CodeLab in Blackboard

CodeLab integrates seamlessly with Blackboard. For students, Codelab exercises appear as an assignment in your course (students are not taken to another website). Within Blackboard, students have access to CodeLab's navigation tools, exercises, feedback, and status information.

For instructors, CodeLab results appear automatically in the gradebook and instructors use Blackboard tools to assign work.

This manual illustrates one sequence of steps that a Blackboard administrator would follow in order to make CodeLab available for faculty and students.

To make CodeLab available, the administrator will need:

(1) A consumer key and shared secret: obtain by emailing info@turingscraft.com

(2) The launch url: https://codelab.turingscraft.com/codelab/lti/launch

(3) If you want grade passback, it must be turned on in 'global properties'

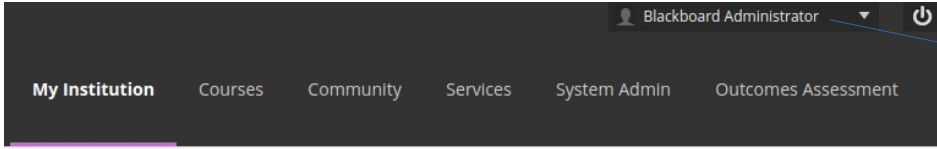(4) CodeLab requires that we receive the user name and email address

For many administrators, nothing further may need to be said. But the next few pages illustrate ONE possible path for using this information. If there are any questions, please write directly to: info@turingscraft.com.

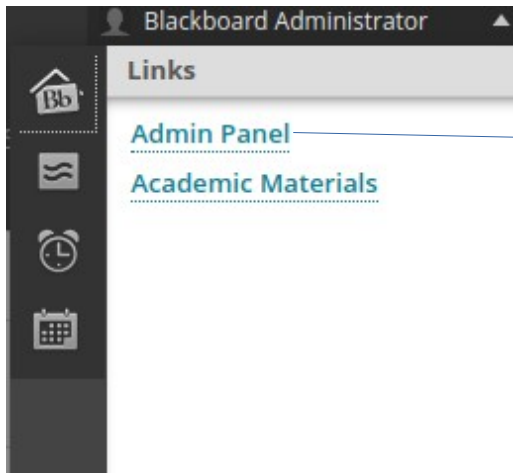We are very eager to support CodeLab-In-Blackboard!

Official Blackboard documentation for LTI can be found here:

https://help.blackboard.com/Learn/Administrator/Hosting/System_Integration/LTI

First: we have to Navigate to the "Admin Panel"

My Institution   Courses   Community   Services   System Admin   Outcomes Assessment

Blackboard Administrator

Click Here

Blackboard Administrator

Links

Admin Panel
Academic Materials

Then click "Admin Panel"

Integrations

Data Integration

Authentication

Building Blocks

Web Services

LTI Tool Providers

Proctoring Services

REST API Integrations

Cross-Origin Resource Sharing
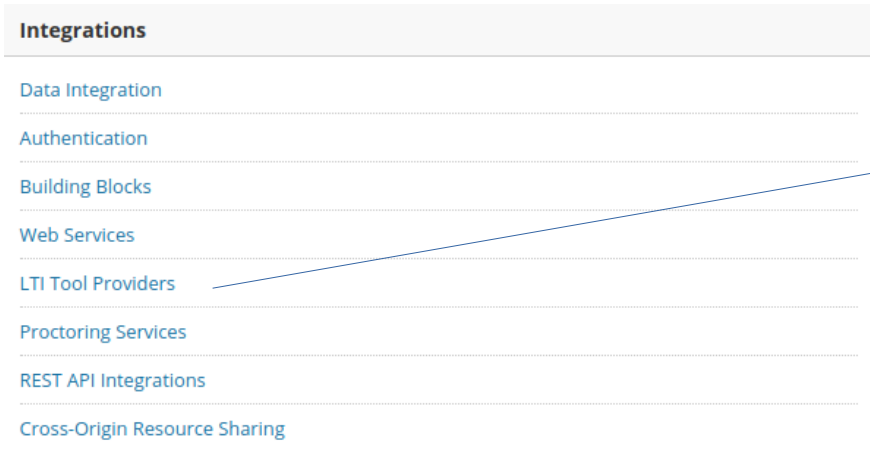
The click
"LTI Tool Providers"

If you want CodeLab to be able to pass back grade information, we need to make sure that option is allowed in "Manage Global Properties"

LTI Tool Providers
This report is available to show all provider domains in use in the system, including the status. Domains can be approved, excluded, and deleted. Use the Register Provider Domain option to create additional LTI Tool Providers. *More Help*

Manage Global Properties   Register Provider Domain   Register LTI 1.3 Tool

Approve	Exclude	Delete

	TOOL/PROVIDER △	TOOL TYPE	STATUS	CREDENTIALS	SENDS USER DATA	USER ACKNOWLEDGMENT PAGE
☐	developer.blackboard.com	Provider Domain	Approved	Per Link	No	No

Approve	Exclude	Delete

Click
"Manage Global Properties"

FEATURE AVAILABILITY

Tool links can be enabled in one of three modes. **Allow any links** enables users building courses to add links to any LT.
not let users add links unless the provider has already been approved. Enabling the grade option will allow tool provide

Enabled in Courses   ⦿ Yes   ○ No

Enabled in Organizations   ○ Yes   ⦿ No

Creation of Tool Provider Links   ○ Allow links to any tool provider that isn't explicitly excluded.
                                     ○ Allow links to any tool provider, but require approval for each new provider.
                                     ⦿ Allow only links to approved tool providers.

Allow configured tool providers   ⦿ Yes   ○ No
to post grades

Select "Yes" if you want
CodeLab to send grades
To the gradebook.

Click Submit

Cancel   Submit

Now we will approve the "codelab.turingscraft.com" domain

LTI Tool Providers

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Manage Global Properties   Register Provider Domain   Register LTI 1.3 Tool

	Approve	Exclude	Delete					
☐	**TOOL/PROVIDER** △			TOOL TYPE	STATUS	CREDENTIALS	SENDS USER DATA	USER ACKNOWLEDGMENT PAGE
☐	developer.blackboard.com			Provider Domain	Approved	Per Link	No	No
	Approve	Exclude	Delete					

Click
"Register Provider Domain"

★ Indicates a required field.

PROVIDER DOMAIN STATUS

Set the status of the provider domain. You can also provide a list of additional hostnames to share this configuration if needed.

★ Provider Domain   codelab.turingscraft.com

Provider Domain Status   ● Approved
                             ○ Excluded

Secondary Hostnames

Enter one hostname per line.

Enter:
"codelab.turingscraft.com"

Make sure "Approved" is selected

Select "Set globally"

DEFAULT CONFIGURATION

LTI Tool Providers can request configuration per link, or can provide key and shared secret information for site-wide configuration.

Default Configuration   ○ Set separately for each link
                             ● Set globally

★ Tool Provider Key   provided_key

★ Tool Provider Secret   provided_secret

Tool Provider Custom
Parameters

Enter any custom parameters required by the tool provider. Parameters must each be on their own line and be

Enter the key and secret provided
To you by CodeLab.

If you do not have a key and secret
Please contact:
info@turingscraft.com

INSTITUTION POLICIES

Choose whether you want to override the institution policies for this specific tool provider domain.

Send User Data
- ○ Never
- ⦿ Send user data only over SSL
- ○ Send user data over any connection

User Fields to Send
- ☑ Role in Course
- ☑ Name
- ☑ Email Address

Allow Membership Service Access
- ○ Yes ⦿ No

Show User Acknowledgment Message
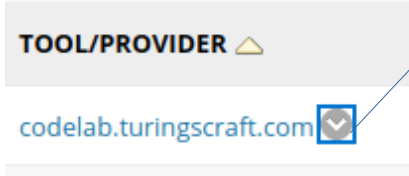*You can edit the user acknowledgment message when Membership Service is disabled.*
- ○ Yes ⦿ No

Select:
"Send user data only over SSL"

Click the User Fields:
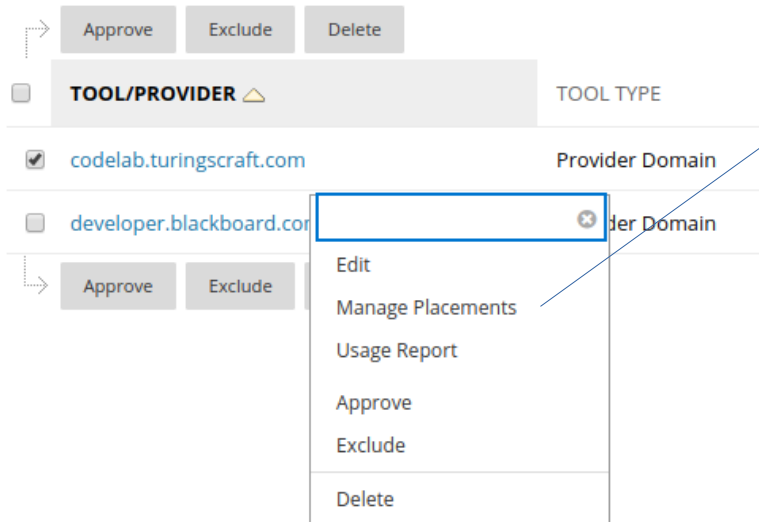Role, Name, and Email Address

Click "Submit"

Cancel   Submit

TOOL/PROVIDER △

codelab.turingscraft.com ⌄

Back in the LTI Tool Provider configuration screen
You should see "codelab.turingscraft.com"

Hover over it and click the arrow

	TOOL/PROVIDER △	TOOL TYPE
☐	**TOOL/PROVIDER** △	TOOL TYPE
☑	codelab.turingscraft.com	Provider Domain
☐	developer.blackboard.cor	der Domain

Approve Exclude Delete

Approve Exclude

Edit
Manage Placements
Usage Report
Approve
Exclude
Delete

Then click
"Manage Placements"

Manage Placements: codelab.turingscraft.com
Create, Edit, or Delete a Tool Provider Placement. Deleting a Tool Provider Place

Create Placement

Click:
"Create Placement"

* Indicates a required field.

PLACEMENT INFORMATION

* Label

CodeLab

The label that shows up in the course

Description

* Handle

CodeLab

Uniquely identifies the placement

* Availability   ● Yes ○ No

Make placement available to course builders and instructors

Type   *Placement Type determines where this tool appears in Blackboard Learn. The tool*

○ Course tool
☐ Student
☑ Non-student

● Course content tool
☐ Supports deep linking
☑ Allows grading

○ System tool
○ Administrator tool

Enter:
"CodeLab"

Select:
"Course content tool"

Click:
"Allows grading"

TOOL PROVIDER INFORMATION

Enter the Tool Provider Information. The Tool Provider URL must be located on one of the configured host names.

* Tool Provider URL

https://codelab.turingscraft.com/codelab/lti/launch

This field may change when B2 upgrades occur.

Enter:
https://codelab.turingscraft.com/codelab/lti/launch

Cancel   Submit

Click "Submit"

CodeLab can now be easily added to a course by instructors!