MOODLE MODULE

HELIX MEDIA LIBRARY

Revision Date May 2012

The following guide explains how to install the Moodle module which allows access to content in the Helix Media Library through the API.

Pre-requisite Step

IMPORTANT: For the Plugin to work the IP address of your Moodle server must be set in the API section of the Helix Media Library

To configure this simply Log In to Helix Media Library as an Administrator and navigate to Settings > API and add your Moodle Server's IP address to the API Menu

Installation

1. Login to Moodle using an account which has system manager privileges.

2. Download the zip file containing the plugin and unzip it into the 'repositories' directory within your Moodle installation.

3. Click the 'Notifications' link within the 'Site Administration' section of the 'Settings' block.

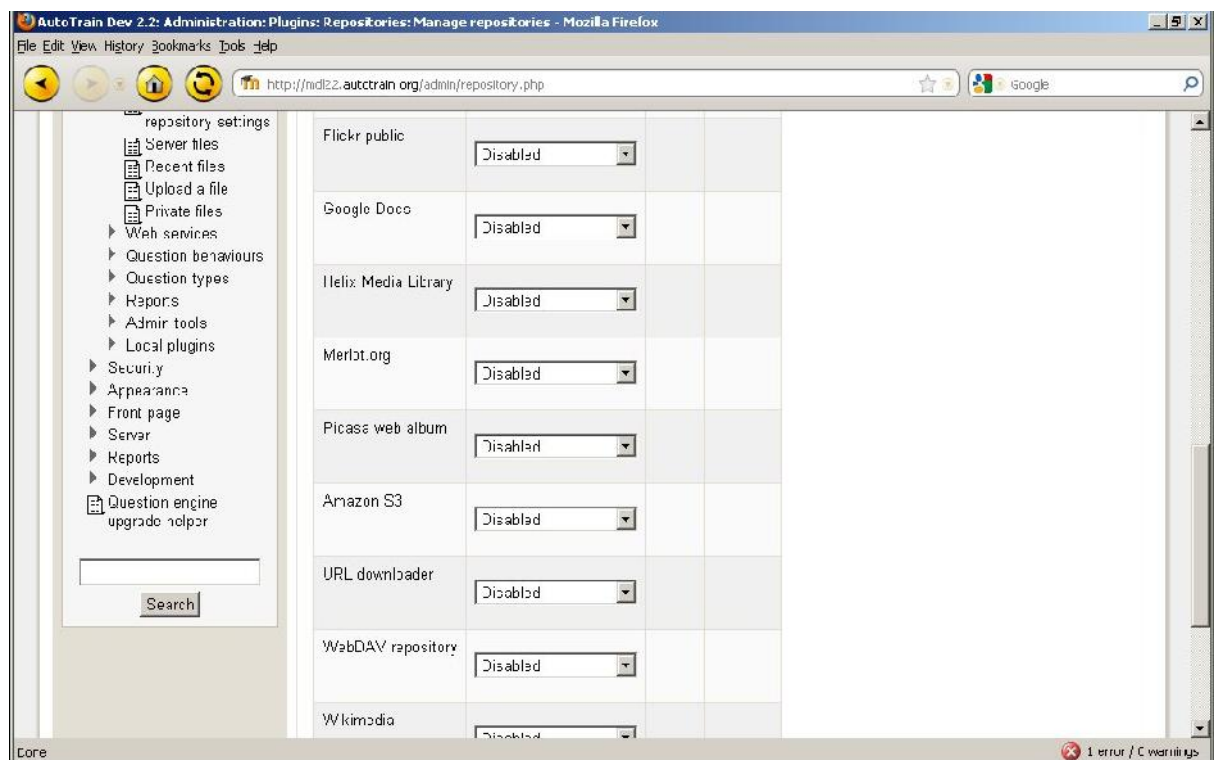4. You should be presented with the plugins check page, click the 'Upgrade' button
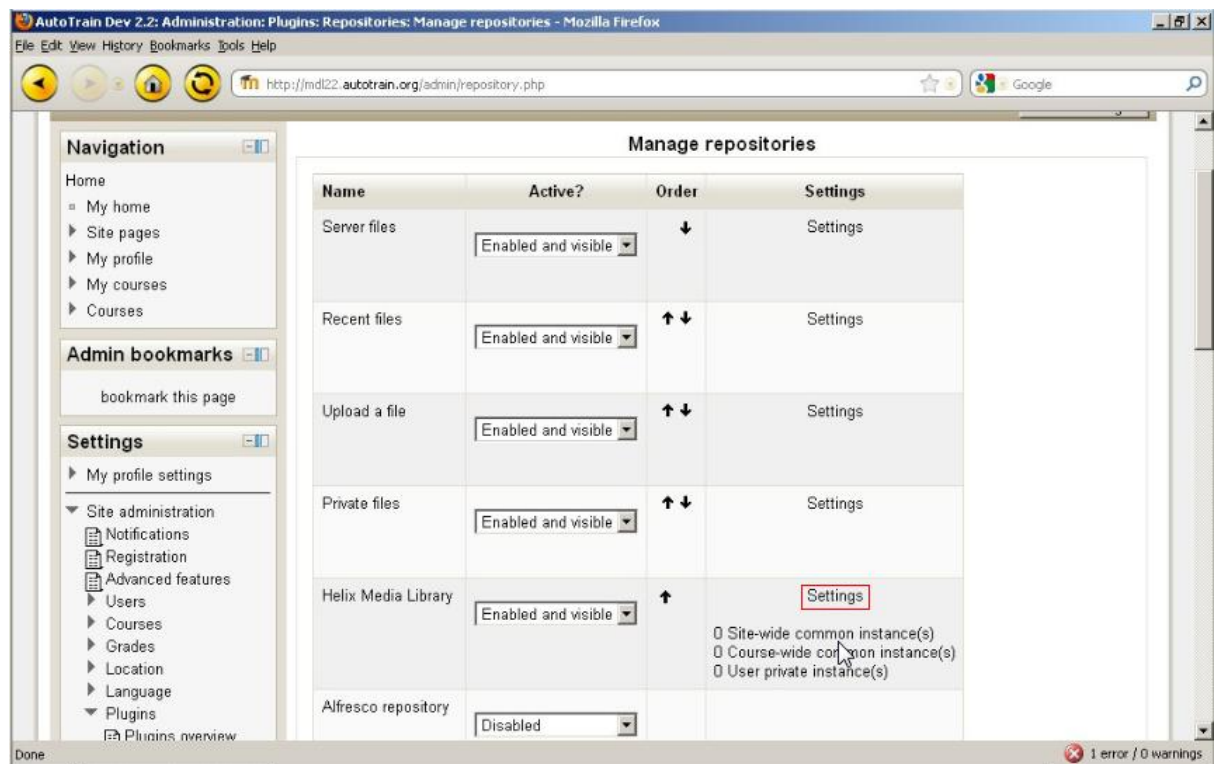
5. You should be given a success message for the installation of
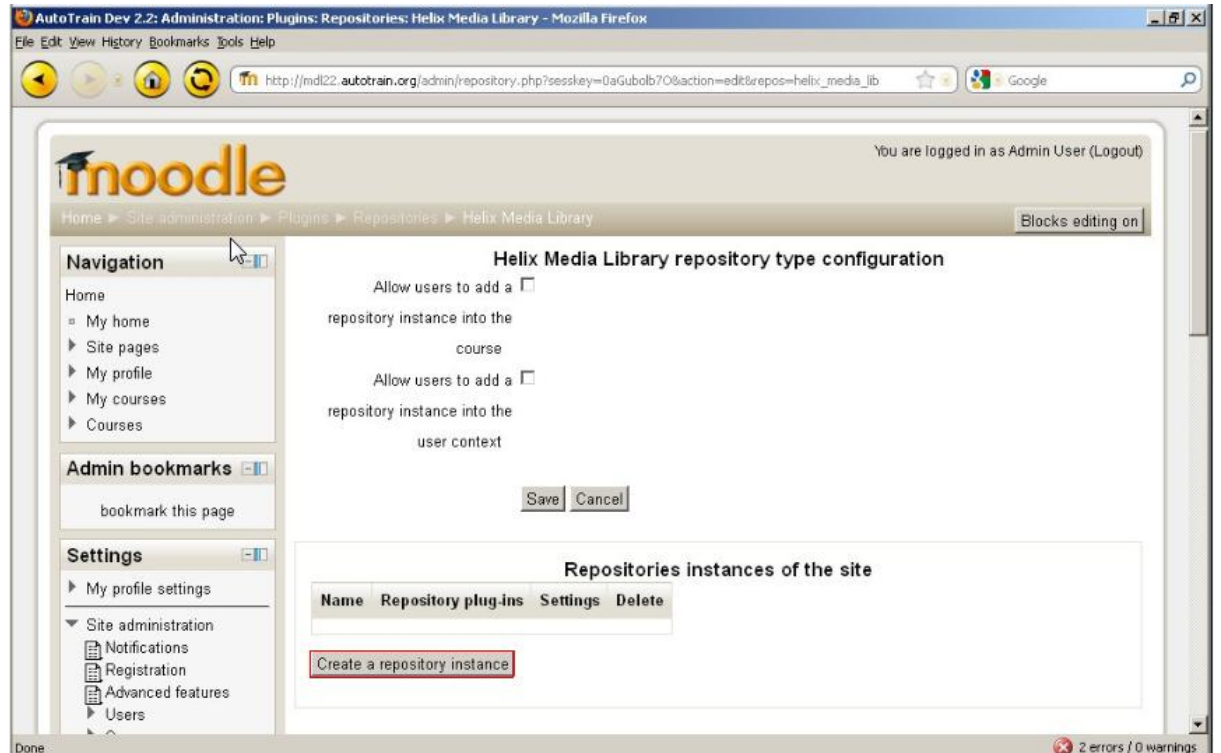'repository_helix_media_lib'.
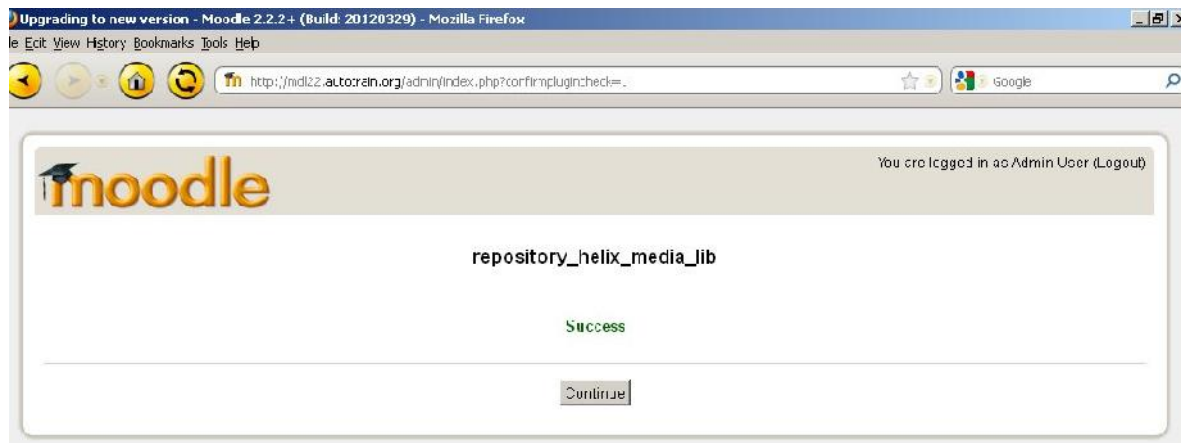
6. In the 'Settings' block navigate to Site Administration > Plugins > Repositories > Manage
Repositories'

7. Enable the Helix Media Library repository

8. Click on the settings link next to the HML Repository

9. Click the 'Create a repository instance' button

10. Enter the connection details for your HML server and click Save.

Below are examples of what needs to be entered for each field:

Name: Helix Media Library
This field is free text and is purely a label

API URL: http://upload.domain.edu/Api/hmlApi.svc
This is the address of the end point of the Helix Media Library API. It is the address of the back end administration web site for your Helix Media Library appended with /Api/hmlapi.svc

HTTP Server Host Name: http://vlshml.domain.edu/
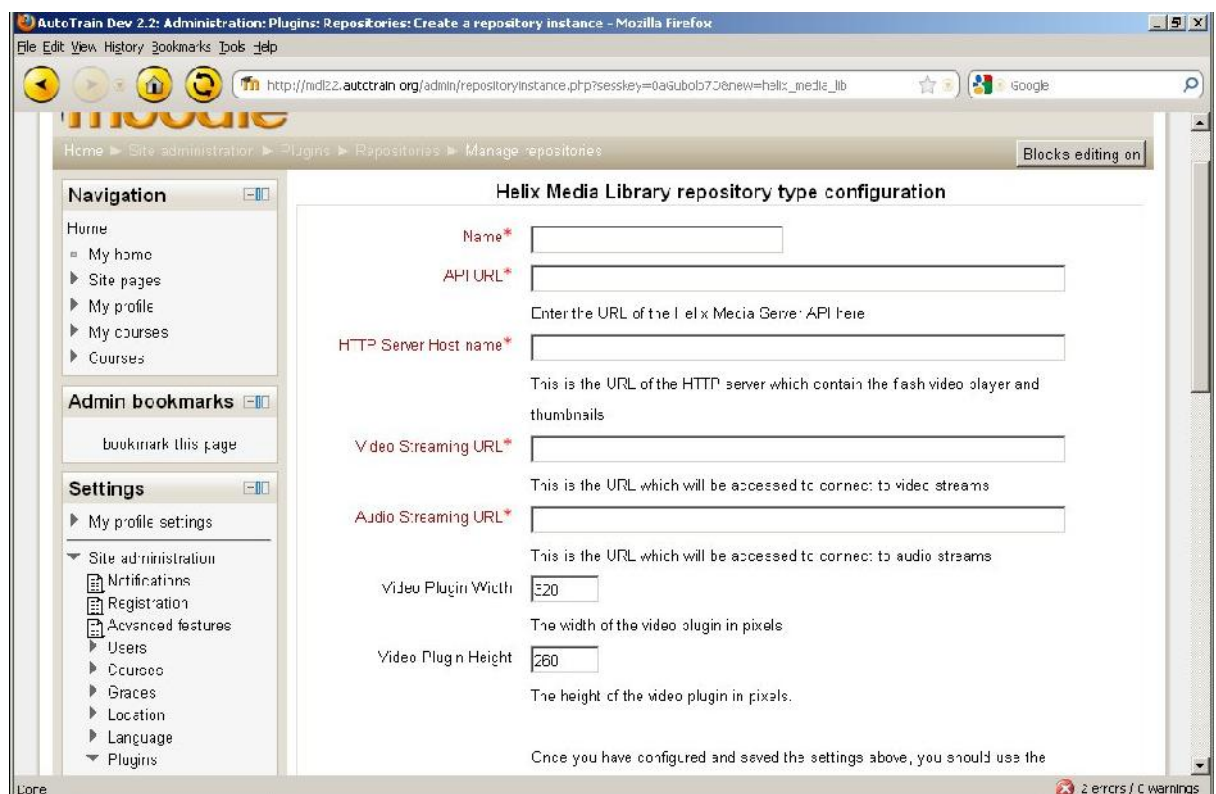This is the address of the front end of your Helix Media Library

Video Streaming URL: rtmp://helix.domain.edu/flash
This is the address of your Helix Server mountpoint used for Helix Media Library appended by rtmp://

Audio Streaming URL: http://helix.domain.edu/flash
This is the address of your Helix Server mountpoint used for Helix Media Library appended by http://

11. Return to the settings page for your newly created repository instance and click the 'Category Association Editor' link

Helix Media Library repository type configuration

Name*	[redacted]
API URI *	[redacted]

Enter the URL of the Helix Media Server API here. e.g. http://hmlupload.comair.ecu/Api/HmlApi.svc

HTTP Server Host name* [redacted]

This is the URL of the HTTP server which contain the flash video player and thumbnails. e.g. http://upload.comair.ecu

Video Streaming URL* [redacted]

This is the URL which will be accessed to connect to video streams. e.g. rtmp://helix.domain.edu/flash/

Audio Streaming URL* [redacted]

This is the URL which will be accessed to connect to audio streams. e.g. http://helix.domain.edu/flash/

Video Plugin Width 640

The width of the video plugin in pixels.

Video Plugin Height 380

The height of the video plugin in pixels.

Once you have configured and saved the settings above, you should use the **Category Association Editor** to link the Moodle categories to the categories in the Helix Media Library.

Category Association Editor

Save Cancel

There are required fields in this form marked*.

12. Set up the category associations for your server (more information below). Please ensure that you at least set the system default associations

Helix Media Library - Category Association Editor

Note: Selecting the "Show All All Available Categories option" in the HML Categories boxes below will give the user the option to search "All Available Categories", it will not cause the complete list of categories to be displayed in the search box, you still need to select the allowed categories individually.

Repository instance to edit: Helix Media Library ▾ Change

Moodle Category	Inherit Assignment	Helix Media Library Category
Respository Instance Default		ESOL / English / Embed Code Testing / Corporate
/Miscellaneous	☑	
/Streaming Category 1 ⇒ Show sub categories	☑	
/Streaming Category 2 ⇒ Show sub categories	☑	

Update Category Associations

13. The HML should now be available within the File Picker for all Moodle resources which support External Files Repositories. You can perform a test using the URL resource

Category Associations

The HML Repository has the ability to associate specific categories on your Moodle server with specific categories on the HML server. This enables system administrators to restrict the videos which are available to Teachers to only those which relate to their own course category. e.g.:

If you have a Moodle category called "Science Courses" and an HML category called "Science Videos", you can create an association between these categories so that only videos within the "Science Videos" category on the HML server are available for use by teachers of courses held in the Moodle "Science Courses" category.

It is possible to associate multiple HML categories with a single Moodle category, so you could associate HML Categories such as "Science Video" and "General Videos" with the Moodle category "Science Courses".

If you have a number of sub categories on your Moodle server, e.g. "Chemistry", "Physics" and "Biology" within "Science Courses", but you only have one category for "Science Videos" on your HML server, you can associate "Science Courses" on Moodle with "Science Videos" on HML and the set "Chemistry", "Physics" and "Biology" to inherit their assignment from the "Science Courses" category, eliminating the need to set them all individually.

Note: Selecting the 'Show All Available Categories option' in the HML Categories boxes on the category editor page will give the user the option to search 'All Available Categories', it will not cause the complete list of categories to be displayed in the search box, you still need to select the allowed categories individually.

Permissions

The HML Plugin comes with two Moodle permissions.

repository/helix_media_lib:searchall

This permission allows a user who has it to search all the available course categories, regardless of the category associations which have been set up in the categories associations editor. By default only Managers have this permission.

repository/helix_media_lib:view

This permission allows a user to view the repository in the Moodle File Picker. By default this permission is assigned to a Teacher.

Optional URL Resource Patch

By default the "Automatic" display type of the URL resource within Moodle will just display a link to the HML video on the Moodle page, rather than embedding the video. If the user chooses the 'Embed' option on the URL resource configuration page, then the video will be shown within the Moodle page. If you would like the 'Embed' behaviour to be the default for your Moodle installation when using HML videos, then you can apply the supplied patch file (*patches/url.patch*) to your Moodle installation. You will need to re-apply this patch after every Moodle upgrade.

Please note: If you have downloaded this module from the Moodle plugins database, then the optional patches will not have been included in the zip file. In order to obtain the patches, please

visit the Helix Media Library website, http://www.helixmedialibrary.net/builds/moodle-patch.zip, and download the copy of the repository module hosted there.

Applying the patch on Linux/Unix

On a Unix/Linux server, this can be applied at the command prompt by switching to the Moodle installation directory and executing the following command:

patch -p0 < repository/helix_media_lib/patches/url.patch

Applying the patch on Windows

Windows users can download a suitable command prompt patch programme here (choose the "Complete package, except sources") :

http://gnuwin32.sourceforge.net/packages/patch.htm

Open the command prompt and switch to the top level directory of your Moodle installation. For the Streaming installation of Moodle, it is installed in the top level directory in Apache, so change the path using 'cd' to: C:\Program Files\Apache Software Foundation\Apache 2.2\htdocs\

Now run the following command:
"C:\Program Files\GnuWin32\bin\patch" -p0 -i repository\helix_media_lib\patches\win-url.patch

If you can't apply the patch

If you do not have the patch command available to you, or are not comfortable with this process, then we also provide a pre-patched version of the modified Moodle file which you can copy into your Moodle installation. You will find a number of directories named *xxx- prepatch* inside the *helix_media_lib/patches* directory. The starting number corresponds to a Moodle version, pick the version which is closest to your Moodle release and copy the *locallib.php* it contains into the *mod/url* directory of your Moodle installation, overwriting the existing version. You will need to repeat this operation every time you upgrade Moodle.

Updating the Helix Media Library Module

If there is an update to the HML Moodle module it will be packaged as 'helix_media_lib'. To update the module, log onto the server and replace the existing helix_media_lib folder that resides in the Moodle directory. The directory for Streaming is:

"C:\Program Files\Apache Software Foundation\Apache2.2\htdocs\repository\helix_media_lib"

Once this is done log into Moodle with an admin account. You will see the following screen

This page displays plugins that may require your attention during the upgrade. Highlighted items include new plugins that are about to be installed, updated plugins that are about to be upgraded and any missing plugins. Contributed plugins are also highlighted. It is recommended that you check whether there are more recent versions of contributed plugins available and update their source code before continuing with this Moodle upgrade.

Number of plugins requiring attention during this upgrade: 1

Display the full list of installed plugins

Plugin name	Directory	Source	Current version	New version	Status
Repositories					
$ Helix Media Library	/repository/helix_media_lib	Extension	2011111801	2012041601	To be upgraded

C Reload

Upgrade

Click Upgrade

Click Continue on the success message that appears next.

Important Information if Using HTTPS for the Upload Site

If the upload site is running over HTTPS then the API will not work properly. To configure it to so that the Moodle module will work, please follow the instructions below.

IMPORTANT: Before proceeding with the changes below, please take a backup of the upload site web.config file.

If the Helix Media Library is working over HTTPS (or just the upload site is using HTTPS) then a configuration change needs to be made within the web.config file on for the upload site.

On the Server locate the path to the web.config file by going to the install directory of the HML, then clicking on the Upload folder, e.g. C:\HelixMediaLibrary\Upload\web.config

Find the following tags: <system.serviceModel></system.serviceModel>. Replace them and all the text between them with the following in RED:

```xml
<system.serviceModel>
<behaviors>
<serviceBehaviors>
<behavior name="SOAPRESTDemoBehavior">
<serviceMetadata httpGetEnabled="False" httpsGetEnabled="True" />
<serviceDebug includeExceptionDetailInFaults="true" />
</behavior>
</serviceBehaviors>

<endpointBehaviors>
<behavior name="SOAPDemoEndpointBehavior">
</behavior>
<behavior name="RESTDemoEndpointBehavior">
<webHttp />
</behavior>
</endpointBehaviors>
</behaviors>
<bindings>
<basicHttpBinding>
<binding name="HmlServiceBinding"
transferMode="Buffered"
messageEncoding="Text"
maxReceivedMessageSize="655360  maxBufferSize="655360
closeTimeout="00:01:00  openTimeout="00:01:00
receiveTimeout="00:10:00  sendTimeout="00:01:00  >
<security mode="Transport">
</security>
</binding>
</basicHttpBinding>
</bindings>
```

```
<serviceHostingEnvironment multipleSiteBindingsEnabled="true">

</serviceHostingEnvironment>


<!--Set up the service-->


<services>

<service behaviorConfiguration="SOAPRESTDemoBehavior" name="HmlApi">

<endpoint address="soap" behaviorConfiguration="SOAPDemoEndpointBehavior"
binding="basicHttpBinding" bindingConfiguration="HmlServiceBinding"
contract="VLSCore2.Interfaces.IHmlApi" />

</service>

</services>

</system.serviceModel>
```

If the upload website ever changes back from HTTPS to HTTP, then use the following code in RED to replace the <system.serviceModel> section and return the web.config file to its previous state.

```
<system.serviceModel>

<serviceHostingEnvironment multipleSiteBindingsEnabled="true">

</serviceHostingEnvironment>

<!--Set up the service-->

<services>

<service behaviorConfiguration="SOAPRESTDemoBehavior" name="HmlApi">

<endpoint address="rest" behaviorConfiguration="SOAPRESTDemoEndpointBehavior"
binding="webHttpBinding" contract="VLSCore2.Interfaces.IHmlApi" />

<endpoint address="soap" binding="basicHttpBinding" contract="VLSCore2.Interfaces.IHmlApi"
/>

</service>

</services>

<!--Define the behaviours-->

<behaviors>

<serviceBehaviors>
```
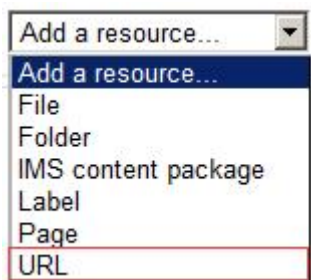
```
<behavior name="SOAPRESTDemoBehavior">

<serviceMetadata httpGetEnabled="true" />

<serviceDebug includeExceptionDetailInFaults="true" />

</behavior>

</serviceBehaviors>

<endpointBehaviors>

<behavior name="SOAPRESTDemoEndpointBehavior">

<webHttp />

</behavior>

</endpointBehaviors>

</behaviors>

</system.serviceModel>
```

Testing and End User Experience

Once logged on as a Course Instructor click to **"Turn editing on"**
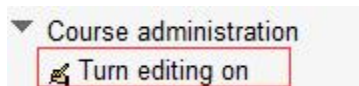
Then select **Add a resource** and then **URL**

Add the required meta-data for your resource and then click **Choose Link**

Adding a new URL

General

Name* Streaming Video

Description*

| Font family | ▾ | Font size | ▾ | Paragraph | ▾ |

This is a streaming video....

Path: p

Content

External URL* [   ] [Choose a link...]

This will bring up the File Picker Menu, select **Helix Media Library** and search for a media item you wish to embed in your course.

File picker   ✕
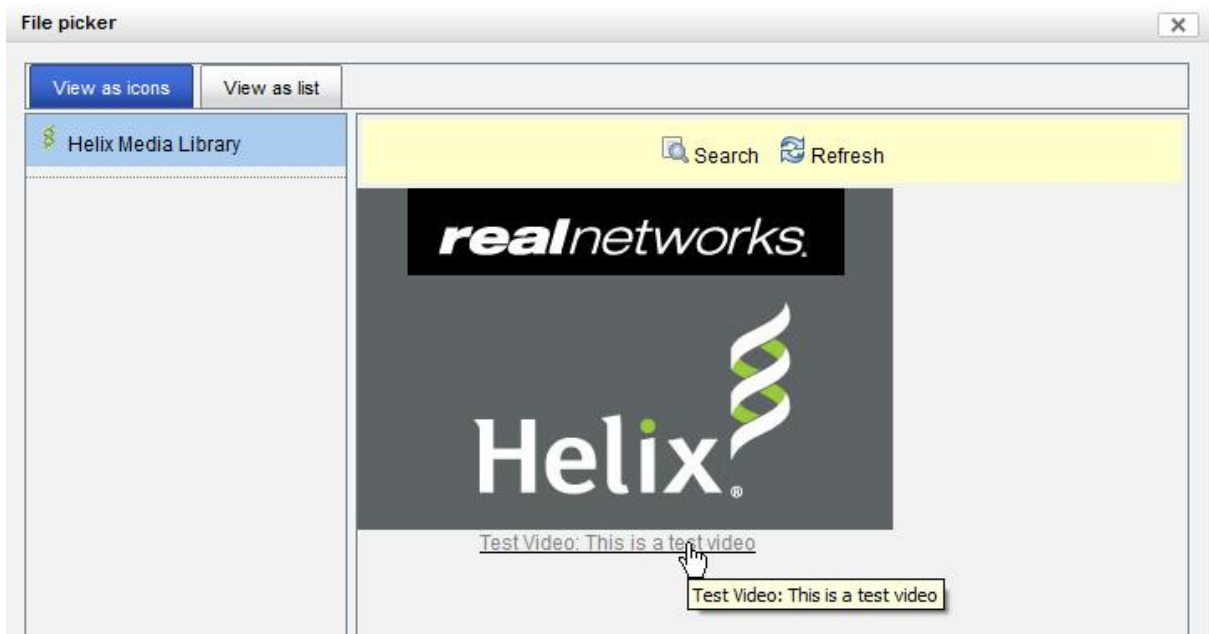
| View as icons | View as list |

§ Helix Media Library

Keyword(s): Test Video

Category: Corporate ▾

Contributor: [   ]

File name: [   ]
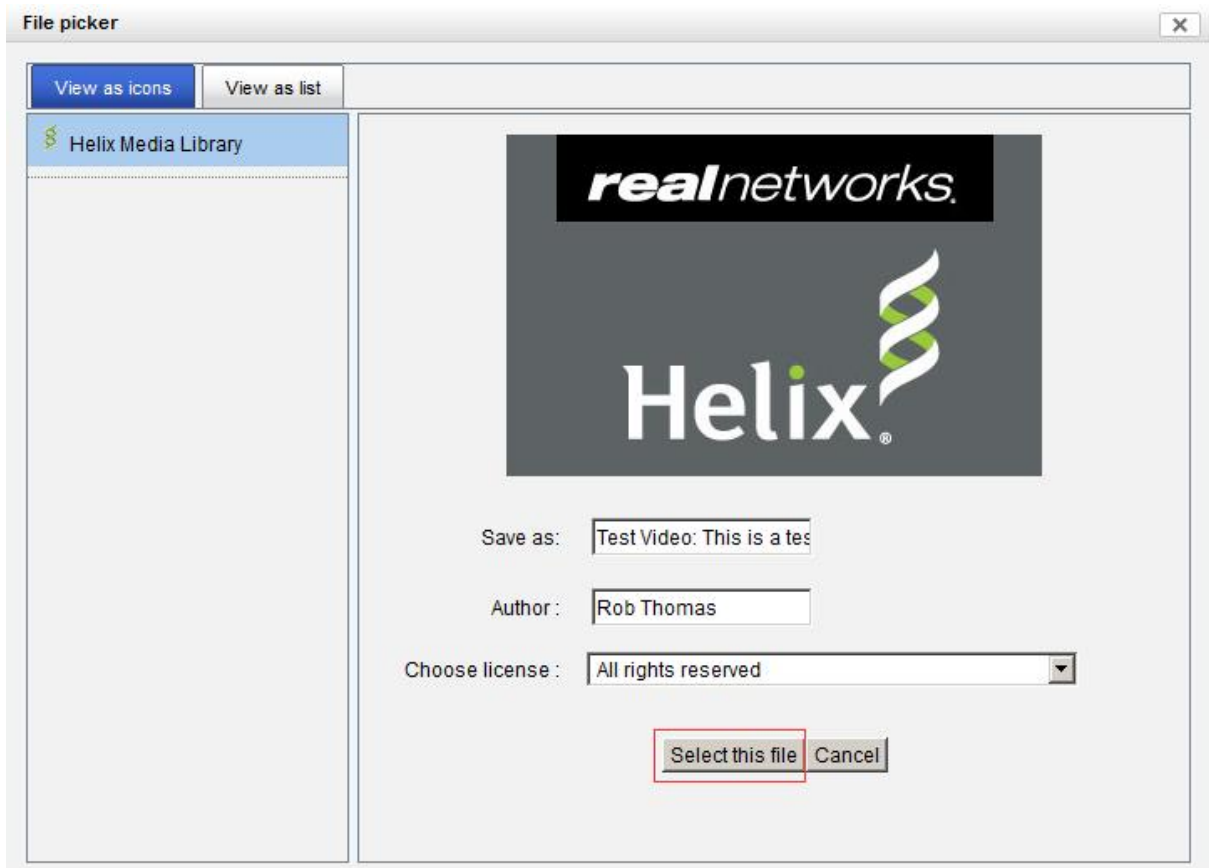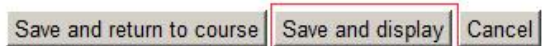
[Search]

This will return some search results, simply click on the item you wish to embed in your course.

Then click **Select this file**

On the resultant page click "Save and display"

The media item should now be successfully embedded in your Course page!