

# **DOOR**

**Digital Open Object Repository**

## **User Manual v1.0**



**July 23, 2006**

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## INTRODUCTION

DOOR (Digital Open Object Repository) is an open source web application for learning objects repository implementing IMS metadata (version 1.2.1) and content package specifications (version 1.1.3). It can be useful to all organizations producing, storing and reusing digital learning contents.

DOOR is released under GPL. It has originally developed and is currently being maintained by the eLab (<http://www.elearninglab.ch>), the e-learning laboratory of the University of Lugano and the University of Applied Sciences of Southern Switzerland.

The reference page for DOOR, with downloads, installation instructions and other useful information is <http://door.sourceforge.net>.

This document explains how to use a the repository and how to pick up learning objects from a repository and include them in a course in moodle.

# 1. DOOR: STAND ALONE VERSION

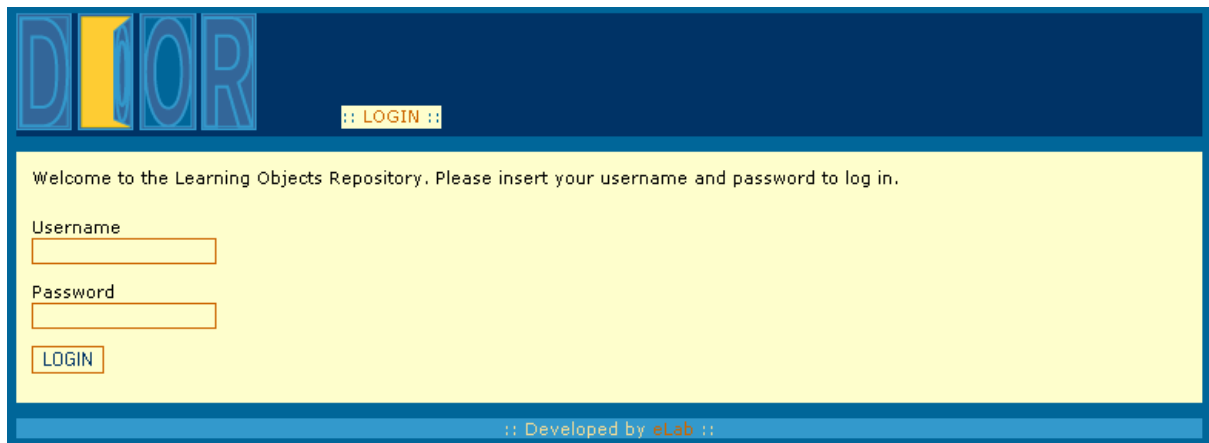
## 1.1. *Authentications and accounts*

### 1.1.1. Supported authentication types

DOOR supports two different authentication types: local authentication (authentication on the resource providing username and password) and shibboleth authentication. Shibboleth is an open source authentication middleware system that lets you sign on once (at your home organization) and then access every resource in the same federation. To learn more about Shibboleth authentication consider visiting the following site: <http://shibboleth.internet2.edu>

### 1.1.2. Local authentication

When you try to access DOOR using the local authentication, the following page is loaded.



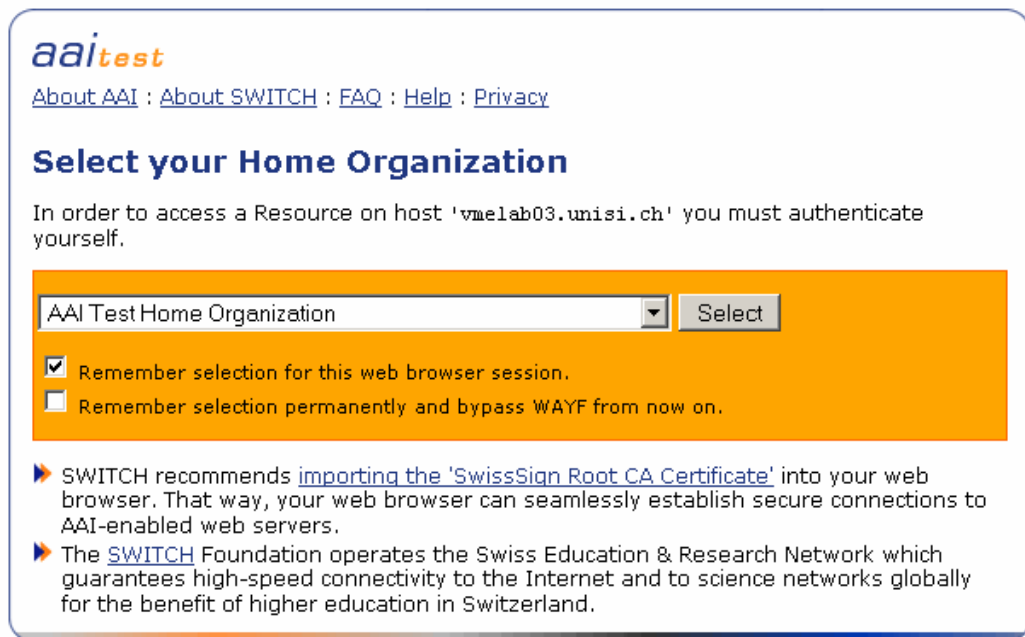
The screenshot shows a web page for local authentication. At the top left is the 'DOOR' logo. To its right is a yellow box with the text ':: LOGIN ::'. Below this is a light yellow box with the text 'Welcome to the Learning Objects Repository. Please insert your username and password to log in.' followed by two input fields labeled 'Username' and 'Password', and a 'LOGIN' button. At the bottom of the page, a dark blue footer contains the text ':: Developed by eLab ::'.

**Picture 1: local authentication.**

You log in locally providing username and password.

### 1.1.3. Shibboleth authentication

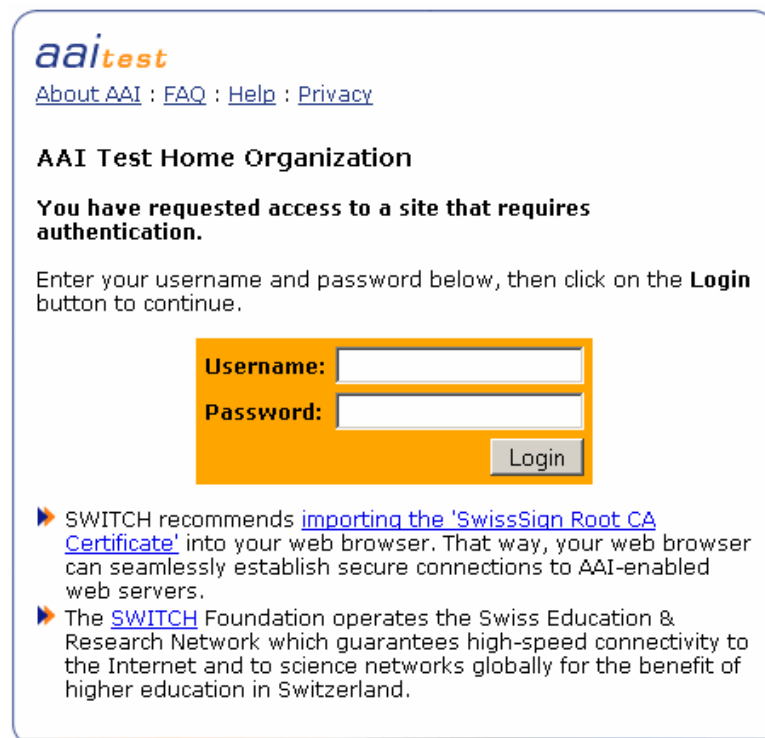
When you try to access a shibboleth protected resource a similar page is loaded.



The screenshot shows the 'aai<sub>test</sub>' logo at the top left, followed by navigation links: [About AAI](#), [About SWITCH](#), [FAQ](#), [Help](#), and [Privacy](#). The main heading is 'Select your Home Organization'. Below this, a message states: 'In order to access a Resource on host 'vmelab03.unisi.ch' you must authenticate yourself.' A yellow box contains a dropdown menu with 'AAI Test Home Organization' selected and a 'Select' button. Below the dropdown are two checkboxes: the first is checked and labeled 'Remember selection for this web browser session.', and the second is unchecked and labeled 'Remember selection permanently and bypass WAYF from now on.' At the bottom of the yellow box, there are two blue arrows pointing to informational text: 'SWITCH recommends importing the 'SwissSign Root CA Certificate' into your web browser. That way, your web browser can seamlessly establish secure connections to AAI-enabled web servers.' and 'The SWITCH Foundation operates the Swiss Education & Research Network which guarantees high-speed connectivity to the Internet and to science networks globally for the benefit of higher education in Switzerland.'

**Picture 2: choose your home organization.**

You have to choose your home organization and then login providing username and password.



The screenshot shows the 'aai<sub>test</sub>' logo at the top left, followed by navigation links: [About AAI](#), [FAQ](#), [Help](#), and [Privacy](#). The main heading is 'AAI Test Home Organization'. Below this, a message states: 'You have requested access to a site that requires authentication.' A message follows: 'Enter your username and password below, then click on the **Login** button to continue.' A yellow box contains two input fields: 'Username:' and 'Password:', with a 'Login' button to the right. Below the yellow box, there are two blue arrows pointing to informational text: 'SWITCH recommends importing the 'SwissSign Root CA Certificate' into your web browser. That way, your web browser can seamlessly establish secure connections to AAI-enabled web servers.' and 'The SWITCH Foundation operates the Swiss Education & Research Network which guarantees high-speed connectivity to the Internet and to science networks globally for the benefit of higher education in Switzerland.'

**Picture 3: provide username and password to login.**

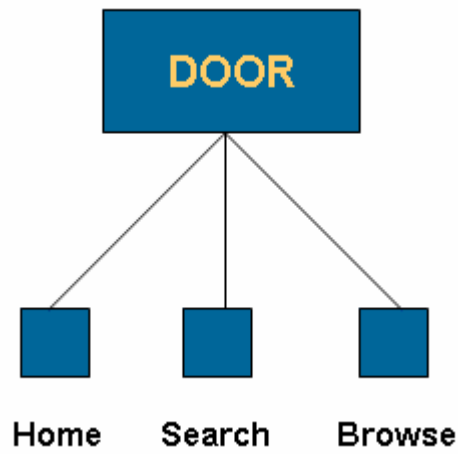
The actual interface for Shibboleth authentication depends on the Home Organization manager.

#### **1.1.4. Account's categories**

DOOR handles two account categories, **administrators** and **users**. Administrators have full control over the repository and its three sections, users can only browse the repository and view and download Learning Objects.

## 1.2. Repository structure

The following diagram shows the DOOR structure.



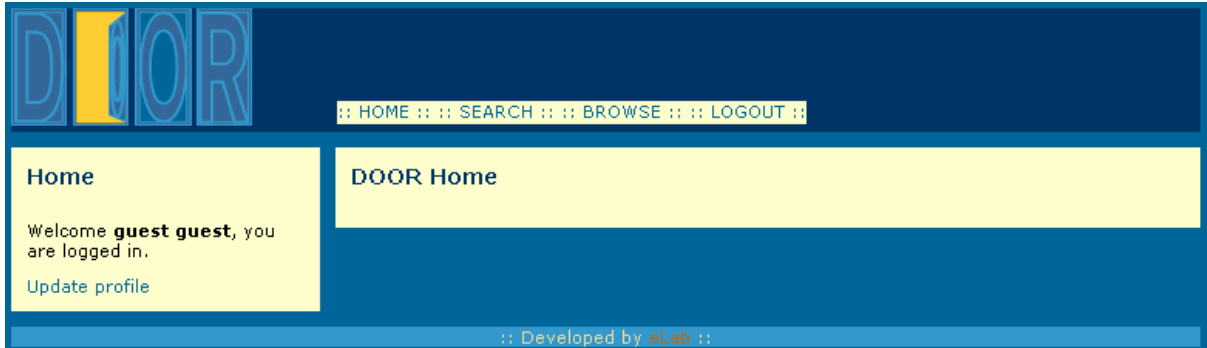
**Picture 4: DOOR structure diagram.**

As you can see DOOR is organized in three sections. Each section has many features that will be explained in the next chapters.

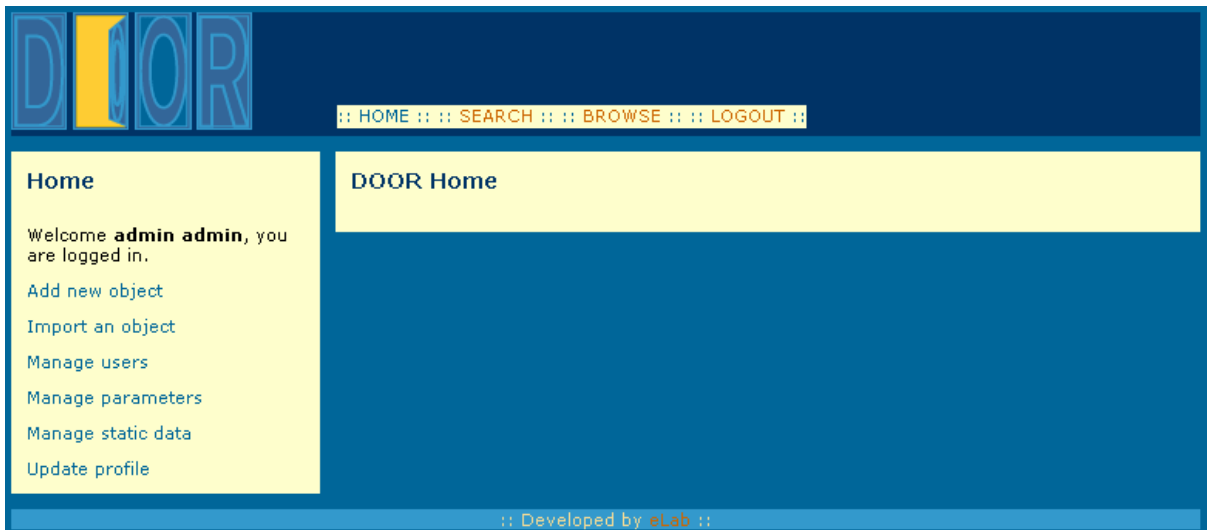


### 1.3. Home section

This section is a simple welcome page for users, but it has a lot of features for administrators. The following two pictures show this section accessed as user and as administrator.



Picture 5: home section in user mode.



Picture 6: home section in administrator mode.

Follow description and pictures of every feature.

### 1.3.1. Add new object (only for administrators)

Every learning object requires a title, a description, a catalogue reference and an attachment (nothing, file or url). Keywords, languages, type of resource, intended use by, intended use in, time required are optional information.

The following picture shows the adding form.

The screenshot shows the 'Add Object' form in the DIOR system. The form is divided into two main sections: a left sidebar and a main content area. The sidebar, titled 'Home', contains a welcome message for 'admin admin' and several navigation links: 'Add new object', 'Import an object', 'Manage users', 'Manage parameters', 'Manage static data', and 'Update profile'. The main content area, titled 'Add Object', contains the following fields and controls:

- Title:** A text input field with a red asterisk indicating it is required.
- Description:** A large text area with a vertical scrollbar and a red asterisk indicating it is required.
- Keywords:** A text input field with a 'set' button and the text 'Comma delimited values.' below it.
- Catalog reference:** A dropdown menu with 'ROOT' selected.
- Language:** A text input field with a 'set' button.
- Type of resource:** A text input field with a 'set' button.
- Intended use by:** A text input field with a 'set' button.
- Intended use in:** A text input field with a 'set' button.
- Time required:** Two dropdown menus for 'Hours' and 'Minutes', both set to '0'.
- Attachment:** Three radio buttons: 'No attachment' (selected), 'Local file', and 'Url'.
- \* Required fields:** A note indicating that the Title and Description fields are required.
- Buttons:** 'Insert Object' and 'Reset' buttons at the bottom of the form.

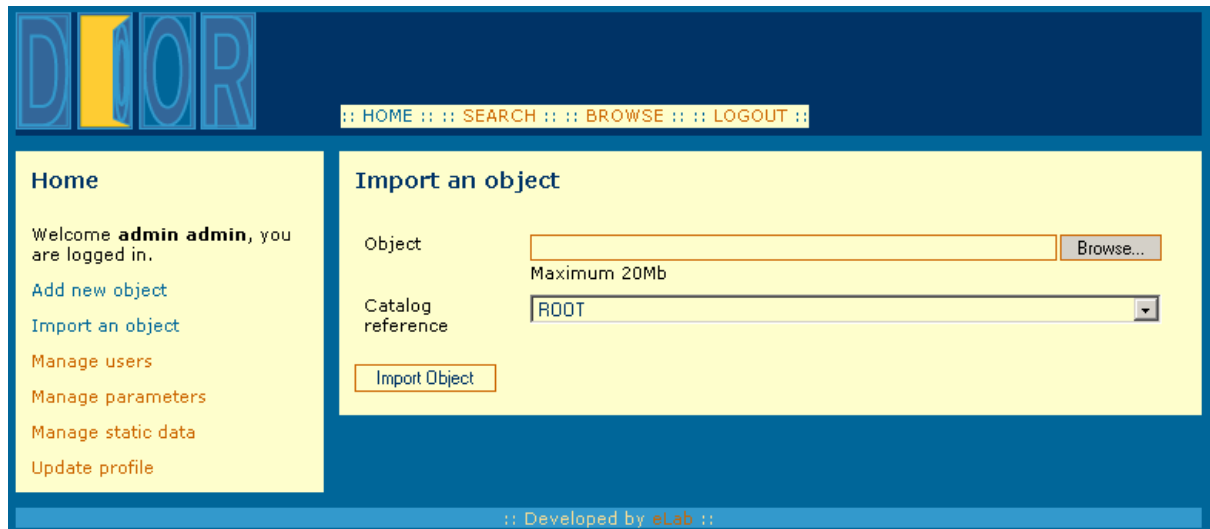
The footer of the page reads ':: Developed by eLab ::'.

Picture 7: adding form.

### 1.3.2. Import an object

It's also possible to import a learning object. You just have to choose a learning object and its position in the catalogue.

The following picture shows the importing form.



The screenshot displays the DIOR web application interface. At the top left is the DIOR logo. A navigation bar contains links for HOME, SEARCH, BROWSE, and LOGOUT. The main content area is split into two columns. The left column, titled 'Home', contains a welcome message for 'admin admin' and several menu items: 'Add new object', 'Import an object', 'Manage users', 'Manage parameters', 'Manage static data', and 'Update profile'. The right column, titled 'Import an object', contains a form with two fields: 'Object' (with a 'Browse...' button and a 'Maximum 20Mb' limit) and 'Catalog reference' (with a dropdown menu showing 'ROOT'). Below these fields is an 'Import Object' button. The footer of the page reads ':: Developed by eLab ::'.

Picture 8: importing form.

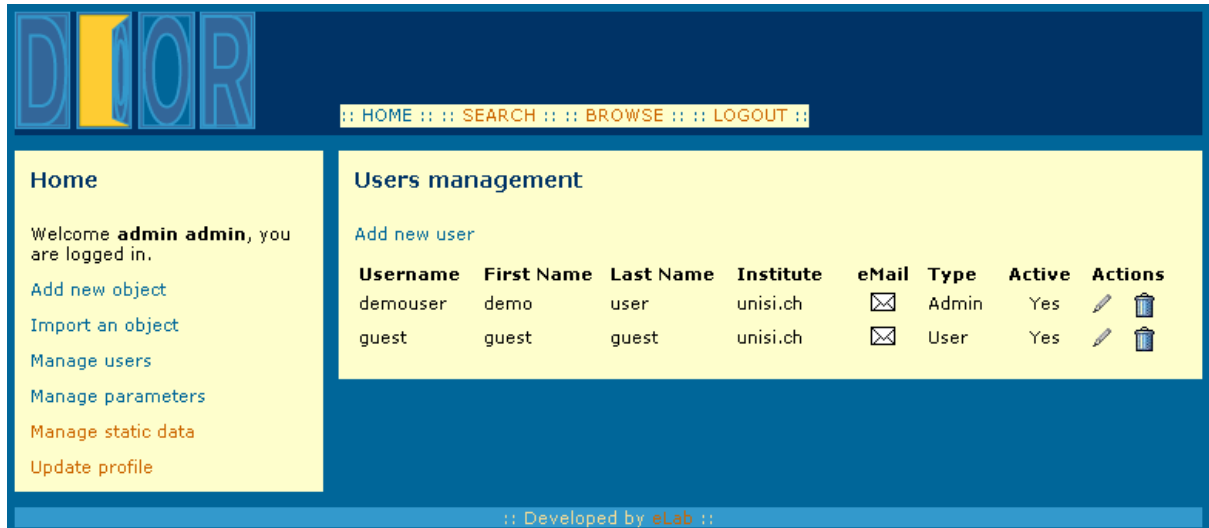
### 1.3.3. Edit and delete learning objects (only for administrators)

After add and import processes you can decide to modify the object clicking a link on the confirmation page. Please refer to the tree section for more information.

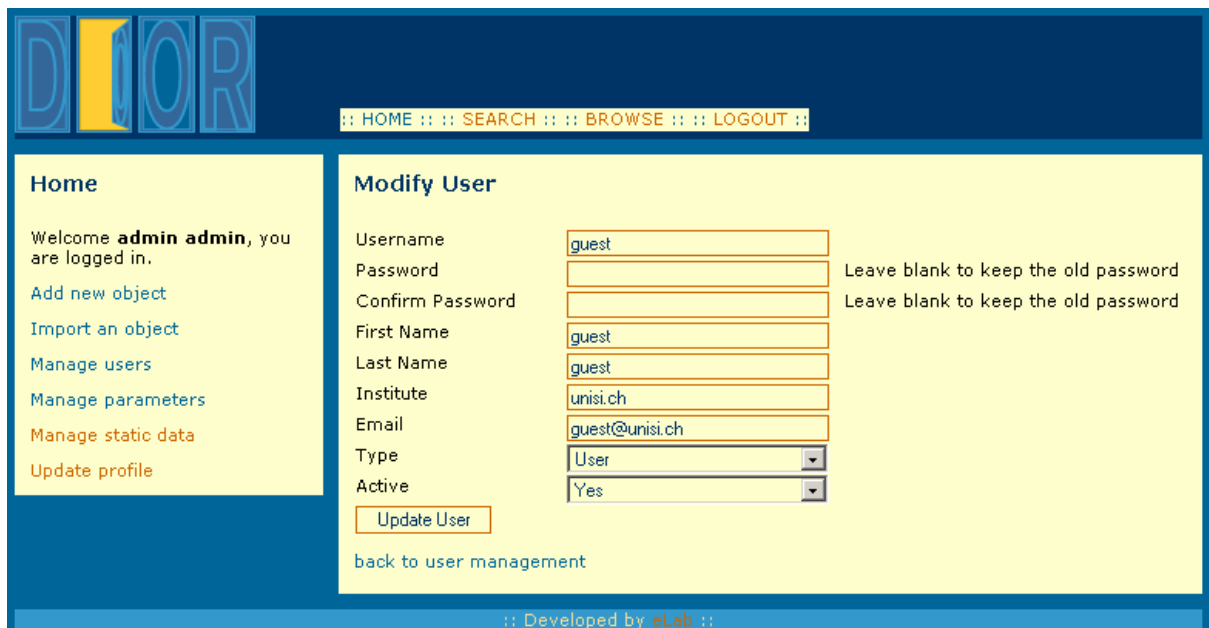
### 1.3.4. Manage users (only for administrators)

As administrator you can add, modify and delete users. Every user has the following information: username, password, first name, last name, institute, email, type (administrator or user) and active (it assumes the “No” value when the user has been deleted).

The following pictures show the user management part.



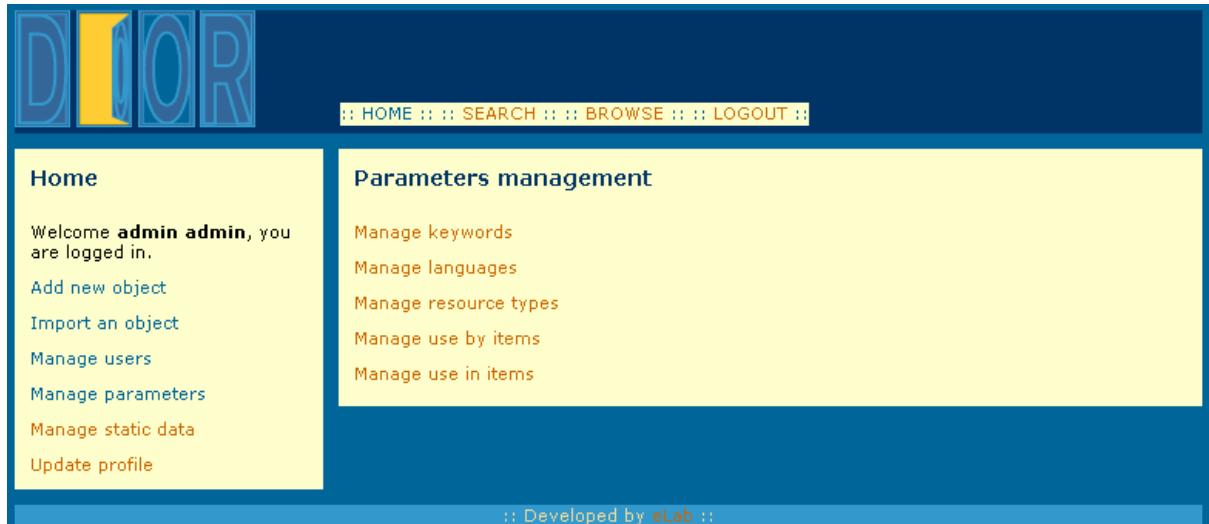
Picture 9: user list.



Picture 10: modify user form.

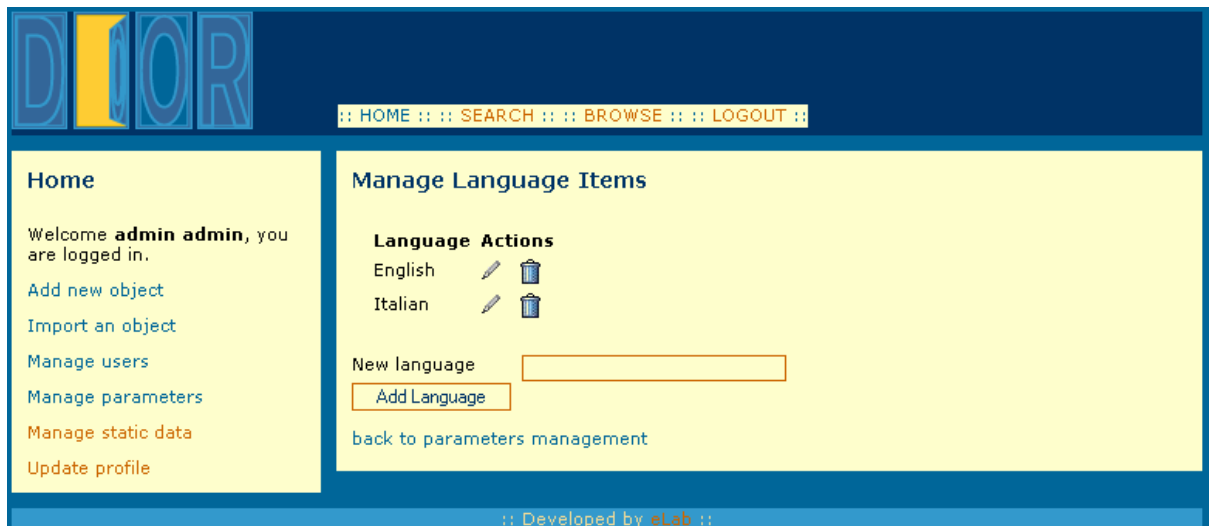
### 1.3.5. Manage parameters (only for administrators)

As administrator you can add, modify and delete parameters that will be used during the creation of learning objects just by choosing “Manage parameters” in the left menu. As you can see in the following picture there are five different parameters: “keywords”, “languages”, “type of resource”, “use by” and “use in”. They correspond to the definition in the IMS Metadata Specification (<http://www.imsglobal.org/metadata/index.html>).



Picture 11: parameters list.

Clicking on a parameter you can access the page that let you add, modify and delete its entries. The following picture shows the languages management part (pages for the other four parameters are similar).



Picture 12: languages management.

### 1.3.6. Manage static data (only for administrators)

Every learning object has common data such as the name of the catalogue, copyright statements and other things. As administrator you can modify it. The following picture represents the relative form.

The screenshot shows a web interface for managing static data. On the left is a 'Home' sidebar with navigation links. The main area is titled 'Edit Static Data' and contains a form with the following fields:

Catalog	door_demo
Format of record	standard
System type	Browser
System name	Explorer; Firefox
Minimum version	1.2
Maximum version	6.0
Copyright	yes
Copyright statement	Copyright of Swiss virtual campus project, as indicated in I0 assets.

Below the form is a 'Save Changes' button and a message: 'No changes, back to home'. The footer of the page reads 'Developed by eLab'.

Picture 13: static data management part.

### 1.3.7. Update profile (for administrators and users)

Everyone can modify his profile changing username, password, first name, last name, institute, email just by choosing “Update profile” in the left menu.

The following picture shows the update profile form.

The screenshot shows a web application interface with a dark blue header and a light yellow main content area. The header contains the logo 'DIOR' and navigation links: HOME, SEARCH, BROWSE, and LOGOUT. The main content area is divided into two sections: 'Home' on the left and 'Update profile' on the right. The 'Home' section includes a welcome message for 'admin admin' and a list of menu items: Add new object, Import an object, Manage users, Manage parameters, Manage static data, and Update profile. The 'Update profile' section contains a form with the following fields and values: Username (admin), Password (empty), Confirm Password (empty), First Name (admin), Last Name (admin), Institute (unisi.ch), and Email (admin@admin.ch). There is an 'Update Profile' button and a message 'No changes, back to home'. The footer of the page says 'Developed by eLab'.

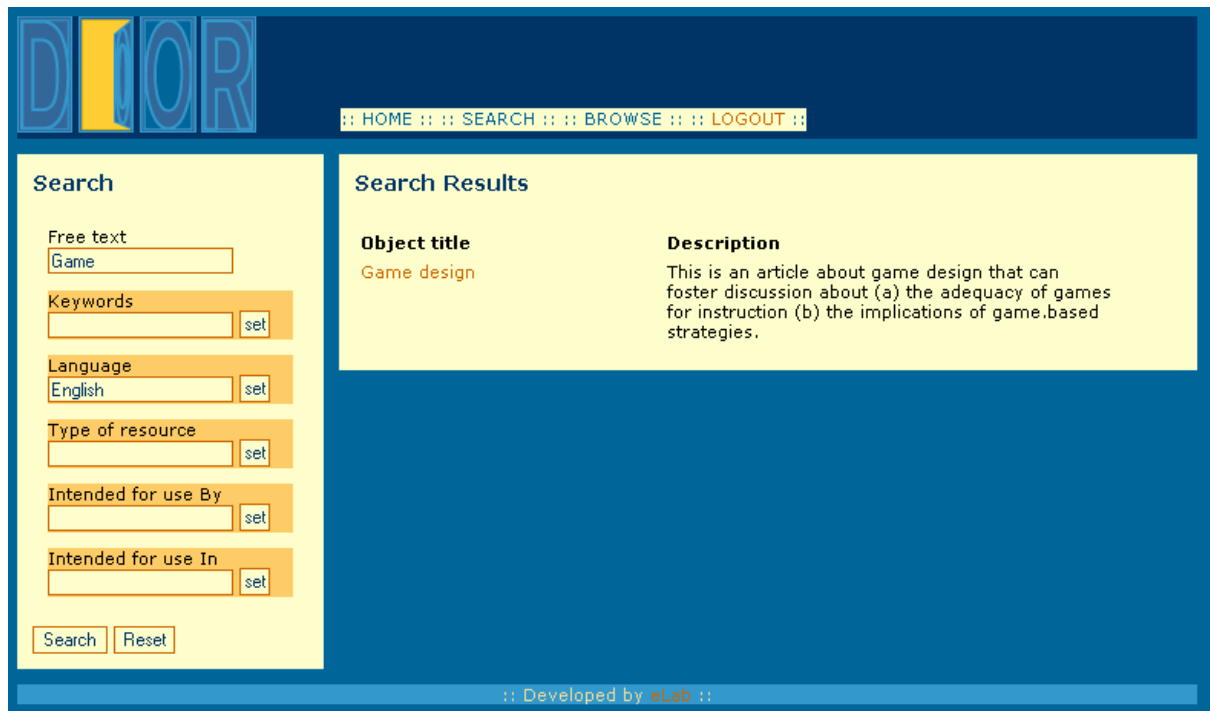
Picture 14: update profile form.

## 1.4. Search section

### 1.4.1. Search for learning objects (for administrators and users)

You can search for learning objects by providing a free text, keywords and parameters (previously explained) in the left form. By clicking on the “Search” button you’ll obtain a list of learning object that satisfy the search requirements.

The following picture shows an example of search.



The screenshot displays the DIOR search interface. At the top left is the DIOR logo. A navigation bar contains links for HOME, SEARCH, BROWSE, and LOGOUT. The main content area is divided into two sections: Search and Search Results.

**Search Section:**

- Free text:
- Keywords:  set
- Language:  set
- Type of resource:  set
- Intended for use By:  set
- Intended for use In:  set
- Buttons: Search, Reset

**Search Results Section:**

Object title	Description
Game design	This is an article about game design that can foster discussion about (a) the adequacy of games for instruction (b) the implications of game based strategies.

At the bottom of the page, it says: :: Developed by eLab ::

Picture 15: Search section.

### 1.4.2. Edit and delete learning objects (only for administrators)

This is a general feature present in every section and it’s explained in the tree section.



## 1.5. Browse section

This section let you browse the repository. Learning objects are organized in a tree structure; in particular they are the leaves of the tree. The following two pictures show this section accessed as user and as administrator.

JavaScript Tree Menu  
REPOSITORY ROOT

- module 1
  - Game design
  - exercises
  - multimedia
- module 2
  - exercises
- module 3
  - exercises

Game design

**Description** This is an article about game design that can foster discussion about (a) the adequacy of games for instruction (b) the implications of game.based strategies.

**Keywords** game

**Catalog Reference** 2 - module 1

**Language** English

**Type of resource** Reading

**Intended use by** students

**Intended use in** HE general

**Time required** 80 min.

**Attachment** [Download](#)  
[Download IMS](#)

:: Developed by eLab ::

Picture 16: tree section in user mode.

new rename move delete

JavaScript Tree Menu  
REPOSITORY ROOT

- module 1
  - Game design
  - exercises
  - multimedia
- module 2
  - exercises
- module 3
  - exercises

Game design

**Description** This is an article about game design that can foster discussion about (a) the adequacy of games for instruction (b) the implications of game.based strategies.

**Keywords** game

**Catalog Reference** 2 - module 1

**Language** English

**Type of resource** Reading

**Intended use by** students

**Intended use in** HE general

**Time required** 80 min.

**Attachment** [Download](#)  
[Download IMS](#)

EDIT | DELETE

:: Developed by eLab ::

Picture 17: tree section in administrator mode.

### **1.5.1. Browse the tree (for administrators and users)**

The tree is a good structure to catalogue learning objects; every node can contain an undefined number of them. It's then so easy to browse the tree and retrieve desired learning objects. Clicking on nodes you can show or hide its content. Clicking on a learning object you can see their details on the right.

### **1.5.2. Edit the tree (only for administrators)**

As administrator you can create, rename, move and delete nodes using the menu over the tree. As normal user you don't see the menu (see the previous pictures).

### **1.5.3. Edit and delete learning objects (only for administrators)**

Every section gives you the possibility to edit or delete objects if you are an administrator. In the home section you can edit or delete only the previously created object, in the other two section you can choose the desired learning object. To modify a learning object you have to click on the "EDIT" link, to delete it you have to click on "DELETE" link.

The following picture shows the form that let you modify the selected object (from the tree section).

The screenshot shows a web interface for editing a learning object. At the top, there is a navigation bar with links for HOME, SEARCH, BROWSE, and LOGOUT. Below this is a sidebar with a tree view showing a repository structure: REPOSITORY ROOT, module 1 (with Game design, exercises, multimedia), module 2 (with exercises), and module 3 (with exercises). The main content area is titled 'Edit Object' and contains the following fields:

- Title: Game design \*
- Description: This is an article about game design that can foster discussion about (a) the adequacy of games for instruction (b) the implications of game.based strategies. \*
- Keywords: game (with a 'set' button and note: Comma delimited values.)
- Catalog reference: 2 - module 1
- New catalog reference: --SELECT new node-- (with a dropdown arrow and note: Do not select to leave unchanged)
- Language: English (with a 'set' button)
- Type of resource: Reading (with a 'set' button)
- Intended use by: students (with a 'set' button)
- Intended use in: HE general (with a 'set' button)
- Time required: Hours: 1 (dropdown), Minutes: 20 (dropdown)
- Current attachment: 2.pdf
- Attachment:  No changes,  No attachment,  Local file,  Url

At the bottom of the form, there is a 'Save Changes' button and a note: 'No changes, back to object normal view'. The footer of the page says ':: Developed by eLab ::'.

Picture 18: edit a learning object.

The form is filled with the current information of the learning object. You can modify it to suit your needs and then save the changes.

## 2. DOOR: PLUGIN FOR MOODLE

A moodle plugin has also been created in order to allow teachers to quickly add learning objects in their courses. This software lets you first choose a repository and then browse it and pick up the desired learning object. Moodle and DOOR support both two different authentication types (normal and shibboleth). The plugin is able to handle the four combinations list.

### 2.1. Configure the module (only for moodle administrators)

First of all you have to install the module. For detailed instructions please visit <http://door.sourceforge.net>. To configure the plugin you have to access moodle as administrator and go under:

**moodle1.5 » Administration » Configuration » Modules » DOOR**

The following picture shows the configuration page.

The screenshot shows the 'DOOR' configuration page. At the top, there is a warning box: 'Be careful modifying these settings - strange values could cause problems.' Below this is the main heading 'LEARNING OBJECTS REPOSITORIES MANAGEMENT' with a help icon. Underneath is the section 'MODIFY EXISTING REPOSITORIES'. This section contains a table with three columns: 'Repository name', 'Repository address', and 'Authentication'. There are four rows of existing repositories, each with a 'delete' button. Below the table is the section 'ADD A NEW REPOSITORY' with three input fields for 'Repository name', 'Repository address', and 'Authentication'. At the bottom of the form is a 'Save changes' button.

Repository name	Repository address	Authentication	
ELAB	www.elab.usilu.net/door	normal	delete
ELEARNINGLAB	door.elearninglab.org	normal	delete
VMELAB01	vmelab01.usilu.net/door	normal	delete
VMELAB03	vmelab03.unisi.ch/door	shibboleth	delete

Repository name	Repository address	Authentication
<input type="text"/>	<input type="text"/>	normal

Save changes

**Picture 19: configuration page of the moodle plugin.**

Follow the instructions below to add, modify and delete repositories.

### **2.1.1. Add a repository**

To add a repository you have to give it a name, enter its address (without protocol) and choose the authentication type (normal or shibboleth). Click on the “Save changes” button to add it.

### **2.1.2. Modify a repository**

To modify a repository edit its information and click on the “Save changes” button.

### **2.1.3. Delete a repository**

To delete a repository click on the “delete” button on its right. Keep in mind that Learning Objects imported in moodle from the deleted repository won't be deleted.

## 2.2. Add a learning object (only for teachers)

Adding a learning object in a course is quite simple. Just follow the next instructions. You must be logged in the course as teacher and be in “edit” mode.

### 2.2.1. Select the resource you want to add

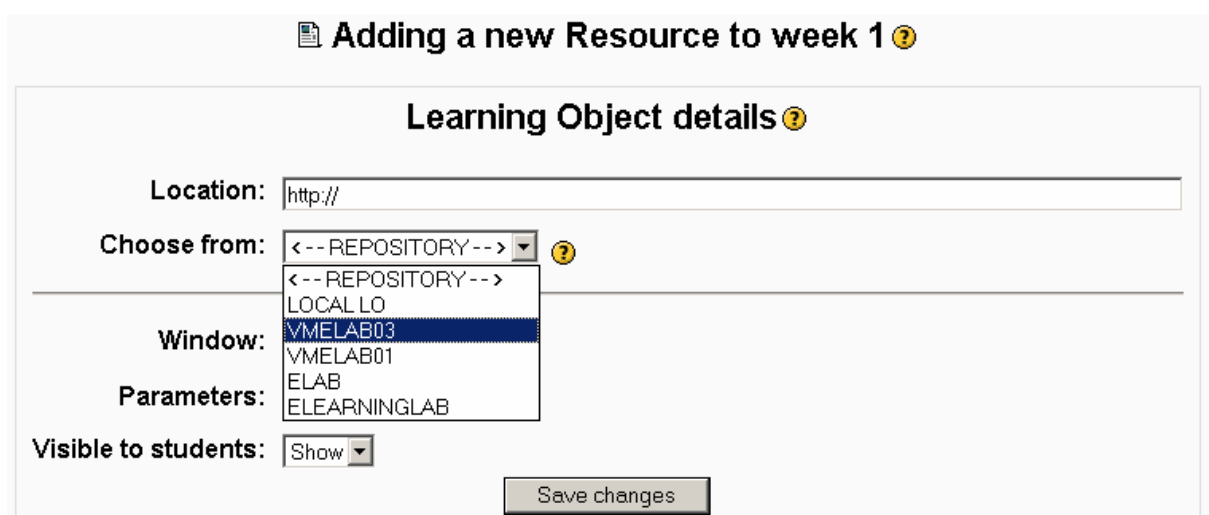
Select the “Link to a Learning Object” entry from the menu that let you add a resource.



Picture 20: add a Learning Object.

### 2.2.2. Select a repository

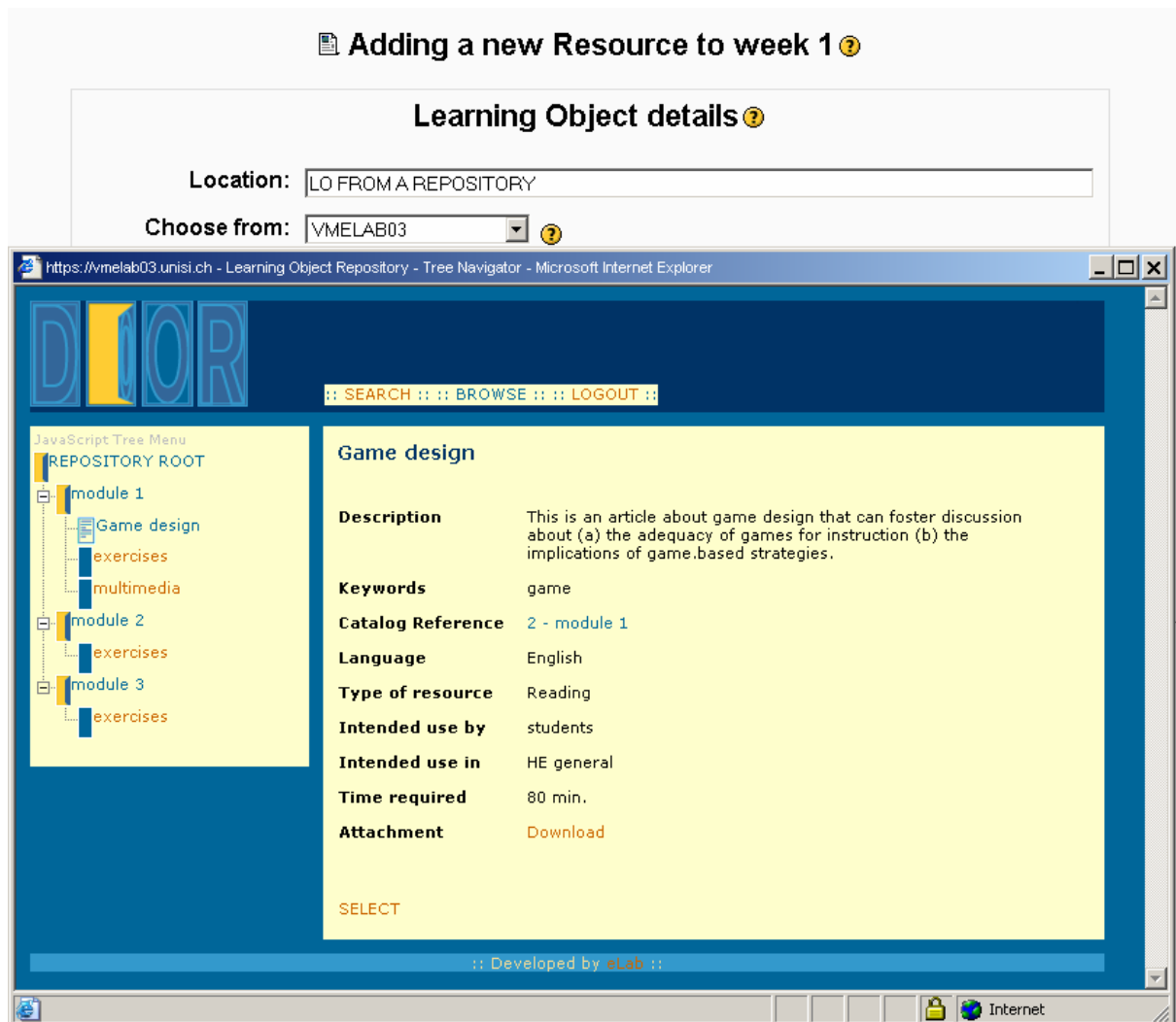
You can now decide the repository to select the learning object from. It's also possible to upload and select a local learning object. Choose the learning object's provenience from the relative menu.



Picture 21: choose a repository.

### 2.2.3. Pick up a learning object from the repository

After choosing a repository a popup appears. You have to login the repository (if you are not already logged in) and then browse it or search for a learning object. To pick up the desired one click on the “SELECT” link. The popup window will disappear and on the “Location” field you’ll see that you chose a learning object from a repository.

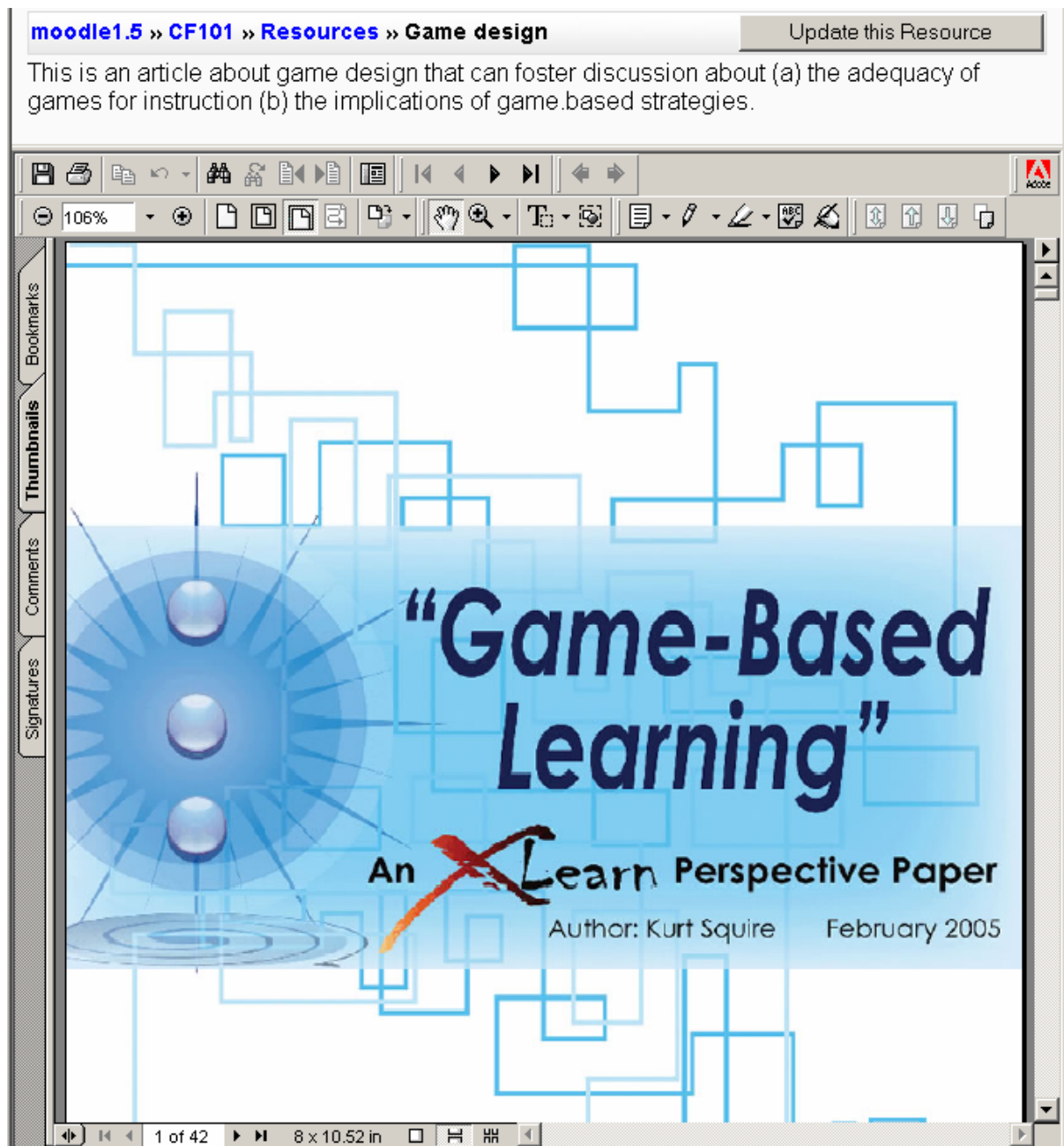


Picture 22: choose an object.

As you can see in the above picture the repository is different when accessed from moodle. The home section is not present and it's neither possible to edit the tree nor to edit or delete objects.

## 2.2.4. Save changes

Click on the “Save changes” button to commit the work and see the result. The following picture shows it.



Picture 23: resulting learning object resource.

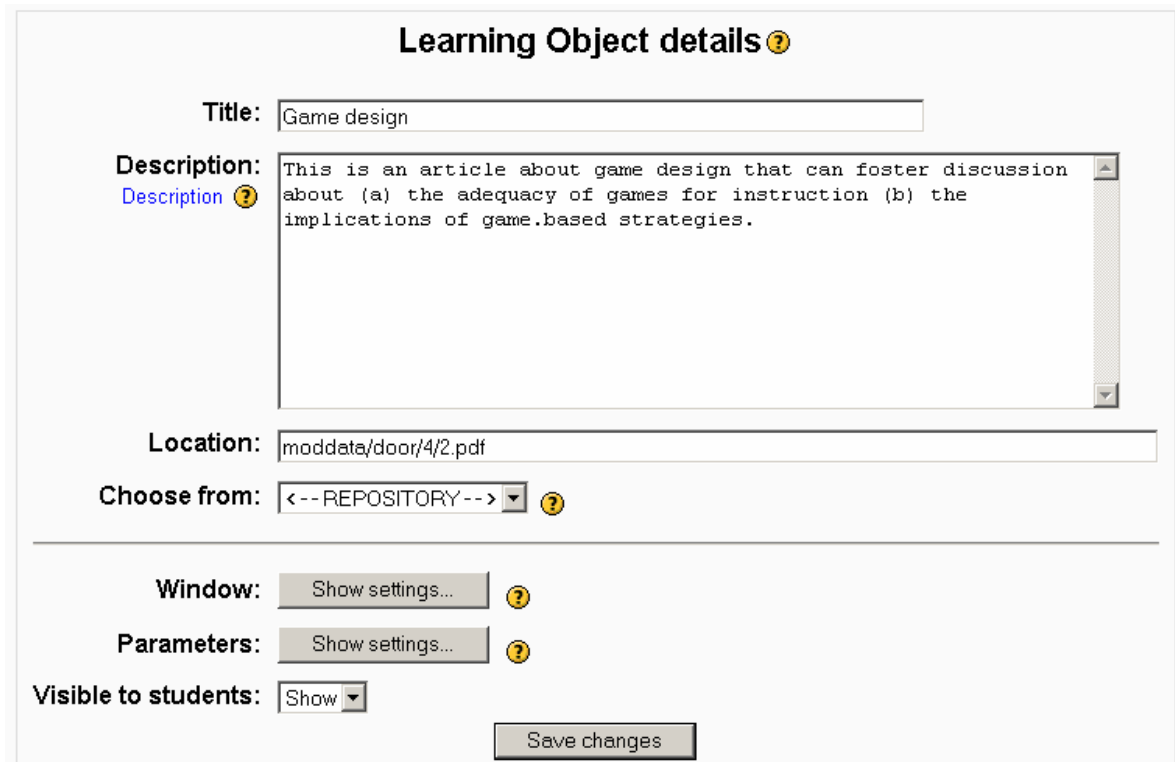


## 2.3. Modify an existing learning object (only for teachers)

### 2.3.1. Select the learning object you want to modify

Once you have chosen the Learning Object to modify click on the relative icon or the relative button depending on your location (same behavior as every resource of moodle). When it's done you'll arrive to the edit page.

### 2.3.2. Change title and/or description or learning object



**Learning Object details** ?

**Title:**

**Description:** [Description](#) ?

**Location:**

**Choose from:** <--REPOSITORY--> ?

---

**Window:**  ?

**Parameters:**  ?

**Visible to students:**

Picture 24: edit the learning object.

You can now modify title and / or description or pick up a new learning object. Keep in mind that if you choose a new learning object then title and description are overwritten (original learning object's title and description are kept).

### 2.3.3. Save changes

Click on the "Save changes" button to commit the work and see the result.

## 2.4. Delete an existing learning object (only for teachers)

Delete a learning object is quite simple. Just click on the relative icon on the course main page and confirm the action (like every resource of moodle).