

## Where is Webwork?

It is important to recognize WeBWorK as existing as both files and directories, and a database.

The files are located at /opt/webwork ... and more specifically /opt/webwork/courses/... for the particular courses.

The database is actually stored at /var/lib/mysql/webwork but this is not important; the only important thing to remember is that the information is accessed differently. Generally all student data is located in the database.

In the “File Manager” we are interested in:

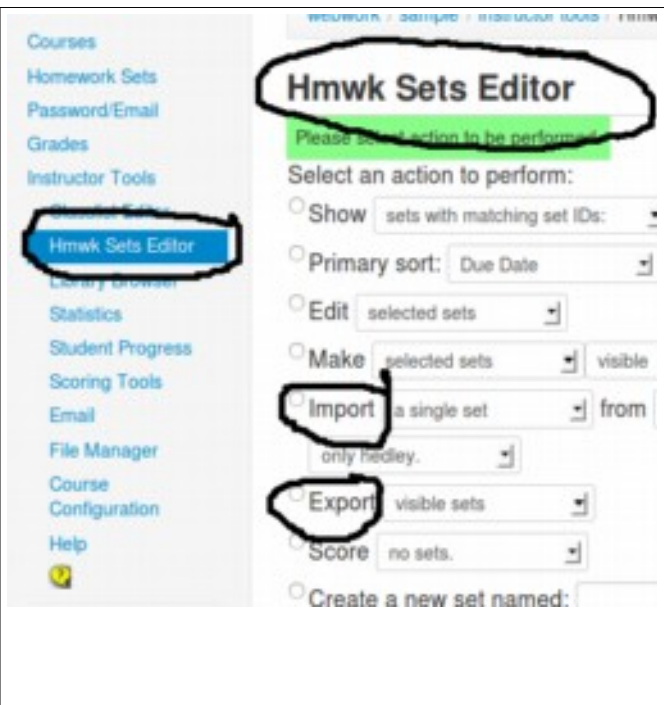


1. “Archive This Course”: This makes an archive that is a complete snapshot of the course specifics (files and database). This can be moved to another WeBWorK installation (use latest versions) and the course is then recreated. A very recent archive could then be used to mitigate the effects of a hardware failure.

2. “Make Archive”: This compresses files and folders into a single archive making their download and upload easy. Note that student data is stored in the database and so “Make Archive” is not used for this.

3/4. “Upload” and “Download” work exactly as you would expect. Note that it does not matter what kind of system is doing the downloading/uploading: it can be a Microsoft machine.

Homework sets are lists of problems the students are tasked to do; they live in the database. Often we want to take a set from one course and incorporate it into a similar course. Sometimes we want to take all the sets used in the fall and use them again in the winter. To facilitate the movement of homework the “homework sets editor” has two features “Export” and “Import”. The “Export” button creates a file representing a homework set; this can then be moved as a file as discussed above. The “Import” button reverses the procedure: after the “homework set file” arrives at its destination the receiving database then imports it from the file system.



Here are three situations we may find ourselves in.

- 1. A new statistics section is being added to an algebra course. John wishes to take several assignments from the statistics course and incorporate them in the algebra course.**
- 2. The hard drive on Janet's computer is failing. Janet needs to transfer her course to another machine with minimal disruption to the students.**
- 3. Abdu wishes to deliver a course exactly as he did the previous semester. He wants to delay deleting student information. He wishes a clone of the previous delivery without the students.**

# 1. A new statistics section is being added to an algebra course. John wishes to take several assignments from the statistics course and incorporate them in the algebra course.

We do not need any student data; in fact it would be a liability. The only information we need from the database are the homework sets: we have the Export utility to retrieve that.

The left screenshot shows the 'Classroom Editor' interface. The 'Export selected sets' button is circled in red. Below it, a table lists the sets being exported:

Set Name	Problems	Assigned Users	Visible
Ch_01_What_is_Statistics	3	12	Yes
Ch_02_Descriptive_Statistics_and_Graphics	11	12	Yes
Ch_03_Descriptive_Statistics_and_Numeric_Measures	5	12	Yes
Ch_04_Probability	18	12	Yes

The right screenshot shows a 'File Manager' window with a list of files. A selection of files is circled in red:

```

set0/
set0.def
setCh_01_What_is_Statistics.def
setCh_02_Descriptive_Statistics_and_Graphics.d
setCh_03_Descriptive_Statistics_and_Numeric_Me
setCh_04_Probability.def
setDemo/
setDemo.def
setMAAtutorial/
    
```

“Set Definition Files” being exported from the database.

“Set Definition Files” after they have been exported from the database.

The “Set Definition Files” would then be Archived, Downloaded, Uploaded to their destination and Imported by the receiving database.

The left screenshot shows a file upload interface. A success message is displayed in a green box:

```

Binary file 'MA1670.tgz' uploaded successfully
4 files unpacked successfully
Archive 'MA1670.tgz' deleted
    
```

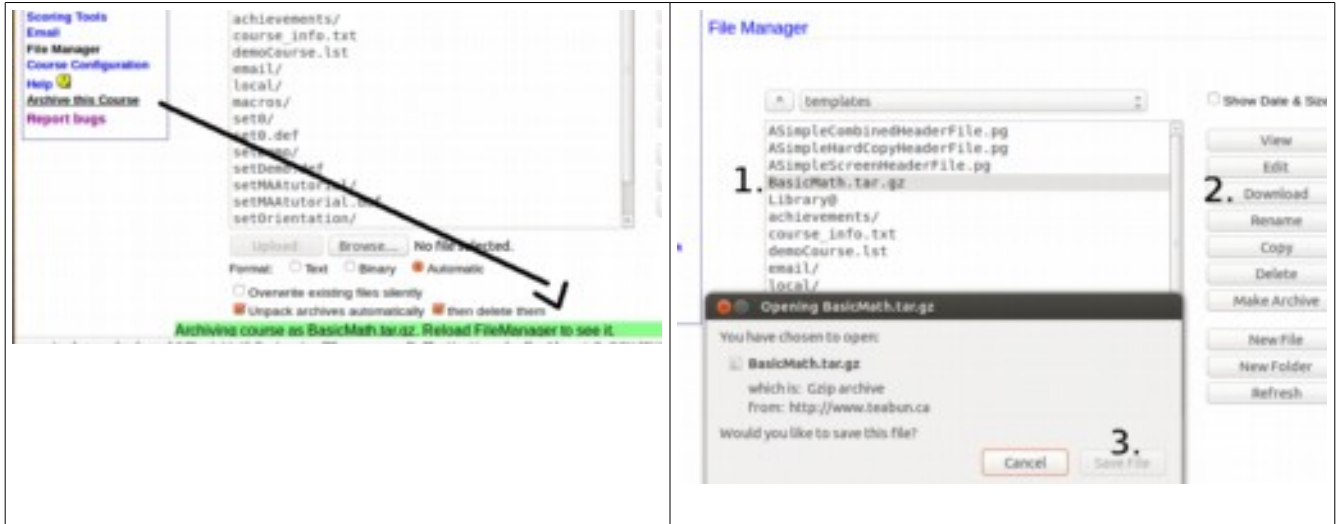
The right screenshot shows the 'Import' action being performed. The 'Import' button is circled in red. Below it, a table lists the files being imported:

File Name	Assigning this set to
set0.def	only hedley
setCh_01_What_is_Statistics.def	only hedley
setCh_02_Descriptive_Statistics_and_Graphics.def	only hedley
setCh_03_Descriptive_Statistics_and_Numeric_Measures.def	only hedley
setCh_04_Probability.def	only hedley
setDemo.def	only hedley

The homework sets have now been added. If the sets themselves were simply pointers to the OPL we would be done. Often the code for the problems are stored locally and these would then, also, need to be uploaded into their appropriate locations.

## 2. The hard drive on Janet's computer is failing. Janet needs to transfer her course to another machine with minimal disruption to the students.

Since we require everything we use “Archive this Course” (1). We then download the archive.



The archive is uploaded and placed in the /opt/webwork/courses directory. We then go into the admin course for the receiving installation and select “Unarchive Course”



**3. Abdu wishes to deliver a course exactly as he did the previous semester. He wants to delay deleting student information. He wishes a clone of the previous delivery without the students.**

If you want to recreate the homework in the current course for a new course on the same machine you can do the following:

1. export all of the homework sets from course1. This exports the data knowledge about the contents of the homework sets to set definition files stored in course1/templates.



**Add Course**

Specify an ID, title, and institution for the new course and underscores.

Course ID:

Course Title:

Institution:

To add the WeBWorK administrators to the new course

Add WeBWorK administrators to new courses

To add an additional instructor to the new course, specify user numbers, letters, hyphens, periods (dots), or underscores.

User ID:

Password:

Confirm Password:

To copy problem templates from an existing course

Copy templates from:

Select a database layout below

sql\_single      sql\_single - Uses a single database layout. This is the recommended layout.

2. create course2 using course1 as the "template" instead of using modelCourse (this has to be done from the admin page of webwork -- a mere instructor can not do this.) This copies over all the files in the templates and html directories in course1 but not the database (that's why you have to export the homework sets first)

3. go to course2 and import homework set definitions (you can import them all at once)

The screenshot shows the 'Hwkw Sets Editor' interface. On the left is a navigation menu with items: Home Sets, Homework Sets, Password/Email, Grades, Instructor Tools, Hwkw Sets Editor (circled in blue), Settings, Statistics, Student Progress, Scoring Tools, Email, File Manager, Course Configuration, Help, and Report Bugs. A black arrow points from the 'Hwkw Sets Editor' menu item to the 'Import' button in the main panel. The main panel has a title 'Hwkw Sets Editor' and a section 'Select an action to perform:' with radio buttons for 'Show', 'Primary sort', 'Edit', and 'Make'. The 'Import' option is selected. Below it, there is a text input field containing 'multiple sets', a 'from' dropdown, and a text input field containing '(taken from filenames)'. To the right, a list of set definitions is shown, with the first three items highlighted in orange: 'setCK\_01\_What\_Is\_Statistics.def', 'setCK\_02\_Descriptive\_Statistics\_and\_Graphics.def', and 'setCK\_03\_Descriptive\_Statistics\_and\_Numbers\_Mean'. Below the list is another text input field containing 'assigning this set to' and a dropdown menu with 'only holiday'. Other options include 'Export', 'Score', 'Create a new set named', and 'Delete'. At the bottom right, there is a 'Select all sets' button and a 'File Attached' label.