

# 2

## Building the Foundation—Creating Categories and Courses

*Now that you have explored the basics of Moodle, developed a concept of how it is designed and most often used, and walked through the installation process and initial customization process, it is time to work on further building Moodle into a CIMS. The C in CIMS stands for curriculum and the fundamental unit within curriculum, as I will use it in this chapter, is the course.*

This chapter will explain and demonstrate how to create and organize the courses offered in your curriculum, within Moodle. The following topics will be covered in this chapter:

- ◆ The creation of course categories
- ◆ Creation of teacher accounts
- ◆ Installing and using the bulk course creation tool

## **Course categories**

Categorization is an innate human behavior that allows us to perceive and understand the environment that surrounds us. Moodle designers must have recognized our tendency to categorize, because Moodle contains a flexible categorization system that allows for the creation of categories in which you may house additional categories and courses. Any educational program that offers courses of various varieties will invariably be using a categorization system like this for grouping courses into specific categories. A language program, for example, might group courses into skill-specific categories such as those of listening, speaking, reading, and writing. A larger entity, such as a college, would likely group courses into content-specific categories such as literature, sciences, speech communications, and the like, with additional subcategories used inside each of those main categories. No matter what the categorization system, Moodle is well-equipped to accommodate via its intuitive user-friendly course category creation interface.

### **Manual creation of course categories**

We will quickly walk through the manual creation of a simple categorization system in the next few pages. It should be noted however, that course categories can be created automatically via the use of the Bulk Course Upload tool that will be introduced later in this chapter. While the automated creation process is certainly a more efficient one, it is a good idea to understand how to create, edit, and adjust categories manually as the need to make adjustments may arise after categories have been created automatically, and at that point, the only practical method may be via the manual process.

Using the language program sample as an example, we will set up a categorization system that uses the traditional language skills (listening, speaking, reading, and writing) as the highest level in the categorization system with subcategories for levels. In our example, our program will have four levels: Advanced, Intermediate, Beginner, and Basic, so we will set up each skill category such that it contains subcategories that coincide with the four levels.

### **Time for action – manually creating course categories**

Let's get started by first taking a look at the courses and categories that exist in the default installation of our MAMP package. We'll proceed by manually creating the categories and subcategories we need for our language program example.

- 1.** Log in to your Moodle site as admin, or as a user with administrative permissions, and click on the **All courses** link found at the bottom of the **Course categories** block from your front page.

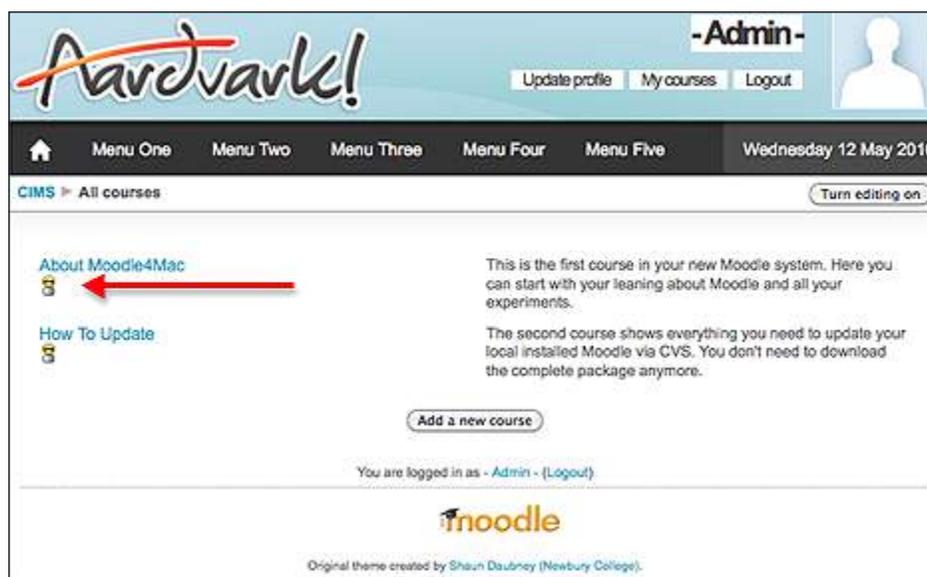


An alternative method for accessing the **Course category** window is to simply type the word 'course' into your browser at the end of your website address from the front page of your Moodle site. This will direct your browser to the default file, `index.php`, located in the course directory (for example, for the XAMPP package, it will look like this `http://localhost/moodle19/course`).

- The block should look like the following screenshot if you followed all the instructions from *Chapter 1, Welcome to Moodle as a Curriculum and Information Management System (CIMS)!* The following screenshot is of a default MAMP installation. For Windows XAMPP installations, no courses or categories will exist.



- You will see the two default courses that are created in the MAMP package and no category. As shown in the following screenshot, the full name of the course will appear on the left side of the screen with a small icon of a person, below it. The icon, shown with an arrow pointing to it in the following screenshot, signifies that the course is set to allow guest users to access it. On the right side of the screen is the course summary.



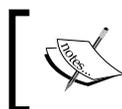
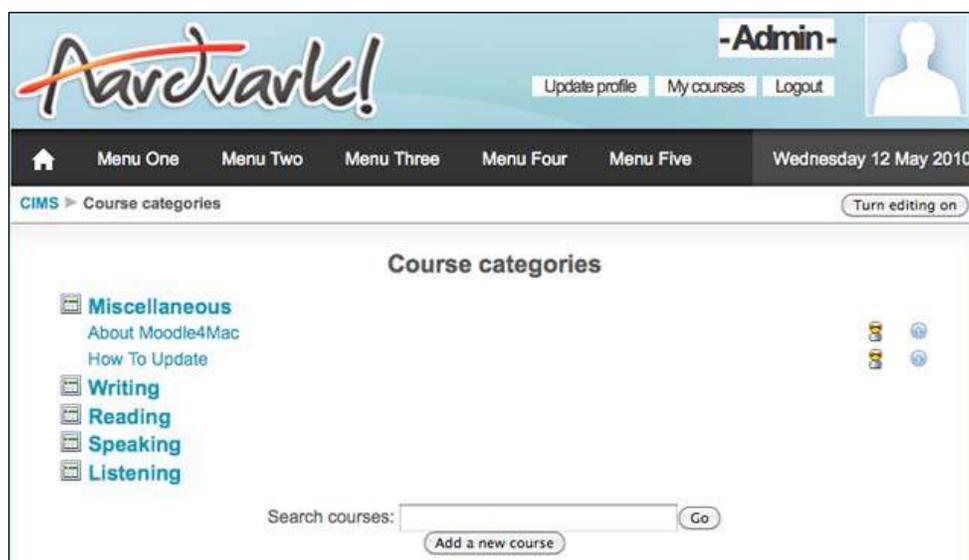
- Click on the **Turn editing on** button from the **All courses** screen, shown in the previous screenshot, to reveal the course category as shown in the next screenshot. This editing screen displays the categories and the number of courses contained in each category. The category was not listed in the course view window in the previous screenshot because there is currently only one category.



- With editing on, now click on the **Add new category** button and, on the subsequent screen, type in the desired category title. For this example, we are going to enter the four skills mentioned previously. Also, as we want these to be our four main categories, we will set the **Parent category** to **Top**. Enter a category description and click on the **Create category** button to finish the process. The following screenshot shows our setup prior to creating the category:

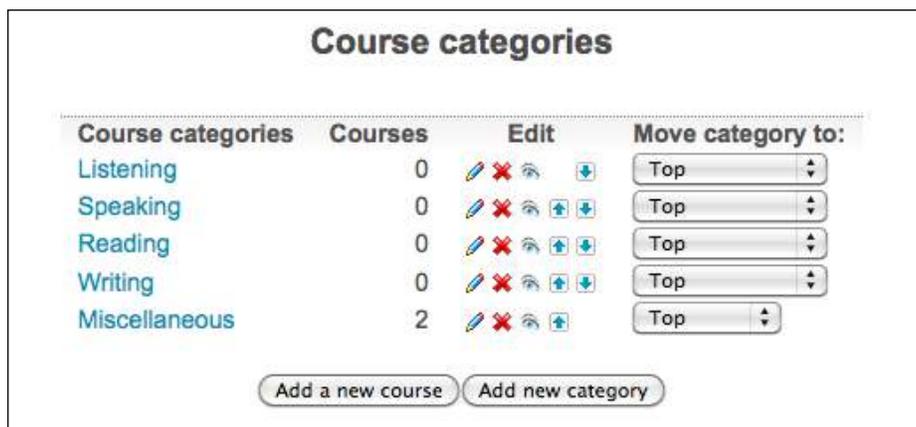


6. After clicking on the **Create category** button, the screen that you will see next will be an editing screen that will allow you to edit from within the Listening category you just created. As a result, you will not see the **Add new category** button. Instead, you will see an **Add a sub-category** button. Click on this button to access the screen that allows you to create a new category. After doing so, you will simply need to change the **Parent category** to **Top**. Repeat this process until you have created all of your top-level categories. After you have created all categories, turn the editing feature off and click on the **Course categories** breadcrumb link, found at the top-left of the screen, to see the result. It will look like the following screenshot:



If you wish to change the order in which the categories appear, you can turn editing back on and use the up and down arrows to move categories.

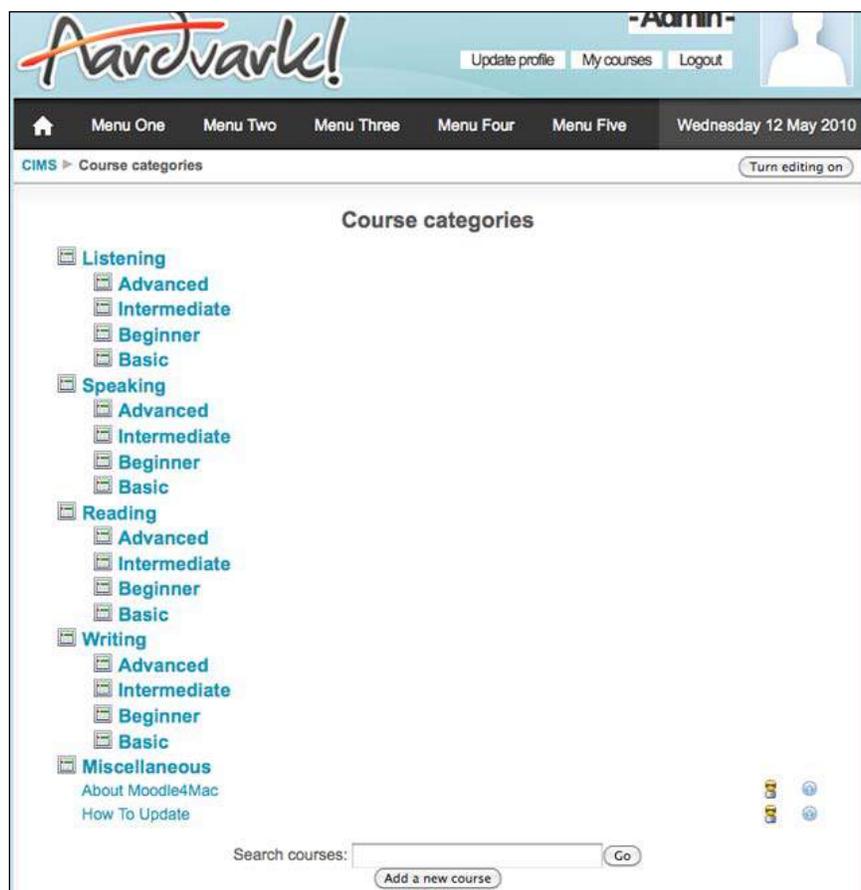
7. In the following screenshot, which is the same screen as the previous one, with editing turned on, we have moved the **Miscellaneous** category to the bottom and rearranged the main categories into a different order.



8. Next, we will create the four level categories using the same process explained for the main categories. The only difference is that we will create each of the four levels inside the main categories by designating the main category as the **Parent category**. From the editing screen shown in the previous screenshot, click on one of the categories and then on the subsequent **Add a sub-category** button, as shown in the following screenshot. Creating the category in this fashion will result in the parent category being automatically set to the main category to which you are adding the sub-category.



9. In the same fashion as earlier when we created multiple categories in succession however, after adding the first sub-category, if you click on **Add a sub-category** again, you will need to then adjust the **Parent category**. If you do not do so, you will be effectively burying sub-categories within sub-categories. The alternative is to click on the **Course categories** pull-down menu prior to clicking on **Add a sub-category**. Create all four levels, **Advanced**, **Intermediate**, **Beginner**, and **Basic**, using this process, for each of the four skills (**Listening**, **Reading**, **Speaking**, and **Writing**).
10. When you have finished adding all of the subcategories to the main categories and have returned to the main **Course Categories** window, your screen should look like the following screenshot:



### ***What just happened?***

You have just created a simple categorization system with four main skills (Listening, Speaking, Reading, and Writing). Next you created four subcategories—levels, inside each of the main categories (Advanced, Intermediate, Beginner, and Basic).

As you followed the example used here or maybe created an even more intricate categorization scheme, you may have felt that the process was a bit time consuming and required quite a few mouse clicks. As mentioned in the beginning of this explanation, creating categories via the Bulk Course Upload tool is much more efficient and recommended when possible. There will be times however, when you need to create new categories after courses have already been made or to edit or rearrange categories. On these occasions, you may find it necessary to use the manual procedure so it is a good idea to be familiar with the process.

## Teacher account creation

We could, at this point, jump to an explanation of the Bulk Course Upload tool. Unfortunately however, the Bulk Course Upload tool will not automatically create user accounts for us. Therefore, if we want to make the most of the tool, we will need to first create the accounts that we will label as teachers in the file used by the Bulk Course Upload tool.

### Time for action – creating teacher accounts

We will create twenty users that are each going to be assigned to teach four courses. If you are only creating one user on your site, you may decide to create the account manually by clicking on the **Add a new user** link found via the following path: **Site Administration | Users | Accounts | Add a new user**. When adding multiple users however, it is a much more efficient process to use the **Upload users** feature found in the same list under **Accounts** where the **Add a new user** feature is located. To create the new teacher accounts, follow these steps:

1. Click on the **Upload users** link as previously described. The following screenshot shows the path visually:



2. After clicking on **Upload users** you will be presented with a screen that allows you to browse your computer and select the file that contains the information necessary to create the accounts. The file must be formatted as a CSV (Comma Separated Values) file and can be created in any text editor or in a Microsoft Excel or Open Document spreadsheet file and then saved as a CSV document. We will use Excel or an Open Document spreadsheet because there are often fields that are repeated and dragging a cell in a spreadsheet application allows for quick replication of values that are the same.



When using special characters and/or foreign language fonts, Open Document format, created using the Open Source productivity package Open Office, provides more accurate and reliable options for using UTF8, a character encoding method that allows for the use of virtually all languages and special characters.

3. Click on the question mark icon located to the right of the **Upload users** title to access detailed information about formatting of the file used to create users. The icon can be seen circled in the following screenshot of the **Upload users** screen.

Upload users

Upload

File (Max size: 10MB)\*  Browse...

CSV delimiter  ▾

Encoding  ▾

Preview rows  ▾

Upload users

There are required fields in this form marked\*.

4. Following is a screenshot of the file used to create our twenty accounts that will be designated as teachers. This file is accessible from the Packt website at [www.packtpub.com/support](http://www.packtpub.com/support).

	A	B	C	D	E	F
1	username	password	firstname	lastname	email	emailstop
2	Teacher1	1234	Teacher	One	Teacher1@Moodle_As_A_CIMS.COM	1
3	Teacher2	1234	Teacher	Two	Teacher2@Moodle_As_A_CIMS.COM	1
4	Teacher3	1234	Teacher	Three	Teacher3@Moodle_As_A_CIMS.COM	1
5	Teacher4	1234	Teacher	Four	Teacher4@Moodle_As_A_CIMS.COM	1
6	Teacher5	1234	Teacher	Five	Teacher5@Moodle_As_A_CIMS.COM	1
7	Teacher6	1234	Teacher	Six	Teacher6@Moodle_As_A_CIMS.COM	1
8	Teacher7	1234	Teacher	Seven	Teacher7@Moodle_As_A_CIMS.COM	1
9	Teacher8	1234	Teacher	Eight	Teacher8@Moodle_As_A_CIMS.COM	1
10	Teacher9	1234	Teacher	Nine	Teacher9@Moodle_As_A_CIMS.COM	1
11	Teacher10	1234	Teacher	Ten	Teacher10@Moodle_As_A_CIMS.COM	1
12	Teacher11	1234	Teacher	Eleven	Teacher11@Moodle_As_A_CIMS.COM	1
13	Teacher12	1234	Teacher	Twelve	Teacher12@Moodle_As_A_CIMS.COM	1
14	Teacher13	1234	Teacher	Thirteen	Teacher13@Moodle_As_A_CIMS.COM	1
15	Teacher14	1234	Teacher	4teen	Teacher14@Moodle_As_A_CIMS.COM	1
16	Teacher15	1234	Teacher	Fifteen	Teacher15@Moodle_As_A_CIMS.COM	1
17	Teacher16	1234	Teacher	6teen	Teacher16@Moodle_As_A_CIMS.COM	1
18	Teacher17	1234	Teacher	7teen	Teacher17@Moodle_As_A_CIMS.COM	1
19	Teacher18	1234	Teacher	8teen	Teacher18@Moodle_As_A_CIMS.COM	1
20	Teacher19	1234	Teacher	9teen	Teacher19@Moodle_As_A_CIMS.COM	1
21	Teacher20	1234	Teacher	Twenty	Teacher20@Moodle_As_A_CIMS.COM	1

There are a couple of things that should be noted in this screenshot:

- ◆ Although it does not appear in the help file accessed by clicking on the question mark found next to the **Upload users** page title, the use of the **emailstop** field name allows you to set the user's **Email activated** setting, that appears in a user's profile, to **This email address is disabled**. We are using it because the domain we have specified for these dummy accounts is not a domain name that actually exists. This will prevent the system from attempting to send e-mails to these addresses. This is important if you will be creating users without knowing their e-mail addresses because Moodle requires that users have an e-mail address entered when accounts are created.
- ◆ Notice the way last names for users sixteen to nineteen have been formatted using the number (for example, **6teen**) instead of spelling out the name. This is because the **Bulk Course Creation** tool, which we will use later in this chapter, uses a search function built into Moodle that will return multiple users if one user's name is contained within the name of another user. For example, 'John Smith' and 'John Smithson' would both be returned from a search for 'John Smith'. The **Bulk Course Creation** tool can only assign a teacher when the search for that teacher returns a single user. Although it may be rare for this type of *name overlap* to occur in your system, you should be aware of the issue. You can also use usernames in place of

full names when assigning teachers to courses, but will have the same problem with overlap. In our example, shown previously, a search for a teacher with the username 'Teacher1', would return eleven results. Why, you say? Because, not only would it return 'Teacher1', but it would also return teachers 10 through 19 as they all contain 'Teacher1' in their username.

- ◆ Additionally, the help file accessed from the **Upload users** page is a bit vague about the fields required in the file utilized to create accounts. Let it suffice to say that, generally, the more information you include in your user account creation file, the better. The six fields included in the file shown here are a minimum for quick and easy account creation. Of course, you may opt not to use the **emailstop** field if you are using legitimate e-mail addresses.
- ◆ Once you have formatted your file and saved it in the CSV format, you can then click on the **Browse** button to locate your file and then click the **Upload users** button to start the account creation process.
- ◆ You will be presented with a preview screen in which the first ten records from your file are displayed and you are given the option to adjust various settings. The following screenshot is of this **preview** screen. Under the **Settings** heading, the default values will be appropriate for creating new accounts if you have formatted your file in the same manner as the one we are using.
- ◆ Under the **Default values** heading, click on the **Show Advanced** button to display other settings that can be adjusted. You should change the default country here using the **Select a country** pull-down menu and possibly even the **City/town** setting, if you want to standardize this setting to the city or town in which your school or program is located.



You can change the default country by clicking on the **Location settings** link found under the **Location** directory in the **Site Administration** block found on the front page of your site. Even if you have set the default country via the **Location** settings, you will still need to specify the country when creating new accounts.

5. Generally, when creating accounts in bulk, you will not need to change any of the other default values unless so desired. Click on the **Upload users** button once you are finished and the accounts will be created. The following screenshot is of the **Upload users preview** screen with the **Show Advanced** menu toggled off:

**Upload users preview**

username	password	firstname	lastname	email	emailstop
Teacher1	1234	Teacher	One	Teacher1@Moodle_As_A_CIMS.COM	1
Teacher2	1234	Teacher	Two	Teacher2@Moodle_As_A_CIMS.COM	1
Teacher3	1234	Teacher	Three	Teacher3@Moodle_As_A_CIMS.COM	1
Teacher4	1234	Teacher	Four	Teacher4@Moodle_As_A_CIMS.COM	1
Teacher5	1234	Teacher	Five	Teacher5@Moodle_As_A_CIMS.COM	1
Teacher6	1234	Teacher	Six	Teacher6@Moodle_As_A_CIMS.COM	1
Teacher7	1234	Teacher	Seven	Teacher7@Moodle_As_A_CIMS.COM	1
Teacher8	1234	Teacher	Eight	Teacher8@Moodle_As_A_CIMS.COM	1
Teacher9	1234	Teacher	Nine	Teacher9@Moodle_As_A_CIMS.COM	1
Teacher10	1234	Teacher	Ten	Teacher10@Moodle_As_A_CIMS.COM	1

Number of preprocessed records: 20

**Settings**

Upload type:

New user password:

Existing user details:

Existing user password:

Allow renames:

Allow deletes:

Prevent email address duplicates:

Select for bulk operations:

**Default values**

Email display:

Forum auto-subscribe:

City/town:

ID number:

Institution:

Department:

There are required fields in this form marked\*.

You are logged in as - Admin - (Logout)

6. After clicking on **Upload users**, the next screen you will see will be a results screen displaying all of the accounts created. Summarized details are presented at the bottom of the screen just above the **Continue** button. If you receive any errors you may need to go back and correct formatting errors in your CSV file or you may be attempting to create two users with the same username. You will receive an error message that will help you trace the root of your problem. The results of the users with a weak password check, in our case, is zero because we have turned off the password policy in the **site policies security** settings.

Upload users results										
Status	CSV line	ID	Username	First name	Surname	Email address	Password	Authentication	Enrolments	Delete
New user	2	45	Teacher1	Teacher	One	Teacher1@Moodle_As_A_CIMS.COM				
New user	3	46	Teacher2	Teacher	Two	Teacher2@Moodle_As_A_CIMS.COM				
New user	4	47	Teacher3	Teacher	Three	Teacher3@Moodle_As_A_CIMS.COM				
New user	5	48	Teacher4	Teacher	Four	Teacher4@Moodle_As_A_CIMS.COM				
New user	6	49	Teacher5	Teacher	Five	Teacher5@Moodle_As_A_CIMS.COM				
New user	7	50	Teacher6	Teacher	Six	Teacher6@Moodle_As_A_CIMS.COM				
New user	8	51	Teacher7	Teacher	Seven	Teacher7@Moodle_As_A_CIMS.COM				
New user	9	52	Teacher8	Teacher	Eight	Teacher8@Moodle_As_A_CIMS.COM				
New user	10	53	Teacher9	Teacher	Nine	Teacher9@Moodle_As_A_CIMS.COM				
New user	11	54	Teacher10	Teacher	Ten	Teacher10@Moodle_As_A_CIMS.COM				
New user	12	55	Teacher11	Teacher	Eleven	Teacher11@Moodle_As_A_CIMS.COM				
New user	13	56	Teacher12	Teacher	Twelve	Teacher12@Moodle_As_A_CIMS.COM				
New user	14	57	Teacher13	Teacher	Thirteen	Teacher13@Moodle_As_A_CIMS.COM				
New user	15	58	Teacher14	Teacher	Fourteen	Teacher14@Moodle_As_A_CIMS.COM				
New user	16	59	Teacher15	Teacher	Fifteen	Teacher15@Moodle_As_A_CIMS.COM				
New user	17	60	Teacher16	Teacher	Sixteen	Teacher16@Moodle_As_A_CIMS.COM				
New user	18	61	Teacher17	Teacher	Seventeen	Teacher17@Moodle_As_A_CIMS.COM				
New user	19	62	Teacher18	Teacher	Eighteen	Teacher18@Moodle_As_A_CIMS.COM				
New user	20	63	Teacher19	Teacher	Nineteen	Teacher19@Moodle_As_A_CIMS.COM				
New user	21	64	Teacher20	Teacher	Twenty	Teacher20@Moodle_As_A_CIMS.COM				

Users created: 20  
 Users having a weak password: 0  
 Errors: 0

[Continue](#)

7. Click on **Continue** from this screen to return you to the **Upload users** page. From this point you can click on the **Users** folder found in the **Site Administration** block and then on **Browse a list of users** to view and confirm the existence of the accounts you just created.

### ***What just happened?***

You have just created twenty user accounts inside your Moodle site. These users have not yet been assigned any roles. They are simply registered users at this point but that will change shortly when we assign them to teach courses that we'll be creating with the Bulk Course Upload tool.

## **Using the Bulk Course Upload tool**

Rather than creating course categories and then courses one at a time and assigning teachers to each course after the course is created, we can streamline the process through the use of the Bulk Course Upload tool. This tool allows you to organize all the information required to create your courses in a CSV (Comma Separated Values) file that is then uploaded into the creation tool and used to create all of your courses at once.



#### **Limitations of the Bulk Course Upload tool**

Due to its design, the Bulk Course Upload tool only works with MySQL databases. Our MAMP package uses a MySQL database as do the LAMP packages explained in *Chapter 1, Welcome to Moodle as a Curriculum and Information Management System (CIMS)*! If your Moodle site is running on a database of a different variety you will not be able to use this tool.

---

## Time for action – installing the Bulk Course Upload tool

Now that we have our teacher's accounts created, we are ready to use the Bulk Course Creation tool to create all of our courses. First we need to install the tool as an add-on admin report into our Moodle site. The steps for the installation process are virtually the same as those explained in *Chapter 1, Welcome to Moodle as a Curriculum and Information Management System (CIMS)!* for installing Modules, Blocks, and Themes. To install this tool, do the following:

- 1.** Go to the **Modules and plugins** area of [www.moodle.org](http://www.moodle.org).
- 2.** Search for **Bulk Course Upload** tool.
- 3.** Click on **Download latest version** to download the tool to your computer.
- 4.** If this does not download the package to your hard drive and instead takes you to a forum in the **Using Moodle** course on [Moodle.org](http://Moodle.org), download the package that was posted in that forum on Sunday, 11 May 2008.
- 5.** Expand the package, contained within, and find the `uploadcourse.php` file.
- 6.** Place the `uploadcourse.php` file in your **admin** directory located inside your main Moodle directory.
- 7.** When logged in as admin, enter the following address in your browser address bar: `http://localhost:8888/moodle19/admin/uploadcourse.php`. (If you are not using a MAMP package, the first part of the address will of course be different.)

8. You will then see the Upload Course tool explanation screen that looks like the following screenshot:

Upload an [RFC4180](#)-Compliant CSV file.  
Valid fields for each course are:

Field	Value
category	[Forward]Slash-Delimited Category "Path" String (new categories are created as necessary) OR Integer Database Category ID
cost	String(10)
enrolperiod	Integer/Seconds
enrollable	0=FALSE,1=TRUE
enrolstartdate	String Date Literal
enrolenddate	String Date Literal
expirynotify	0=FALSE,1=TRUE
expirythreshold	Integer Value Between 10-30
format	String('social','topics','weeks')
fullname	String(254)
groupmode	0=NOGROUPS,1=SEPARATEGROUPS,2=VISIBLEGROUPS
groupmodeforce	0=FALSE,1=TRUE
guest	0=NO,1=YES,2=WITHKEY
idnumber	String(100)
lang	String(10)
maxbytes	Integer(Site Max)
metacourse	0=FALSE,1=TRUE
newsitems	Integer(10)
notifystudents	0=FALSE,1=TRUE
numsections	Integer(52)
password	String(50)
shortname	String(15)
showgrades	0=FALSE,1=TRUE
showreports	0=FALSE,1=TRUE
sortorder	Integer
startdate	String Date Literal
student	String(100)
students	String(100)
summary	Text
teacher	String(100)
teachers	String(100)
teacher[1,2,...]_account	Search String that returns only one User Account (as used in <a href="#">Administration » Edit user accounts</a> ) OR Integer Database User ID
teacher[1,2,...]_role	String(40)
template	String
theme	String(50)
timecreated	String Date Literal
timemodified	String Date Literal
topic0 [main heading], topic1 ... topic52 [topic/week headings]	Text
visible	0=FALSE,1=TRUE

**Upload Courses**

Choose:

9. The screen, shown in the previous screenshot, lists the thirty-nine different fields that can be included in a CSV file when creating courses in bulk via this tool. Most of the fields here control settings that are modified in individual courses by clicking on the **Settings** link found in the **Administration** block of each course. The following is an explanation of the fields with notes about which ones are especially useful when setting up Moodle as a CIMS:
- **category:** You will definitely want to specify categories in order to organize your courses. The best way to organize courses and categories here is such that the organization coincides with the organization of your curriculum as displayed in school documentation and student handbooks. If you already have categories in your Moodle site, make sure that you spell the categories exactly as they appear on your site, including capitalization. A mistake will result in the creation of a new category. This field should start with a forward slash followed by the category name with each subcategory also being followed by a forward slash (for example, /Listening/Advanced).
  - **cost:** If students must pay to enroll in your courses, via the PayPal plugin, you may enter the cost here. You must have the PayPal plugin activated on your site, which can be done by accessing it via the **Site Administration** block by clicking on **Courses** and then **Enrolments**. Additionally, as this book goes to print, the ability to enter a field in the file used by the Bulk Course tool that allows you to set the enrolment plugin, is not yet available. Therefore, if you enter a cost value for a course, it will not be shown until the enrolment plugin for the course is changed manually by navigating to the course and editing the course through the **Settings** link found in the course **Administration** block. Check `Moodle.org` frequently for updates to the Bulk Course Upload tool as the feature should be added soon.
  - **enrolperiod:** This controls the amount of time a student is enrolled in a course. The value must be entered in seconds so, for example, if you had a course that ran for one month and students were to be unenrolled after that period, you would set this value to 2,592,000 (60 seconds X 60 minutes per hour X 24 hours per day X 30 = 2,592,000).
  - **enrollable:** This simply controls whether the course is enrollable or not. Entering a 0 will render the course unenrollable and a 1 will set the course to allow enrollments.
  - **enrolstartdate** and **enrolenddate:** If you wish to set an enrollment period, you should enter the dates (start and end dates) in these two fields. The dates can be entered in the month/day/year format (for example, 8/1/10).
  - **expirynotify:** Enter a 1 here to have e-mails sent to the teacher when a student is going to be unenrolled from a course. Enter a 0 to prevent e-mails from being sent when a student is going to be unenrolled. This setting is only functional when the **enrolperiod** value is set.

- ❑ **expirythreshold:** Enter the number of days in advance you want e-mails notifying of student unenrollment sent. The explanation file included calls for a value between 10 and 30 days but this value can actually be set to between 1 and 30 days. This setting is only functional when the **enrolperiod** value and **expirynotify** and/or **notifystudents** (see below) is/are set.
- ❑ **format:** This field controls the format of the course. As of Moodle 1.9.8+ there are six format options included in the standard package. The options are lams, scorm, social, topics, weeks, and weeks CSS, and any of these values can be entered in this field.
- ❑ **fullname:** This is the full name of the course you are creating (for example, History 101).
- ❑ **groupmode:** Set this to 0 for no groups, 1 for separate groups, and 2 for visible groups.
- ❑ **groupmodeforce:** Set this to 1 to force group mode at the course level and 0 to allow group mode to be set in each individual activity.
- ❑ **guest:** Use a 0 to prevent guests from accessing this course, a 1 to allow guests in the course, and a 2 to allow only guests who have the key into the course.
- ❑ **idnumber:** You can enter a course ID number using this field. This number is only used for administrative purposes and is not visible to students. This is a very useful field for institutions that use identification numbers for courses and can provide a link for connecting the courses within Moodle to other systems. If your institution uses any such numbering system it is recommended that you enter the appropriate numbers here.
- ❑ **lang:** This is the language setting for the course. Leaving this field blank will result in the **Do not force** language setting, which can be seen from the **Settings** menu accessed from within each individual course. Doing so will allow users to toggle between languages that have been installed in the site. To specify a language, and thus force the display of the course using this language, enter the language as it is displayed within the Moodle lang directory (for example, English = en\_utf8).
- ❑ **maxbytes:** This field allows you to set the maximum size of individual files that are uploaded to the course. Leaving this blank will result in the course being created with the site wide maximum file upload size setting. Values must be entered in bytes (for example, 1 MB = 1,048,576 bytes). Refer to an online conversion site such as [www.onlineconversion.com](http://www.onlineconversion.com) to help you determine the value you want to enter here.
- ❑ **metacourse:** If the course you are creating is a meta course, enter a 1, otherwise enter a 0 or leave the field blank.

- ❑ **newsitems:** Enter the number of news items you want to be displayed in your course in the news box that appears on the right-hand side of the page in each course. This value can range from 0 to 10.
- ❑ **notifystudents:** This controls whether students are to be notified if they are going to be unenrolled from a course. (See **expirynotify** and **expirythreshold** explained earlier) Enter a 0 to prevent students from being notified and a 1 to have notification e-mails sent to students.
- ❑ **numsections:** The number of weeks or topics that are displayed can be set using this field. The value entered must be between 1 and 52. If this field is left blank, only one section will be created.
- ❑ **password:** To set a password that controls access to this course, enter a value here. Teachers assigned to this course will have access to the password via the **Settings** area of the course. Setting the password to a randomly generated number is therefore one way to keep students, who have not been assigned to a course, from accessing the course. This is useful for programs that assign students to courses based upon enrollment data obtained from an external system. If courses are to be accessed via a predetermined password, that value can be entered here or if teachers will set their own passwords that are to be distributed to students in a classroom setting, the teacher can change the value via the course settings, if he or she so desires. It is important to consider all of your options and goals in terms of how courses within your Moodle site will be used in conjunction with the use of this field, and course setting, as it has the capability of helping you to position your Moodle site as a curriculum management system.
- ❑ **shortname:** This is the course short name setting that is used for display in the breadcrumb path.
- ❑ **showgrades:** Set this field to 1 to allow students to view the grade book and 0 to prevent them from accessing the grade book.
- ❑ **showreports:** This setting only pertains to students. Entering a 0 here prevents students from accessing their individual activity reports and a 1 allows them to access these reports.
- ❑ **sortorder:** This allows you to presort the courses within categories. For example, if you have five courses in the **Advanced Listening** category, you can enter a value of 1 to 5 in this field for each course. The course with 1 will be displayed at the top of the list, the course with a 2, below the first course, and so on.
- ❑ **startdate:** Enter the date the courses start here in the month/day/year format (for example, 6/1/10).

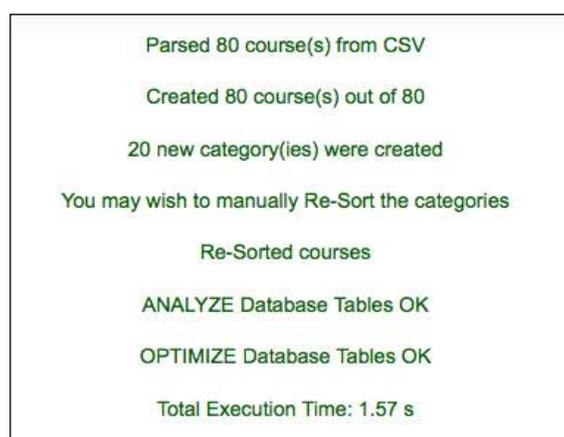
- ❑ **student** and **students**: These fields allow you to enter the default role title for student and students. For example, if you want students to be displayed as 'Employees', enter that value here.
- ❑ **summary**: Enter the summary for the course here. Unfortunately, you cannot use commas in your summary in this file as the comma is interpreted as a field separation point and corrupts the course creation process. Future versions of this tool will hopefully allow for the use of commas.
- ❑ **teacher** and **teachers**: These fields allow you to enter the default role title for teacher and teachers. For example, if you want teacher to be displayed as 'Manager', enter that value here.
- ❑ **teacher1\_account**: Enter either the full name or the user name of the user to be assigned as the teacher of this course. As was noted in the *Teacher account creation* section, if you have teachers with similar names (for example, one name overlaps another), the Bulk Course Upload tool will generate an error and stop processing without creating courses. Also, use **teacher2\_account**, **teacher3\_account**, and so on to assign multiple teachers to a course.
- ❑ **teacher1\_role**: Enter the role of the teacher being assigned to the course in this field. For a teacher with full editing permissions, use the role shortname, `editingteacher`. For a teacher who does not have permissions to edit content inside the course, use the shortname, `teacher`. These short names are the defaults that can be viewed by clicking on **Permissions** and then **Define roles** from the **Site Administration** block found on the front page of your site.
- ❑ **template**: This function allows you to specify a template course; a course that already exists on your Moodle site, from which some information will be copied as the new course is created. Some blocks and other basic formatting settings are copied from the template course but activities and other content from the template course are not. Please experiment with this feature to see if it is useful for your application.
- ❑ **theme**: If your site is set to allow courses to use their own individual themes from the themes installed in the site, you can specify a theme for the course using this field. Note however, that this could cause problems if you are using a theme such as the one that we have selected for this book. In other words, if you use a theme that provides easy access to various components of your site (courses and other information), it may not be a good idea to allow this to be overridden at the course level.
- ❑ **timecreated** and **timemodified**: These fields allow you to enter times for both when the course was created and when it was modified. These values can only be referenced by accessing the database directly and are thus not of primary concern for the purposes of setting up our system.

- ❑ **topic0, topic1, topic2:** The number of these specified should not exceed the number you specified in **numsections** plus one. The **topic0** is the 'plus one' as it is for the unnumbered main heading located in the top section of your course. The numbered topics coincide with the number of sections set in **numsections**.
- ❑ **visible:** This field allows you to make the course invisible, and thus only accessible by users with a teaching role or higher, by entering a 0, or visible to all users by entering a 1.

**10.** While the list of all the possible fields and explanation for each field seems long and complicated, formatting a CSV file and experimenting with bulk course creation will enable you to quickly understand how to format your file and if you are creating many courses, will very quickly demonstrate the power and efficiency of the tool.

**11.** As I mentioned earlier, we are going to create eighty courses with each of our twenty teachers assigned to teach four courses, one from each of our four levels. I have deleted the categories we created earlier in the *Manual creation of course categories* section, as I wanted to create the categories on the fly while I was creating the courses. Creating courses inside existing categories is however, equally as easy. Just remember to spell and capitalize the categories in your CSV file exactly as they appear on your site. To follow this tutorial, you should also delete all of the categories that you created earlier.

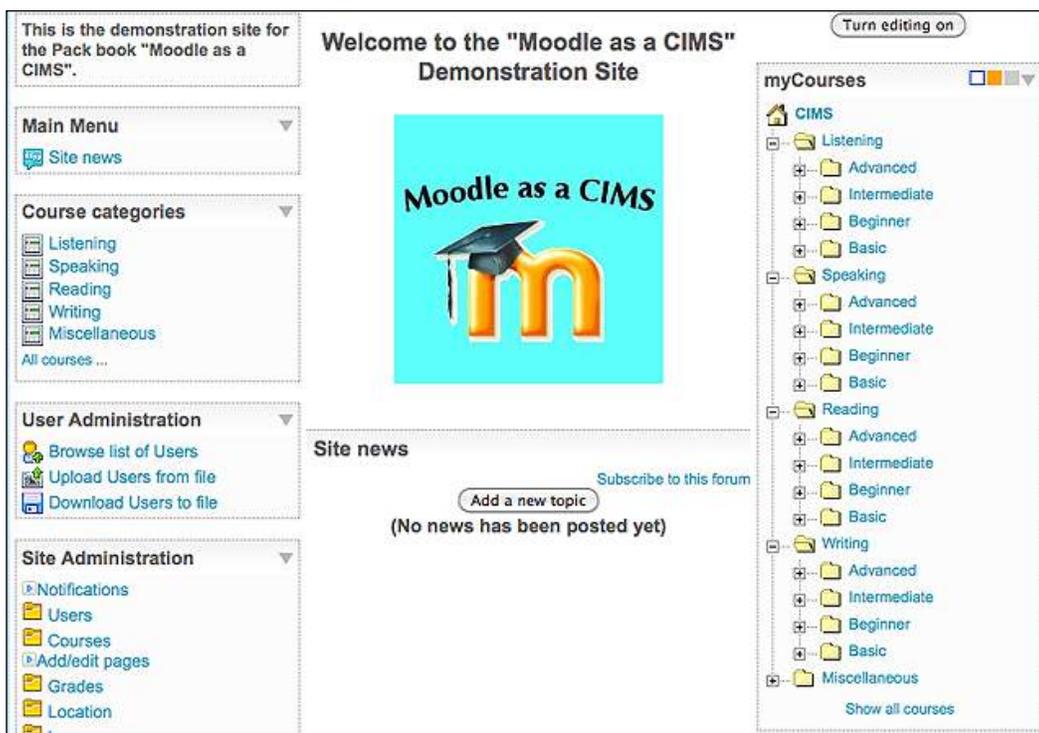
**12.** Once the file has been constructed and saved in CSV format, access the Bulk Course Upload tool by entering `http://localhost:8888/moodle19/admin/uploadcourse.php` in your browser address bar when logged into your site as admin. Click on **Browse** to locate your CSV file and then **Upload** to upload and initiate the course creation process. The following screenshot is of the results page that is displayed after the tool has finished executing the file.



13. To download a copy of the course creation file being used for this example, visit [www.packtpub.com/support](http://www.packtpub.com/support).

## What just happened?

That was fast, wasn't it? While the creation of the CSV file may take a little time and thought, once the file is prepared, execution and creation of the courses takes literally a matter of seconds. Our creation of eighty courses here took a whopping 1.57 seconds! Logging in to our site as admin now reveals all of the courses and categories we have just created in our **MyCourses** block, as shown in the following screenshot:



Further expanding each of the level categories by clicking on the plus sign, will reveal five courses in each level. Each course created has also been assigned a teacher. To demonstrate the ability to assign multiple teachers to courses, we have assigned two teachers to the first course listed in the CSV file.

## Summary

In this chapter, you have learned how to set up and organize course categories manually via the editing screen of your Moodle site. You then walked through the process of creating accounts for teachers that were going to be assigned to courses through the use of the Bulk Course Upload tool. We then introduced the Bulk Course Upload tool and explained how to get it installed on your system. You walked through an explanation of the fields that can be specified in the CSV file used by the tool and then practiced creating courses and assigning them teachers in order to get a *seeing is believing* perspective on the usefulness of the tool. In the next chapter, we'll continue to build on the system we have created so far by adding students and registering them in courses.

