EQUELLA®

Push to LMS

Version 6.1

Document History

Document No.	Reviewed		Finalised		Published	
1	13/05/2013		14/05/2013		14/05/2013	

May 2013 edition.

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Push to LMS overview

EQUELLA allows LMS integration enabling direct contribution of resources into Moodle™ (Moodle) or Blackboard Learn™ (Blackboard) courses without having to access each LMS separately. This functionality enables the addition of a resource to multiple locations across courses in one process. Push to LMS also allows the user to find all the current course locations a resource has been linked to in the LMS. Additionally, the user can find all resources within the EQUELLA system that share the same attachments.

The **Manage external resources** function enables administrators to view, edit, sort and filter linked LMS resources, as well as removing or moving multiple LMS resources in one action.

The purpose of this guide is to provide administrators with an understanding of how to configure the connectors required to use Push to LMS functionality and manage external resources. It also provides end users with an understanding of how to use the functionality once configured.

Please note that this guide has been developed using EQUELLA version 6.1, Moodle version 2.4 and Blackboard Learn version 9.1. (SP11) and as such may differ in appearance to your own installation.

Prerequisites

To successfully complete this installation the system administrator will require:

- sufficient privileges to access the Moodle or Blackboard system integration functionality;
- sufficient privileges to access the EQUELLA Security Management functionality (further information is provided in the *EQUELLA Security Guide*); and
- privileges to unzip and create files in Moodle.

System prerequisites for integration:

- EQUELLA version 6.1 and Moodle version 2.1,2.2, 2.3 or 2.4 or Blackboard version 9.1 (SP8, SP9 or SP11) must be installed and running. Further information on installing EQUELLA is provided in the *EQUELLA Installation and Administration Guide*.
- Ensure that the servers have the same UTC (formerly GMT) time. As long as the UTC time is synchronised on all servers, different times and time zones can be set on each server.
- If using Moodle, the latest EQUELLA Moodle Module must be installed within Moodle to use this feature. See the *EQUELLA Moodle Configuration Guide* for more details.
- If using Blackboard, the latest EQUELLA Blackboard Building Block must be installed within Blackboard to use this feature. See the *EQUELLA Blackboard Learn Configuration Guide* for more details.

Push to LMS configuration procedure

EQUELLA Push to LMS configuration can be broken down into the following steps:

- Select new connector type.

- Enter configuration details for the connector then test the URL (unless setting up a local resources connector).

- Test Web Service (unless setting up a local resources connector).

- Check for new LMS functionality.

Push to LMS privileges

There are six privileges associated with the configuration of **External system connectors** and the associated functionality**.** Four can be found in the **Security Manager** under **Connectors** and **Institution**, and are:

- **CREATE_CONNECTOR**—allows new connectors to be configured.

- **DELETE_CONNECTOR**—allows existing connector to be deleted.

- **EDIT_CONNECTOR**—allows existing connector to be edited.

- **EXPORT_VIA_CONNECTOR**—allows users to access the **Add to external system** from the resource summary page, and **Edit** and **Perform an action** from the Manage external resources page.

- **VIEWCONTENT_VIA_CONNECTOR**—allows users to access the **Find uses** function from the resource summary page.

In addition to the **VIEWCONTENT_VIA_CONNECTOR,** another privilege is required to allow access to the **Find Uses** functionality. It is found in the **Security Manager** under **Resources**, **Collections** and **Institution** and is:

- **FIND_USES_ITEM**—allows users to access the **Find Uses** function from the Resource summary page for a specific resource, collection or across an institution, depending on the level at which it is set.

The sixth is the privilege required to allow access to the management pages (Manage resources, Manage activations and **Manage external resources)**, found in the **Security Manager** under **Management pages** and would typically only be granted to administrators. It is:

- **VIEW_MANAGEMENT_PAGE**

See the *EQUELLA Security Administration Guide* for further information.

Set up a Moodle connector

Setting up a Moodle connector will enable suitably privileged users to add resources to Moodle courses from EQUELLA using the **Add to external system** link from the Resource summary screen (see Add a resource to a Moodle location on page 28). Additionally,

users will be able to check the current usage of the resource within Moodle using the **Find uses link** (see Find uses in Moodle on page 34).
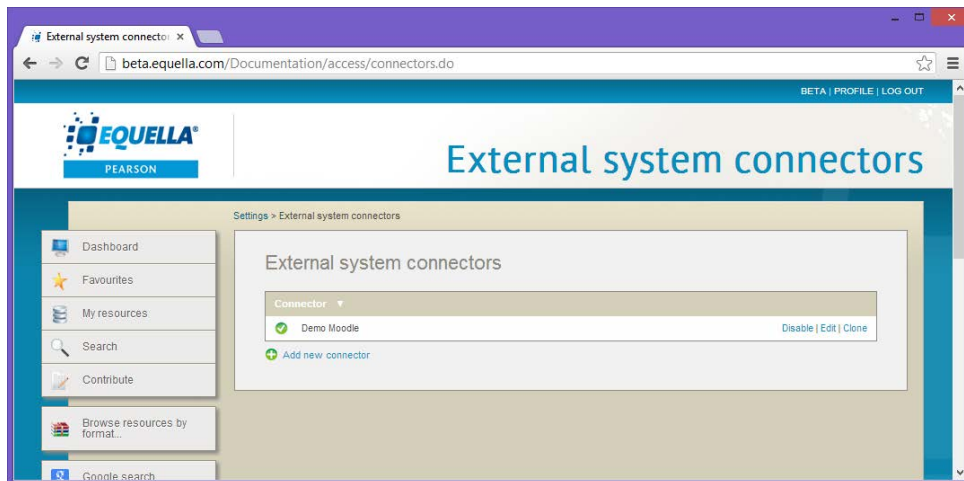
To set up a Moodle connector

1. Select **External system connectors** from the **Settings** menu. An example is shown in Figure 1.
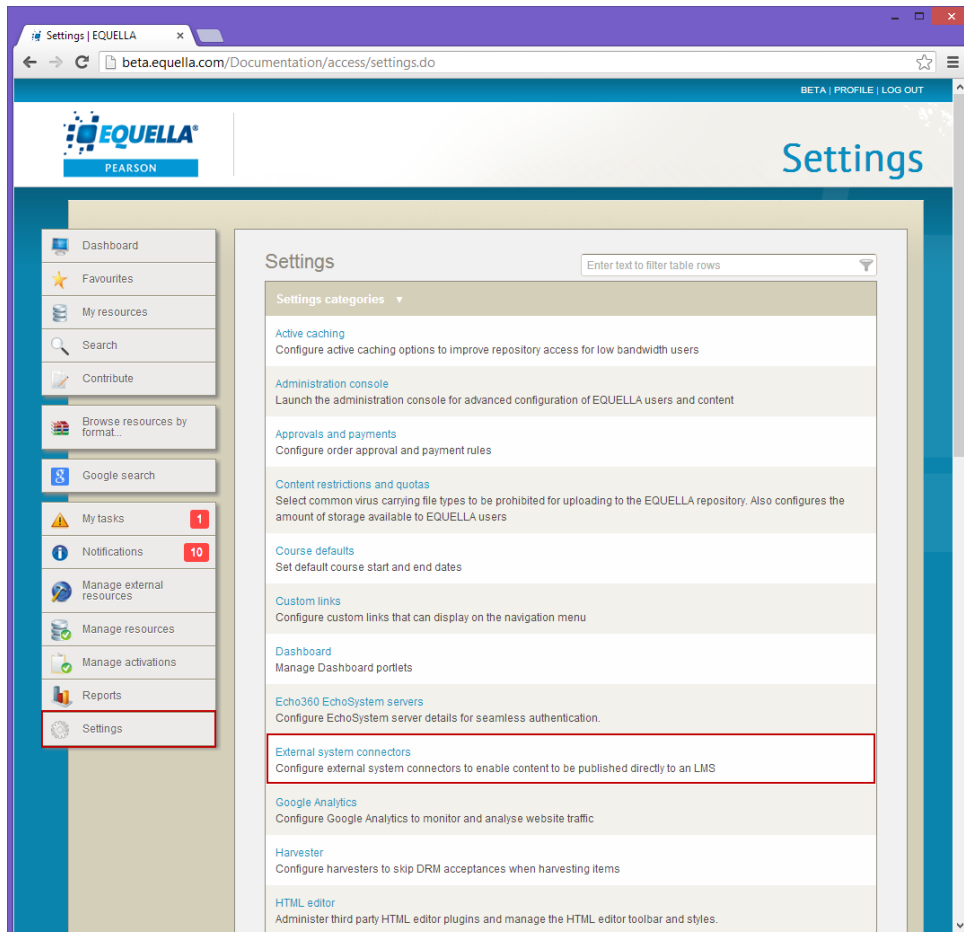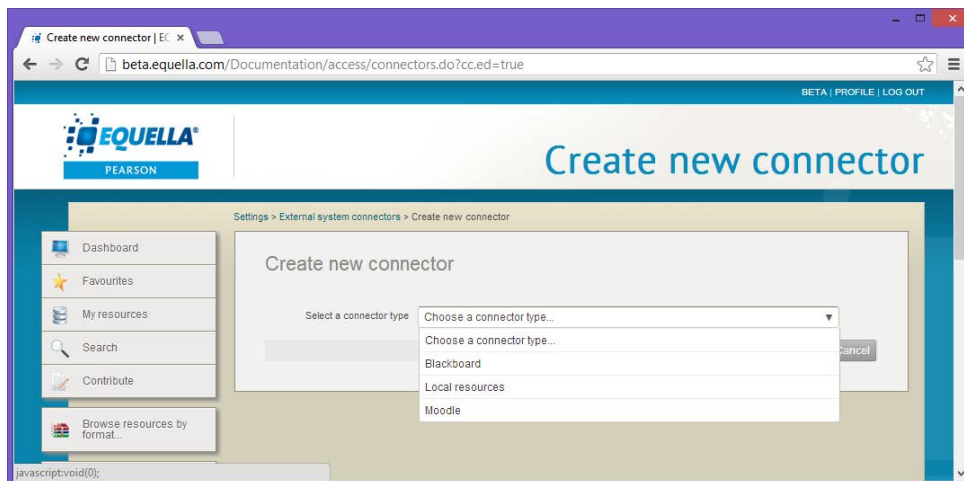

Figure 1 Settings menu—External system connectors

2. The **External system connectors** page displays with any existing connectors listed. An example is shown in Figure 2.

Figure 2 External system connectors page

3. Click the **Add new connector** link to display the **Create new connector** page. An example is shown in Figure 3.

Figure 3 Create new connector

4. Select **Moodle** from the drop-down menu. The Moodle configuration page displays, as shown in Figure 4.

Figure 4 Moodle Create new connector page.

5. Enter a **Connector name** (e.g. Moodle).

6. Enter a description, if required.

7. Enter the **Moodle URL.** (e.g. '*http://moodle.myequellainstitution.edu*').

8. Click ![Test URL] to make sure the entered URL is valid. A successful connection page displays, as shown in Figure 5.

Figure 5 Confirmation of successful URL connection

9. Click the **enable web services** link. The system requires the user to be logged into Moodle to activate web services. A log in screen displays if the user is not currently logged in. The **Enable web services** page displays, as shown in Figure 6.

Figure 6 Enable web services confirmation page

10. Select the check box then click Save changes.

11. Close the Moodle page then click the **enable the REST protocol** link. The **Manage Protocols** page displays.

12. Click ✎ next to **REST protocol** to enable it, then click [Save changes]. An example is shown in Figure 7
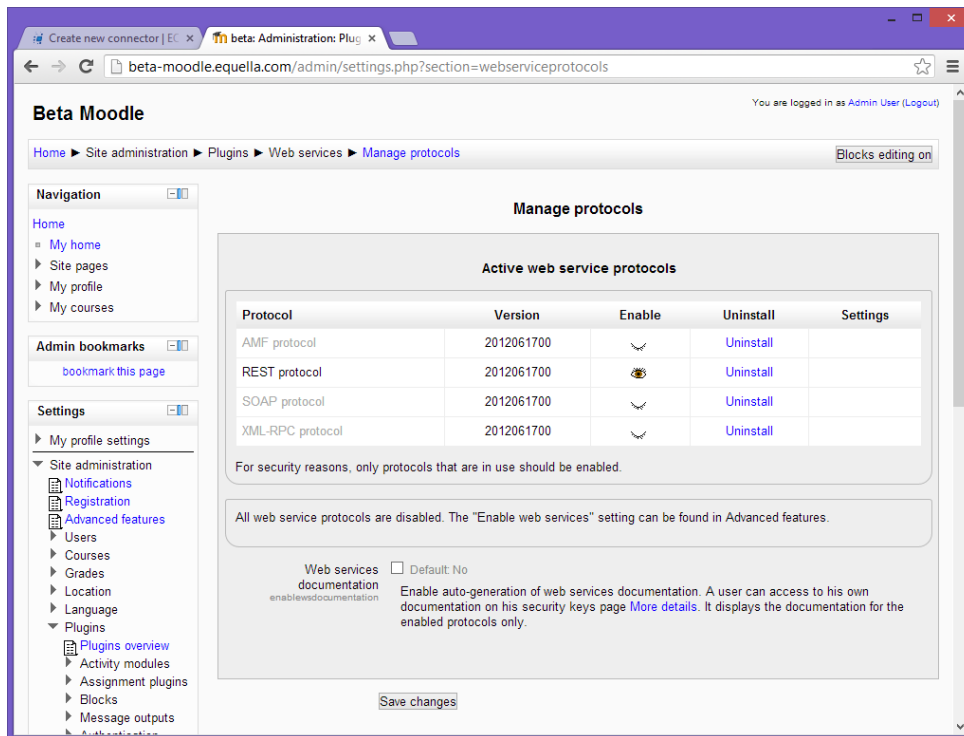

Figure 7 Enable REST protocol confirmation page

13. From the **Site administration** menu, select **Web Services** then **External Services** from the Web services node. The External services page displays, with the **equellaservice** listed.

14. Click on the *equellaservice* **Authorised users** link. An example is shown in Figure 8.
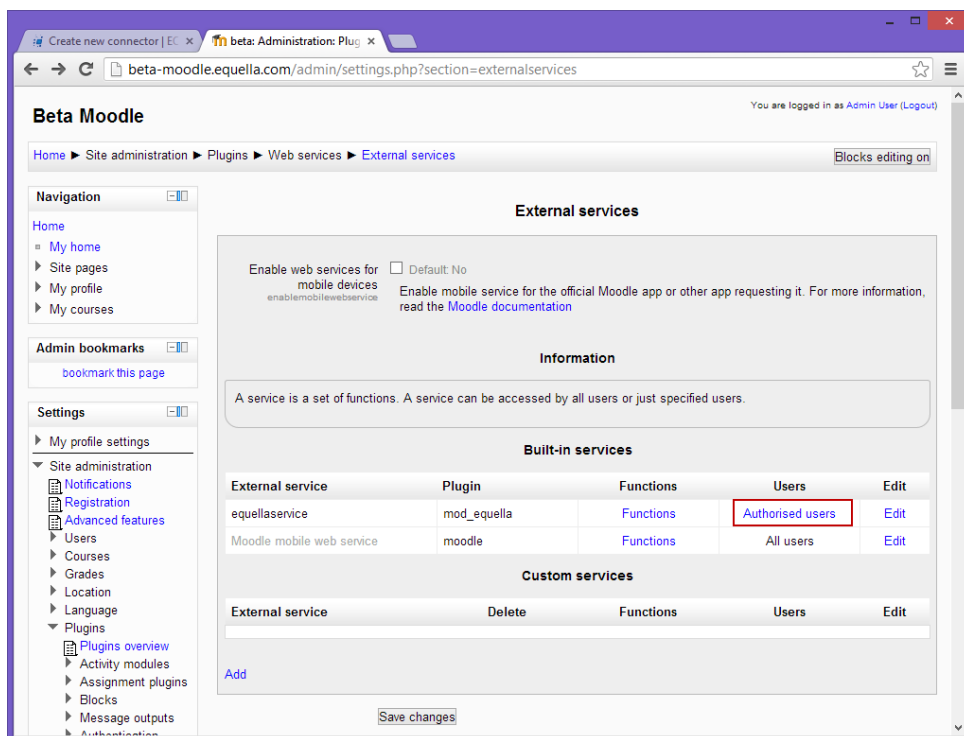
Figure 8 External services—equellaservice Authorised users link

The **Select authorised users** page displays, with all available users listed in the **Not authorised users** pane. An example is shown in Figure 9.
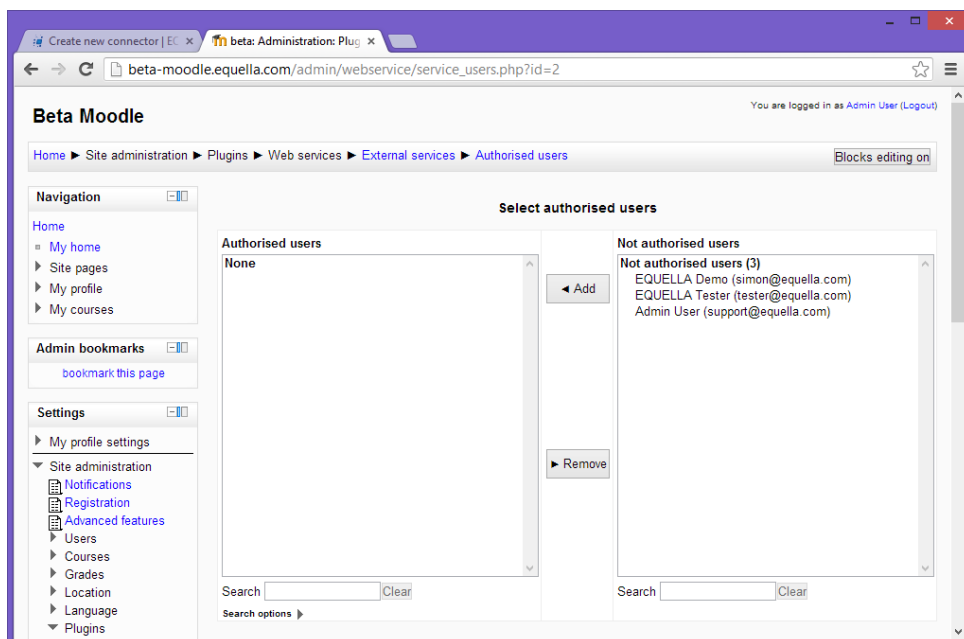
Figure 9 External services—Select authorised users page

15. Highlight the users authorised to use the EQUELLA functionality, then click ◄ Add to move them to the **Authorised users** pane. Use ctrl+click or shift+click to highlight multiple users. Selections are automatically saved. An example is shown in Figure 10.
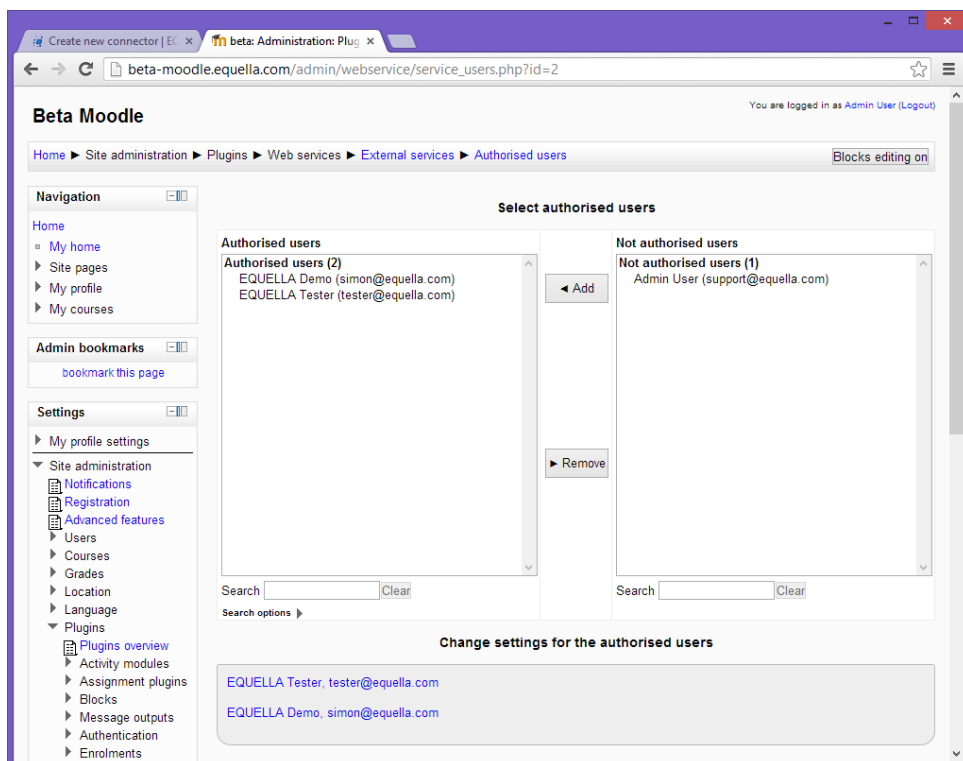
Figure 10 Add authorised users

16. Close the Moodle page then click the **create a web service token** link. A **Manage tokens** page displays. Click the **Add** link. The **Create token** page displays, as shown in Figure 11.
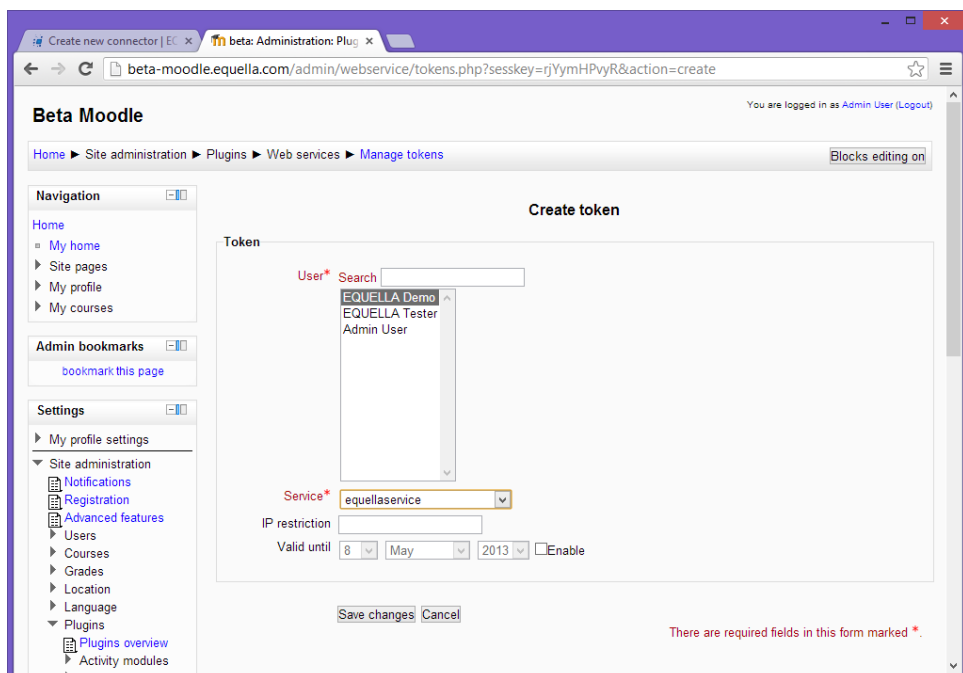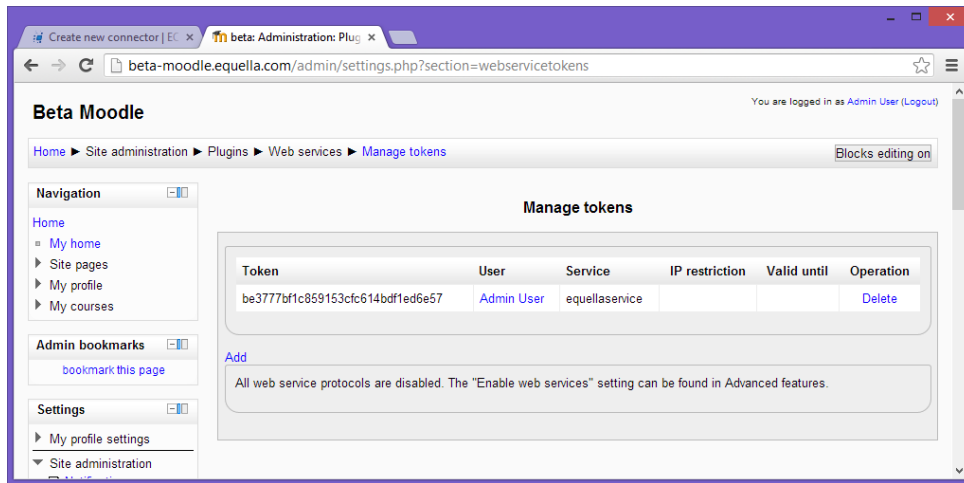

Figure 11 Create token page

17. Select a Moodle user with web service and REST service permissions from the **User** list. Select **equellaservice** from the **Service** drop-down list.

18. Click Save changes. The **Manage tokens** page displays with a Token value.

19. Copy the Token value and close the page. An example is shown in Figure 12.

Figure 12 Manage tokens page

20. Paste the Token value to the **Web service token** field then click Test web service.
    Connection successful should display, as shown in Figure 13.

Figure 13 Web service confirmation page

21. If required, select **Modify EQUELLA usernames to match Moodle:**. A text box displays for entering Javascript to modify and return the EQUELLA username stored in the variable "username". An example is shown in Figure 13.
If a token is set up to prepend a string to the start of a username (e.g. "moodle_" for users coming from moodle) then an example script to string off the "moodle_" prefix and just return the original username would be:

```
if (username.indexOf("moodle_") == 0)
{return username.substr(7);}
else
{return username;}
```

22. If required, click ![Change] next to **Exportable by** to open the **Select users** page. Select the users to access the **Add to external link** from the Resource summary page. Click ![OK] to save.

23. If required, click **[Change]** next to **Content viewable by** to open the **Select users** page. Select the users to access the **Find uses** link from the Resource summary page. Click **[OK]** to save.

24. Click **[OK]** to save the connector details.

Set up a Blackboard connector

Setting up a Blackboard connector will enable suitably privileged users to add resources to Blackboard courses from EQUELLA, using the **Add to external system** link from the Resource summary screen (see Add a resource to a Blackboard location on page 31). Additionally, users will be able to check the current usage of the resource within Blackboard using the Find uses link (see Find uses in Blackboard on page 38).

Once the Blackboard connector has been configured, a scheduled event (which runs with the Weekly Tasks) will table existing EQUELLA resources in Blackboard and display each instance in Manage external resources (see Manage external resources page—Blackboard on page 50 for more information).

If a resource is moved from one Blackboard location to another from the Blackboard application, the scheduled event needs to run before the new locations will display in EQUELLA.

Prior to setting up the Blackboard connector in EQUELLA, the **EQUELLA webservice.jar** file must be uploaded in Blackboard to create the EQUELLA web service, then web service settings in Blackboard need to be checked for correct configuration.

Upload the EQUELLA web service

1. Log in to Blackboard as an administrative user.

2. Select the **System Admin** tab. The **Administrator Panel** displays. An example is shown in Figure 14.
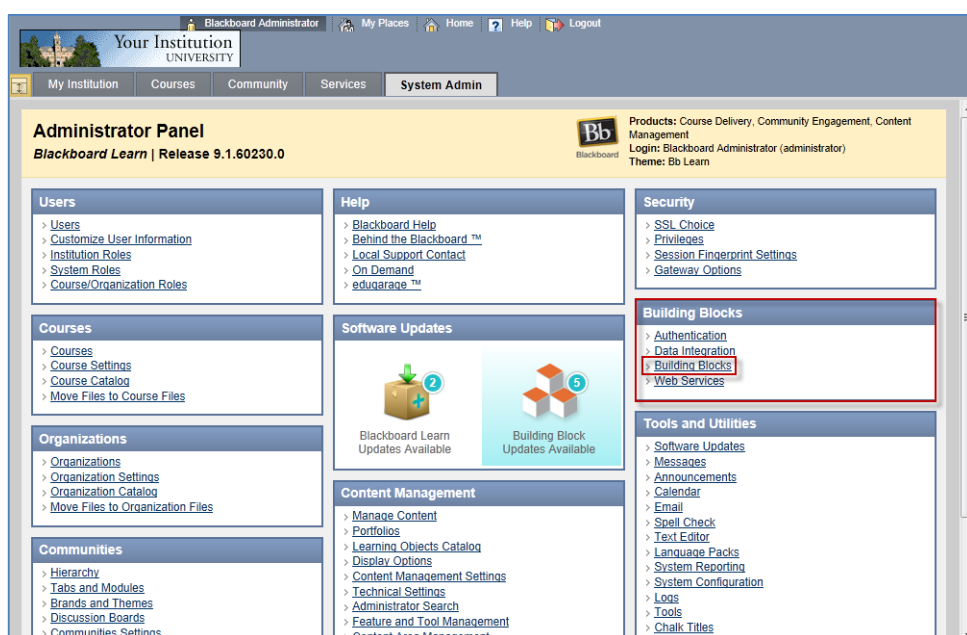
Figure 14 Blackboard Administrator Panel

3. From the Building Blocks portlet, select the **Building Blocks** link. The Building Blocks menu page displays. Click the **Installed Tools** link to open the Building Blocks page. An example is shown in Figure 15.
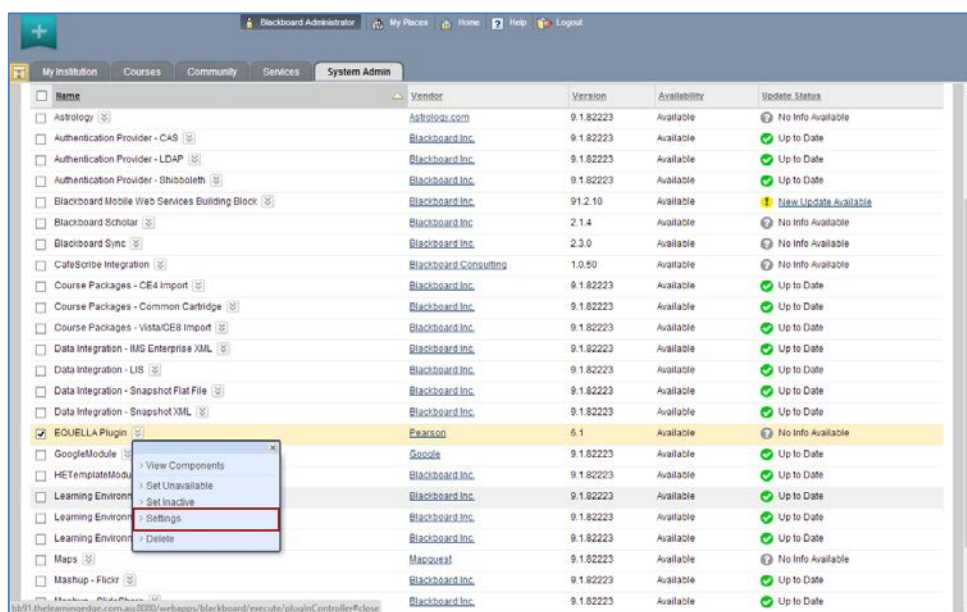

Figure 15 Blackboard Building Blocks page

4. Click the ⊗ button beside the **EQUELLA Plugin** building block and select **Settings** from the menu. The **EQUELLA Server Configuration** page displays.

5. Click the Download the **web service.jar** link in the Web Service Download section. An example is shown in Figure 16.

Figure 16 EQUELLA Server Configuration page

6. Save the **webservice.jar** file to a selected folder.

7. Click the **System Admin** tab. The **Administrator Panel** displays. An example is shown in Figure 17.

Figure 17 Blackboard Administrator Panel

8. From the Building Blocks portlet, select the **Web Services** link. The Web Services page displays. An example is shown in Figure 18.
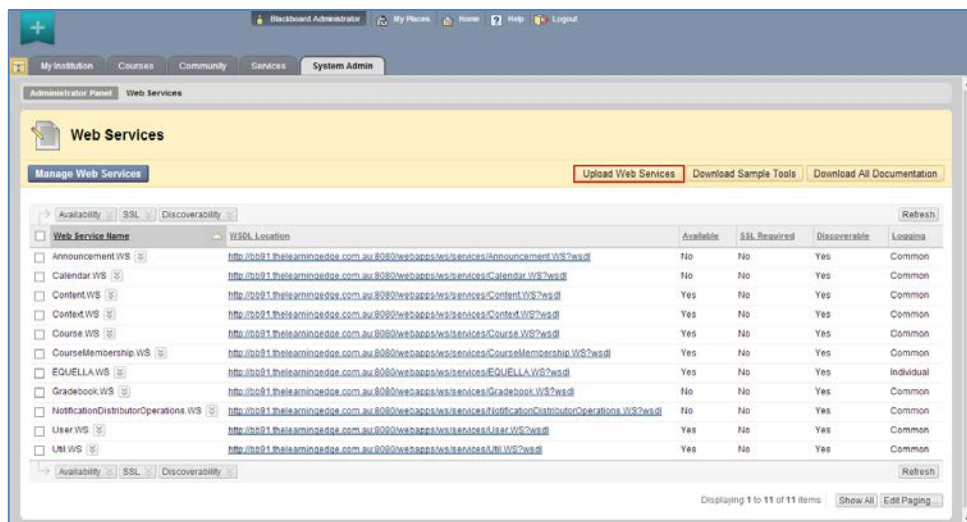
Figure 18 Blackboard Web Services page

9. Click [Upload Web Services]. The Install Web Service page displays, as shown in Figure 19.
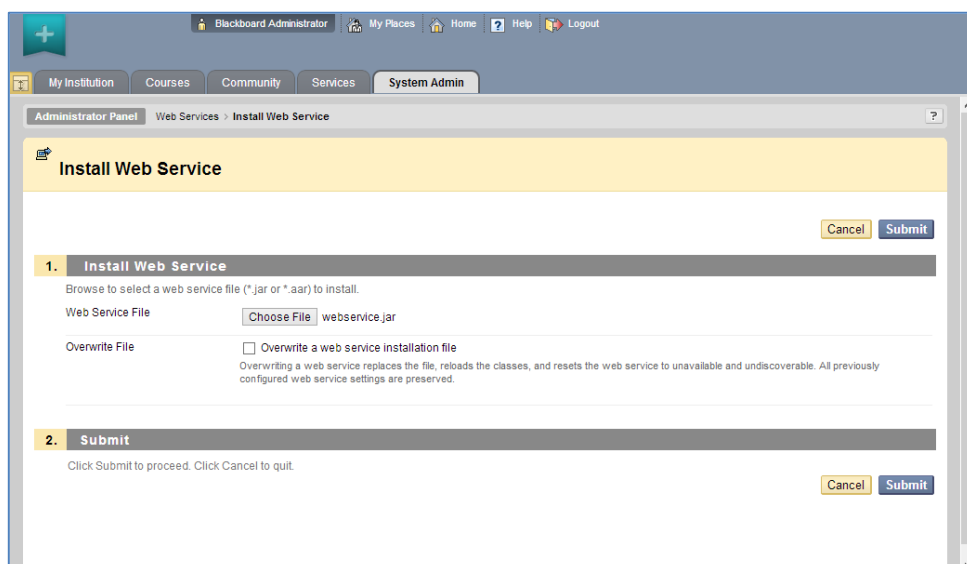
Figure 19 Blackboard Install Web Service page

10. Click [Browse...] and select the downloaded *webservice.jar* file.

11. Click [Submit]. The EQUELLA web service (EQUELLA.WS) now displays in the Web Services list, and a 'Success' message displays at the top of the screen.

Configure Blackboard Web Services settings

1. Check the following web service configurations, as shown in Figure 20:

- Context.WS
  - Available—**Yes** and SSL Required—**No**
- EQUELLA .WS
  - Available—**Yes** and SSL Required—**No**
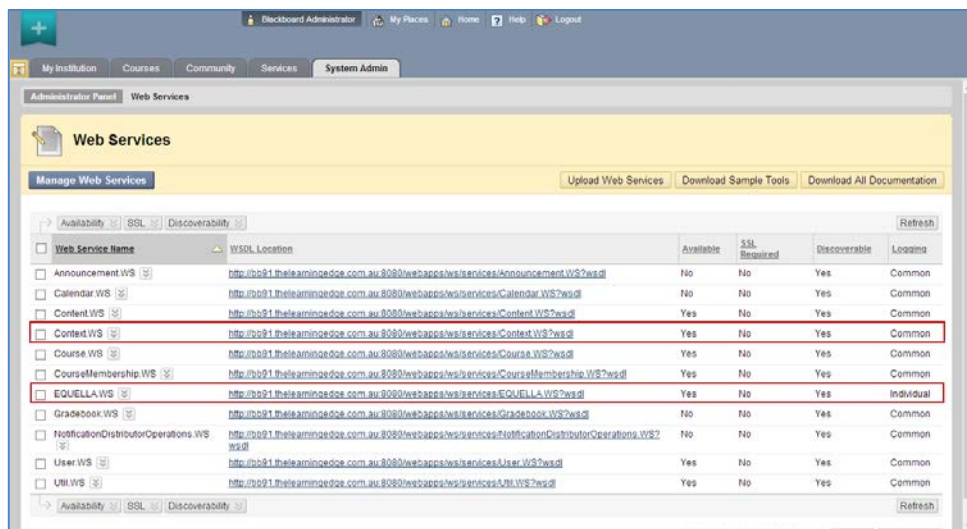
Figure 20 Blackboard Web Services page

To change the configuration

1. Select the checkbox beside the required web service.

2. Mouse over [Availability ⌄] in the bottom left, then select **Make Available**, or mouse over [SSL ⌄] in the bottom left, then select **Set as Not Required.** An example is shown in Figure 21.
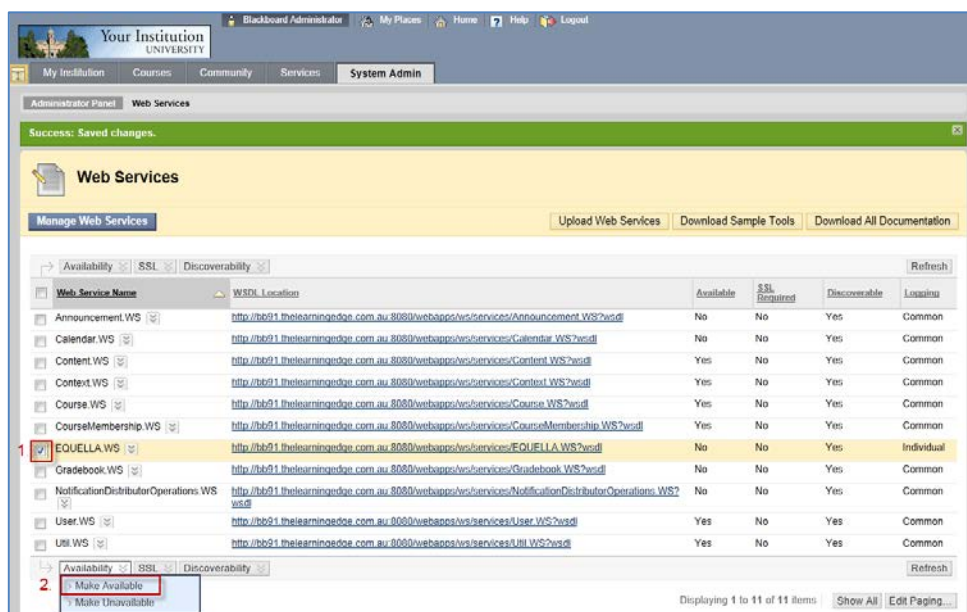
Figure 21 Blackboard—Configure Web Services

To set up a Blackboard connector

1. Select **External system connectors** from the **Settings** menu. An example is shown in Figure 22.
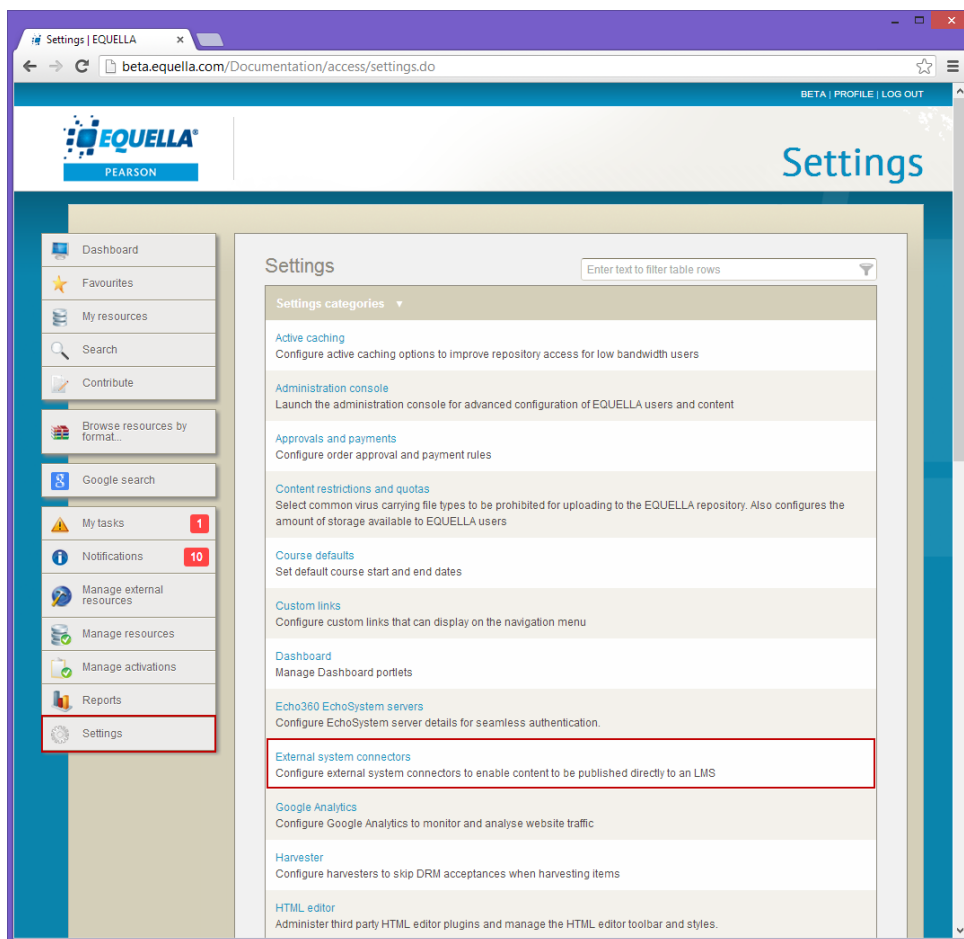
Figure 22 Settings menu—External system connectors

2. The **External system connectors** page displays with any existing connectors listed. An example is shown in Figure 23.
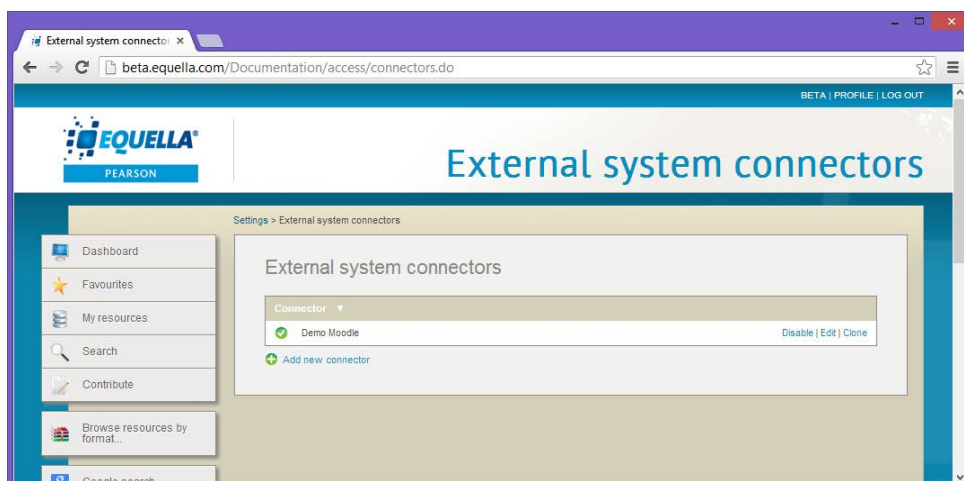
Figure 23 External system connectors page

3. Click the **Add new connector** link to display the **Create new connector** page. An example is shown in Figure 24.
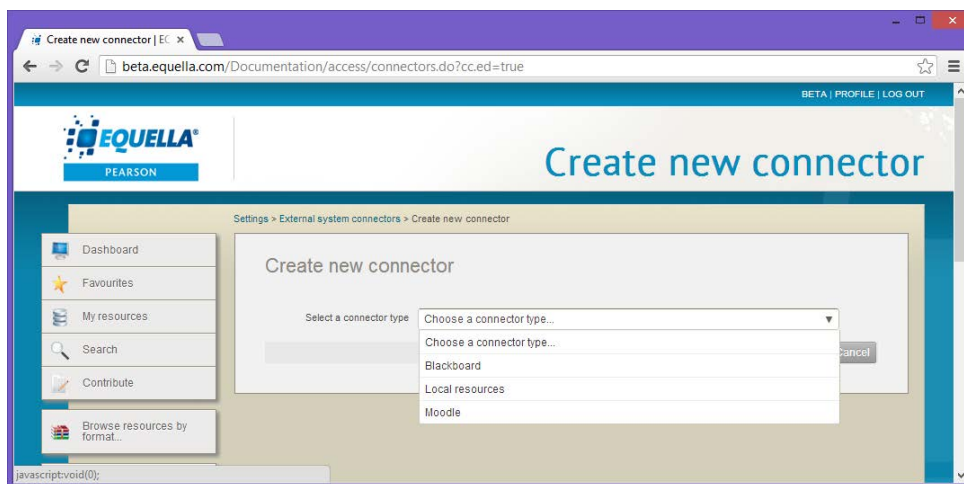
Figure 24 Create new connector
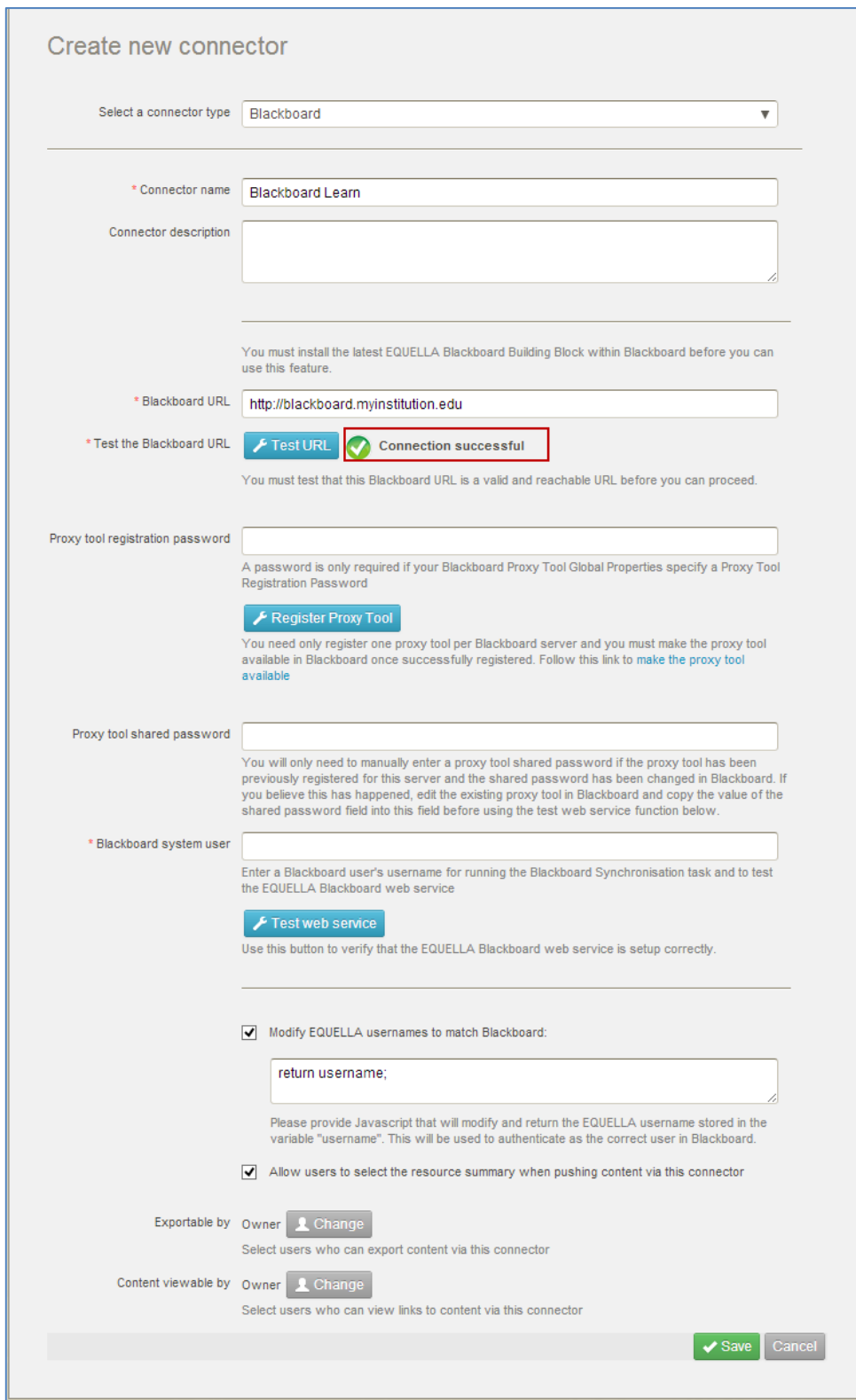
4. Select **Blackboard** from the drop-down menu. The Moodle configuration page displays, as shown in Figure 25.
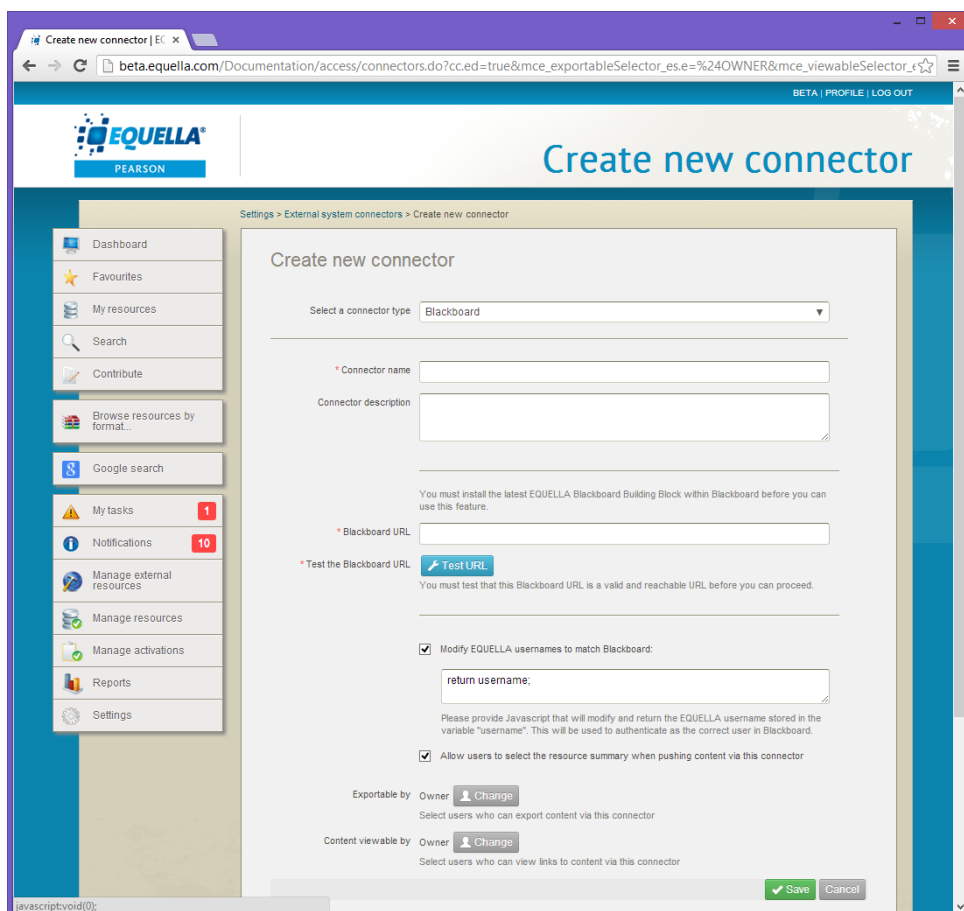
Figure 25 Blackboard Create new connector page

5. Enter a **Connector name** (e.g. Blackboard).

6. Enter a description, if required.

7. Enter the **Blackboard URL** (e.g.'*http://*blackboard.*myequellainstitution.edu'*).

8. Click ![Test URL] to make sure the entered URL is valid. A successful connection page displays, as shown in Figure 26.

Figure 26 Confirmation of successful URL connection

9. Enter a **Proxy tool registration** password if your Blackboard Proxy Tool Global Properties specifies a Proxy Tool Registration Password; otherwise, leave blank.

10. Click [Register Proxy Tool]. This creates a proxy tool registration and automatically populates the **Proxy tool shared password** field. An example of the screen after the [Register Proxy Tool] button is selected in shown in Figure 27.

Figure 27 Confirmation of proxy tool registration

11. Click the **make the proxy tool available** link. The Blackboard **Proxy Tool** page displays. Click the ☒ button beside EQUELLA and select **Edit**. An example is shown in Figure 28.
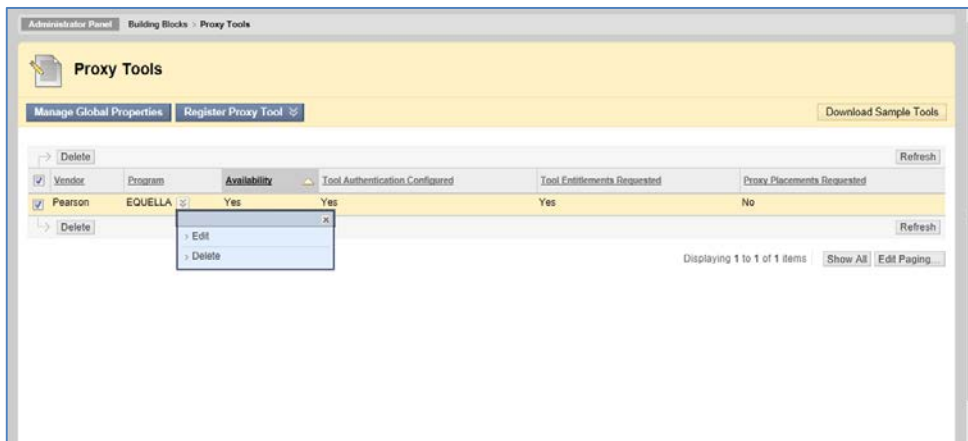
Figure 28 Proxy Tools page

12. The **Edit Proxy Tool** page displays. In the **Availability** section, select **Yes** then click Submit . An example is shown in Figure 29.
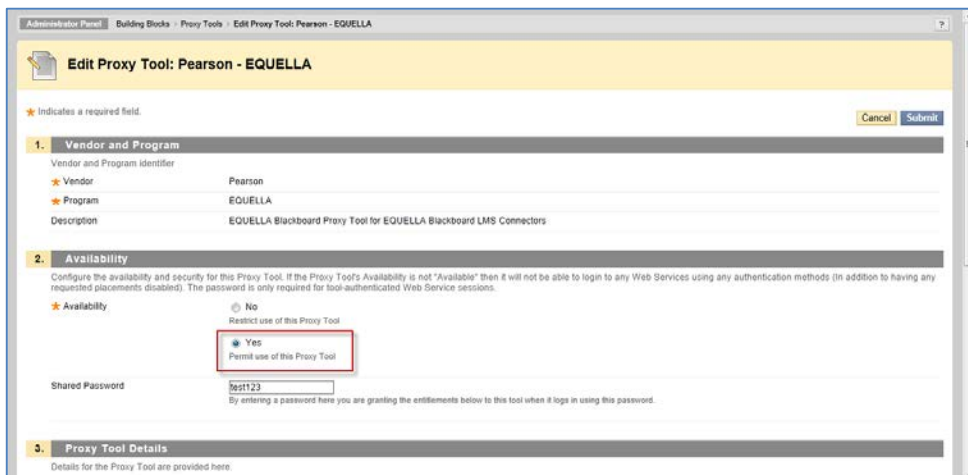
Figure 29 Edit Proxy Tool page

13. Close the Proxy Tools page.

14. Enter the Blackboard administrator username in the **Blackboard system user** field.

15. Click Test web service . A web service confirmation displays. An example is shown in Figure 30.

Figure 30 Web service confirmation page

16. If required, select **Modify EQUELLA usernames to match Moodle:**. A text box displays for entering Javascript to modify and return the EQUELLA username stored in the variable "username". An example is shown in Figure 30.

If a token is set up to prepend a string to the start of a username (e.g. "bb_" for users coming from Blackboard) then an example script to string off the "bb_" prefix and just return the original username would be:

```
if (username.indexOf("bb_") == 0)
{return username.substr(7);}
else
{return username;}
```

17. If required, click **Change** next to **Exportable by** to open the **Select users** page. Select the users to access the **Add to external link** from the Resource summary page. Click **OK** to save.

18. If required, click **Change** next to **Content viewable by** to open the **Select Users** page. Select the users to access the **Find uses** link from the Resource summary page. Click **OK** to save.

19. Click **Save** to save the connector details.

Set up a local resources connector

Setting up a local resources connector allows suitably privileged users the ability to view any current uses of attachments linked to a resource within EQUELLA by accessing the **Find uses** link from the Resource summary page (see Find uses in local resources on page 41).

To set up a local resources connector

1. Select **External System Connectors** from the Settings menu. An example is shown in Figure 31.
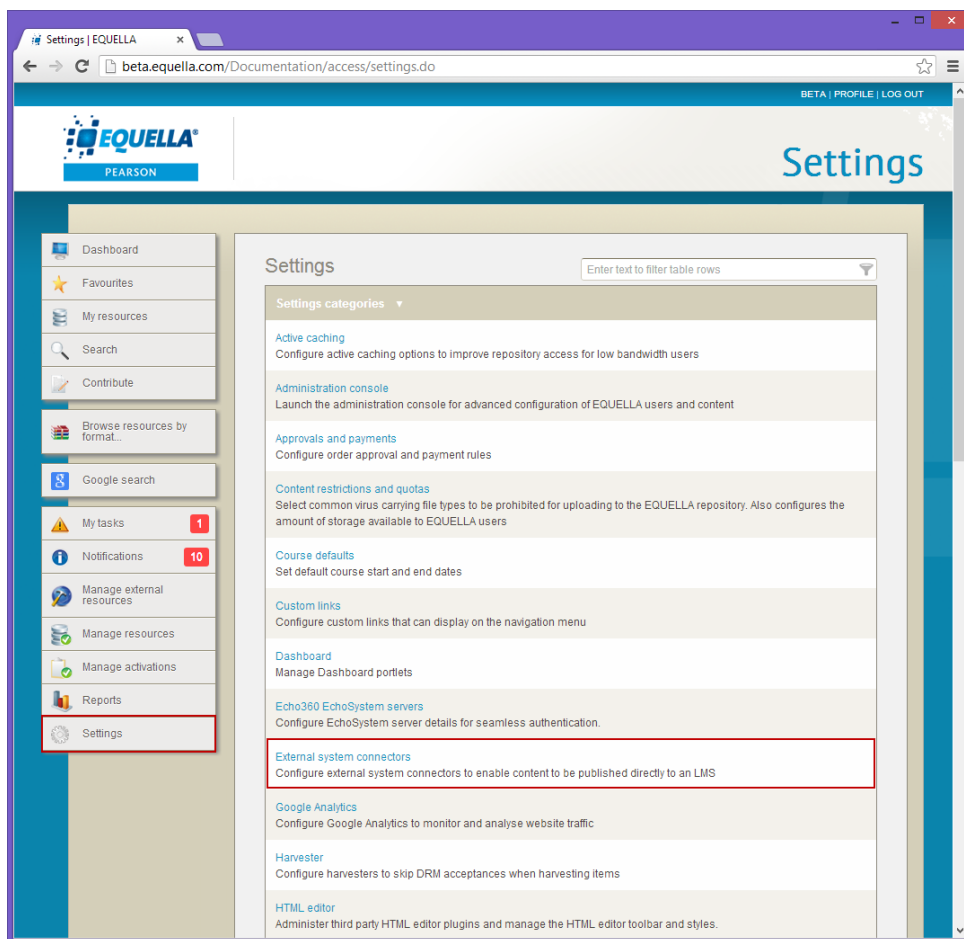
Figure 31 Settings menu—External system connectors

2. Click the **Add new connector** link to display the **Create new connector** page. An example is shown in Figure 32.
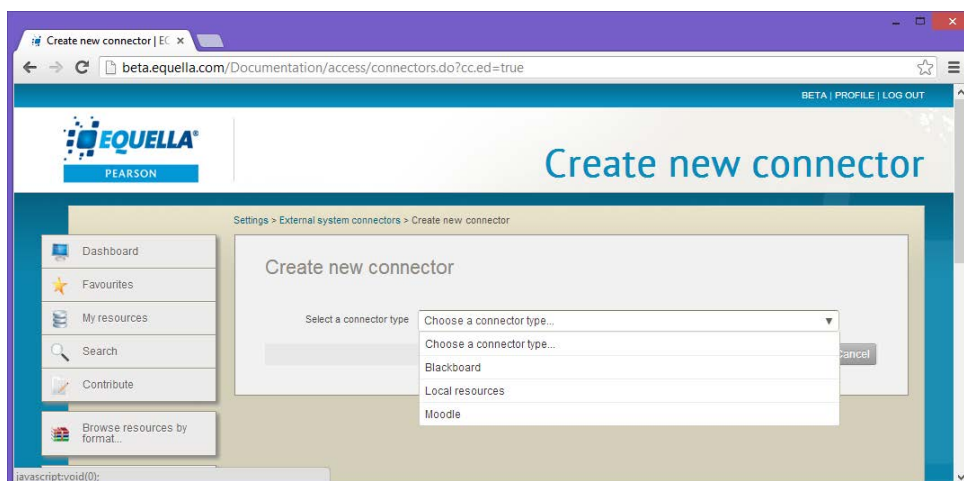
Figure 32 Create new connector

3. Select **Local resources** from the drop-down menu. An example is shown in Figure 33.
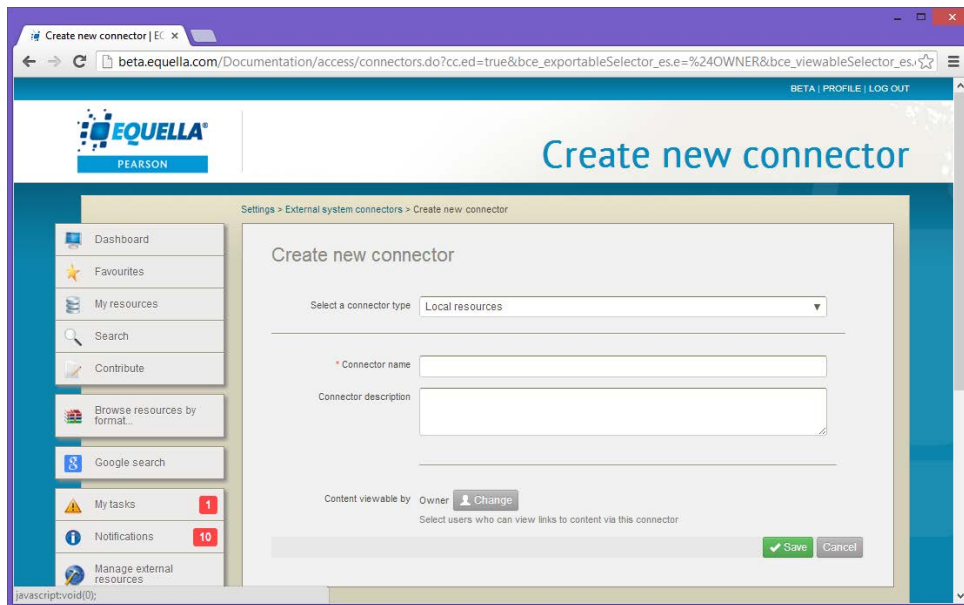
Figure 33 Local resource—Create new connector page

4. Enter a **Connector name** (e.g. EQUELLA).

5. If required, click ![Change] next to **Content viewable by** to open the **Select users** page. Select the users to access the **Find uses** link from the Resource Summary page. Click ![OK] to save.

6. Click ![Save] to save the connector details.

Add to external system function

The **Add to external system** function allows suitably privileged users to add all, or parts of, a resource to multiple locations in an LMS (VLE) from the EQUELLA system. (*NOTE: The **Add to external system** link only displays if at least one LMS connector has been configured in the EQUELLA system.*)

Add a resource to a Moodle location

1. From the **Resource summary** screen, select the **Add to external system** link from the Actions section. An example is shown in Figure 34.
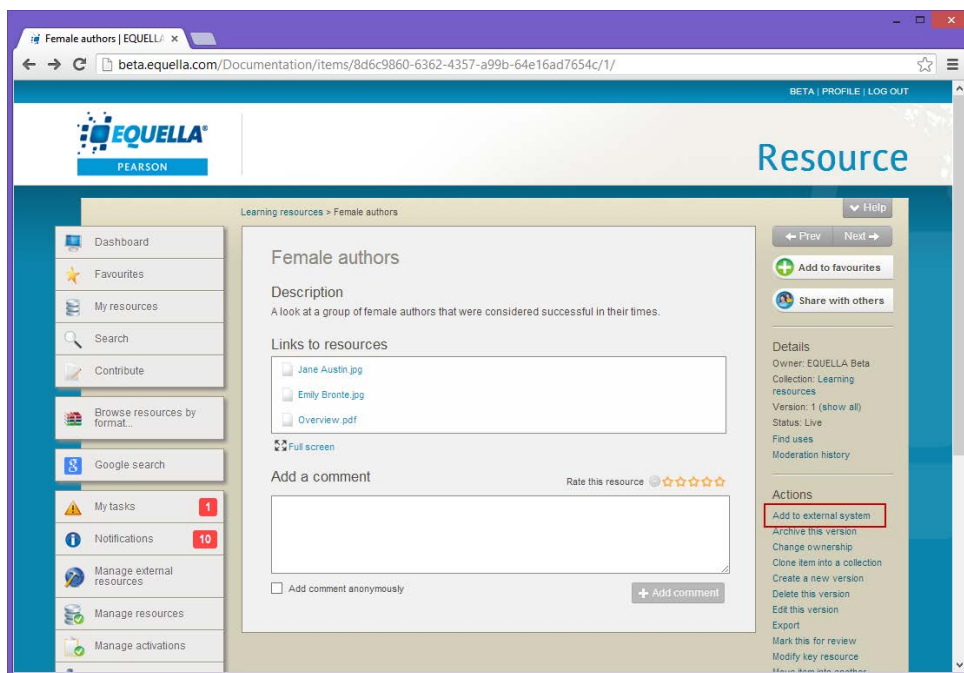
Figure 34 Add to external system menu item

2. Select the external system (e.g. *Moodle*) from the drop-down list to which the resource is to be added. If only one external system is set up, the **Add to external system** screen displays immediately. An example is shown in Figure 35.

Figure 35 Add to external system - Moodle

3. Select the required resources from the **Select the resources to add** section. Select **Add resource summary** to create a link to the resource as a whole, or select only specific attachments. Each attachment selected appears as a single item in the LMS location.

4. In the **Select the locations to add to** section, enter course search criteria in the course filter box. The *Select the locations to add to* section then only displays results matching the entered text. Delete the search criteria to view all courses. (*NOTE: The course filter box only displays when there are 10 or more courses listed.*) Select the **Show hidden courses** checkbox to display courses that are 'hidden' in Moodle.

5. Click on the ⊞ beside the required course to expand the course grouping options. Select the Moodle locations to which the resource should be added, then select [Add selected resources].

6. An action receipt confirming the successful addition of the resource displays at the top of the page. An example is shown in Figure 36.

Figure 36 Successful addition of resource to Moodle location

7. Use the breadcrumbs to navigate back to the resource, as shown in Figure 36.

Add a resource to a Blackboard location

1. From the **Resource summary** screen, select the **Add to external system** link from the Actions section. An example is shown in Figure 37.
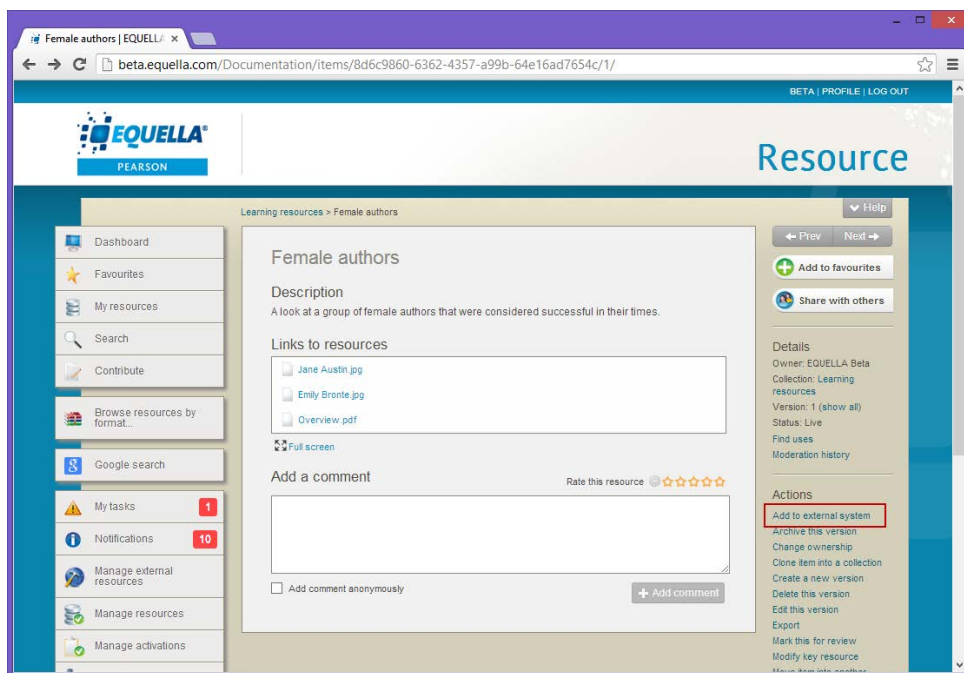
Figure 37 Add to external system menu item

2. Select the external system (Blackboard) from the drop-down list to which the resource is to be added. If only one external system is set up, the **Add to external system** screen displays immediately. An example is shown in Figure 38.

Figure 38 Add to external system - Blackboard

3. Select the required resources from the **Select the resources to add** section. Select **Add resource summary** to create a link to the resource as a whole, or select only specific attachments. Each attachment selected appears as a single item in the Blackboard location.

4. In the **Select the locations to add to** section, enter the first few letters of the course name in the course filter edit box. The *Select the locations to add to* section then only displays courses beginning with the entered text. *(NOTE: The course filter edit box only displays when there are 10 or more courses listed.)*
   Select the **Show unavailable courses** checkbox to display courses that are 'unavailable' in Blackboard.

5. Click on the ⊞ beside the required course to expand the course grouping options. Select the Blackboard locations to which the resource should be added, then select Add selected resources .

6. An action receipt confirming the successful addition of the resource displays at the top of the page. An example is shown in Figure 39.

Figure 39 Successful addition of resource to Blackboard location

7. Use the breadcrumbs to navigate back to the resource, as shown in Figure 39.

Find uses function

The **Find uses** function allows suitably privileged users to view all the locations in the LMS where the selected resource is currently being used. If the local resources connector has been configured in the system, the user will be able to view all resources that share any of the same attachments as the selected resource within the EQUELLA system. (*NOTE: The* **Find uses** *link only displays if at least one external connector has been configured in the EQUELLA system.*)

Find uses in Moodle

1. From the **Resource summary** screen, select the **Find uses** link from the Details section. An example is shown in Figure 40.
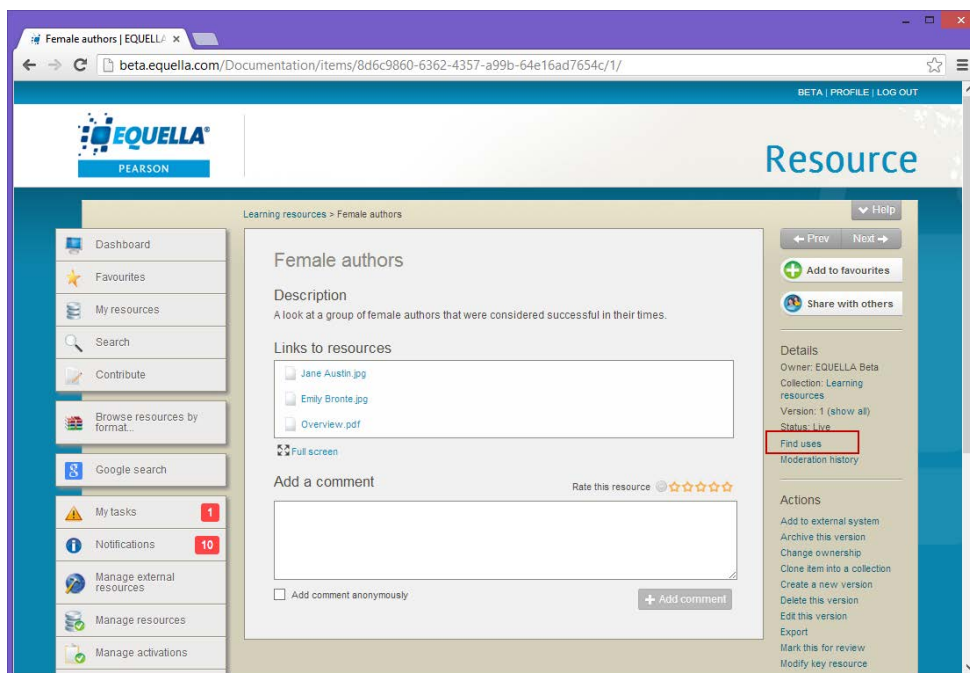
Figure 40 Find uses menu item

2. EQUELLA supports external connectors (*Moodle, Blackboard* and *Local resources*), and more than one may be configured. If there are multiple connectors configured, a drop-down list displays, and the user selects from the list (e.g. *Moodle*). If there is only one connector configured, the **Find uses** screen is displayed immediately. An example of a Blackboard connector is shown in Figure 41.

Figure 41 Find uses page—Moodle

The courses in which the selected resource is currently used are listed, with the **Location** and **Date added** information. The **Where this resource is used** section elements include:

- **Enter text to filter table rows** edit box—enter the first few characters of a course, location or date added to filter the table to display relevant results. (*NOTE: This filter edit box only displays when there are 10 or more courses listed.*)

- **Course**—lists the Moodle courses the resource has been added to. Click on the **Course** column title or arrow to sort by course in alpha-numerical order. Clicking the link a second time reverses the order. An example is shown in Figure 42.

Course ▼	Location	Date added ▼
EQUELLA 201	[Click to sort column]	about a minute ago
EQUELLA 201	Users	about a minute ago
Demo	27 November – 3 December	about a minute ago
EQUELLA 201	Advanced searched	about a minute ago
EQUELLA 101	3 June – 9 June	about a minute ago
Demo	General	about a minute ago
EQUELLA 101	27 May – 2 June	about a minute ago
Demo	20 November – 26 November	2 minutes ago
EQUELLA 101	27 May – 2 June	2 minutes ago
Demo	9 October – 15 October	2 minutes ago
EQUELLA 201	Introduction	2 minutes ago
EQUELLA 101	13 May – 19 May	3 minutes ago
EQUELLA 101	13 May – 19 May	3 minutes ago
Demo	27 November – 3 December	17 days ago
Demo	6 November – 12 November	20 days ago
Demo	20 November – 26 November	21 days ago
Demo	20 November – 26 November	21 days ago
Demo	9 October – 15 October	21 days ago
Demo	16 October – 22 October	21 days ago

Figure 42 Column title sort option

- **Location**—lists the location within the course that the resource has been added to. Click the **Location** column title or arrow to sort by location in alpha-numerical order. Clicking the link a second time reverses the order.

- **Date added**—time since resource or attachment was added to the course location. The results display in order of date added by default (most recent first). Click the **Date added** column title or arrow to sort by date added if another column title sort option has been used. Clicking the link a second time reverses the order.

- **Show all versions of this resource**—select to display any uses of earlier versions of the resource.

- **Show hidden courses and items**—select to display any hidden courses and items in which the selected resource is used.

Select the down arrow (which displays to the right of the **Date added column** when the cursor points at a course line) to display an expandable pane showing information about the resource details, which can include:

- **Resource version**—the current version of the resource.

- **Date modified**—the approximate time the resource was last updated.

- **Name in external system**—the Moodle title, which may differ from the EQUELLA title.

- **Description**—the Moodle description, which may differ from the EQUELLA description.

- **Enrollments**—the number of students enrolled in the associated course.

- **Instructor**—the instructor allocated to the course.

- **Visible**—refers to the availability of the associated course. Values can be *true* (available) or *false* (hidden).

- **Number of views**—the number of times the resource has been accessed.

- **Last accessed**—the approximate time since the resource was last accessed.

(*NOTE: Not all the details listed above will display for every resource, as some information may not be available.*)

An example is shown in Figure 43.
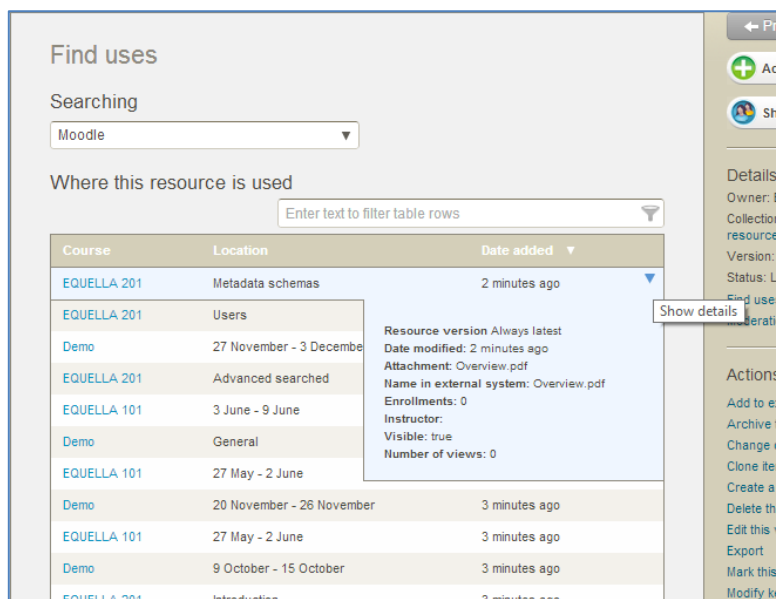
Figure 43 Find uses resource details

Find uses in Blackboard

1. From the **Resource summary** screen, select the **Find uses** link from the Details section. An example is shown in Figure 44.
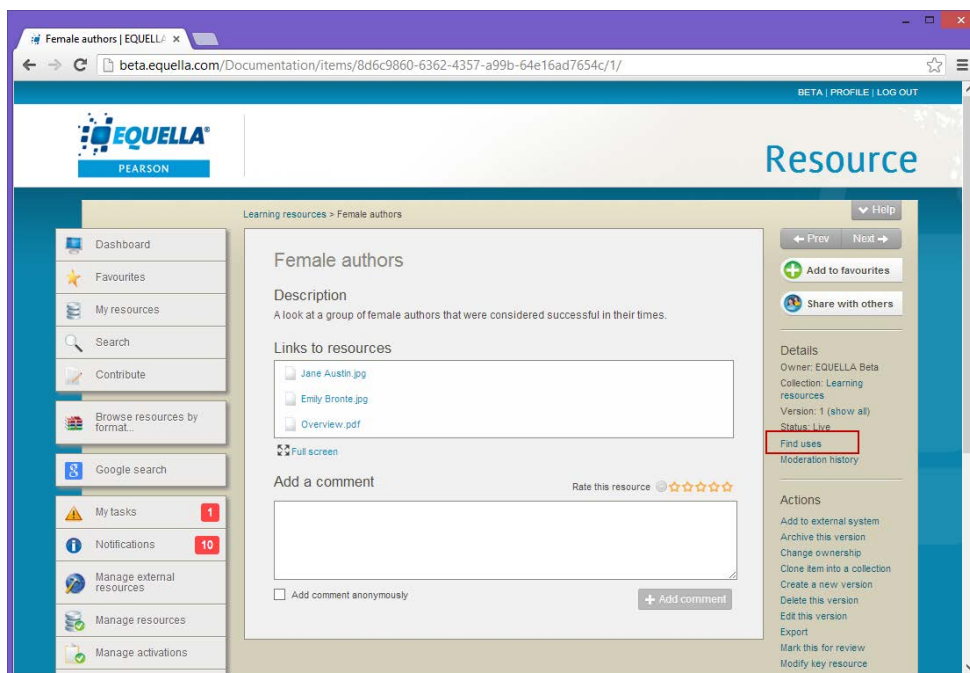
Figure 44 Find uses menu item

2. EQUELLA supports external connectors (*Moodle, Blackboard* and *Local resources*), and more than one may be configured. If there are multiple connectors configured, a drop-down list displays, and the user selects from the list (e.g. Blackboard). If there is only one connector configured, the **Find uses** screen is displayed immediately. An example of a Blackboard connector is shown in Figure 45.
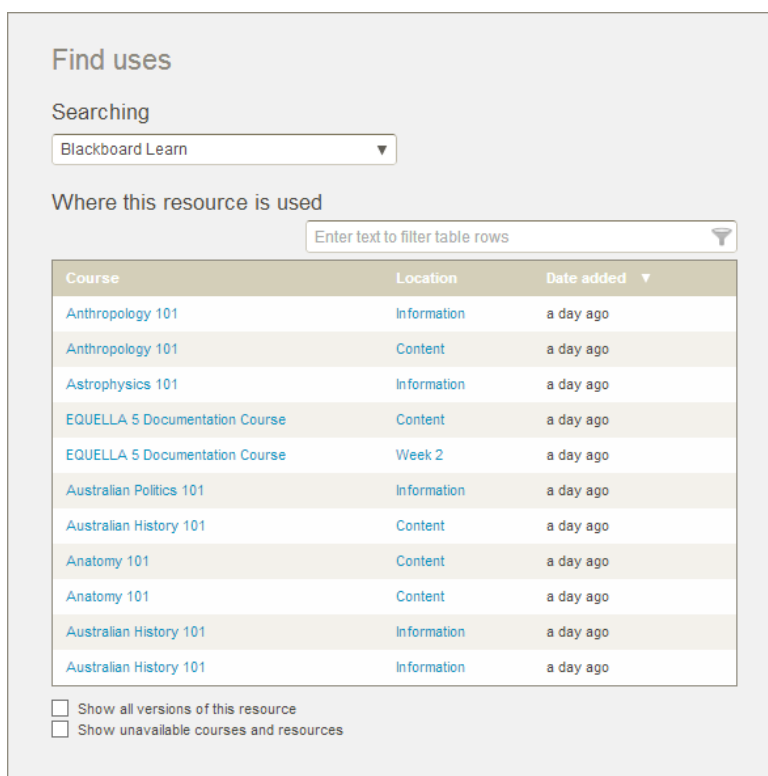
Figure 45 Find uses page

The courses in which the selected resource is currently used are listed, with the **Location** and **Date added** information. The **Where this resource is used** section elements include:

- **Enter text to filter table rows edit box**—enter the first few characters of a course, location or date added to filter the table to display relevant results. (*NOTE: This filter edit box only displays when there are 10 or more courses listed.*)

- **Course**—lists the Blackboard courses the resource has been added to. Click the Course column title or arrow to sort by course in alpha-numerical order. Clicking the link a second time reverses the order. An example is shown in Figure 46.

Course ▼	Location	Date added ▼
A[Click to sort column]	Information	a day ago
Anthropology 101	Content	a day ago
Astrophysics 101	Information	a day ago
EQUELLA 5 Documentation Course	Content	a day ago
EQUELLA 5 Documentation Course	Week 2	a day ago
Australian Politics 101	Information	a day ago
Australian History 101	Content	a day ago
Anatomy 101	Content	a day ago
Anatomy 101	Content	a day ago
Australian History 101	Information	a day ago
Australian History 101	Information	a day ago

Figure 46 Column title sort option

- **Location**—lists the location within the course that the resource has been added to. Click the **Location** column title or arrow to sort by location in alpha-numerical order. Clicking the link a second time reverses the order.

- **Date added**—time since resource or attachment was added to the course location. The results display in order of date added by default (most recent first). Click the **Date added** column title or arrow to sort by date added if another column title sort option has been used. Clicking the link a second time reverses the order.

- **Show all versions of this resource**—select to display any uses of earlier versions of the resource.

- **Show unavailable courses and resources**—select to display any hidden courses and resources in which the selected resource is used.

Select the down arrow (which displays to the right of the Date added column when the cursor points at a course line) to display an expandable pane showing resource details, including **Resource version**, **Date modified**, and **Name in external system**. An example is shown in Figure 47.
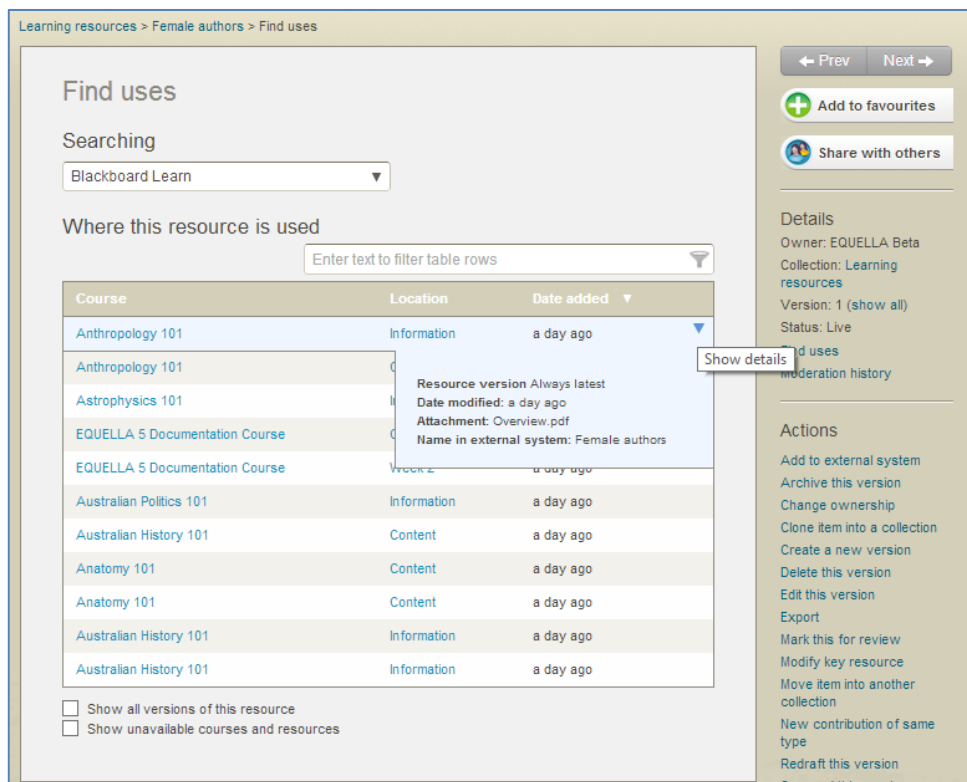
Figure 47 Find uses resource details—Blackboard

Find uses in local resources

This connector displays any instances where attachments linked to the selected resource have been linked to other resources in EQUELLA through the Attachments control/EQUELLA Resources option during contribution. An example is shown in Figure 48.
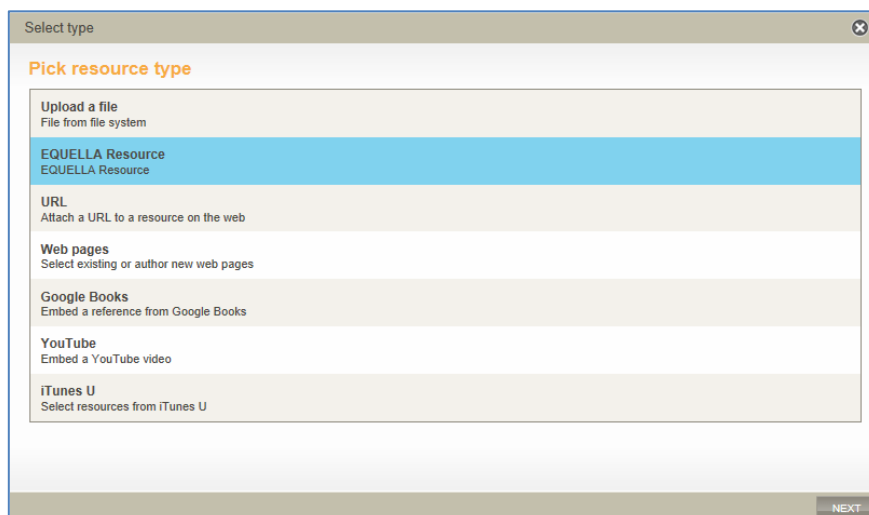
Figure 48 Attachment control—EQUELLA Resource

A list of resources that share the same attachments displays.

To find uses in local resources (EQUELLA)

1. From the **Resource summary** screen, select the **Find uses** link from the Details section. An example is shown in Figure 49.
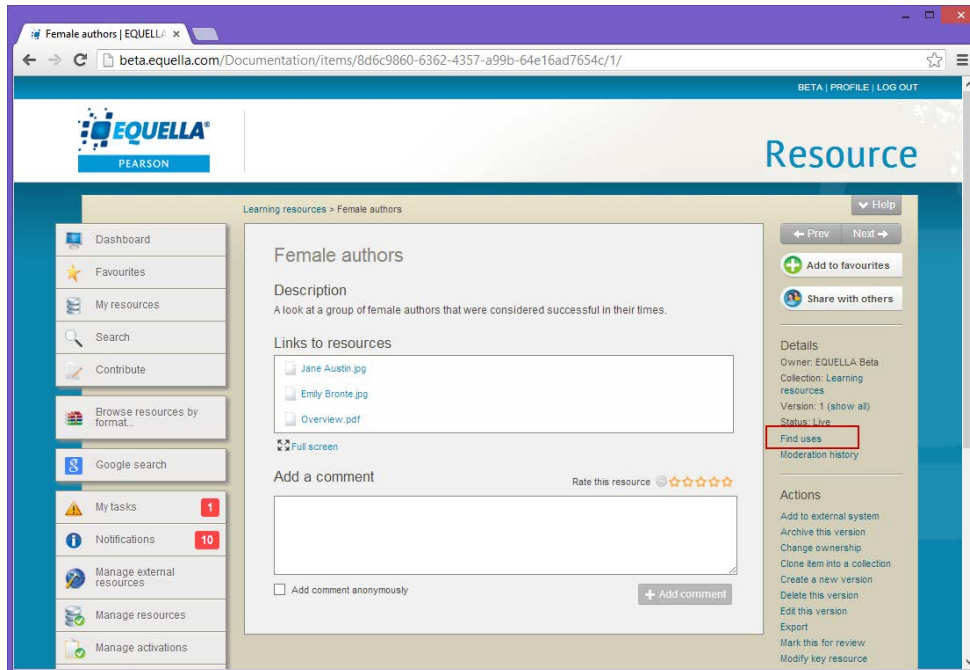
Figure 49 Find uses menu item

2. EQUELLA supports connectors (*Moodle, Blackboard* and *Local resources*), and more than one may be configured. If there are multiple connectors configured, a drop-down list displays, and the user selects from the list (e.g. EQUELLA). If there is only one connector configured, the **Find uses** screen is displayed immediately. An example of a local resources (EQUELLA) connector is shown in Figure 50.

Figure 50 Find uses page

The resources in which attachments linked to the selected resource are currently used are listed, with the **Attachment** and **Date added** information.

3. Check **Show all versions of this resource** to display any uses of earlier versions of the resource.

4. Check **Include non-live items** to display resources with any status.

5. Select the down arrow (which displays to the right of the Date added column when the cursor points at a course line) to display an expandable pane showing resource details, including **Resource version**, **Date modified**, **Owner** and **Selected attachment.** An example is shown in Figure 51.

Figure 51 Find uses attachment details

Manage external resources

The Manage external resources page displays all instances of an EQUELLA resource or resource attachment that have been allocated to courses within configured LMSs. Additionally, Manage external resources also allows the user to view the uses of internal EQUELLA resources and attachments within the EQUELLA system, if *Local resources* has been configured as a connector.

The Manage external resources function enables users to perform a variety of actions to any EQUELLA resource or resource attachment that has been added to an LMS. These actions include editing the name and description, and deleting and moving (the latter two can be done in bulk). (*NOTE: These functions are not available for Local resource connectors.*)

To access Manage external resources

1. Select **Manage external resources** from the navigation menu, as shown in Figure 52.
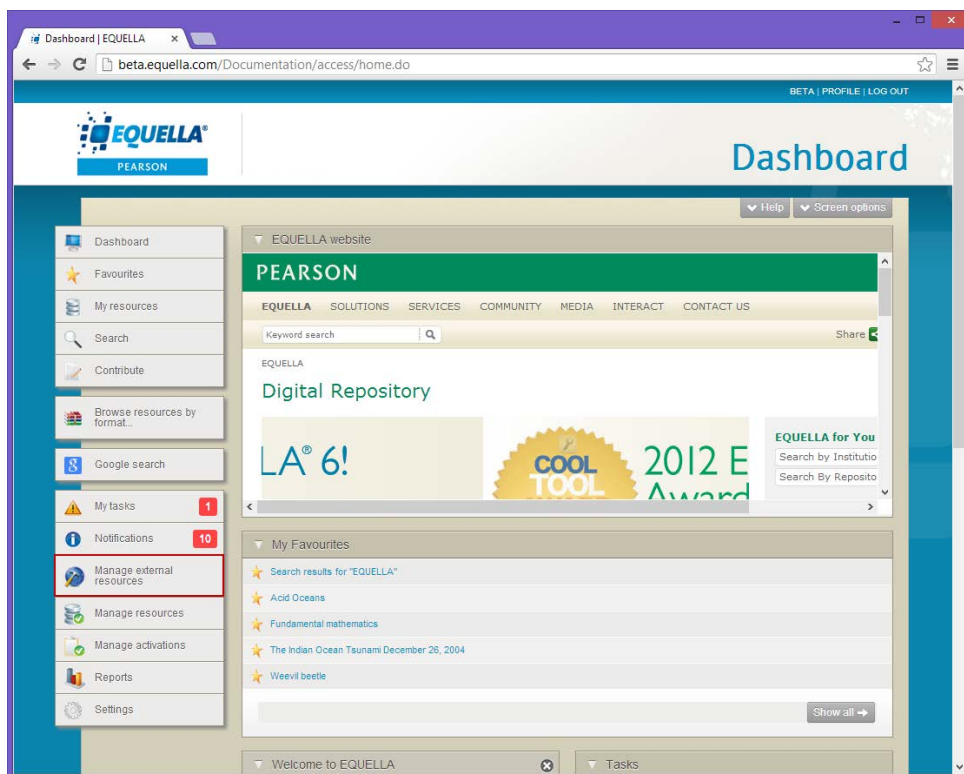
Figure 52 Manage external resources menu item

Manage external resources page—Moodle

The first time a user accesses the Manage external resources function during a session, and if there are multiple connectors (LMSs) configured in the system, the page will prompt for a connector to be selected, otherwise the results page will display immediately. An example is shown in Figure 53.
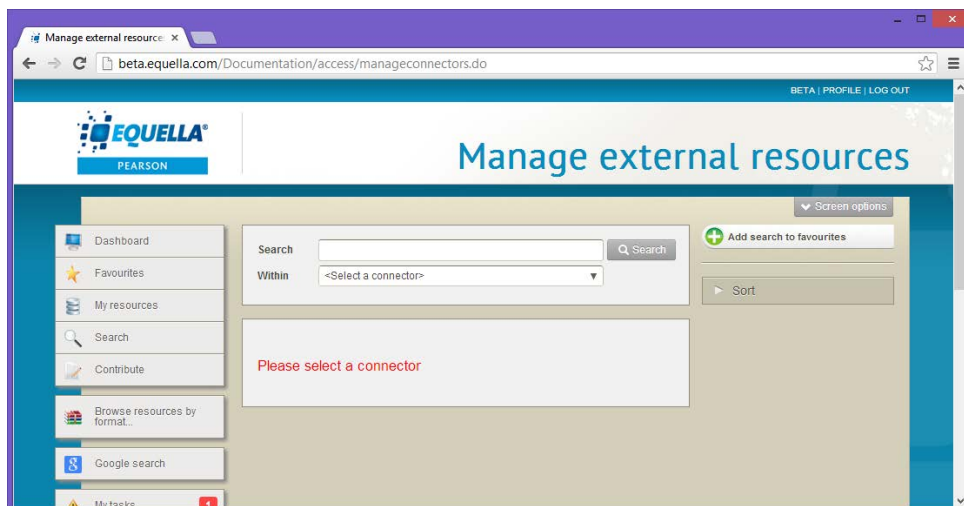
Figure 53 Manage resources page

Select the Moodle connector from the **Within** drop-down. The Manage external resources results page displays for Moodle resources. An example is shown in Figure 54.
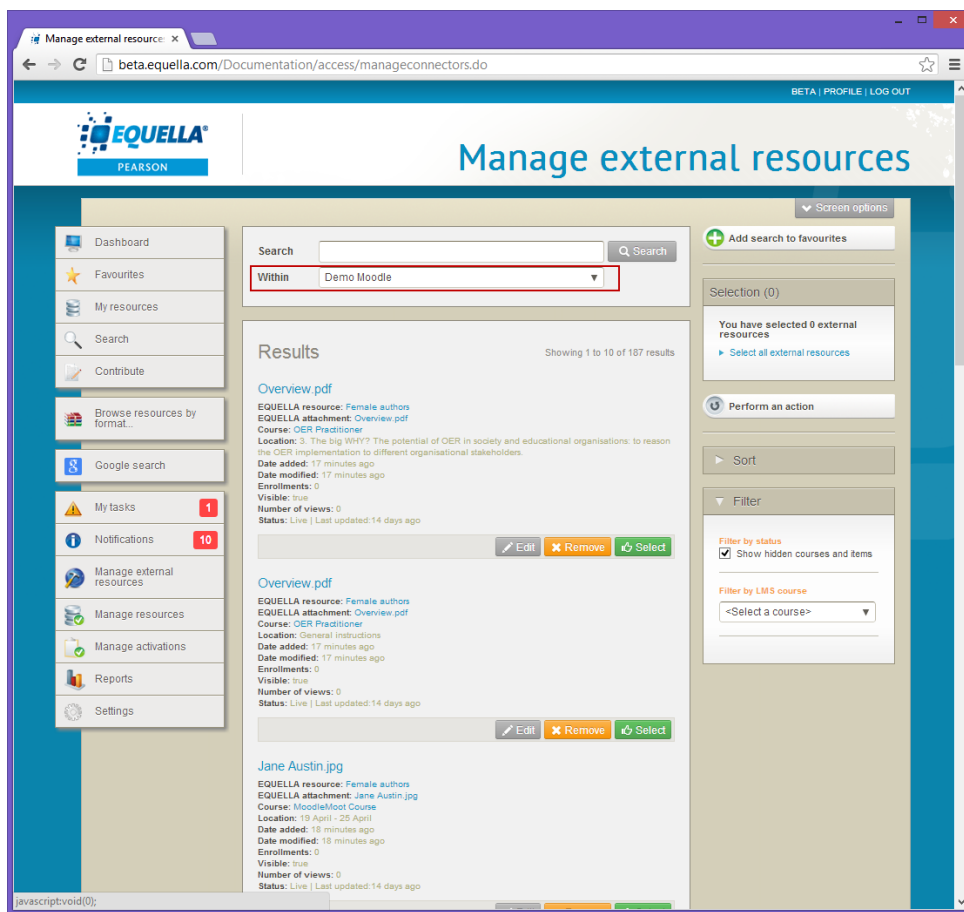
Figure 54 Manage external resources—Moodle

The Moodle Manage external resources page displays EQUELLA resources and resource attachments that have been added to Moodle courses as links. It provides functionality for viewing, sorting and filtering resources. Additionally, resources can be edited and deleted. The ability to select multiple resources to perform bulk actions (delete and move) is also available from this page. Elements of this page include:

Screen options

Click to display the screen options at the top of the page. One screen option is available from this page, **Number of results per page.** Select the required option from the drop-down list. Options available are *10, 50 or 100.* An example is shown in Figure 55.
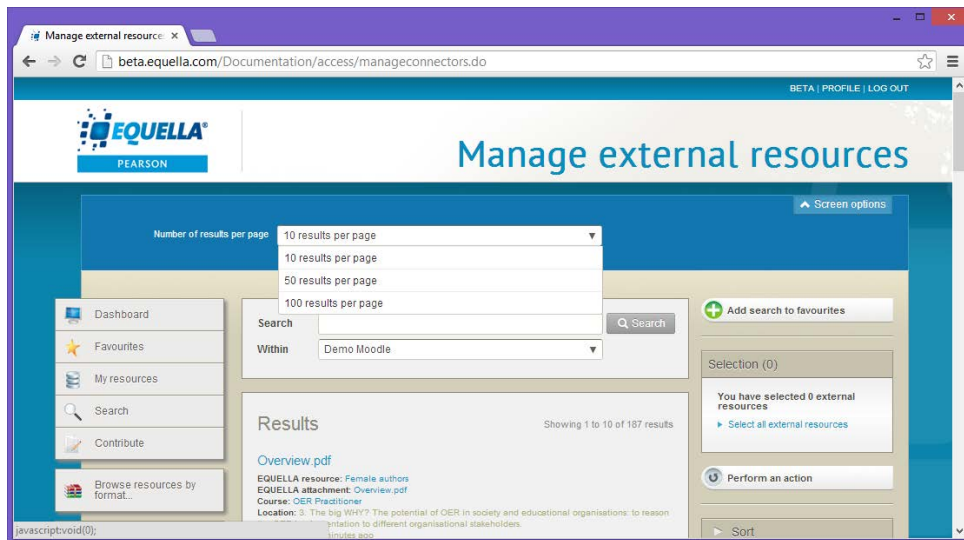
Figure 55 Manage external resources—Screen options

Search pane

- **Search**—enter a search term (e.g. *author*) and click [Q Search]. Matching results are displayed. See *EQUELLA Searching User Guide* for more information.

- **Within**—select the required external connector (LMS) to show matching results. If only one connector is configured on the system, this option does not display.

Search results

Results can be displayed in groups of 10, 50 or 100 per page, with paging displayed at the end of the search results page. Information displayed for each matching result can include:

- **Title**—the Moodle name for the resource or resource attachment. Select this link to display the EQUELLA resource summary page.

- **Description**—the Moodle description.

- **EQUELLA resource**—the name of the resource in EQUELLA.

- **EQUELLA attachment**—the name of the attachment in EQUELLA. (Only displays if the Moodle resource is an EQUELLA attachment.)

- **Course**—the Moodle course the resource or resource attachment is associated with.

- **Location**—the location within the selected Moodle course (e.g. *8 November -14 November*).

- **Date added**—approximate time in minutes, hours, days or months since the resource or resource attachment was added to the Moodle system. Mouse-over the number of days to display a pop-up showing the exact date and time.

- **Date modified**—approximate time in minutes, hours, days or months since the resource was last updated in Moodle. Mouse-over the number of days to display a pop-up showing the exact date and time.
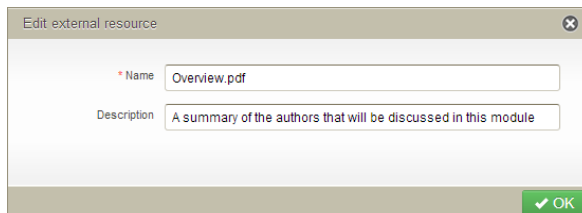
- **Enrollments**—the number of enrolments in the associated Moodle course.

- **Visible**—refers to the availability of the associated course. Values can be *true* (available) or *false* (hidden).

- **Number of views**—the number of times the resource or resource attachment has been viewed in Moodle.

- **Last accessed**—approximate time in minutes, hours, days or months since the resource or resource attachment was last viewed or updated. Mouse-over the number of days to display a pop-up showing the exact date and time.

- **Status**—displays the EQUELLA resource status and when it was last updated. Statuses displayed can be *live*, *archived*, *deleted*, *suspended, review, moderating, rejected* or *draft*.

- **Last updated**—the last time the status was updated.

- [✎ Edit]—click to edit names and descriptions. See Edit section below for more information.

- [✖ Remove]—click to remove the resource or resource attachment from Moodle.

- [👍 Select]—click to add the current resource or resource attachment to the Select panel. See the Bulk actions section on page 60 for more information.

Edit

Resource and resource attachment Moodle names and descriptions can be edited from the Manage external resources page. This does not affect the EQUELLA names and descriptions.

To edit names and descriptions

1. Locate the required Moodle resource on the Manage external resources results page, then click [✎ Edit]. The **Edit external resource** dialog displays. An example is shown in Figure 56.

Figure 56 Edit external resource

2. Edit the **Name** and **Description** fields as required, then click [✔ OK]. The new text displays on the Manage external resources results page, and in the Moodle system. An example of the updated entry in the Manage external resources results page is shown in Figure 57.
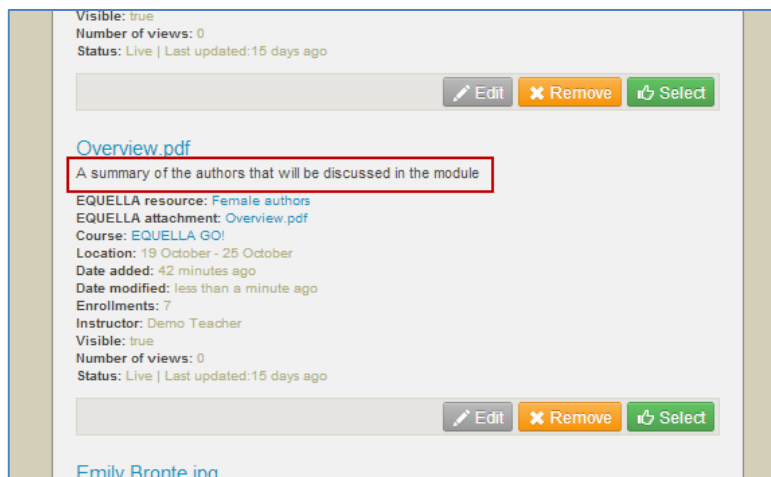
Figure 57 Updated entry on Manage external resources results page

An example of the updated resource in Moodle is shown in Figure 58
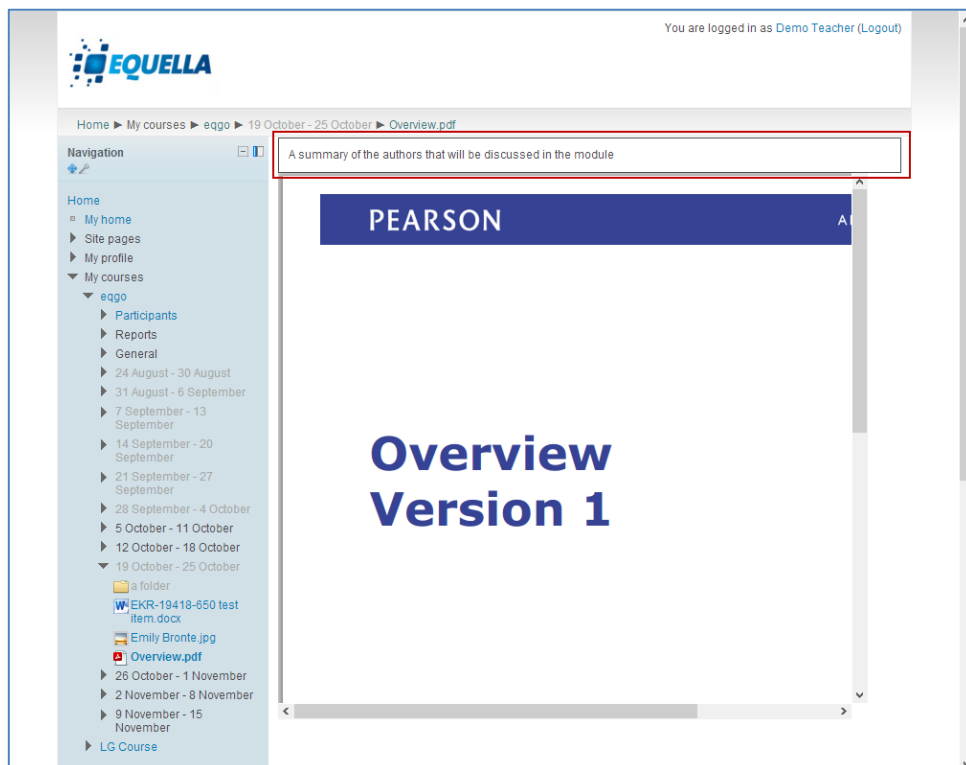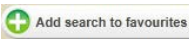
Figure 58 Moodle view of updated resource description

Add search to favourites

Selecting the [Add search to favourites] button on the right-hand side of the page displays the **Add search to favourites** dialog where a name is entered to help identify the search. An example is shown in Figure 74.
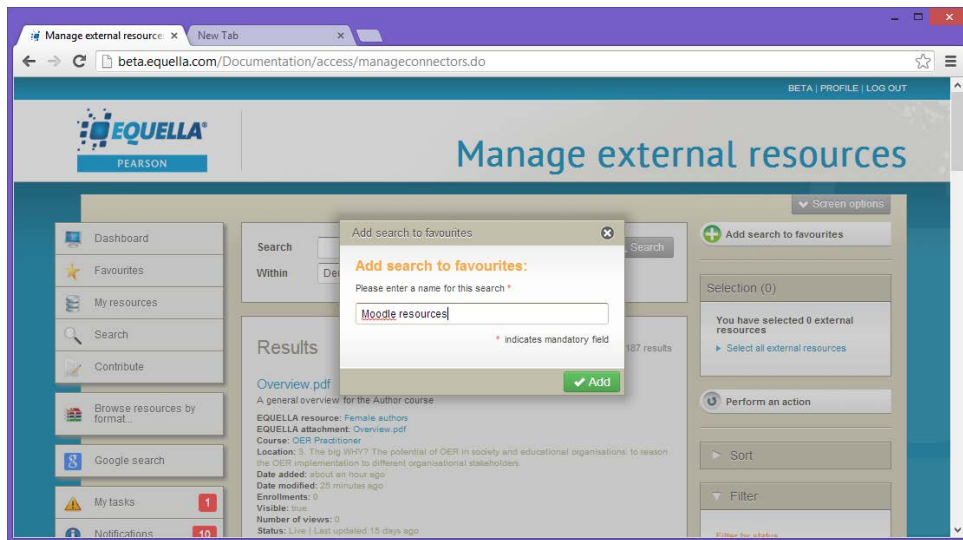
Figure 59 Add search to favourites dialog

Clicking ✔ Add displays a *'Successfully added this search to your favourites'* message and adds the search to your Favourite searches list.

Sort and filter

The **Sort** and **Filter** boxes on the Manage external resources results page (Moodle) display options relevant to Moodle resources. An example of the **Sort** box is shown in Figure 60.
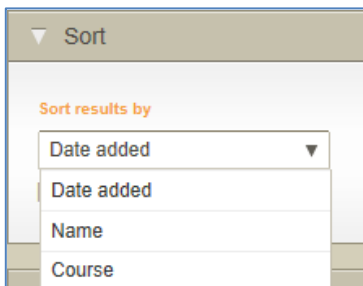
Figure 60 Manage external resources sort box

The sort options are:

- **Date added**—sorts the results by the date the resource was added to its Moodle location.

- **Name**—sorts the results by the Moodle name of the resource.

- **Course**—sorts the results by Moodle course name.

- **Reverse order of results**—select to change the order of the results.

An example of the **Filter** box is shown in Figure 61.
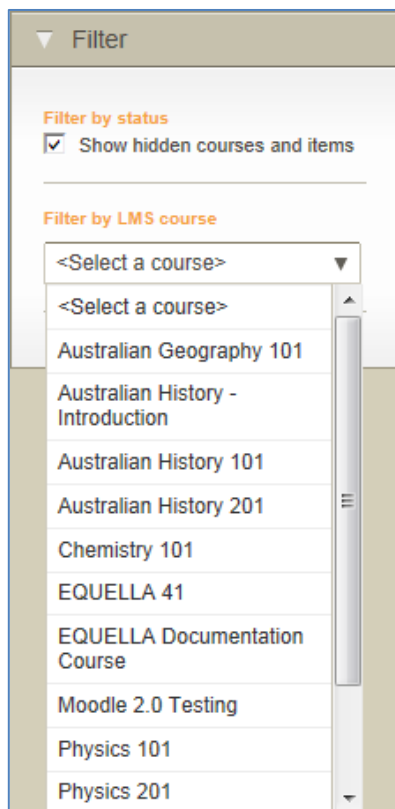
Figure 61 Manage external resources filter box—Moodle

From the Manage external resources results page (Moodle), the following filter options are available:

- **Filter by status**—select this option to include results from courses set as 'hidden' in Moodle.

- **Filter by LMS course—**select a Moodle course from the drop down list to show only results from the selected course.

Manage external resources page—Blackboard

The first time a user accesses the Manage external resources function during a session, and if there are multiple connectors (LMSs) configured in the system, the page will prompt for a connector to be selected, otherwise the results page will display immediately. An example is shown in Figure 53.
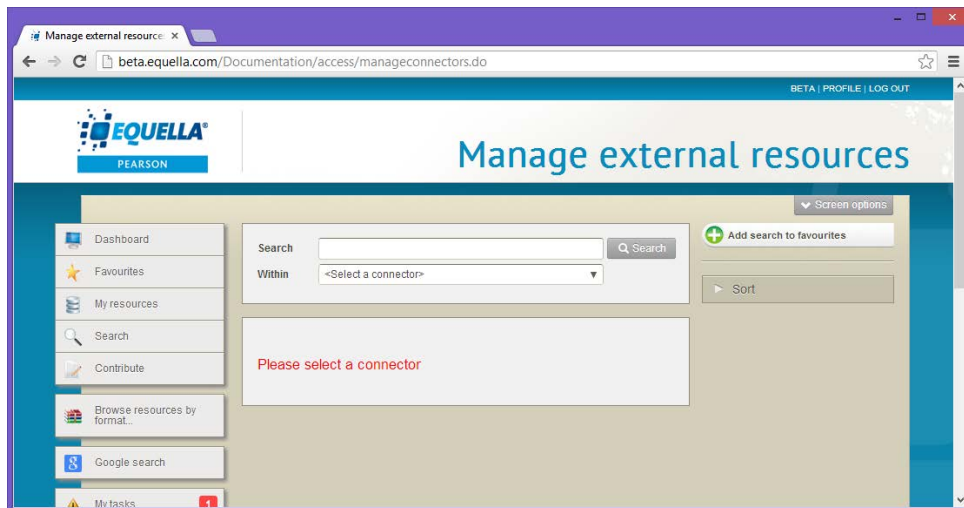
Figure 62 Manage resources page

Select the Blackboard connector from the **Within** drop-down. The Manage external resources results page displays for Blackboard resources. An example is shown in Figure 54.
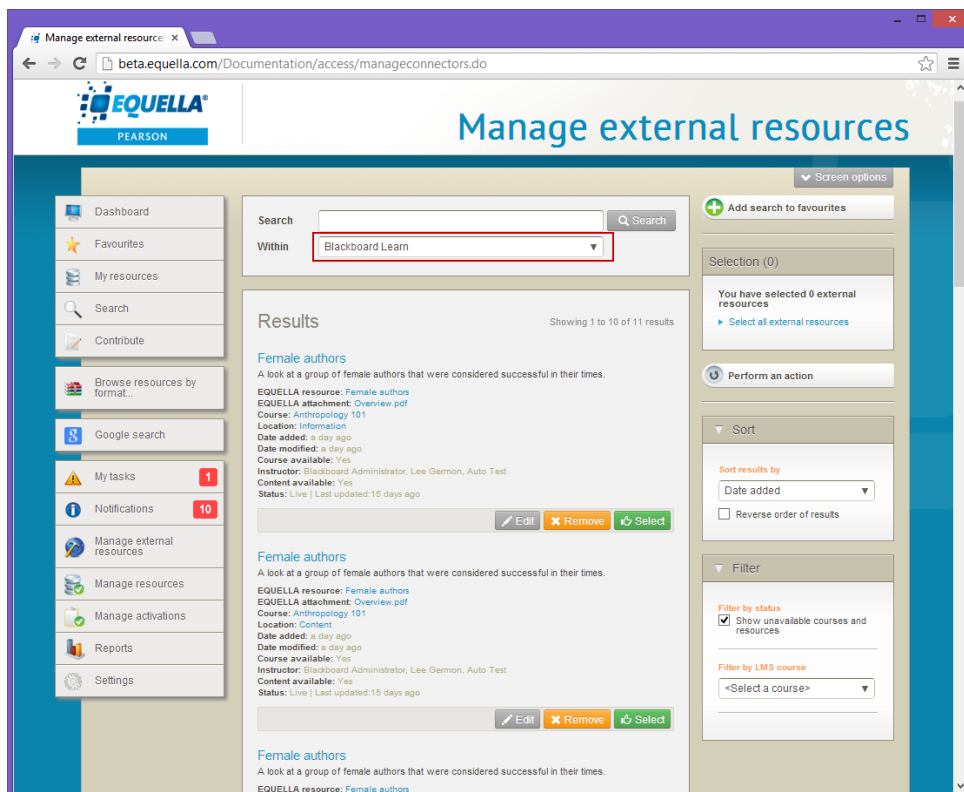
Figure 63 Manage external resources - Blackboard

The Blackboard Manage external resources page displays EQUELLA resources and resource attachments that have been added to Blackboard courses. It provides functionality for viewing, sorting and filtering resources. Additionally, resources can be edited and deleted. The ability to select multiple resources to perform bulk actions (delete and move) is also available from this page. Elements of this page include:

Screen options

Click [⌄ Screen options] to display the screen options at the top of the page. One screen option is available from this page, **Number of results per page.** Select the required option from the drop-down list. Options available are *10, 50 or 100.* An example is shown in Figure 55.
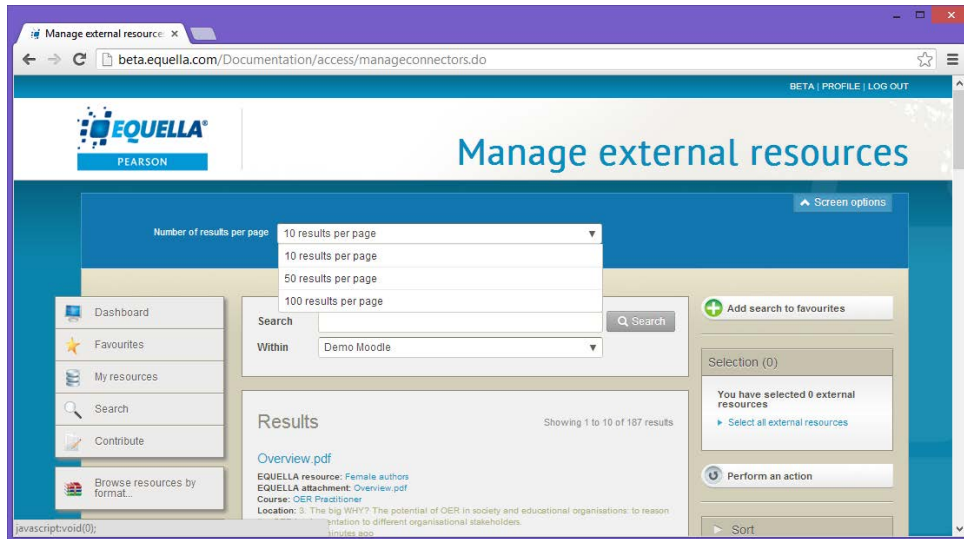
Figure 64 Manage external resources—Screen options

Search pane

- **Search**—enter a search term (e.g. *author*) and click [🔍 Search]. Matching results are displayed. See *EQUELLA Searching User Guide* for more information.

- **Within**—select the required external connector (LMS) to show matching results. If only one connector is configured on the system, this option does not display.

Search results

Results can be displayed in groups of 10, 50 or 100 per page, with paging displayed at the end of the search results page. Information displayed for each matching result can include:

- **Title**—the Blackboard name for the resource or resource attachment. Select this link to display the original resource summary page.

- **Description**—the Blackboard description.

- **EQUELLA resource**—the name of the resource in EQUELLA.

- **EQUELLA attachment**—the name of the attachment in EQUELLA. (Only displays if the Blackboard resource is an EQUELLA attachment.)

- **Course**—the Blackboard course the resource or resource attachment is associated with.

- **Location**—the location within the selected Blackboard course (e.g. *Content*).

- **Date added**—approximate time in minutes, hours, days or months since the resource or resource attachment was added to the Blackboard system. Mouse-over the number of days to display a pop-up showing the exact date and time.

- **Date modified**—approximate time in minutes, hours, days or months since the resource was last updated in Blackboard. Mouse-over the number of days to display a pop-up showing the exact date and time.

- **Enrollments**—the number of enrolments in the associated Blackboard course.

- **Course available**—refers to the availability of the associated course. Values can be *Yes* (available) or *No* (unavailable).

- **Instructor**—the name of the instructor allocated to the selected course.

- **Content available**—refers to the availability of the resource or resource attachment. Values can be *Yes* (available) or *No* (unavailable).

- **Status**—displays the EQUELLA resource status and when it was last updated. Statuses displayed can be *live*, *archived*, *deleted*, *suspended, review, moderating, rejected* or *draft*.

- **Last updated**—the last time the status was updated.

- ✎ Edit —click to edit names and descriptions. See Edit section below for more information.

- ✖ Remove —click to remove the resource or resource attachment from Blackboard.

- 👍 Select —click to add the current resource or resource attachment to the Select panel. See the Bulk actions section on page 60 for more information.

Edit

Resource and resource attachment Blackboard names and descriptions can be edited from the Manage external resources page. This does not affect the EQUELLA names and descriptions.

To edit names and descriptions

1. Locate the required Blackboard resource on the Manage external resources results page, then click ✎ Edit . The **Edit external resource** dialog displays. An example is shown in Figure 56.
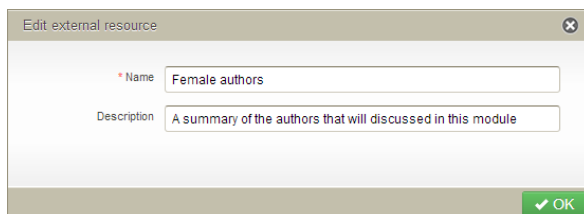

Figure 65 Edit external resource

2. Edit the **Name** and **Description** fields as required, then click ✔ OK . The new text displays on the Manage external resources results page, and in the Blackboard

system. An example of the updated entry in the Manage external resources results page is shown in Figure 57.

Figure 66 Updated entry on Manage external resources results page

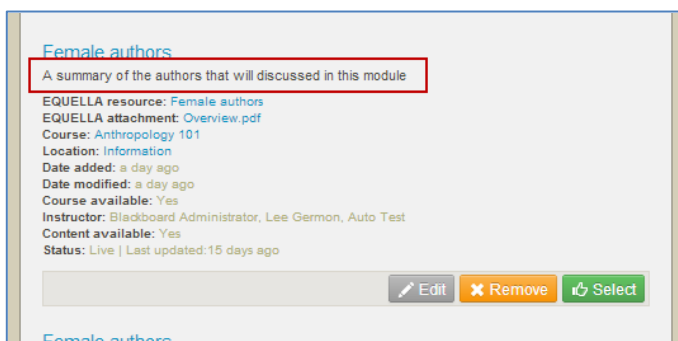An example of the updated resource in Blackboard is shown in Figure 58.
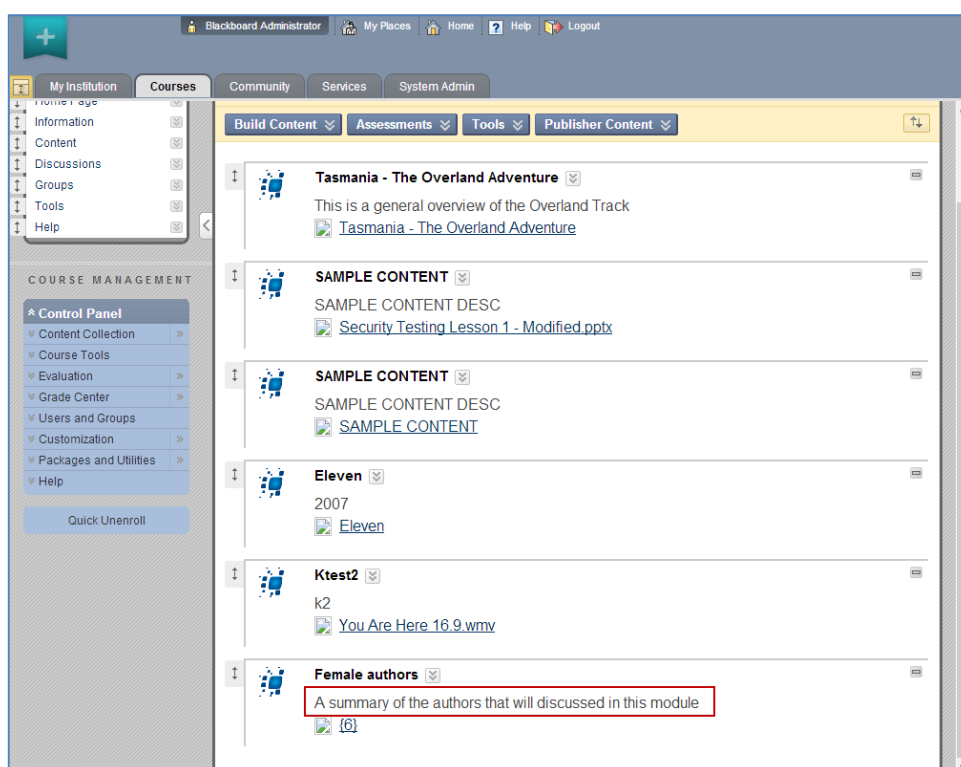
Figure 67 Blackboard view of updated resource description

Add search to favourites

Selecting the [Add search to favourites] button on the right-hand side of the page displays the **Add search to favourites** dialog where a name is entered to help identify the search. An example is shown in Figure 74.

Figure 68 Add search to favourites dialog

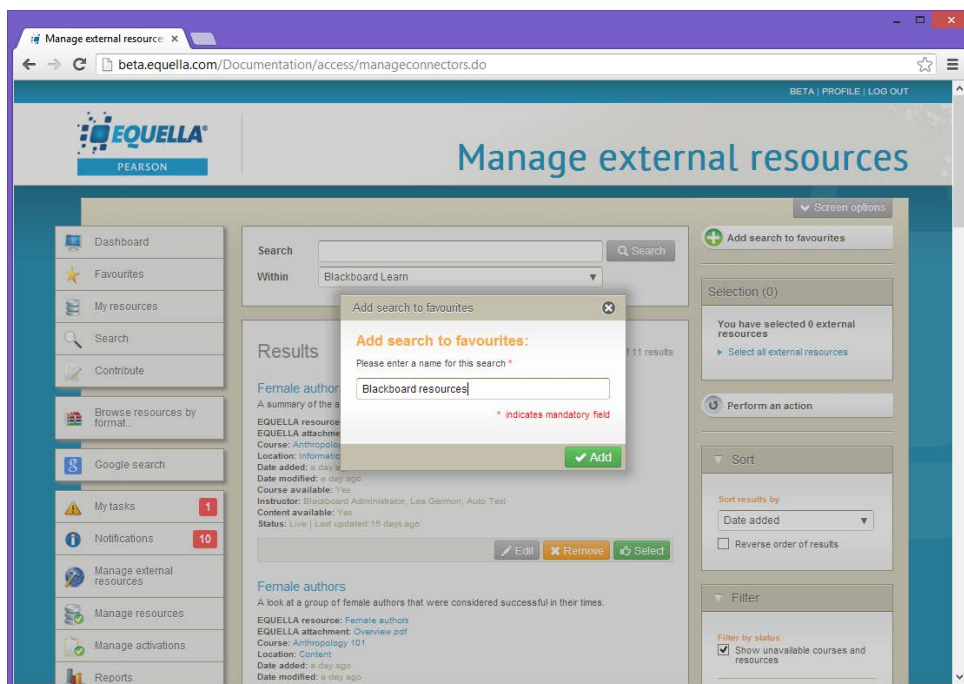Clicking displays a *'Successfully added this search to your favourites'* message and adds the search to your Favourite searches list.

Sort and filter

The **Sort** and **Filter** boxes on the Manage external resources results page (Blackboard) display options relevant to Blackboard resources. An example of the **Sort** box is shown in Figure 60.
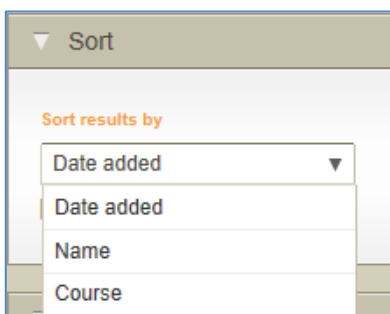
Figure 69 Manage external resources sort box

The sort options are:

- **Date added**—sorts the results by the date the resource was added to its Blackboard location.
- **Name**—sorts the results by the Blackboard name of the resource
- **Course**—sorts the results by Blackboard course name.
- **Reverse order of results**—select to change the order of the results.

An example of the **Filter** box is shown in Figure 61.
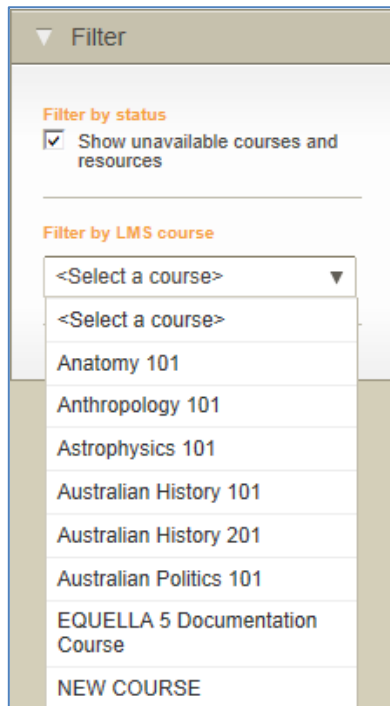

Figure 70 Manage external resources filter box—Blackboard

From the Manage external resources results page (Blackboard), the following filter options are available:

- **Filter by status**—select this option to include results from courses set as 'unavailable' in Blackboard.

- **Filter by LMS course—**select a Blackboard course from the drop down list to show only results from the selected course.

Manage external resources page—Local resources

The first time a user accesses the Manage external resources function during a session, and if there are multiple connectors (LMSs) configured in the system, the page will prompt for a connector to be selected, otherwise the results page will display immediately. An example is shown in Figure 53.
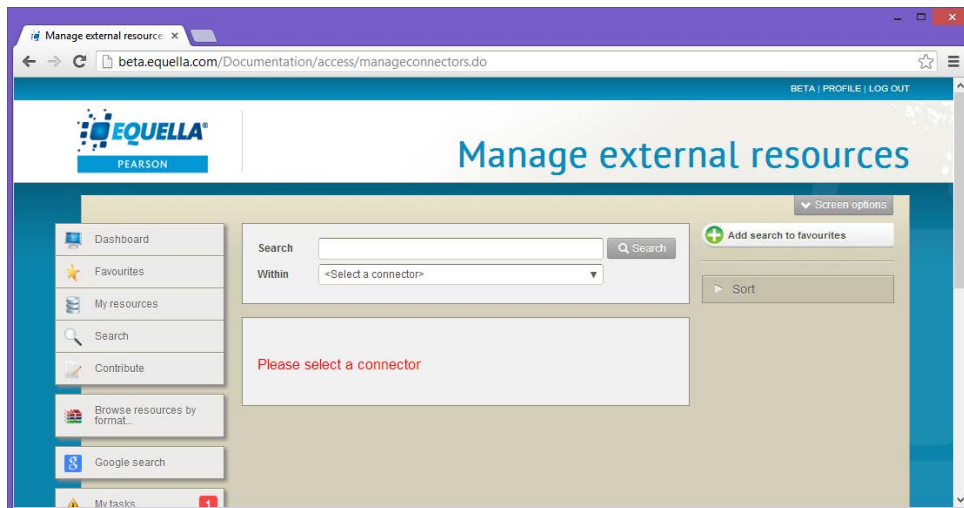
Figure 71 Manage resources page

Select the **Local resources** connector from the **Within** drop-down (in this example, it has been called '*EQUELLA*'). The Manage external resources results page displays for Local resources displays. An example is shown in Figure 54.
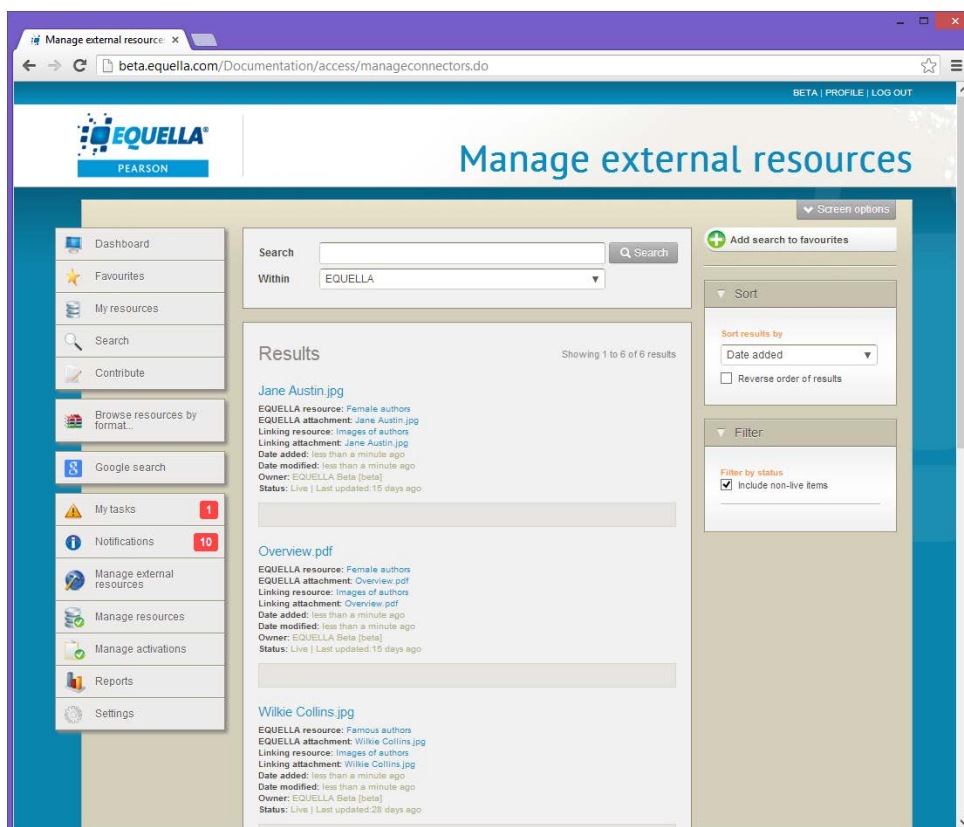
Figure 72 Manage external resources—EQUELLA

The EQUELLA Manage external resources page displays EQUELLA resources and resource attachments that have been added to EQUELLA courses. It provides functionality for viewing, sorting and filtering resources. Elements of this page include:

Screen options

Click ![Screen options] to display the screen options at the top of the page. One screen option is available from this page, **Number of results per page.** Select the required option from the drop-down list. Options available are *10, 50 or 100.* An example is shown in Figure 55.
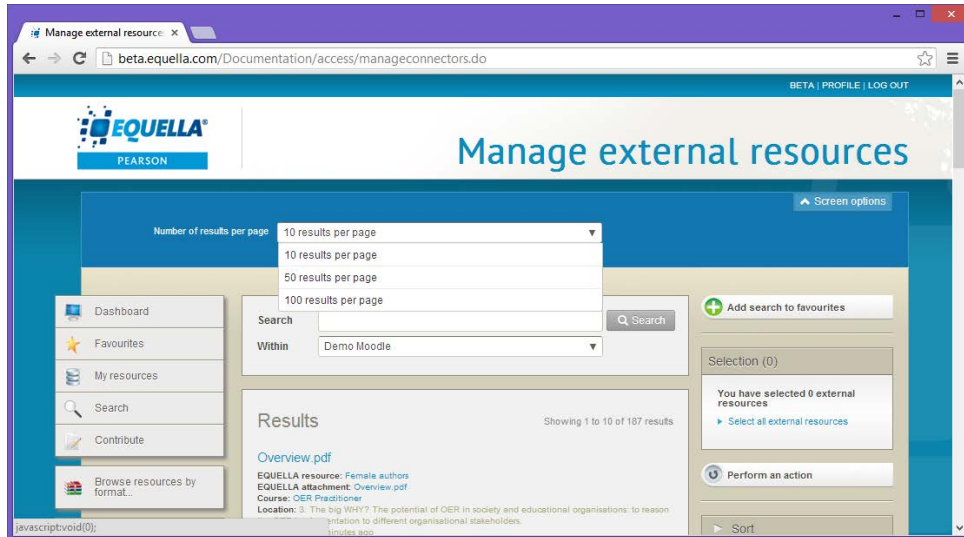

Figure 73 Manage external resources—Screen options

Search pane

- **Search**—enter a search term (e.g. *author*) and click ![Search]. Matching results are displayed. See *EQUELLA Searching User Guide* for more information.

- **Within**—select the required external connector (LMS) to show matching results. If only one connector is configured on the system, this option does not display.
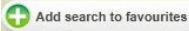
Search results

Results can be displayed in groups of 10, 50 or 100 per page, with paging displayed at the end of the search results page. Information displayed for each matching result can include:

- **Title**—the name of the resource or resource attachment. Select this link to display the original resource summary page.

- **EQUELLA resource**—click to view the original resource.

- **EQUELLA attachment**—click to open the attachment in the default viewer.

- **Linking resource**—click to open the new resource that the attachment or resource summary has been attached to.

- **Linking attachment**—click to open the attachment in the default viewer.

- **Date added**—approximate time in minutes, hours, days or months since the resource or resource attachment was added to the new EQUELLA resource. Mouse-over the number of days to display a pop-up showing the exact date and time.

- **Date modified**—approximate time in minutes, hours, days or months since the resource was last updated in EQUELLA. Mouse-over the number of days to display a pop-up showing the exact date and time.

- **Owner**—the owner of the resource (generally the user who created the resource).

- **Status**—displays the EQUELLA resource status and when it was last updated. Statuses displayed can be *live*, *archived*, *deleted*, *suspended*, *review*, *moderating*, *rejected* or *draft*.

- **Last updated**—the last time the status was updated.

Add search to favourites

Selecting the [⊕ Add search to favourites] button on the right-hand side of the page displays the **Add search to favourites** dialog where a name is entered to help identify the search. An example is shown in Figure 74.
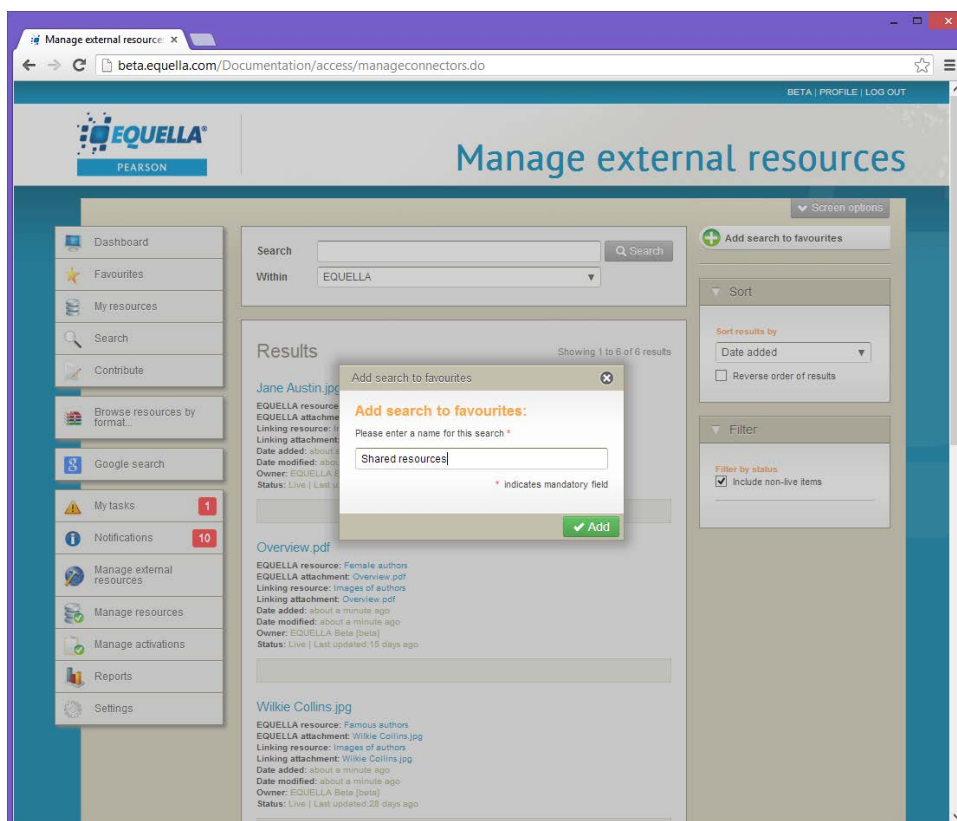

Figure 74 Add search to favourites dialog

Clicking [✔ Add] displays a *'Successfully added this search to your favourites'* message and adds the search to your Favourite searches list.

Sort and filter

The **Sort** and **Filter** boxes on the Manage external resources results page (local resources) display options relevant to local resources. An example of the **Sort** box is shown in Figure 60.
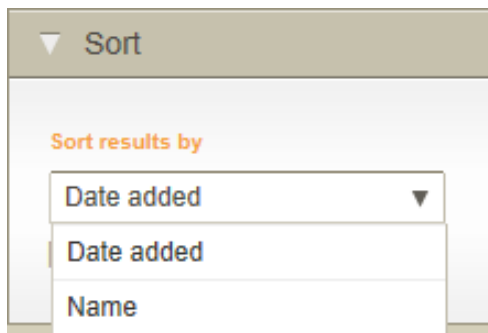
Figure 75 Manage external resources sort box—Local resources

The sort options are:

- **Date added**—sorts the results by the date the local resource was added to a new resource.
- **Name**—sorts the results by the name of the resource or attachment
- **Reverse order of results**—select to change the order of the results.

An example of the **Filter** box is shown in Figure 61.

Figure 76 Manage external resources filter box—Local resource

From the Manage external resources results page (local resources), the following filter options are available:

- **Filter by status**—select this option to include results that are not '*Live'* (still in a moderation workflow).

Bulk actions

Administrators can remove or move individual or multiple external resources in a single operation using the ⟨ Perform an action ⟩ button to the right-hand side of the Manage external resources page. An example is shown in Figure 77.
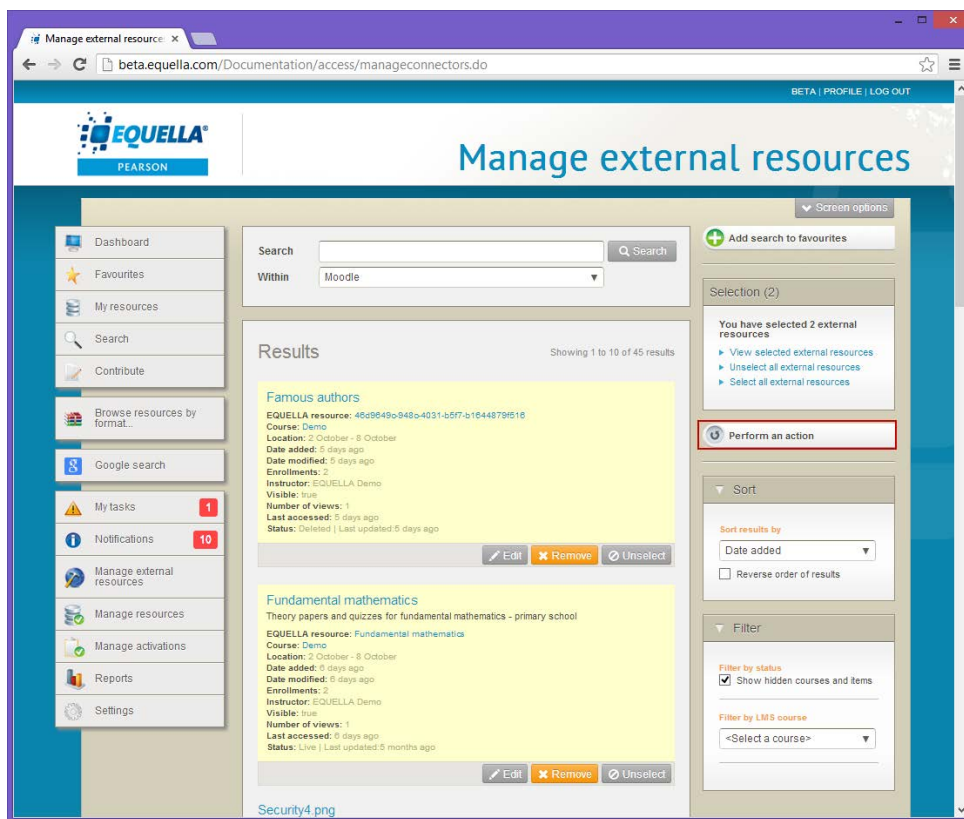
Figure 77 Perform an action control

Selecting resources

Select the required resource or resources by clicking beside each resource. To select all resources on the results page, click the **Select all external resources** link in the **Selection pane**. An example is shown in Figure 78.
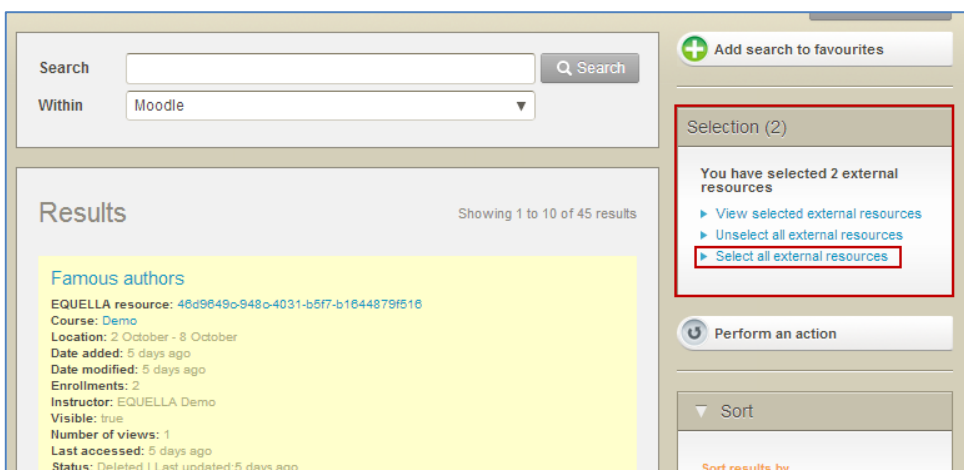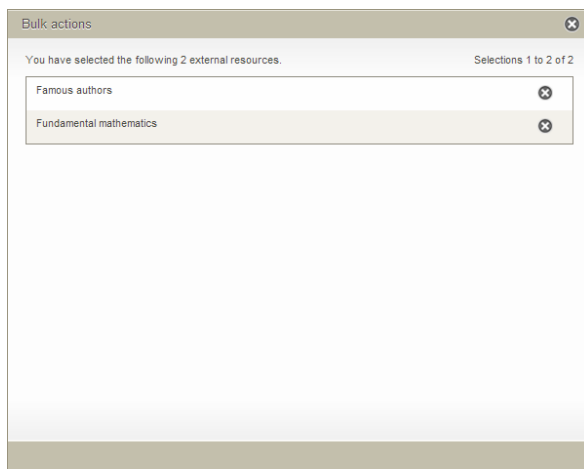

Figure 78 Selection pane

The selection pane displays the current number of selected resources, as well as the following links:

- **View selected external resources**—click to open a **Bulk actions** dialog which lists the currently selected resources. An example is shown in Figure 79.

Figure 79 Bulk actions dialog—currently selected resources

Click ⊗ to delete resources.

- **Unselect all external resources**—click to unselect all resources currently selected.
- **Select all external resources**—click to select all external resources listed in the Manage external resources results pages.
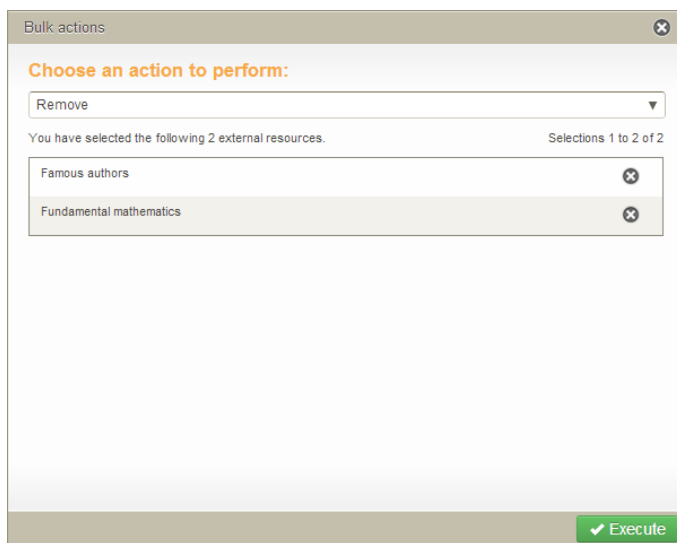
Actions

Remove

Selecting this action removes the selected resources from their location within the associated LMS. They are also removed from the Manage external resources results page.

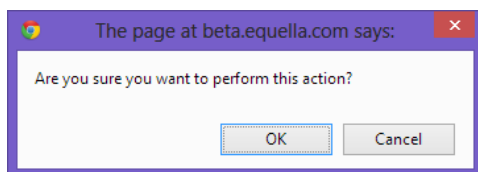#### To remove external resources

1. With the required resources selected, click to display the **Bulk actions** page, as shown in Figure 80.

Figure 80 Bulk operations list

Click next to a resource to remove that resource from the list.

2. Select **Remove** from the **Choose an action to perform:** drop-down list then click . A confirmation dialog displays, as shown in Figure 81.


Figure 81 Confirmation dialog

3. Click . An information dialog displays, confirming the action was successful. In the case of an unsuccessful action, an error message displays with an explanation of the failed action.

Move

The **Move** action moves the selected resources from the current location within the associated LMS to the ones selected on the Move dialog.
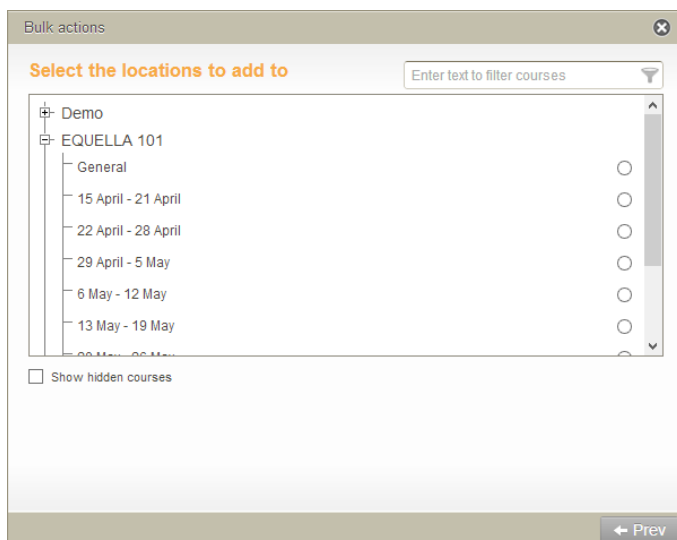
To move selected resources

1. With the required resources selected, click to display the **Bulk actions** page, as shown in Figure 82.
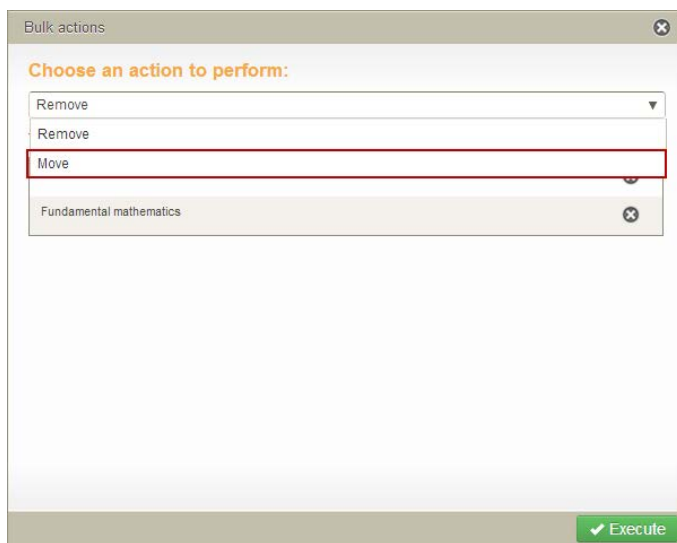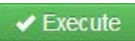
Figure 82 Bulk actions list—Move

Click ⊗ next to a resource to remove that resource from the list.

2. Select **Move** from the drop-down list, then click `Next ➜`. The **Bulk actions—Select the locations to add to** dialog displays. An example is shown in Figure 83

Figure 83 Bulk actions—Move dialog

3. Click ⊞ to expand courses and select the required location or locations to move the selected resources to. Select **Show hidden courses** (Moodle) or **Show unavailable courses** (Blackboard) to display currently hidden/unavailable courses in the selected LMS.

4. Click ✔ Execute. A confirmation dialog displays, as shown in Figure 84.
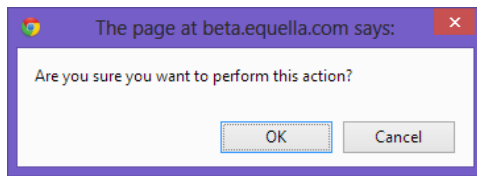
Figure 84 Confirmation dialog

5. Click [OK]. In the case of an unsuccessful action, an error message displays with an explanation of the failed action.

Contact Client Support

We are always happy to help.

If your organisation has a support agreement with EQUELLA then help is available at http://equella.custhelp.com.