

# User Manual

## Metadata and Moodle



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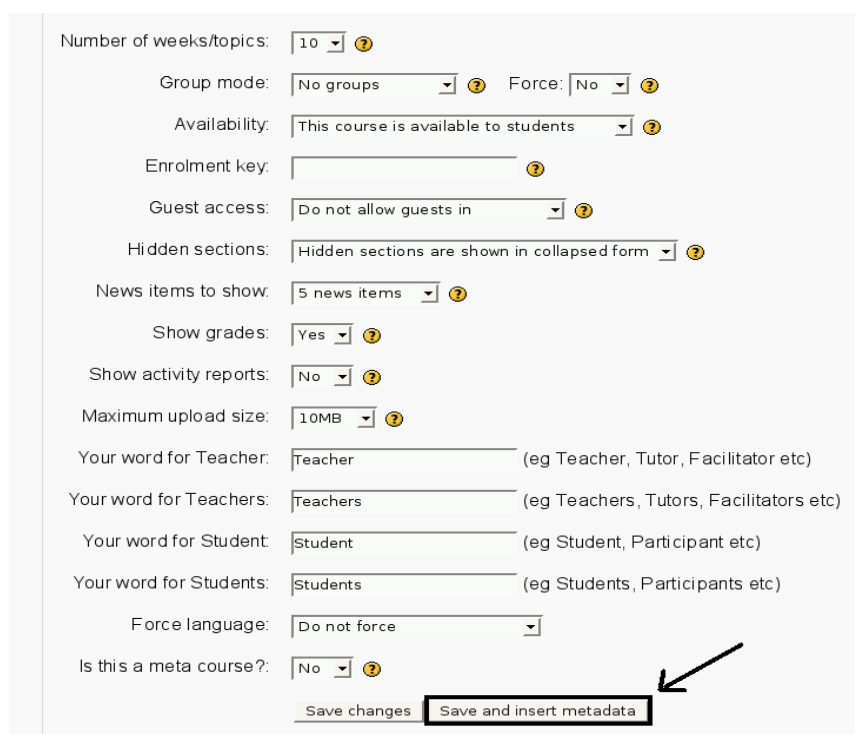
## Introduction

The present document is focused on the description of a metadata tool implemented for moodle in the University of Extremadura. In this section, we try to explain every and each use case that we consider the tool has solved.

- 1.- Creating a new metadata instance for a course.
- 2.- Editing a metadata instance for a course
- 3.- Metadata Profile management
- 4.- Search by metadata
- 5.- Import/export metadata (XML)
- 6.- Step by step example

### 1. Creating a new metadata instance for a course

The creation of metadata is quite simple. Lets suppose that we create a new course (for what we will need creator or administrator permissions). When we finish the insertion of the parameters of the course (name, description, etc) we will have a new option to insert the course's metadata. In order to do this, we have a new button, called "Save and insert metadata", that saves the data of the configuration of the course and go directly to the metadata form.



The screenshot displays the Moodle course configuration interface. It includes several settings with dropdown menus and text input fields, each accompanied by a help icon (question mark in a circle). The settings are: 'Number of weeks/topics' (10), 'Group mode' (No groups), 'Force' (No), 'Availability' (This course is available to students), 'Enrolment key' (empty), 'Guest access' (Do not allow guests in), 'Hidden sections' (Hidden sections are shown in collapsed form), 'News items to show' (5 news items), 'Show grades' (Yes), 'Show activity reports' (No), 'Maximum upload size' (10MB), 'Your word for Teacher' (Teacher), 'Your word for Teachers' (Teachers), 'Your word for Student' (Student), 'Your word for Students' (Students), 'Force language' (Do not force), and 'Is this a meta course?' (No). At the bottom, there are two buttons: 'Save changes' and 'Save and insert metadata'. An arrow points to the 'Save and insert metadata' button, which is highlighted with a black border.

When we are dealing with a newly created course the system try to ease the

inserting of the metadata to the user by auto-filling as many fields of the form as possible. This information is stored in moodle's database, so it could be used. Of course, the user can change this autocompleted data if he wants. In the next screenshot, we can see some auto-filled metadata (as catalog and entry in the general category):

**Insertar metadatos del curso**

[general](#) | [classification](#) | [lifeCycle](#) | [metaMetadata](#) | [technical](#) | [educational](#) | [rights](#) | [relation](#) | [annotation](#)

Seleccionar un perfil

**general** ?

**identifier**

catalog:  Insertar

entry:  Insertar

**identifier**

catalog:  Insertar

entry:  Insertar

**identifier**

catalog:  Insertar

entry:  Insertar

**title**

title:  Idioma:  Insertar

title:  Idioma:  Insertar

title:  Idioma:  Insertar

language:  Insertar

These are the metadata that we consider must be filled automatically by the system:

- General
  - Identifier (catalog and Entry)
  - Title
  - Language
  - Description
  - Structure
  - Aggregation Level
- Life Cycle
  - Contribute (Type, Entity and Date)
- MetaMetadata
  - Identifier (Catalog and Entry)

- Contribute (Type, Entity and Date)
- Metadata Schema
- Technical
  - Location
  - Requirements (OrComposite-Type and OrComposite-Name)
- Educational
  - Interactivity type
  - Interactivity level
  - Intended end user role
  - Language

As we can see in previous screenshot, there is a check box beside every field of the metadata form. This check box indicates to the form which operation should be done with the metadata (Insert, modify or delete).

At the bottom of the metadata page, we have inserted a button to complete the insertion of metadata. When this button is used, the metadata are stored in database and then continues the natural flow of moodle.

## ***2.-Editing a metadata instance for a course***

The functioning is quite simple. One can access the metadata editing form by going to the settings of the course and using the “Save and Insert metadata” button (as course teacher or administrator).

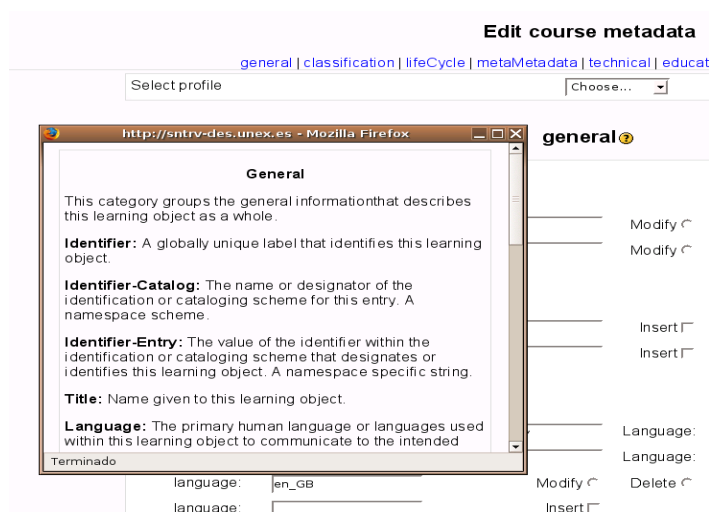
As we said before, the changes in course configuration is stored and then, the metadata editing form is showed to the user, as we can see in this screenshot:

The screenshot displays the 'Edit course metadata' interface for a 'Microbiology course'. At the top, a breadcrumb trail reads: 'Metamoodleuex » MBC » Edit course settings » Edit course metadata'. The page title is 'Edit course metadata'. Below this, there are tabs for different metadata sections: 'general', 'classification', 'lifeCycle', 'metaMetadata', 'technical', 'educational', 'rights', 'relation', and 'annotation'. The 'general' tab is currently selected. A 'Select profile' dropdown menu is visible. The main content area is divided into two sections: 'identifier' and 'title'. The 'identifier' section contains two rows of fields. The first row has 'catalog' (value: 'CDU') and 'entry' (value: '57'), each with 'Modify' and 'Delete' buttons. The second row has empty 'catalog' and 'entry' fields, each with an 'Insert' button. The 'title' section is currently empty.

One can modify or insert the metadata, by checking the check box beside the desired field with the right option. For example, if there is no metadata in one field, we must check the insert option. If we want to modify the data, we should check the modify option, and finally we should check the delete option if we want to remove this field from the metadata record.

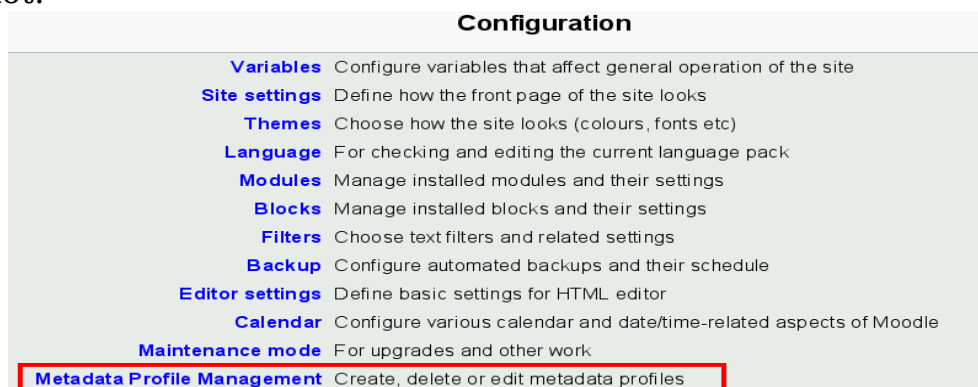
At the bottom of the metadata page, a button have been added to complete the edition of metadata. When this button is used, the metadata are stored in the database and then continues the natural flow of moodle.

Most people don't know the meaning of the metadata fields, so in every cathegory we have placed one help item to explain the meaning of the metadata, as we can see in the next screenshot:



### 3. Metadata Profile Management

To make easier for the user filling of the metadata record, the administrator of moodle can set metadata profiles that can be used in every course. The profile are subsets of the LOM metadata. This profiles can be configured by the administration menu of moodle, as we can see in the last option of the next screenshot:



The interface is quite simple. There are two big metadata groups. The left one shows the profile that we are building, and the right one shows the available metadata. By clicking the arrows, we can add or delete a metadata to the profile.

If we click in the “delete” button, we remove the profile selected, and if we click the “new” button, the fields are resetted to the initial values, allowing to begin the building of a new profile. The first step when building a profile is to fill the “name” field (it's required).

We can see the user interface on this screenshot:

[Administration](#) » [Configuration](#) » [Profile management](#)

The screenshot displays the 'Profile management' interface. At the top, there is a breadcrumb trail: 'Administration » Configuration » Profile management'. Below this, a 'Choose...' dropdown menu with a help icon (?) is visible. The main area is divided into three sections. On the left, '38 Metadata in profile' lists various metadata fields such as 'general', 'identifier', 'catalog', 'entry', 'title', 'language', 'description', 'keyword', 'aggregationLevel', 'classification', 'taxonPath', 'source', 'taxon', 'id', 'entry', 'purpose', 'keyword', 'lifeCycle', 'version', and 'contribute'. In the center, there are two vertical lists of metadata. The left list, '46 Available metadata', includes 'general', 'coverage', 'structure', 'classification', 'description', 'lifeCycle', 'status', 'metaMetadata', 'identifier', 'catalog', 'entry', 'contribute', 'role', 'entity', 'date', 'technical', 'requirement', 'orComposite', 'type', and 'name'. Between these two lists are left and right arrow buttons. On the right, the 'Profile name' field contains 'Agatha', and the 'Profile description' field contains 'Agatha es un perfil de prueba creado para el guiado en el manual.'. At the bottom right, there are 'Modify', 'Delete', and 'New' buttons.

As can be seen in the previous image, there is a select menu in which we can choose one of the existing profiles to show or to modify it.

There is a minimum profile, called moodlecore profile. You can add metadata to this profile, but no case delete metadata from it.

#### **4. Search by metadata**

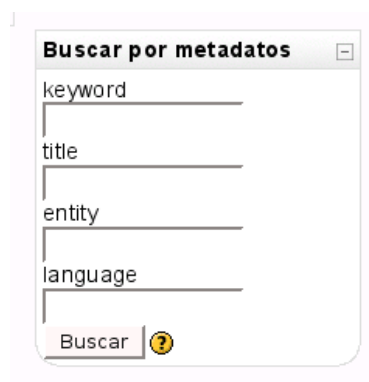
We can perform searches, using the metadata inserted in the courses. In order to do this, a search metadata block have been created and placed in 0 course (Init screen of moodle). The block shows one search form with 4 search parameters (it will be changed in next versions). The logic used is OR. The

parameters are:

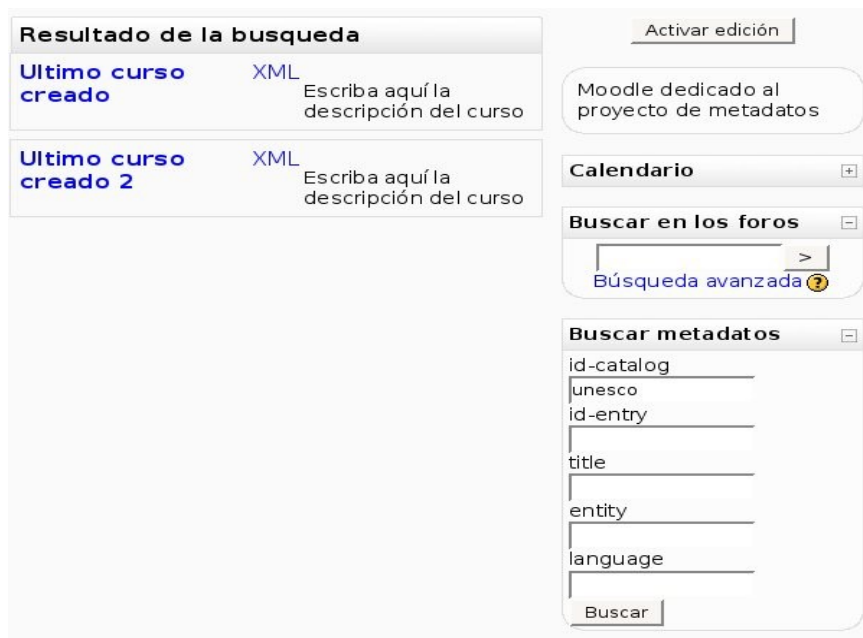
- KeywordPalabra clave
- Title
- Entity
- Language

Those fields are to be filled if they are going to be used in the search. If any of the search parameters fits to the metadata of any course, the course will be displayed in the results page.

The search block looks like the one in next image:



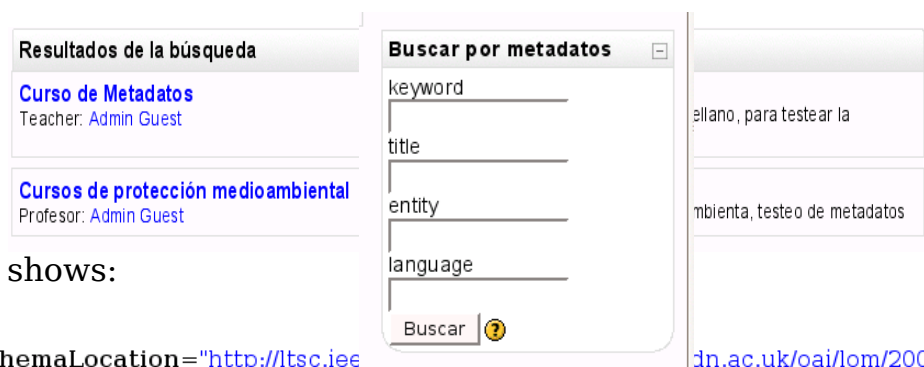
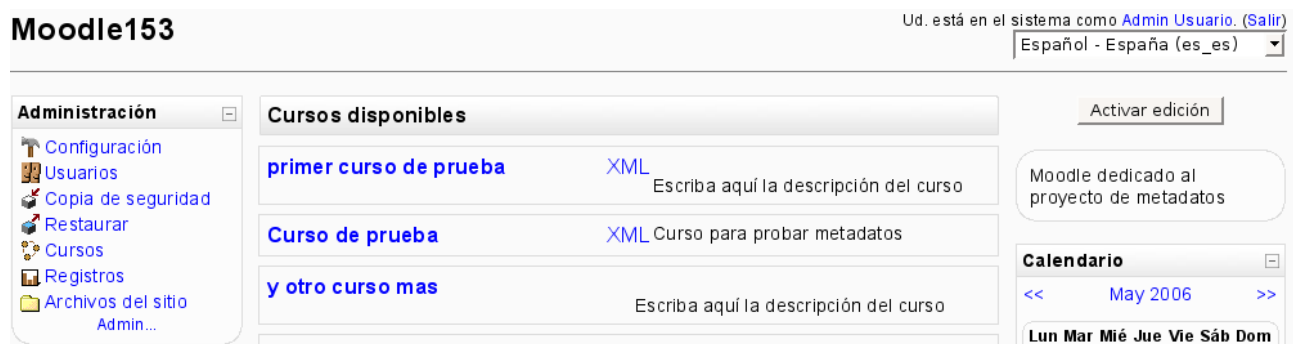
The next screenshot shows a results page example:





## 5. Import/export metadata (XML)

We have the possibility to download the XML file of the metadata with the LOM specification by clicking in the XML link next to the title of the course. We can see the appearance of the link in the following image:



The XML shows:

```
<lom xsi:schemaLocation="http://ltsc.iee
- <general>
- <identifier>
  <catalog>UNESCO</catalog>
  <entry>2406</entry>
</identifier>
- <identifier>
  <catalog>URI</catalog>
  <entry>
    http://sntrv-des.unex.es/metamoodleuex/course/view.php?id=12
  </entry>
</identifier>
- <identifier>
  <catalog>UNESCO</catalog>
  <entry>2401</entry>
</identifier>
- <title>
```

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