

Connecting to WebPA with Blackboard Learn 9

Blackboard Learn 9 and WebPA are connected using the IMS Learning Tools Interoperability specification. The basic steps for establishing this connection are as follows:

1. Install the Basic LTI Building Block.
2. Configure the Basic LTI Building Block.
3. Register WebPA as a Basic LTI tool.
4. Add a link to the WebPA tool in each relevant course.

An alternative method which makes WebPA available in specific courses only using a domain registration, is outlined in the final section of this document.

Installing the Basic LTI Building Block

The Building Block is open source and documented at:

<http://www.spvsoftwareproducts.com/bb/basiclti/>

Follow the link to OSCELOT in the Licence section to download a copy. The Building Block is installed in Blackboard Learn 9 in the same way as any other – via the *Building Blocks, Installed Tools* page on the *System Admin* tab. After installing the Building Block it should be made available. This will make a link available to the settings page on the action menu and in the *Tools and Utilities* section of the *System Admin* tab.

Configuring the Basic LTI Building Block

On first installing the Building Block, the following configuration steps should be followed:

1. Click on the *System Settings* button on the settings page.
2. Enter a name and description in the *Institution Details* section. (N.B. The name and description should be different for each Learn 9 server; for example, use names of *myuni-dev*, *myuni-test* and *myuni* for development, test and production servers.)
3. Enable all the extension services: outcomes, memberships and setting.
4. The remaining settings are optional; click on the *Submit* button to save the changes.

Registering WebPA as a Basic LTI tool

To make the WebPA application available within the system:

1. Click on the *Register New Tool* button on the settings page of the Basic LTI Building Block .
2. Enter a name, such as *WebPA*; this appears to instructors within courses.
3. Enter the launch URL, consumer key and shared secret (provided separately) specifically for use with this Learn 9 server.
4. Set each of the extension services to *Required by tool*. Leave the *Limit membership list?* checkbox unchecked.
5. Set the *Icon file* setting to the value provided separately (optional).
6. Click on the *Submit* button to save the changes.

Specify the data to be passed to WebPA as follows:

1. Select the *Edit data settings* option from the *Options menu* against the WebPA tool.
2. Set each setting as follows:
 - a. Context Data:
 - i. Context ID – checked
 - ii. Context Sourcedid – unchecked
 - iii. Context Title – checked
 - b. Personal Data:
 - i. User ID – Required by tool
 - ii. Value to use for user ID – Username (if you prefer not to send usernames to WebPA then select Database key)
 - iii. Sourcedid – unchecked
 - iv. User name – Required by tool
 - v. Email – Required by tool
 - vi. User Avatar – unchecked
 - vii. User Roles – checked
 - c. WebPA supports two different roles: Tutor and Student. These are associated with the LTI roles of Instructor and Learner, respectively. The role mappings section is used to identify which Learn 9 course roles should be assigned to which LTI role. For example, to give a user with the course role of Teaching Assistant the LTI role of Instructor (and thereby the WebPA role of Tutor) check the checkbox in the row labelled Teaching Assistant and column labelled Instructor. If a course role should not be given access to WebPA, leave all the checkboxes in the row unchecked. Leave the *Send administrator role?* checkbox unchecked.
 - d. Click on the *Submit* button to save the changes.

Specify the launch settings for WebPA as follows:

1. Select the *Edit launch settings* option from the *Options menu*.
2. The *Connect to Tool Options* may be set as preferred but using the *open tool in frame* setting is recommended. A splash screen may also be created to display text to users as they launch WebPA.
3. The *Custom Parameters* are used to pass branding preferences and should be set to the values provided separately.
4. Click on the *Submit* button to save the changes.

Enable the WebPA tool by selecting the *Enable* option from the *Options menu*; a tick should appear next to the tool in the *Status* column.

Add WebPA tool to a course

Before WebPA can be added to a course, the Basic LTI tools Building Block must be available; this can be checked by:

1. Select the *Tool Availability* option from the *Customisation* section of the course *Control Panel*.
2. Check the checkbox in the *Availability* column for the *Basic LTI tools* entry.

3. To allow WebPA to be added as a content item, check the checkbox in the *Available in Content Area* column for the *Basic LTI Tool* entry. (Ignore the *Basic LTI* and *Basic LTI link* entries as these relate to the core LTI functionality of Learn 9 and not the Building Block.)
4. Click on the *Submit* button to save the changes.

A link to WebPA can be made available in the following ways:

- as a course tool;
- as a Basic LTI tool content item;
- as a hyperlink in the description of a standard content item.

Accessing WebPA as course tool

1. Select the *Basic LTI tools* option from the *Course Tools* section of the *Control Panel*.
2. Select the *Make Available* option from the *Options menu* against the WebPA tool; a tick should appear next to the tool in the *Available?* column.

The WebPA tool should now appear on the list displayed by selecting the *Basic LTI tools* option from the *Tools* option on the course menu.

Accessing WebPA as a content item

1. Select a content page within the course and ensure edit mode is on.
2. Select the *Basic LTI Tool* option from the *Tools* menu.
3. Select the WebPA tool from the drop-down list.
4. Click on the *Submit* button to save the selection.
5. Change the name and add a description to appear on the content page (optional).
6. Set the availability and tracking of the content item as required in the *Options* section.
7. Select the groups to which this link should be made available in the *Groups* section (optional).
8. Click on the *Submit* button to save the changes.

A link to the WebPA tool should now be available at the bottom of the content page.

Accessing WebPA via a hyperlink

1. Select a content page within the course and ensure edit mode is on.
2. Select the *Item* option from *Create* section of the *Build Content* menu.
3. Enter text in the *Text* element of the *Content Information* section.
4. Highlight the text to be used as the hyperlink.
5. Select the *Basic LTI Tool* option from the *Add Mashup* menu (available in the bottom row of the text box editor tool bar).
6. Select the WebPA tool from the drop-down list.
7. Click on the *Submit* button to save the selection.
8. Click on the *Submit* button to save the changes to the content item.

A link to the WebPA tool should now be available within the item text.

Using WebPA

When connecting to WebPA as an instructor an option is provided to upload the list of enrolments (restricted to members of any groups selected when using a content item) into WebPA. Each time

the option is selected the enrolments in Learn 9 are compared with those in WebPA and all changes displayed for confirmation before any updates are made. No changes are made to the enrolments in Learn 9.

A grade book column with the same name as the WebPA tool or content item will be created when a grade is first passed back from WebPA (using the *transfer grades* option on the *Admin* menu in WebPA).

A screencast of using WebPA via LTI as an instructor is available at:

http://www.celtic-project.org/Project_blog/2011/11/An_instructors_view_of_LTI

Each content item linking to WebPA will connect to a different WebPA module, but using the course tool option will always connect to the same module. So to keep all the WebPA assessments together in WebPA either use a single content item or use the course tool option. Note, however, that each module has only a single Grade Centre column associated with it, so to return results for more than one assessment, each assessment should be added to a separate content item so as to create multiple modules in WebPA.

It is possible to share a WebPA module with links from other courses, VLEs and institutions by using the *sharing* option on the *Admin* menu. This is illustrated in the screencast available at:

http://www.celtic-project.org/Project_blog/2011/11/Using_LTI_to_enable

Adding WebPA using a domain registration

Rather than registering WebPA as a Basic LTI tool, it is also possible to register the WebPA domain and use the launch URL within each course to make the tool available. This means that the WebPA tool is not visible in the Basic LTI Building Block in every course where it is available. But it does require instructors to know the launch URL for WebPA in order to add a connection. It also limits connections to being added as content items only – it is not possible to access it as a course tool or via a hyperlink within another content item.

The basic steps for establishing this connection are as follows:

1. Install the Basic LTI Building Block.
2. Configure the Basic LTI Building Block.
3. Register the WebPA domain in the Basic LTI Building Block.
4. Add WebPA to a course as a content item using the launch URL.

The first two steps (installing and configuring the Basic LTI Building Block) are the same as described in the sections above.

Register the WebPA domain

To register the WebPA domain within the system:

1. Click on the *Domains* button on the settings page of the Basic LTI Building Block .
2. Click on the *Register New Domain* button.
3. Enter the domain name for WebPA (provided separately).
4. Enter the consumer key and shared secret (provided separately) specifically for use with this Learn 9 server.

5. Set each of the extension services to *Required by tool*. Leave the *Limit membership list?* checkbox unchecked.
6. Set the *Icon file* setting to the value provided separately (optional).
7. Click on the *Submit* button to save the changes.

Specify the data to be passed to WebPA and launch settings as outlined in the *Registering WebPA as a Basic LTI tool* section above. Enable the WebPA domain by selecting the *Approve* option from the *Options menu*; a tick should appear next to the domain name in the *Status* column.

Accessing WebPA to a course as a content item using the launch URL

Ensure that the Basic LTI Building Block is available within the course by following the steps outlined in the *Add WebPA tool to a course* section above. To add a link to WebPA:

1. Select a content page within the course and ensure edit mode is on.
2. Select the *Basic LTI Tool* option from the *Tools* menu.
3. Click on the *By URL* tab.
4. Enter a name to appear on the content page.
5. Enter the launch URL (provided separately) specifically for use with this Learn 9 server (leave the consumer key and shared secret settings empty).
6. Click on the *Submit* button to save the changes.

A link to the WebPA tool should now be available at the bottom of the content page. Use the *Edit* option on the *Options* menu for the content item to:

- change its name;
- add a description to appear on the content page;
- set the availability and tracking of the content item;
- select the groups to which this link should be made available.

This link to WebPA is used in the same way as described in the *Add WebPA tool to a course* section above.

*Prepared for the [ceLTlc:sharing project](#) by Stephen P Vickers
July 2012*