



LMS Integration - Blackboard Learn

28 January 2020

[Overview](#)

[Before you start](#)

[Setup](#)

- [1. Activate LMS integration](#)
- [2. Obtain a token](#)
- [3. Download the kuraCloud Building Block](#)
- [4. Install the kuraCloud Building Block](#)

[Configuration](#)

- [Creating a Course Mapping](#)
- [Enable Synchronization for a single Course Mapping](#)
- [Enable Synchronization for all Course Mappings](#)
- [Removing a Course Mapping](#)

[Workflows](#)

- [Synchronization of Students from Blackboard.](#)
- [Synchronization of Grades to Blackboard](#)
- [Editing and Deleting Courses](#)

[Support and Troubleshooting](#)

- [Supported Blackboard Versions](#)
- [Connection Problems](#)
- [Resolving Issues](#)

[Appendix A - Detailed Setup Guide](#)

- [Obtain a token](#)
- [Download the kuraCloud Building Block](#)
- [Install the kuraCloud Building Block](#)

[Appendix B - Detailed Configuration Guide](#)

- [Create a Course Mapping](#)
- [Enable Synchronization for a single Course Mapping](#)
- [Enable Synchronization for all Course Mappings](#)
- [Removing a Course Mapping](#)

[Appendix C - Detailed Workflows Guide](#)

- [Synchronization of Students from Blackboard.](#)
- [Synchronization of Grades to Blackboard](#)
- [Editing and Deleting Courses](#)

[Appendix D - Technical Details](#)

Overview

LMS integration with Blackboard Learn can be implemented using the kuraCloud building block. Your ADI Customer Support manager can provide you with a copy of the building block.

The kuraCloud Building Block adds the following functionality to your kuraCloud and Blackboard Learn environments:

- Synchronization of students from Blackboard Learn courses to kuraCloud courses.
- Synchronization of student kuraCloud grades to Blackboard Learn.

Before you start

Choose the kuraCloud.war that is appropriate for your blackboard installation. The earliest integration version is for Blackboard Learn version 9.1 Q2 2016 (3000.1.0-rel.52+991d). You can find more information about what version you need by checking the Requirements & Release Notes section of the community page.

CARE REQUIRED: It is strongly recommended that LMS integration is trialed in a test environment before rolling-out to your production Blackboard Learn installation. There is no 'undo', so if unintended changes are made to courses or students they will need to be manually fixed.

Setup

LMS integration is disabled by default on new and existing instances. A request to have it enabled for an instance can be submitted via your ADInstruments representative.

Setup is required from within both kuraCloud and Blackboard Learn and will require an administrative account on both platforms. The following steps outline the initial setup, however a more detailed guide with screenshots may be found in [Appendix A](#). Please consult the Blackboard documentation if you're intending to install the building block in Learn SaaS

https://help.blackboard.com/Learn/Administrator/SaaS/Building_Blocks.

1. Activate LMS integration

Contact your ADInstruments representative to have LMS integration enabled for your kuraCloud instance.

2. Obtain a token

Generate a token within kuraCloud to enable communication with Blackboard Learn:

- As a kuraCloud Administrator navigate to *Instance Administration*.
- Select *LMS Integration* then *Configure LMS Integration*. Please note this menu will not be visible until LMS Integration is enabled for your kuraCloud Instance.
- Select *Blackboard* from the drop-down menu then press the *Enable LMS Integration* button. Copy the provided token to a safe place. This is important because your token can be viewed only once in kuraCloud, losing this will require the generation of a completely new token.

CARE REQUIRED: It is strongly recommended that a new token is generated for your production Blackboard installation following trials within a test environment. This will ensure data from your test environment is no longer synchronized with kuraCloud.

3. Acquire the kuraCloud Building Block

Visit <https://www.adinstruments.com/support/it#downloads> to acquire the latest version of the building block. Be sure to choose the appropriate Java8 or Java11 version for your environment.

4. Install the kuraCloud Building Block

Navigate to the Blackboard Learn *Administrator Panel* to install the Building Block:

- Select *Building Blocks* from the *Building Blocks* menu, then navigate to *Installed Tools*.
- Select *Upload Building Blocks* and browse to your **kuraCloud.war** file. Click *Submit*.
- Review the required Blackboard Learn privileges for kuraCloud integration, then click *Approve*.
- Click *Return* when installation completes.
- On the *Installed Tools* page, locate the kuraCloud Building Block and click its drop-down menu, select *Settings*.
- Enter your token in the provided field and click *Add*.
- Verify the token has been accepted by checking your kuraCloud instance name and instance ID are now listed.

The kuraCloud Building Block can also be uninstalled from the *Installed Tools* page within Blackboard Learn.

Configuration

The following steps outline the configuration of kuraCloud integration from within Blackboard Learn. A more detailed guide with screenshots may be found in [Appendix B](#).

Creating a Course Mapping

Before following these steps you must ensure that the course(s) to be mapped exist in both kuraCloud and Blackboard Learn.

Navigate to the Blackboard Learn *Administrator Panel* to map courses:

- Select *kuraCloud Sync* from the *Tools and Utilities* menu.
- Select the courses to be mapped from the provided drop-down menus, then click the *Add* button. This new course mapping will appear at the top of the page. This may also be verified in kuraCloud by navigating to the *Student Accounts* menu within the course, it will read 'Blackboard Connected'.

Note: When mapping is complete you will no longer be able to edit the students from within that kuraCloud course.

Enable Synchronization for a single Course Mapping

Within Blackboard Learn navigate to your course's *Home Page* to enable kuraCloud synchronization:

- From *Course Management* expand the *Customization* menu.
- Select *Tool Availability* and locate the following entries:
 - kuraCloud Grade Sync
 - kuraCloud Student Sync
- Check the appropriate boxes in the *Available* column then click the *Submit* button.

The *kuraCloud Student Sync* option will now be available in the *Course Tools* menu.

Enable Synchronization for all Course Mappings

Navigate to the Blackboard Learn *Administrator Panel* to enable kuraCloud synchronization for all mapped courses, and all courses that will be mapped from this point forward:

- From the *Courses* menu select *Course Settings*.
- Select *Course Tools* and locate the following entries:
 - kuraCloud Grade Sync
 - kuraCloud Student Sync
- Toggle the appropriate switches in the *Availability* column.
- In the *Scope of Change* column select how you will apply these changes to new and existing courses, then click the *Submit* button.

Note: If you are using child courses within Blackboard Learn, only the parent course will be shown in the

dropdown.

Removing a Course Mapping

Navigate to the Blackboard Learn *Administrator Panel* to remove a course mapping:

- Select *kuraCloud Sync* from the *Tools and Utilities* menu.
- Under the *Remove a Course Mapping* header select the course mapping you want to remove, then click the *Remove* button.

Note: The following information may be useful to users that are considering the removal of a course mapping:

- If you are using child courses within Blackboard Learn, only the parent course will be shown in the dropdown.
- If a course mapping is removed, student accounts that were synchronized from Blackboard Learn will remain in the kuraCloud course. These accounts may be deleted manually from within kuraCloud.
- Mapping may only be removed from active kuraCloud courses. If a kuraCloud course is deleted it must first be restored before the mapping can be removed. This kuraCloud course may safely be deleted again when the mapping is removed.

Workflows

The following section outlines standard workflows, however a more detailed guide with screenshots may be found in [Appendix C](#). Course Administrator privileges are required to synchronize students or grades.

Synchronization of Students from Blackboard.

Note: The email address for student accounts is not a mandatory field within Blackboard Learn, however it is required in order to create accounts within kuraCloud. Please ensure that this has been addressed before you proceed.

Within Blackboard Learn navigate to your course's *Home Page* to synchronize students to kuraCloud:

- From *Course Management* expand the *Course Tools* menu.
- Select *kuraCloud - Sync Students*

CARE REQUIRED: Be sure to carefully review the detailed summary that is provided to ensure you are happy with the outcome of this synchronization. The following important points should be considered:

1. Students that exist in your kuraCloud course but not in Blackboard Learn will be deleted from kuraCloud.
 2. If more than one student shares the same email in Blackboard Learn, neither will be synchronized to kuraCloud.
 3. If a student's email has changed in kuraCloud or Blackboard Learn following a previous synchronization, the student's kuraCloud account will be deleted and a new invite will be sent to their new email address.
 4. Only Blackboard Learn users with the institution role of 'Student' and the course role of 'Student' will be synchronized to kuraCloud. (These are default values within Blackboard Learn)
- When you have considered the above, click the *Sync Students* button to proceed.

Students that have been synchronized will be created within the mapped course in kuraCloud and be sent an invite email. If the kuraCloud course already contains students with a matching email address from Blackboard Learn their details will be updated and no invite email will be sent.

If you make changes to student's details (including deleting students) within a mapped course you should resynchronize to ensure consistency across platforms.

If you have used child courses within Blackboard Learn, students within kuraCloud will be mapped as follows:

Blackboard Learn's *Course ID* field → kuraCloud student's *Section* field

Synchronization of Grades to Blackboard

This will synchronize all grades within a mapped course from kuraCloud to Blackboard Learn. By default, all grades that are added to Blackboard Learn will not be visible to students until *Hide from Students* (on/off) is toggled manually in the Grade Center.

Within Blackboard Learn navigate to your course's *Home Page* to synchronize grades from kuraCloud:

- From *Course Management* expand the *Grade Center* menu.

- Select *Full Grade Center*.
- From the *Manage* drop-down menu select *kuraCloud - Sync Grades*.
- Click *Start* to begin synchronization.

Grade synchronization can be an intensive process, so this can only be performed by one user at a time. Users will receive a message if they attempt to synchronize grades when a synchronization is already in progress, and should wait for 10 minutes before trying again.

Editing and Deleting Courses

Course mappings are resilient and will be remembered if the following occurs:

- A mapped kuraCloud course is deleted.
- A mapped Blackboard Learn course is deleted.
- A mapped Blackboard Learn course is changed from a standard course to a child course.

Restoring the deleted course on either platform will reinstate the functionality of the mapping so it can be used again.

Deleting a course within one platform will not delete the corresponding course within the other platform.

Support and Troubleshooting

Supported Blackboard Versions

The kuraCloud extension for Blackboard Learn will not function with Blackboard Learn version 9.1 Q4 2015 (9.1.201510.1171621) or earlier. This is due to the oldest available version of the kuraCloud.war extension using version 3000.1.0-rel.52 of the Blackboard libraries.

Connection Problems

Verify any connection issues by navigating to the Blackboard Learn *Administrator Panel* and select *kuraCloud Sync* from the *Tools and Utilities* menu.



Connected Instance:

Lt Feature Showcase-748d8887

This instance could not connect to kuraCloud. Check the configuration in the settings. These courses will not be synced until the connection issue is resolved.

Blackboard Course	kuraCloud Course
LTFC101 Lt Feature Showcase	Lt Feature Showcase Lt Feature Showcase

ADD A COURSE MAPPING

Blackboard Course	No Courses available to add
kuraCloud Course	No Courses available to add

REMOVE A COURSE MAPPING

★ Mapping

LTFC101 Lt Feature Showcase - Lt Feature Showcase Lt Feature Showcase

Back Settings Remove

Perform the following checks prior to requesting support:

- Ensure you can log-in to kuraCloud.com.
- Within kuraCloud, verify that [LMS integration is enabled](#).

Resolving Issues

If you are experiencing problems with installing and/or using the kuraCloud Building Block please contact your Blackboard Learn administrator in the first instance. If you are using a SaaS product then you will need to contact your Blackboard support representative. This will allow them to check the Blackboard logs for issues, this can be done in a non-SaaS environment as follows:

- Navigate to the Blackboard Learn *Administrator Panel*.
- Select *Logs* from the *Tools and Utilities* menu.

The most useful log files for diagnosing issues are generally **tomcat/stdout-stderr-[date].log** and **custom/kuracloud.log**

If your Blackboard Learn administrator is unable to rectify the issue, please contact your ADInstruments representative and provide them with the following:

- A detailed description of your issue.
- The Blackboard Learn build version you have installed.

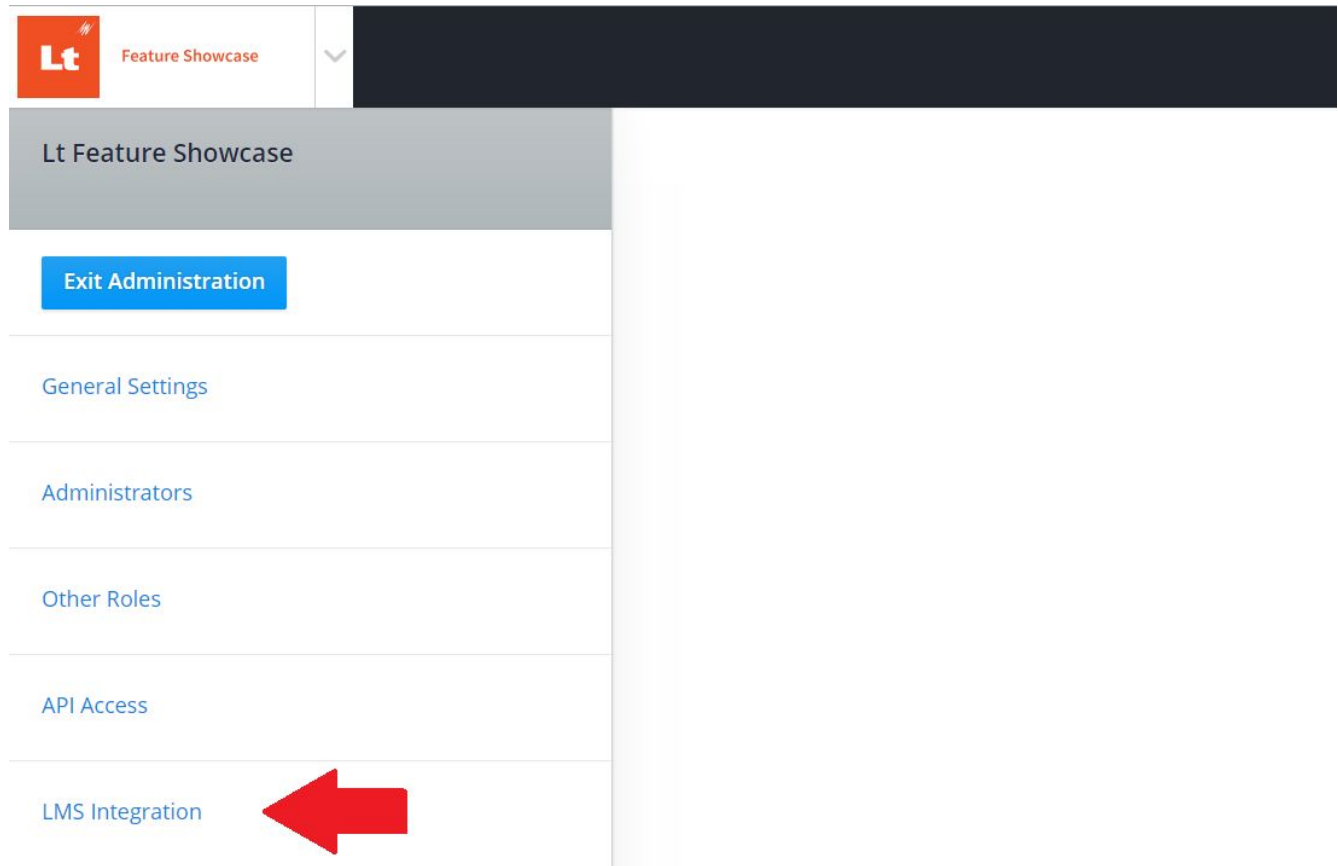
- Applicable screenshot(s) that illustrate the issue.
- A copy of any output from **tomcat/stdout-stderr-[date].log** (mentioned above) that appears relevant. Please do not send the entire log file as it may contain personally identifiable information (PII) from your students.
- A copy of the **custom/kuracloud.log** file (mentioned above).

Appendix A - Detailed Setup Guide

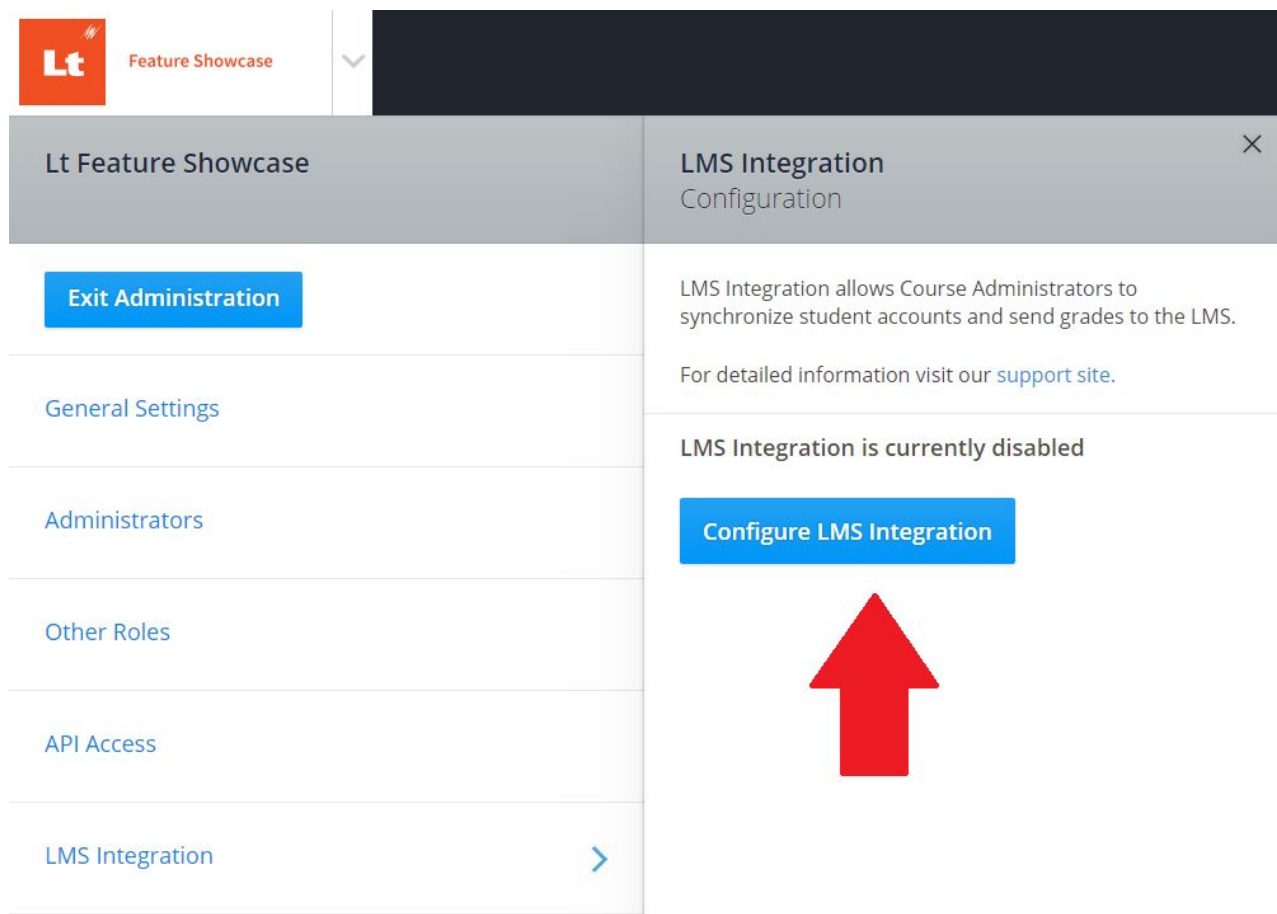
Please ensure you have contacted your ADInstruments representative to have LMS integration enabled for your kuraCloud instance.

Obtain a token

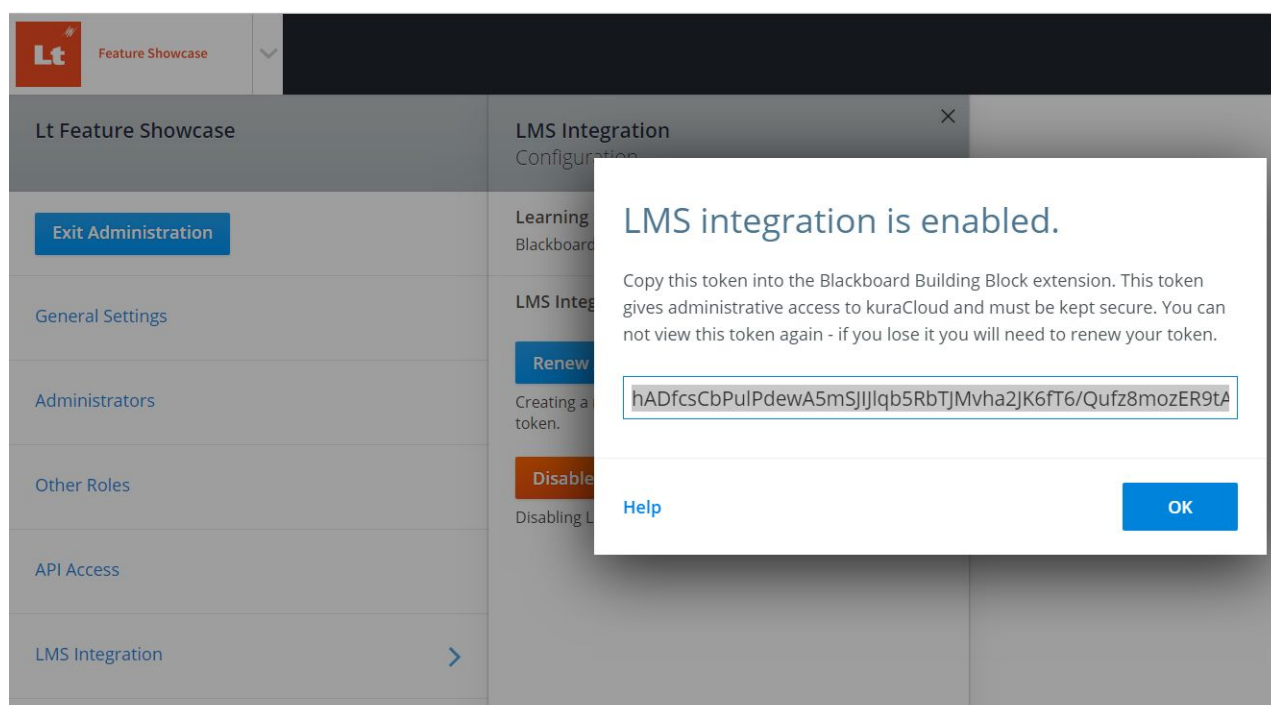
Generate a token within kuraCloud to enable communication with Blackboard Learn, then as a kuraCloud Administrator navigate to *Instance Administration*.



Select *LMS Integration* then *Configure LMS Integration*. Please note this menu will not be visible until LMS Integration is enabled for your kuraCloud Instance.

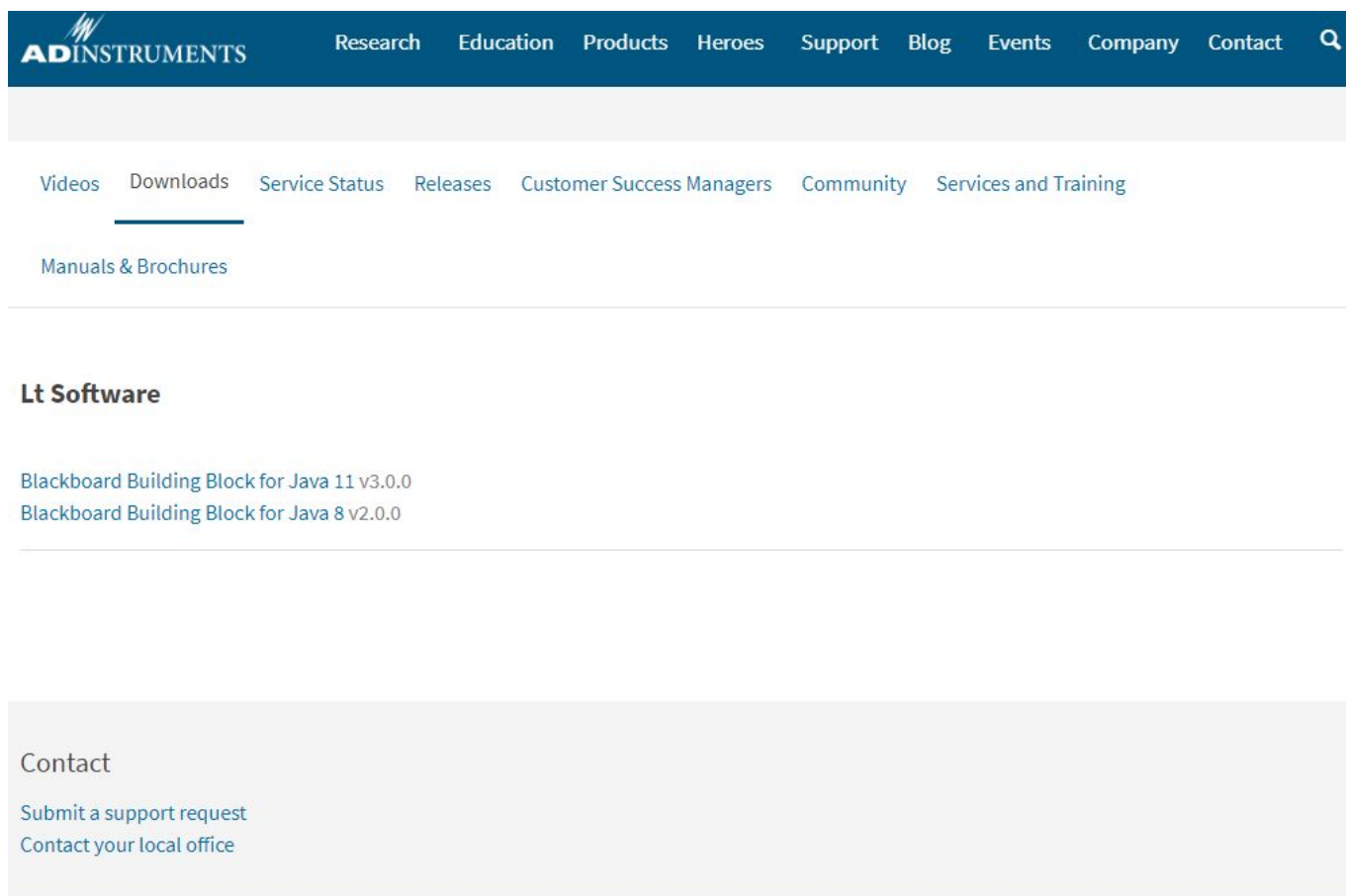


Select *Blackboard* from the drop-down menu then press the *Enable LMS Integration* button. Copy the provided token to a safe place. This is important because your token can be viewed only once in kuraCloud, losing this will require the generation of a completely new token.



Download the kuraCloud Building Block

Visit <https://www.adinstruments.com/support/lt#downloads> to download the Blackboard building block.

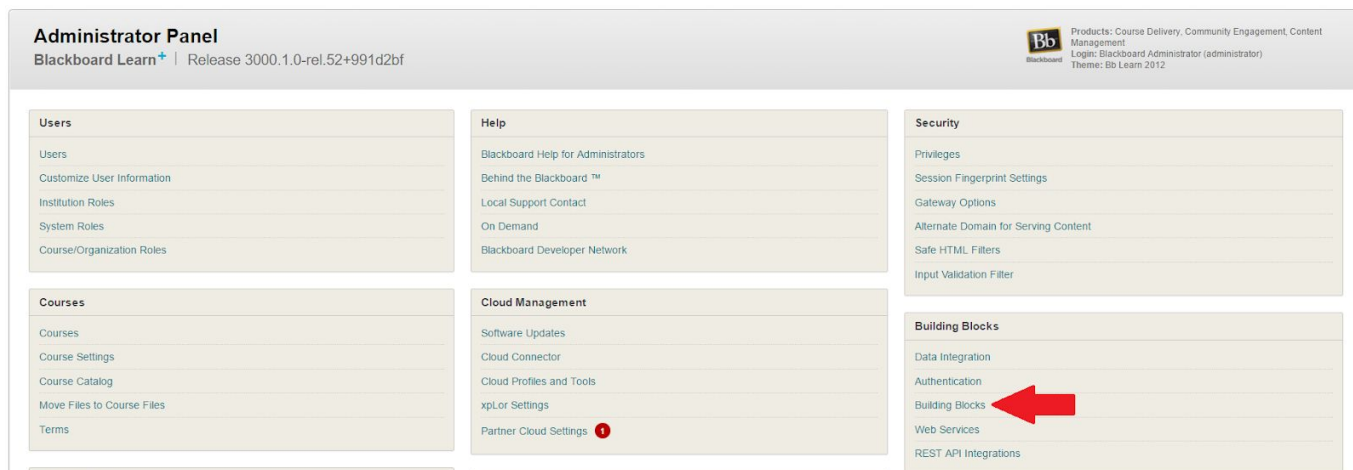


The screenshot shows the AD Instruments website. The top navigation bar includes links for Research, Education, Products, Heroes, Support, Blog, Events, Company, and Contact. Below this, a secondary navigation bar highlights 'Downloads' with a blue underline. Other links in this bar include Videos, Service Status, Releases, Customer Success Managers, Community, and Services and Training. A 'Manuals & Brochures' link is also visible. The main content area is titled 'Lt Software' and lists two download options: 'Blackboard Building Block for Java 11 v3.0.0' and 'Blackboard Building Block for Java 8 v2.0.0'. At the bottom, there is a 'Contact' section with links to 'Submit a support request' and 'Contact your local office'.

Download the version appropriate for your environment.

Install the kuraCloud Building Block

Navigate to the Blackboard Learn *Administrator Panel* to install the Building Block, then select *Building Blocks* from the *Building Blocks* menu:



The screenshot shows the Blackboard Learn Administrator Panel. The top header displays 'Administrator Panel' and 'Blackboard Learn' with a release version. The main content area is divided into several sections: Users, Courses, Help, Cloud Management, Security, and Building Blocks. The 'Building Blocks' section is highlighted with a red arrow pointing to the 'Building Blocks' link. The 'Building Blocks' section also includes links for Data Integration, Authentication, Web Services, and REST API Integrations.

Navigate to *Installed Tools*:

Building Blocks

Installed Tools

Configure or Delete Building Blocks that are included in the system.

Proxy Tools

Manage and register Proxy Tools and define their Global Properties.

LTI Tool Providers

Manage and register LTI Tool Providers.

Featured Building Blocks

Manage and install Featured Building Blocks

Select *Upload Building Blocks*:

Installed Tools

Upload Building Blocks

Global Settings

Find and Download Building Blocks

Av		Uninstall				Page 1 of 4	
	Name	Vendor	Version	Availability	Update Status		
<input type="checkbox"/>	!gradeGrabba	gradeGrabba	0.0.8	Available	No Info Available		
<input type="checkbox"/>	Achievements	Blackboard Inc.	3000.1.0-rel.42+575c549	Available	Up to Date		
<input type="checkbox"/>	Admin Console	Blackboard Inc.	3000.1.0-rel.43+43d870b	Inactive	Up to Date		
	Alerts	Blackboard Inc.	3000.1.0-rel.39+cbd72c2	Available	Up to Date		
<input type="checkbox"/>	API Gateway	Blackboard Inc.	3000.1.0-rel.38+80d2f5	Available	No Info Available		

Browse to your **kuraCloud.war** file. Click *Submit*:

Install Building Block

[Cancel](#) [Submit](#)

INSTALL BUILDING BLOCK

Browse to select a Building Block package to install. Building Blocks can be downloaded from the Blackboard Building Blocks Catalog.

Building Block Package

Click **Submit** to proceed. Click **Cancel** to go back.

[Cancel](#) [Submit](#)

Review the required Blackboard Learn privileges for kuraCloud integration, then click *Approve*:

Install Building Blocks and Make Building Blocks Available

Installing a new version or Updating an existing version of this plugin might temporarily impact features in use or have other unintended consequences. Make sure to install plugins during non-peak times and test after the installation to minimize impact on other users. You are installing a new version or updating an existing version of Building Block(s) that you previously licensed from Blackboard and/or third parties. All terms and conditions of your original license to such Building Block(s) ("Original License") shall remain in full force and effect and shall apply to the updated version of the Building Block(s) to the same extent as the original Building Block(s). Except as expressly stated in your Original License, Blackboard disclaims all warranties and liability associated with the original and updated Building Block(s).

[Cancel](#) [Approve](#)

PRIVILEGES

The privileges listed below are required by following Building Blocks to perform properly.

Making the following Building Blocks available means that you trust the Building Blocks to have privileges on this system.

By default, Building Blocks have privileges to read system properties, read and write to their local filesystem, and read specific filesystem components required to function properly, like the tag libraries.

Vendor: kura Handle: kuraCloud Version: 0.0.950

Implied Blackboard Data Privileges

These are privileges for loading and storing objects in the Blackboard database, bestowed implicitly by the plugin framework.

Name	Read	Create	Edit	Remove	Comments
Announcements	✓				Includes course, organization, and Institution Announcements.
Calendar Entries	✓				
Course Contents	✓				Includes items, folders, lessons, course links, web links, and custom content types created by Building Blocks.
Content Links	✓				
Courses and Organizations	✓				Includes both courses and organizations
Enrollments and Staff Assignments	✓				
Grade Center Outcomes	✓	✓	✓		Includes grades in the Grade Center
Grade Center Line Items	✓				
Users	✓				
Secondary Institution Roles	✓				

Blackboard Data Privileges

These are privileges for loading and storing objects in the Blackboard database.

Name	Read	Create	Edit	Remove	Comments
blackboard.persist.PersistPermission: vsession	✓	✓	✓	✓	
blackboard.persist.PersistPermission: outcomeDefinitioncategory	✓	✓	✓		
Grade Center Outcomes	✓	✓	✓		Includes grades in the Grade Center.

Implied Blackboard User Attribute Privileges

These are privileges for getting and setting user attributes, bestowed implicitly by the plugin framework.

Click *Return* when installation completes:

Success: This action has been queued. An email will be sent when the process is complete.

Track Progress of Building Block installations

[Return](#)

TRACKING PROGRESS

Install Plugin with vendor kura handle kuraCloud version 0.0.950

100%

✓

Plugin enabled Task complete: 5 seconds

Processing will continue to run in the background, even if you choose to leave this page. You will always receive an email reminder once processing has completed.

[Return](#)

On the *Installed Tools* page, locate the kuraCloud Building Block and click its drop-down menu, select *Settings*:

Installed Tools

Upload Building Blocks

Global Settings

Find and Download Building Blocks

Availability

Uninstall

Page 3 of 4

Name	Vendor	Version	Availability	Update Status
Group Manager	Blackboard Inc.	3000.1.0-rel.48+20817fe	Available	Up to Date
HETemplateModules	Blackboard Inc.	3000.1.0-rel.13+6417b2f	Available	Up to Date
Inline Grading	Blackboard Inc.	3000.1.0-rel.33+3e8ae70	Available	Up to Date
Input Validation Filter	Blackboard Inc.	3000.1.0-rel.33+70da68d	Available	Up to Date
Item Analysis	Blackboard Inc.	3000.1.0-rel.41+c8fe451	Available	Up to Date
kuraCloud	kuraCloud	0.0.628	Available	No Info Available
Maps	Mapquest	3000.1.0-rel.13+b96b154	Available	No Info Available
Mashup - F	Blackboard Inc.	3000.1.0-rel.40+e5c54ff	Available	Up to Date
Mashup - S	Blackboard Inc.	3000.1.0-rel.38+0fe1ba8	Available	Up to Date
Mashup - Y	Blackboard Inc.	3000.1.0-rel.38+b2c5dea	Available	Up to Date

View Components

Set Unavailable

Set Inactive

Settings

Uninstall

Enter your token in provided field and click *Add*:

Not connected to kuraCloud

ENTER KURACLOUD TOKEN

Token

Back

Add

Verify the token has been accepted by checking your kuraCloud instance name and instance ID are now listed:

Instance:

Lt Feature Showcase-748d8887

ENTER KURACLOUD TOKEN

Token

Back

Add

REMOVE AN EXISTING TOKEN

Instance

Lt Feature Showcase

Remove

Appendix B - Detailed Configuration Guide

Create a Course Mapping

Check that the course(s) to be mapped exist in both kuraCloud and Blackboard Learn (identical names are not required):

The screenshot shows the Blackboard 'Courses' page. At the top, there are tabs for 'Create Course', 'Enroll Users', and 'Backup Actions'. Below these is a search bar with 'Course Name' selected. A table lists courses with columns: Status, Course ID, Course Name, Date Created, Instructor Username, Instructor Name, and Data Source Key. One course is listed: 'Lt Feature Showcase' with ID 'LTF0101' and date '10/17/16 12:43 PM'. A red arrow points to this course. Below the table is a dropdown menu for 'Lt Feature Showcase' with options: 'Course', 'Lessons', 'Modules', and 'Student Work'. A red arrow points to the 'Course' option.

Navigate to the Blackboard Learn *Administrator Panel* and select *kuraCloud Sync* from the *Tools and Utilities* menu:

The screenshot shows the Blackboard Administrator Panel. On the left is a sidebar with 'Organizations' and 'Communities' sections. The main area has 'Software Updates' and 'Content Management' sections. On the right is a 'Tools and Utilities' menu. A red arrow points to 'kuraCloud Sync' at the bottom of this menu.

Select the courses to be mapped from the provided drop-down menus, then click the *Add* button:

Connected instance:
Lt Feature Showcase-748d8887
No Mappings for this instance

ADD A COURSE MAPPING

Blackboard Course: LTFC101 Lt Feature Showcase
kuraCloud Course: Lt Feature Showcase Lt Feature Showcase

Back Settings Add

This new course mapping will appear at the top of the page:

Connected instance:
Lt Feature Showcase-748d8887

Blackboard Course: LTFC101 Lt Feature Showcase
kuraCloud Course: Lt Feature Showcase Lt Feature Showcase

ADD A COURSE MAPPING

Blackboard Course: No Courses available to add
kuraCloud Course: No Courses available to add

REMOVE A COURSE MAPPING

Mapping: LTFC101 Lt Feature Showcase - Lt Feature Showcase Lt Feature Showcase

Back Settings Remove

The course mapping can be verified in kuraCloud by navigating to the *Student Accounts* menu within the course, it will read 'Blackboard Connected':

Feature Showcase

Instance Administration
Courses +

Lt Feature Showcase

Lessons
Modules
Student Work
Student Accounts
Staff Accounts

Student Accounts
Lt Feature Showcase

Blackboard connected

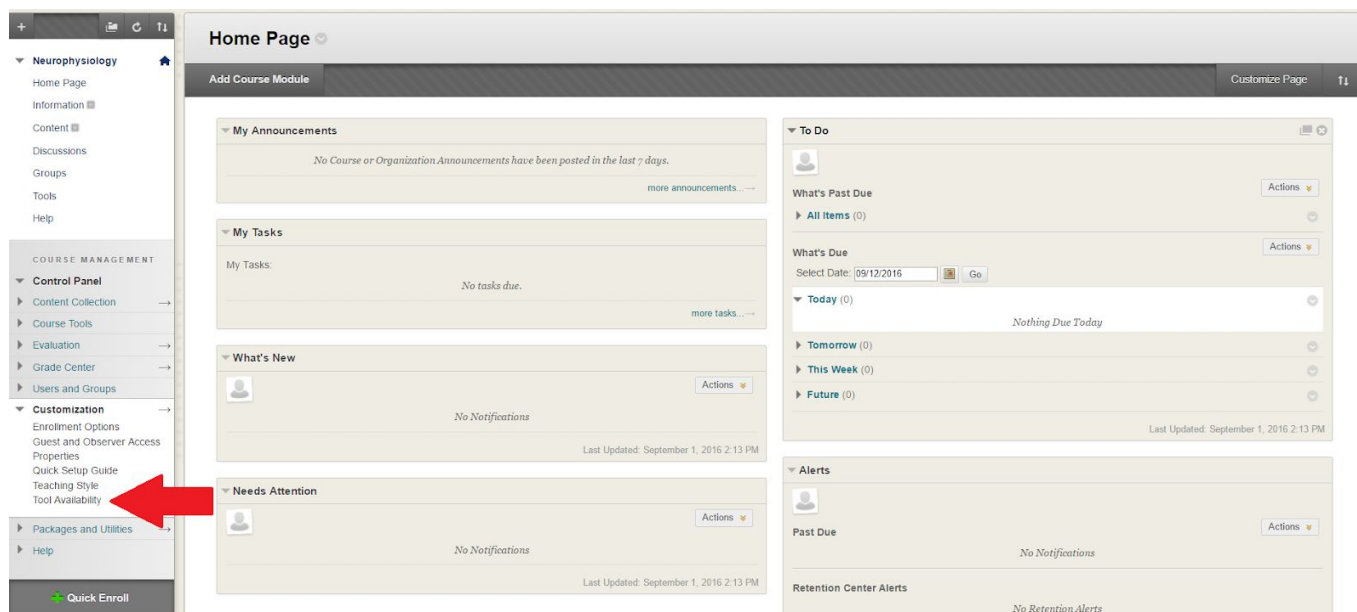
Filter students
SEARCH

Students
Andrew Coulson
Jerry Bonner
John Smith
Katherine Hudson

Note: When mapping is complete you will no longer be able to edit the students from within that kuraCloud course.

Enable Synchronization for a single Course Mapping

Within Blackboard Learn navigate to your course's *Home Page*. From *Course Management* expand the *Customization* menu and select *Tool Availability*:



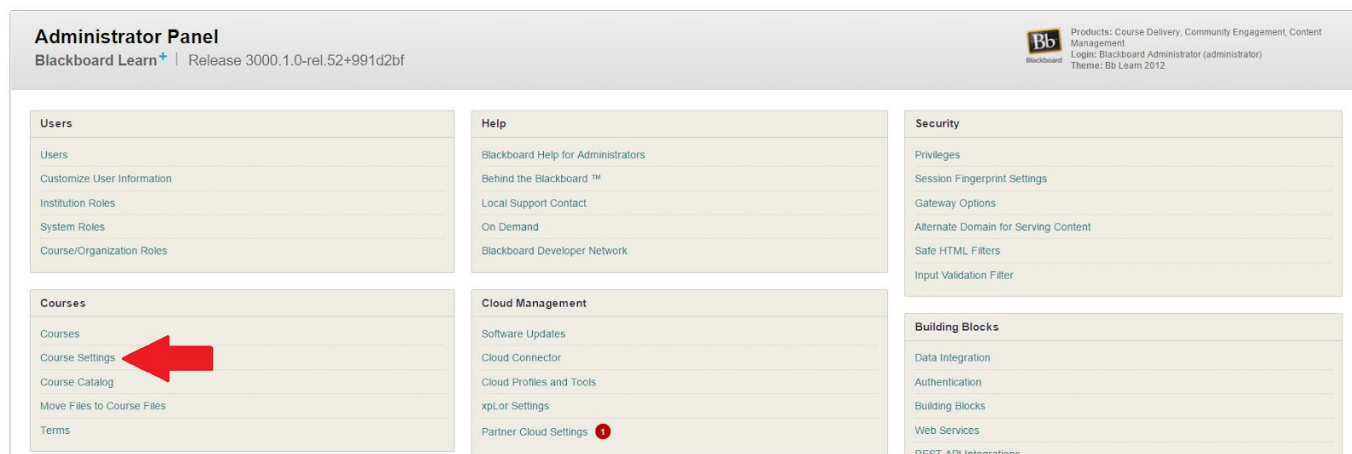
On the *Tool Availability* locate **kuraCloud Grade Sync** and **kuraCloud Student Sync**. Check the appropriate boxes in the available column for each that you wish to enable. When you have finished click the *Submit* button:

gradeGrabbia Grade Sync	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groups	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Item	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Journals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
kuraCloud Grade Sync	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
kuraCloud Student Sync	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning Module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lesson Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Manual Entry Textbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Math Editor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
McGraw-Hill Assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
McGraw-Hill Assignment Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

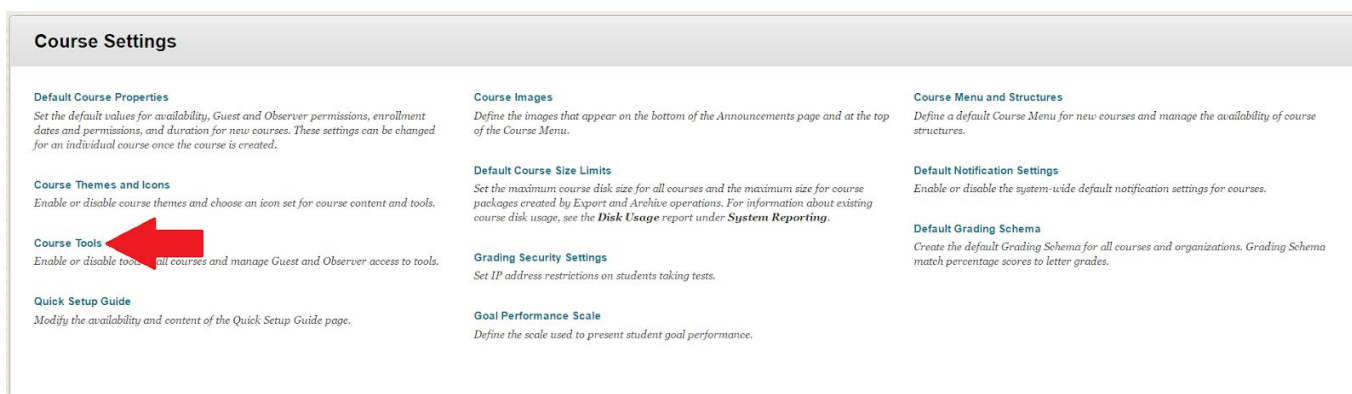
The *kuraCloud Student Sync* option will now be available in the *Course Tools* menu.

Enable Synchronization for all Course Mappings

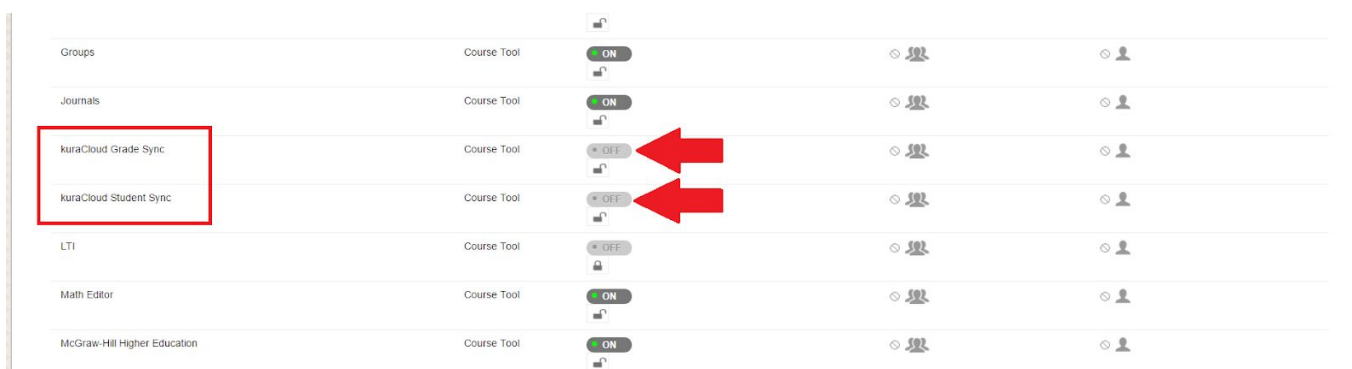
Navigate to the Blackboard Learn *Administrator Panel*, then select *Course Settings* from the *Courses* menu:



Select *Course Tools* from the *Course Settings* page:



Locate the kuraCloud Grade Sync and kuraCloud Student Sync entries. Toggle the appropriate switches in the *Availability* column:



For each entry, review the *Scope of Change* column choose how you will apply these changes to new and existing courses, then click the *Submit* button:

Groups	Course Tool	ON		
Journals	Course Tool	ON		
kuraCloud Grade Sync	Course Tool	ON	Apply changes to New courses only Leave tool off for existing courses	
kuraCloud Student Sync	Course Tool	OFF		
LTI	Course Tool	OFF		
Math Editor	Course Tool	ON		
McGraw-Hill Higher Education	Course Tool	ON		

Note: If you are using child courses within Blackboard Learn, only the parent course will be shown in the dropdown.

Removing a Course Mapping

Navigate to the Blackboard Learn *Administrator Panel*, then select *kuraCloud Sync* from the *Tools and Utilities* menu:

Organizations
Organization Settings
Organization Catalog
Move Files to Organization Files

Communities
Institutional Hierarchy
Tabs and Modules
Brands and Themes
Discussion Boards
Communities Settings
Domains

Software Updates
Blackboard Learn Updates Available
Building Block Updates Available
Featured Building Blocks Available

Content Management
Manage Content
Learning Objects Catalog
Display Options
Content Management Settings
Technical Settings
Administrator Search
Content Area Management
Feature and Tool Management

Tools and Utilities
Announcements
Goals
Calendar
Enterprise Surveys
Course Messages
Email
Language Packs
System Reporting
System Configuration
Logs
Tools
Chalk Titles
Avatars
Notifications
Portfolios
Spell Check Dictionaries
Math Editor Image Service
Achievements
Student Goal Performance Export
My Blackboard Settings
gradeGrabba
kuraCloud Sync

Under the *Remove a Course Mapping* header select the course mapping you want to remove, then click the *Remove* button:

Connected instance:
Lt Feature Showcase-748d8887

Blackboard Course	kuraCloud Course
LTFC101 Lt Feature Showcase	Lt Feature Showcase Lt Feature Showcase

ADD A COURSE MAPPING

Blackboard Course	No Courses available to add
kuraCloud Course	No Courses available to add

REMOVE A COURSE MAPPING

★ Mapping

LTFC101 Lt Feature Showcase - Lt Feature Showcase Lt Feature Showcase ▼

Back Settings

Remove

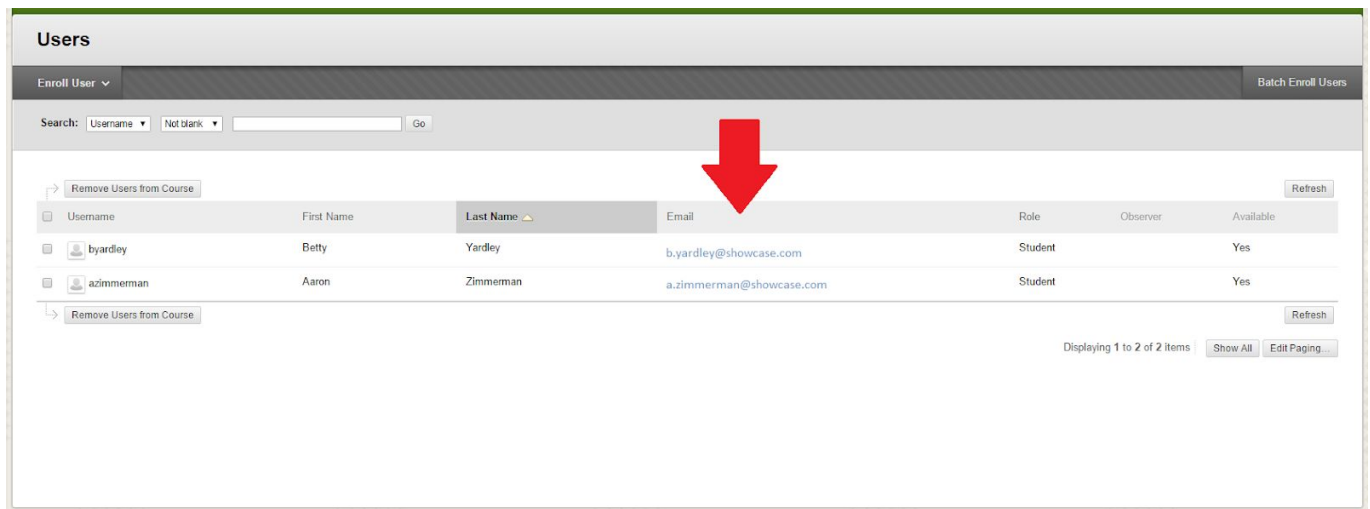
Note: The following information may be useful to users that are considering the removal of a course mapping:

- If you are using child courses within Blackboard Learn, only the parent course will be shown in the dropdown.
- If a course mapping is removed, student accounts that were synchronized from Blackboard Learn will remain in the kuraCloud course. These accounts may be deleted manually from within kuraCloud.
- Mapping may only be removed from active kuraCloud courses. If a kuraCloud course is deleted it must first be restored before the mapping can be removed. This kuraCloud course may safely be deleted again when the mapping is removed.

Appendix C - Detailed Workflows Guide

Synchronization of Students from Blackboard.

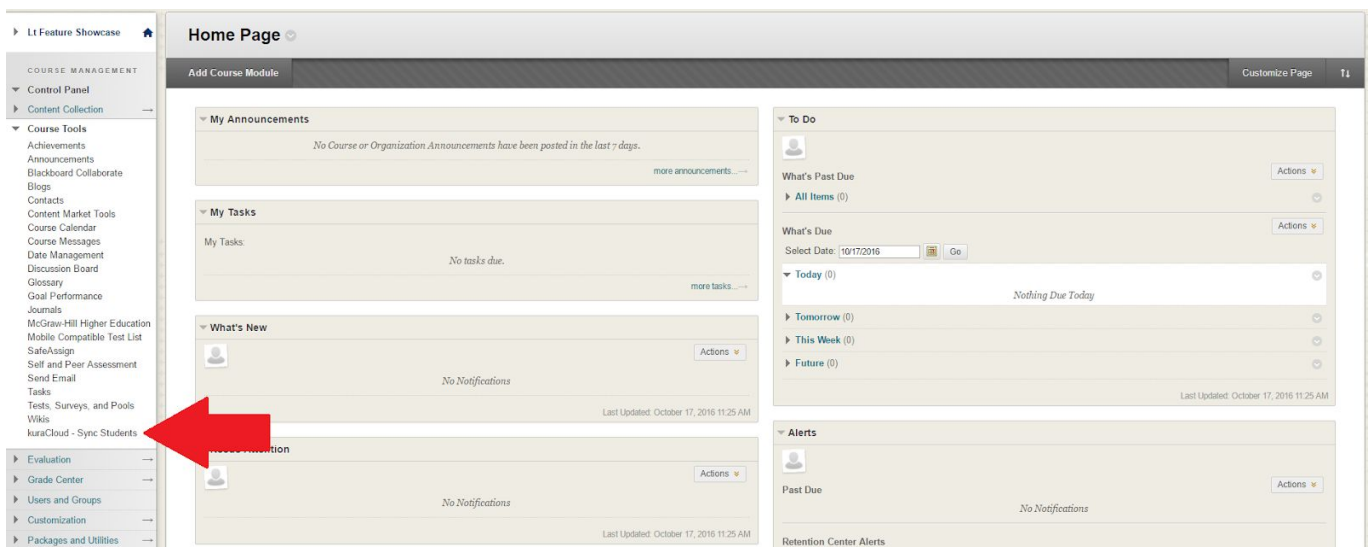
Ensure all student accounts within Blackboard Learn have an email address:



The screenshot shows the 'Users' page in Blackboard. At the top, there's a search bar with 'Username' selected and a 'Go' button. Below the search bar is a table of users. A red arrow points to the 'Email' column header. The table contains two users: 'byardley' (Betty Yardley) and 'azimmerman' (Aaron Zimmerman). Both have email addresses listed in the 'Email' column. The table has columns for Username, First Name, Last Name, Email, Role, Observer, and Available. There are 'Remove Users from Course' buttons on the left and 'Refresh' buttons on the right. At the bottom right, it says 'Displaying 1 to 2 of 2 Items' with 'Show All' and 'Edit Paging...' links.

Username	First Name	Last Name	Email	Role	Observer	Available
byardley	Betty	Yardley	b.yardley@showcase.com	Student		Yes
azimmerman	Aaron	Zimmerman	a.zimmerman@showcase.com	Student		Yes

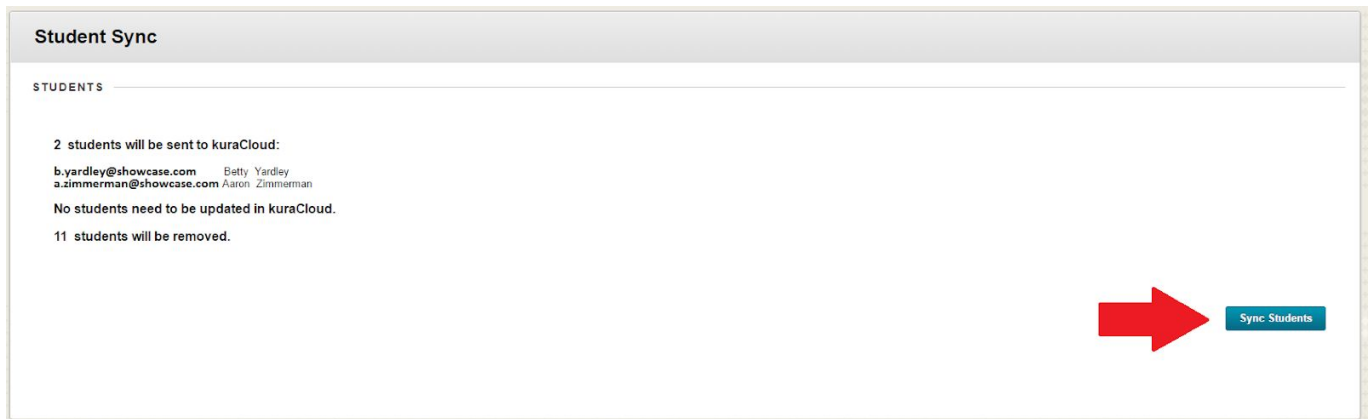
Within Blackboard Learn navigate to your course's *Home Page*. From *Course Management* expand the *Course Tools* menu and select *kuraCloud - Sync Students*:



The screenshot shows the 'Home Page' in Blackboard. On the left is a sidebar with 'COURSE MANAGEMENT' expanded, showing 'Control Panel', 'Content Collection', and 'Course Tools'. Under 'Course Tools', 'kuraCloud - Sync Students' is highlighted with a red arrow. The main content area shows 'My Announcements', 'My Tasks', and 'What's New' sections, all with 'No Course or Organization Announcements have been posted in the last 7 days.' and 'No tasks due.' messages. On the right, there's a 'To Do' section with 'What's Past Due' and 'What's Due' sections, both showing 'All Items (0)'. Below that is an 'Alerts' section with 'Past Due' and 'Retention Center Alerts' sections, both showing 'No Notifications'.

CARE REQUIRED: Be sure to carefully review the detailed summary that is provided to ensure you are happy with the outcome of this synchronization. Students that exist in your kuraCloud course but not in Blackboard Learn will be deleted from kuraCloud.

Click the *Sync Students* button to proceed:



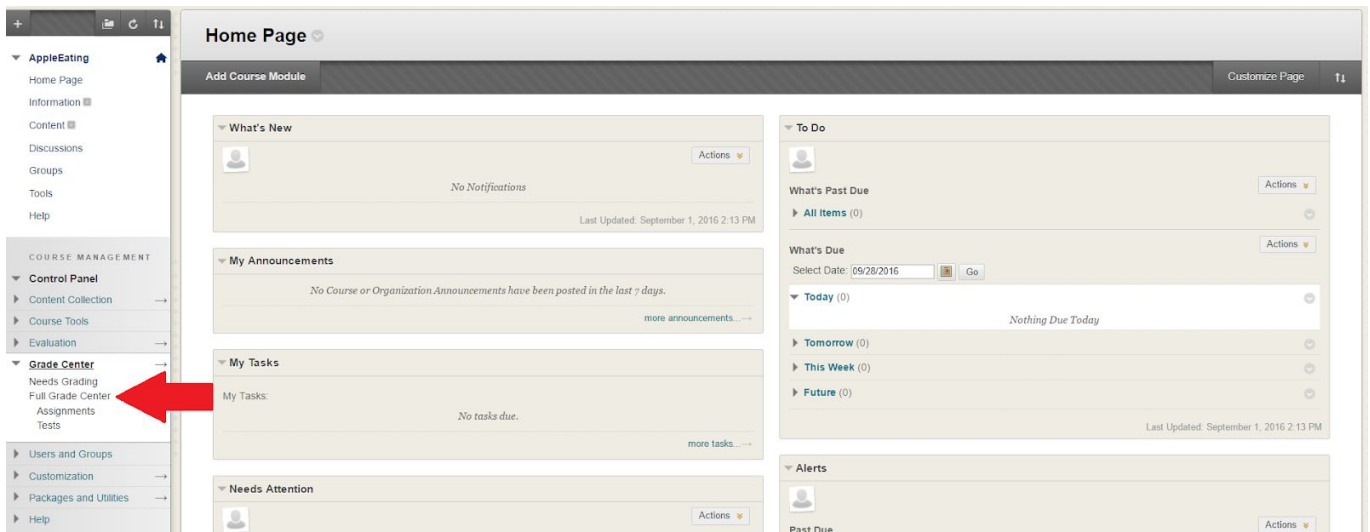
Students that have been synchronized will be created within the mapped course in kuraCloud and be sent an invite email.

If you have used child courses within Blackboard Learn, students within kuraCloud will be mapped as follows:

Blackboard Learn's *Course ID* field → kuraCloud student's *Section* field

Synchronization of Grades to Blackboard

Within Blackboard Learn navigate to your course's *Home Page*. From *Course Management* expand the *Grade Center* menu and select *Full Grade Center*.



From the *Manage* drop-down menu select *kuraCloud - Sync Grades*.

Grade Center : Full Grade Center

When screen reader mode is on, the Grade Center data appears in a simplified grid. You cannot freeze columns or edit inline, making it easier to navigate using the keyboard. To enter a grade, access a cell's contextual menu and click **View Grade Details**. When screen reader mode is off, you can type a grade directly in a cell on the Grade Center page. To enter a grade: click the cell, type the grade value, and press the Enter key to submit. Use the arrow keys or the tab key to navigate through the Grade Center. [More Help](#)

Create Column Create Calculated Column Manage Reports Filter Work Offline

Grade Information Bar

Move To Top Email

Last Name	First Name	Username
Yardley	Betty	byardley
Zimmerman	Aaron	azimmerman

Selected Rows: 0

Move To Top Email

Grading Periods
Grading Schemas
Grading Color Codes
Categories
Smart Views
Column Organization
Row Visibility
Send Email
McGraw-Hill Connect Reports
McGraw-Hill Connect To Do List
kuraCloud - Sync Grades

Sort Columns By: Layout Position Order: Descending

Availability	Weighted Total	Total
Available	--	--
Available	--	--

Icon Legend

Edit Rows Displayed

Click **Start** to begin synchronization:

SYNC GRADES

Click Start to begin syncing kuraCloud grades.

Start

Sync Grades

SYNC COMPLETE

Progress: Complete

View

Grade synchronization can be an intensive process, so this can only be performed by one user at a time. Users will receive a message if they attempt to synchronize grades when a synchronization is already in progress, and should wait for 10 minutes before trying again.

Editing and Deleting Courses

Course mappings are resilient and will be remembered if the following occurs:

- A mapped kuraCloud course is deleted.
- A mapped Blackboard Learn course is deleted.
- A mapped Blackboard Learn course is changed from a standard course to a child course.

Restoring the deleted course on either platform will reinstate the functionality of the mapping so it can be used again.

Deleting a course within one platform will not delete the corresponding course within the other platform.

Appendix D - Technical Details

The kuraCloud.war building block has dependencies on blackboard libraries:
<https://community.blackboard.com/docs/DOC-1147>.

This building block is using the blackboard libraries from:
<https://bbprepo.blackboard.com/content/repositories/releases/>

Library dependencies are as follows:

- bb-taglibs
- bb-platform

Bundled inside this building block are the following libraries:

- bb-ws-context
- bb-ws-course
- bb-ws-coursemembership
- bb-ws-user
- bb-ws-gradebook