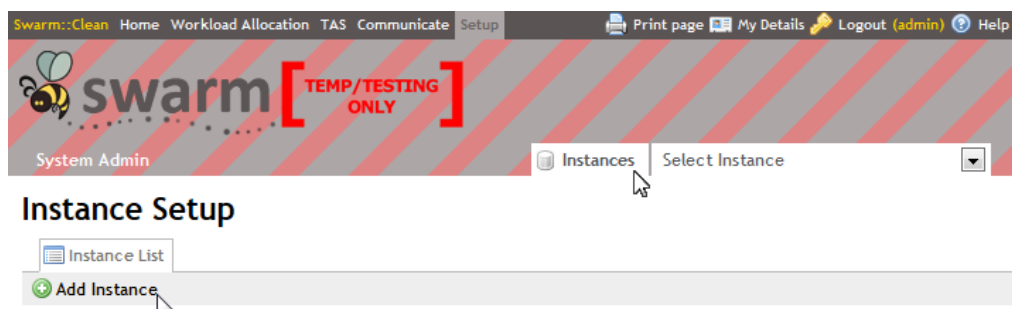
Initial Setup

Note: In a real institution rollout, these instances, permissions and group settings would ideally have already been done by a central administration team.

Objective: Create a new instance and call it "Training Session 1".

*If you are logging into a system along with other admin users, give your **name** as the instance name so that you can differentiate between each other, e.g. "Training Session (John)"*

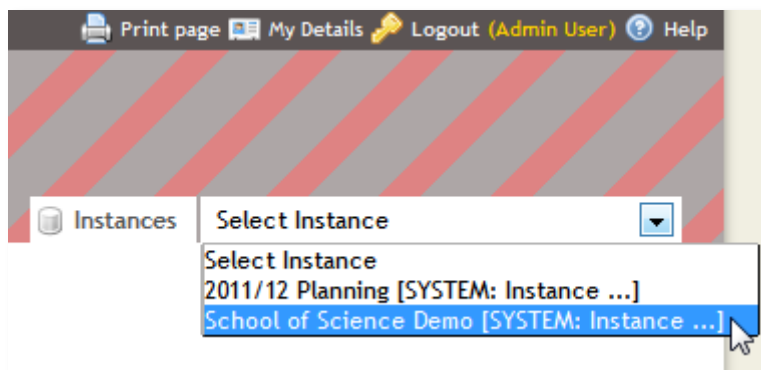
1. Login as a system admin
2. Create an **instance**
 - a. To create an instance click on *Instances*
 - b. Next click *Add Instance*



- c. Enter Instance Name and Beginning of Academic Year.
- d. The other fields are not important right now, but you can click on the (?) icons to find out more information.
- e. Click *Add Instance*

Selecting your active instance:

If you have more than one instance in the system, you can switch between them by using the Instance selection box in the top right. As a system administrator, you can see all instances in the system. Regular users will be only shown instances that are visible and that they have access to.



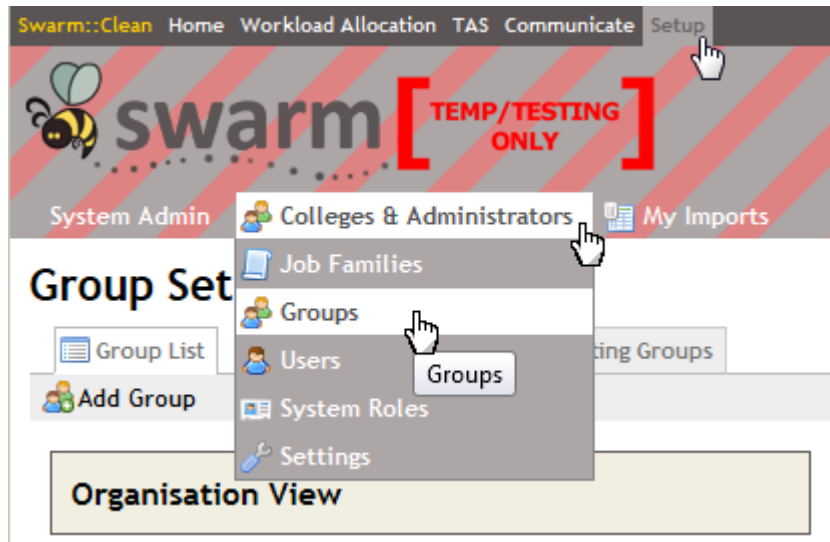


Objective: Create three groups, with the following structure:

- **School of Science**
 - Engineering
 - Mathematics

3. Create some **groups**

- a. Click *Setup > Colleges & Administrators > Groups*



- b. Click *Add Group*

- c. Enter the *Group Name*.

*Hint: start with the 'highest level' group, e.g. **School of Science***

- d. To add a more groups, click *Add Group* then enter *Group Name*. Use the **Parent Group** select box to choose to add a group underneath another group.

When done, your group list should look like this:

Group Setup

[Group List](#) [Group Organisation](#) [Reporting Groups](#)

[Add Group](#)

Organisation View

- School of Science
 - Mathematics
 - Engineering

Showing 1 to 3 of 3 results

#	Group Name	Members
3	Engineering	0
2	Mathematics	0
1	School of Science	0



Objective: Set some permissions for your organisation.

- To get group permissions, select the group that you want the permissions to apply to. We suggest applying this to the topmost group. When the group details page loads, click *Group Permissions*.
- Click *Edit*
- Check the checkbox for all read permissions **excluding any that start with the word "setup/"**.
- Click Save Changes.

Group: School of Science

Details
Group Members
Group Settings
Group Permissions

View Permissions

Permission Section	Read	Add
access	<input checked="" type="checkbox"/>	<input type="checkbox"/>
access/self	<input checked="" type="checkbox"/>	<input type="checkbox"/>
access/unrelatedInfo	<input checked="" type="checkbox"/>	<input type="checkbox"/>
access/reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>
system/help	<input checked="" type="checkbox"/>	<input type="checkbox"/>
setup	<input type="checkbox"/>	<input type="checkbox"/>
setup/settings	<input type="checkbox"/>	<input type="checkbox"/>
setup/groups	<input type="checkbox"/>	<input type="checkbox"/>
setup/groups/reporting	<input type="checkbox"/>	<input type="checkbox"/>
setup/jobfamilies	<input type="checkbox"/>	<input type="checkbox"/>
setup/systemroles	<input type="checkbox"/>	<input type="checkbox"/>
setup/users	<input type="checkbox"/>	<input type="checkbox"/>
setup/permissions	<input type="checkbox"/>	<input type="checkbox"/>
setup/instances	<input type="checkbox"/>	<input type="checkbox"/>
setup/instances/invisible	<input type="checkbox"/>	<input type="checkbox"/>
communicate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
communicate/email	<input checked="" type="checkbox"/>	<input type="checkbox"/>
communicate/comment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/teachingallocation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/modules	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/studentprojects	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/tutees	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/rsas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/rsas/categories	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/grants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/grants/categories	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/userroles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/pgr	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/workload/linemanagers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/tas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/tas/categories	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/tas/mappings	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/tas/data	<input checked="" type="checkbox"/>	<input type="checkbox"/>
modules/tas/export	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Reset
Save Changes

Setting permissions is an important but often overlooked step. As system administrators we don't need to worry about permissions, but for end-users to login to the system, the appropriate permissions must be in place otherwise they will receive access forbidden errors when they try to access the Swarm system.




Importing Users

The first piece of information we should start with getting into Swarm is your staff list. Rather than typing in each member's details by hand, we'll import it from an excel file.

Objective: Download the support files, import the **"1. Staff List.xls"** file into Swarm

If you need help with this step, or you have never imported data into Swarm before, we suggest that you check out the online video walkthrough on the support website.

- Goto the **support website** and download and extract the Swarm Demo "School of Science" zip file.
- Import some **users**
 - a. To import users click *Workload Allocation > Management > Control Panel*
 - b. Click *Import Data* icon  in the *Staff* row.
*Note: There are also other ways to get to navigate to the import area, e.g. the **User List** page has an 'import data' button in it's toolbar.*
 - c. Select Excel File by clicking on *Browse*. Select the file that relates to staff users
 - d. Ensure *Import Type* is **User Data / RA Supervision**
 - e. Select the *Group* you want to import them into.
 - f. Click *Upload File*

Import Excel File

Swarm can handle both Excel (.xls), and Excel 2007 (.xlsx) file formats. Please type in a "friendly name" for your import, then click the browse button. All fields are required.

Friendly Name	<input type="text" value="My Staff Upload"/>
Excel File (.xls or .xlsx)	<input type="text" value="O:\Projects\Swarm\Scho"/> <input data-bbox="922 1220 1007 1245" type="button" value="Browse..."/>
Import Type	<input type="text" value="User Data / RA Supervision"/>
Group	<input type="text" value="School of Science"/>
<input type="button" value="Upload File"/>	



- **Step 1. Map Datafields**

- Enter a new map name into the *Create a new map called:* field
- Map the *Uploaded Data* field to the *Swarm Datafield*

Create a new map called: ⚠ This is a required field

Swarm Datafield	Uploaded Data	Preview (first row)	Preview (random row)
Name	<input type="text" value="name"/>	Clark, Dr F	MacDonald, Dr R
Person Number	<input type="text" value="pers ref no"/>	20077	10062
Job Title	<input type="text" value="position"/>	Teaching Fellow	Research Fellow
Email	<input type="text" value="email"/>	F.Clark@popple.ac.uk	R.MacDonald@popple.ac.uk
Campus	<input type="text" value="campus"/>	Poppleton	Poppleton
Join Date	<input type="text"/>		
Date of Birth	<input type="text"/>		
Retire Date	<input type="text"/>		
Pension	<input type="text"/>		
Post Number	<input type="text" value="postn ref no"/>	P35970	P30065
Job Family Name	<input type="text" value="job family"/>	Teaching Only	Research Only
Group Name	<input type="text" value="reporting unit"/>	Engineering	Mathematics
Line Manager	<input type="text" value="line manager"/>	Elstone, Dr M	Johns, Dr K
Position Start Date	<input type="text" value="position start date"/>	40018	39448
Position End Date	<input type="text"/>		
Hours	<input type="text"/>		
Weeks	<input type="text"/>		
FTE (%)	<input type="text" value="% fte"/>	100	50
Grade	<input type="text"/>		
Scale Point	<input type="text"/>		
FTE Salary	<input type="text"/>		
Incr Date	<input type="text"/>		
Salary	<input type="text"/>		
Cost Code Salary	<input type="text"/>		
Cost Code	<input type="text" value="position cost code"/>	1-SH-F-J0A-000-USH03~~~~~...	1-SH-P-J1A-000-022-AD-B1-03...
Split	<input type="text" value="split %"/>	100	100
Position Category	<input type="text" value="position category"/>	Employee	Employee

- Click *Save changes and proceed to next step*



- **Step 2. Preview Data**

- a. Review any errors (highlighted in yellow).
- b. Can change errors by selecting the section displayed in yellow. A selection box will appear, from where you can modify the data.

Note: We are seeing these errors in the Job Family column because our imported data doesn't match up to the job families that have already been defined within swarm.

Email	Campus	Job Family Name	Group Name	Line Manager	Position Start Date	FTE (%)
F.Clark@popple.ac.uk	Poppleton	Teaching Only	Engineering	Elstone, Dr M	2009-07-24	100
M.Elstone@popple.ac.uk	Poppleton				2000-10-01	100
T.Fleming@popple.ac.uk	Poppleton				2007-05-08	100
E.Jenner@popple.ac.uk	Poppleton				2009-09-01	100
J.Loosemore@popple.ac.uk	Poppleton				2002-10-01	100
F.Owens@popple.ac.uk	Poppleton				2001-10-01	100
P.Searle@popple.ac.uk	Poppleton				2006-01-01	100

Change "Teaching Only" to:

Job Family Name

- Research
- Research
- Teaching Fellow
- Support Staff
- Teaching & Research
- Consultant
- Postgraduate
- Research

Repeat this process for any other errors you see in the Job Family column.

*Note: We can **ignore errors** in the **Line Manager** column - this is our first user import, so the system is telling us that those line managers don't already exist within Swarm, which is ok!*

- c. Click **Proceed to next step** at the bottom of the page
- d. 3. *Import Issues* will show any issues there are with importing the data.
If you need to correct more errors, do so now.
- e. Click **Proceed to next step** at the bottom of the page



- **4.Import to Database**

- a. Select the import type *“Insert Missing data and Update existing data”* and click *Import data to Swarm*
- b. Swarm will import the data.

After you see ‘Import Successful’, click *“View the import report”* to continue – the system won’t automatically refresh the page.

- **Tidy Up:**



Any data that wasn’t imported fully will be kept within the uploaded import – you can check this yourself by looking at the ‘preview data’ screen to see that all of your records imported. You may notice that there are some remaining records in this import, this is because the system can’t find the line managers that were specified for these users – but don’t worry, those users have had all of their data imported EXCEPT for their line managers.

- a. Assuming everything went well, go back to the Import Information tab and click ‘Delete’.

Objective: Check your user information

- Click *Workload Allocation > Management > Users*
You should be able to see all of the users you just imported.
- Click *(Workload Allocation) > Workload > Workload Summary*
Because your user import contained line managers, you should now see that some users have an incurred workload for RA supervision!


Side Objective: Set up some group administrators

- Setup some of those users as **group admins**.
 - a. To set users as group admins click *(Workload Allocation) > Management > Control Panel*
 - b. Click the icon  that relates to the group that you want to add a group admin too.
 - c. *Add Administrator* search will show. You can search for users by name or browse by school and job group. Users will show in the box that shows *Found (number) users*:
 - d. Select the user then click *Assign User*
 - e. User will be assigned to the group as a group admin and will be listed under the  icon
 - f. Add more group admins in the same way.



Import Grant Data

Objective: import the “3. Grants.xls” file into Swarm.

- i. To import grants click *Workload Allocation > Management > Control Panel*
- ii. Click on the  icon next to the *Grants* import
- iii. Select Excel File by clicking on *Browse*. Select the “3. Grants.xls” file from the demo data.
- iv. Ensure *Import Type* is **Research Projects (Grants)**
- v. Select the *Group* you want to import them into.
- vi. Click *Upload File*
- vii. Click *1. Map Datafields*
- viii. Enter a new map name into the *Create a new map called:* field

Create a new map called:

Swarm Datafield	Uploaded Data	Preview (first row)	Preview (random row)
Cost Centre Code	<input type="text" value="costcentre"/>	PC001034	PC001038
Research Project Name	<input type="text" value="project"/>	Project 1034	Project 1038
Sponsor	<input type="text" value="sponsor"/>	EPSRC	EPSRC
researchproject.projecttype	<input type="text"/>		
researchproject.projectssubtype	<input type="text"/>		
researchproject.sponsorname	<input type="text"/>		
researchproject.sponsorcategory	<input type="text"/>		
Notes	<input type="text"/>		
Academic Name	<input type="text" value="academic"/>	Dwyer, Prof P	Loosemore, Dr J
Hours	<input type="text" value="no of hours on project"/>	330	495
Recovery	<input type="text" value="% of recovery"/>	1	0.8
Start Date	<input type="text" value="start date"/>	39808	40026
End Date	<input type="text" value="end date"/>	40903	41120

- ix. Map the *Uploaded Data* field to the *Swarm Datafield*
- x. Click *Save changes and proceed to next step*
- xi. You will move to *2. Preview Data*
- xii. Review any errors (highlighted in yellow)
- xiii. Can change errors by selecting the section displayed in yellow. Selection box will show where you can select the category that you want to change it to.
- xiv. Click *Proceed to next step*
- xv. **3. Import Issues** will show any issues there are with importing the data
- xvi. Click *Proceed to next step*
- xvii. **4.Import to Database**
- xviii. Select the import type “*Insert Missing data and Update existing data*” and click *Import data to Swarm*
- xix. Swarm will import the data. Click *Proceed to View the import report*.
- xx. Import is now complete.

Again, if you check back on the Workload Summary screen, some more users should now have workload.

**Objective: Look at the workload across your organisation**

Now that we have a bit more workload information in the system, it would be a good opportunity to take a closer look at the system and how you can check up on each user's data.

Click (*Workload Allocation*) > *Workload* > *Workload Summary*

- Try clicking on an (i) symbol next to a user
- Try sorting and filtering the data using the header area of the workload summary table.
- Try clicking on a user

Optional Imports:

In the interests of speed, the following imports are optional and could be completed at the end of the exercise.


- 2. PGR Students.xls
- 4. Admin & Other Loads.xls
- 6. Student Project Modules.xls



Importing Taught Modules:

Lets now import the taught modules into the system. Once they're in, we can then assign teaching for those modules.

Objective: import the “5. Taught Modules.xls” file into Swarm.

- Import some teaching modules
 - i. To import modules click *Workload Allocation > Management > Control Panel*
 - ii. Click on the  icon that relates to the *Modules* import
 - iii. Select Excel File by clicking on *Browse*. Select the file that relates to modules
 - iv. Ensure *Import Type* is **Module Import (module data only)**
 - v. Select the *Group* you want to import them into.
 - vi. Click *Upload File*
 - vii. Click *1. Map Datafields*



Proceed to map the data fields – and make sure to map all the ‘Hours : Prep’ fields, as these hours are what are used to generate workload for users.
 - viii. Click *Save changes and proceed to next step*
 - ix. You will move to *2. Preview Data*
 - x. Review any errors (highlighted in yellow)
 - xi. Can change errors by selecting the section displayed in yellow. Selection box will show where you can select the category that you want to change it to.
 - xii. Click *Proceed to next step*
 - xiii. **3. Import Issues** will show any issues there are with importing the data
 - xiv. Click *Proceed to next step*
 - xv. **4.Import to Database**
 - xvi. Select the import type “*Insert Missing data and Update existing data*” and click *Import data to Swarm*
 - xvii. Swarm will import the data. Click *Proceed to View the import report*.
 - xviii. Import is complete



Allocate Teaching

Objective: Use the drag & drop GUI to allocate teaching

If you have not used the drag & drop GUI before, please read the support document “**Assigning Teaching**” - available from the **Documents** area of the swarm support site. Do this before continuing, however if you’re familiar with the GUI, read on:

- Allocate some teaching
 - i. To allocate teaching to a module click *Workload Allocation > Workload > Teaching*
 - ii. Select the group that you want to allocate teaching too. You can do this by either selecting the group from the selection box and clicking *Go* or by clicking on the *Group Name* that relates to the group you want to allocate teaching to.
 - iii. Once the teaching group has loaded, you will be shown a list of modules.
 - iv. To add Module Leaders and Lecturers to a module. Find the user in the *User List* by either searching by *Group* and then by *Job Families* or selecting the user or by searching for them by name using the *Search on name* search box.
 - v. Once you have found the user you require click and hold on their name and drag and drop them into the position you want them to hold. The *Module Leaders* and *Lecturers* boxes will go green when the selected user is held over them. If you let go of them now, they will take that role. If you let go of the user when the box is white then nothing will happen with that user as they haven’t been given a role.
 - vi. Once lecturers have been assigned to a module you can edit their percentage split. To edit the percentage split that a user has with this module change the number in the box that looks like:  100
 - vii. If multiple users are assigned to a module as Lecturers they the total percentage split should be 100%. If the number goes over this then the whole box will turn yellow. The box will also go yellow if the percentage split is less than 100%.
 - viii. If the module has Postgraduates who support the module then you can add postgraduates to the module in the same way as lecturers and module leaders. Postgraduates go in the *Postgraduate Support* box.
 - ix. If the module has admin support assigned to the module then you can add admin support to the module in the same way as lecturers and module leaders. Admin support users go in the *Admin Support* box. You can change the hours allocated to *Postgraduates* and *Admin Support* by changing the numbers in the box that looks like:  33
 - x. You can edit the details of the module by clicking *Edit Details*.
 - xi. Once you have completed all the information required about the module, use the *Complete* checkbox to mark the module as completed. Once this has been marked, the module will shrink and a small green tick will appear. To mark the module as *Incomplete*, expand the module and remove the check in the *Complete* checkbox.

**Objective:** See how teaching workload gets calculated

Teaching workload is based on a series of calculations, using the 'teaching matrix' that has been set for each module e.g. time for preparation, delivery/lecture time, admin time, etc.

On the support website under [Files/Resources] is a section 'Data Definitions and Workload Calculations', which contains a PDF which shows the teaching calculation below (pages 13 and 14), plus an interactive excel document that shows how the Swarm Fields and the calculations are used.

In short, the calculation goes like this:

Variables:

The following variables are normally set to default (1) unless the following conditions are true:

- IF user is doing this module for the first time,
 - **\$prepFactor** = `SETTING_WORKLOAD_TEACHING_LOAD_PREP_FACTOR1`
- IF module is new
 - **\$newModuleFactor** = `SETTING_WORKLOAD_TEACHING_FACTOR_NEW`

The Calculation:

- IF (user is listed as module leader)
 - Add "Module Load for Administrative Duties"
- IF (user is listed as Postgraduate Support)
 - Add load for PG Tutorial Delivery
 - Add load for PG Workshop Delivery
 - Add load for (PG CA Marking * totalStudents / 10)
- IF (user is listed as a lecturer)
 - Add Preparation time as:
(Teaching Prep + CA Prep + Exam Prep) * **\$prepFactor** * **\$newModuleFactor**
 - Add Delivery time as:
LectureDelivery + Tutorial Delivery + Workshop Delivery + Other Contact Time
 - Add Marking time as:
(CA Marking + Exam Marking) * totalStudents / 10
 - Multiply result by lecturer split %

If you want to play about with the school of science modules, just click the 'Edit Module' button and modify the values to see it update the workload in real time.

¹ See **Parameters** on the next page for details on where to modify these settings



Further Tasks:

All Objectives Completed!

Now you've finished the tasks above, try out the following:

Add **User Roles** (Administrative Duties) to the system

To allocate time spent doing admin or role based duties (e.g. Director of Research, Head of School, Admissions Officer):

- create a User Role, give it a load (e.g. 50 hours)
 - assign users to it using the same drag & drop GUI.

Organise Grants (research projects) using **Categories**

Swarm v1.2 introduced the ability to add **Categories** to Grants (Research Projects) and RS&S (ResearchSupport&Scholarship).

- To add a category, go to *Workload Allocation > Workload > Grants* , then click on 'Grant Categories'.
 - Categories that have 'show on summary' will be displayed on the workload summary chart.
 - Each category should be assigned a colour.

Play with **Parameters**

Swarm allows you to tweak some parameters at a group level – allowing you to customise how each department generates their workload data. For instance, you may decide that only certain job families are eligible for mentoring hours, or that new modules in one department get a different weighting than other departments.

Parameters are found under *Workload Allocation > Management > Control Panel*, then **Parameters**.