

Kaltura LMS Setup Guide for KAF versions

This guide describes how to setup the Kaltura Video integration within your LMS through the Kaltura Application Framework (KAF) settings. Information on how to control user roles and permissions using the Kaltura Application Framework (KAF) Admin Console is also provided.

Prerequisites

[collapsed title="Brightspace by D2L"]

Brightspace by D2L

The following items are required to setup the Kaltura Video Brightspace by D2L Video Extension:

- Access to a Brightspace environment with Account Admin permissions.
- A Kaltura account - Please contact your Kaltura representative for your Kaltura account details.
- Deployment of the Kaltura Video Extension on your Brightspace environment. For deployment instructions, see [Kaltura Video Extension for Brightspace by D2L Installation Guide](#) .
- KAF Admin Console – please ask your Kaltura representative for credentials to access your KAF Admin Console instance.

Before You Begin

You will need to create a Canvas root category in the KMC, if not already created for you by your Kaltura representative.

To create the Brightspace by D2L root category in the KMC

1. Log into the KMC.
2. Select the **Content** tab and then select the **Categories** tab.
3. Click **Add Category**.
4. On the New Category window, select the position of the root category and save your new category.

New Category [?] [x]

Metadata

Select the parent category under which the new category will appear

No Parent

[Next >](#)

5. Click **Next**.
6. In the metadata tab, enter metadata for your new category and click Save.

New Category [?] [x]

Metadata

Name:

Description:

Tags:

Reference ID:

Detail:
[+ Add](#)

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[collapsed title="Brightspace by D2L"]

Brightspace by D2L

The following items are required to setup the Kaltura Video Brightspace by D2L Video Extension:

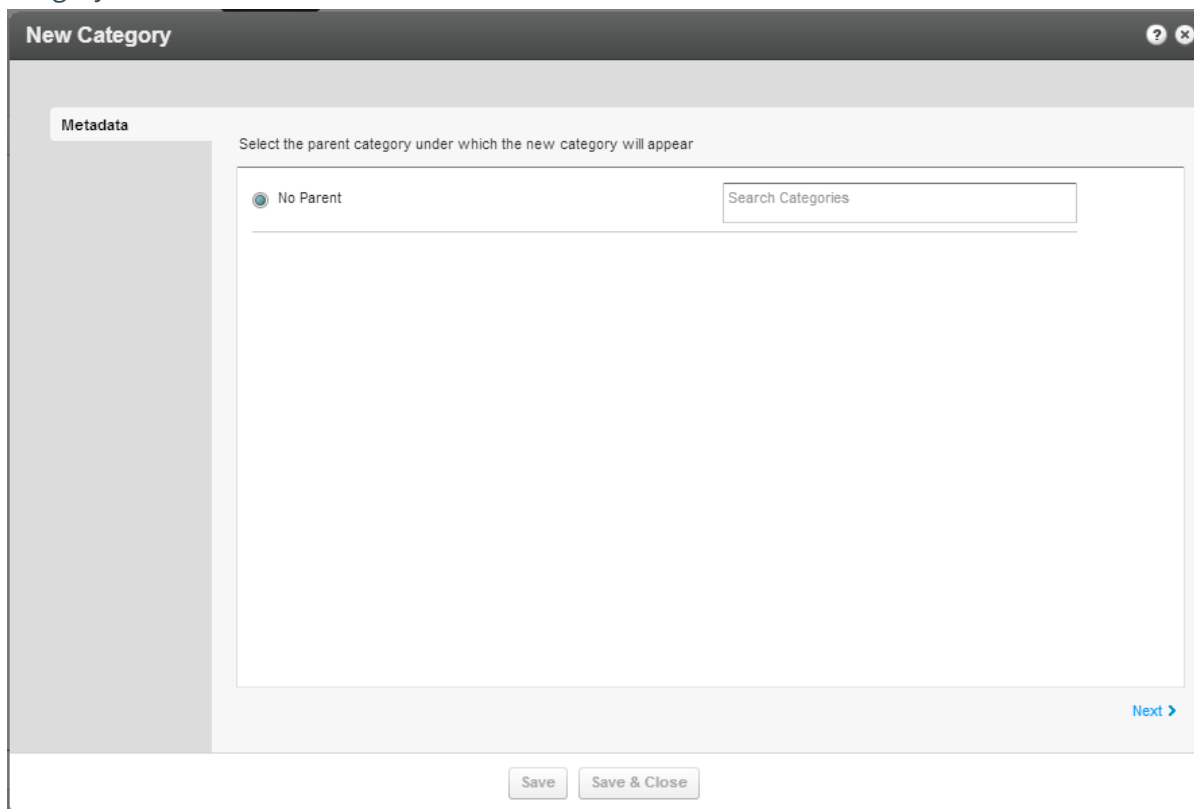
- Access to a Brightspace environment with Account Admin permissions.
- A Kaltura account - Please contact your Kaltura representative for your Kaltura account details.
- Deployment of the Kaltura Video Extension on your Brightspace environment. For deployment instructions, see [Kaltura Video Extension for Brightspace by D2L Installation Guide](#) .
- KAF Admin Console – please ask your Kaltura representative for credentials to access your KAF Admin Console instance.

Before You Begin

You will need to create a Canvas root category in the KMC, if not already created for you by your Kaltura representative.

To create the Brightspace by D2L root category in the KMC

1. Log into the KMC.
2. Select the **Content** tab and then select the **Categories** tab.
3. Click **Add Category**.
4. On the New Category window, select the position of the root category and save your new category.



The screenshot shows the 'New Category' dialog box. The title bar reads 'New Category'. On the left, there is a 'Metadata' sidebar. The main content area has the instruction 'Select the parent category under which the new category will appear'. Below this, there is a list of categories with 'No Parent' selected. A search box labeled 'Search Categories' is positioned to the right of the list. At the bottom right of the main area, there is a 'Next >' button. At the bottom of the dialog, there are 'Save' and 'Save & Close' buttons.

5. Click **Next**.

6. In the metadata tab, enter metadata for your new category and click Save.

The screenshot shows a web form titled "New Category" with a "Metadata" tab. The form contains the following fields and elements:

- Name:** D2L KAF
- Description:** Desire2Learn Root Category
- Tags:** (Empty text area)
- Reference ID:** (Empty text area)
- Detail:** + Add
- Buttons:** Save, Save & Close
- Link:** ^ Back to Top

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[collapsed title="Blackboard Ultra"]

Blackboard Ultra

The following items are required to setup the Kaltura Video Application for Blackboard Ultra:

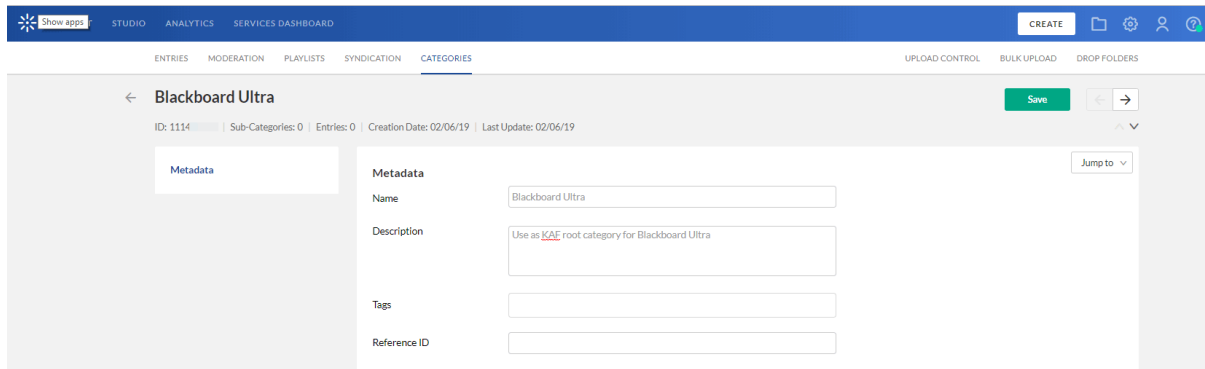
- Access to a Blackboard environment with Account Admin permissions.
- A Kaltura account - Please contact your Kaltura representative for your Kaltura account details.
- Deployment of the Kaltura Video App for Blackboard Ultra on your BlackBoard Ultra environment. For deployment instructions, see [Kaltura Video Tool for Blackboard Ultra Deployment Guide](#) .
- KAF Admin Console – please ask your Kaltura representative for credentials to access your KAF Admin Console instance.

Before You Begin

You will need to create a Blackboard Ultra root category in the KMC, if not already created for you by your Kaltura representative.

To create the Blackboard Ultra root category in the KMC

1. Log into the KMC.
2. Select the **Content** tab and then select the **Categories** tab.
3. Click **Add Category**.
4. On the New Category window, select the position of the root category and save your new category.
5. Click **Apply**.
6. In the Metadata tab, enter metadata for your new category and click Save.



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[collapsed title="KAF LTI"]

KAF LTI

The following items are required to setup the Kaltura Application Framework (KAF) as a tool provider within your LMS.

- Access to a LTI compliant LMS environment with site administrator role.
- A Kaltura account - Please contact your Kaltura representative for your Kaltura account details.
- KAF LTI Integration on your LMS environment. For installation/integration instructions, see the [Kaltura Application Framework \(KAF\) Learning Tools Interoperability \(LTI\) Integration Requirements Guide](#) .
- KAF Admin Console – please ask your Kaltura representative for credentials to access your KAF Admin Console instance.

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[collapsed title="Moodle"]

Moodle

The following items are required to setup the Kaltura Video Package for Moodle:

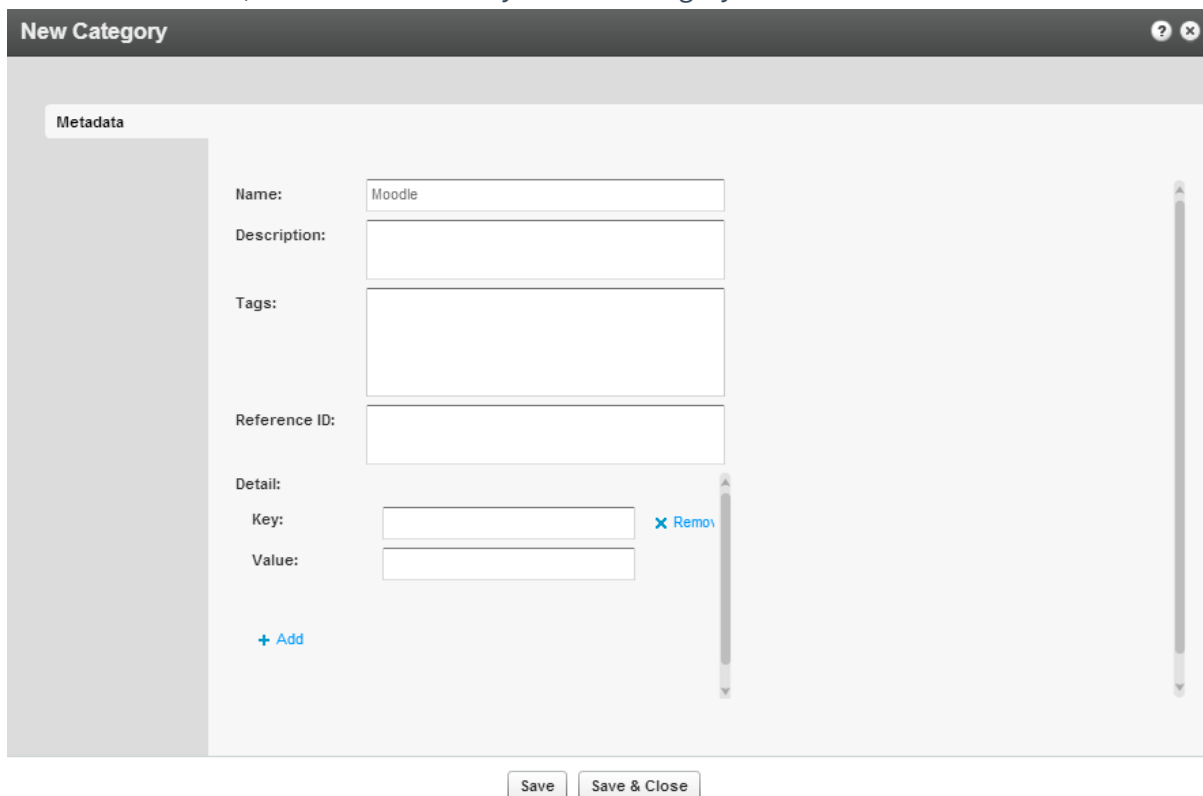
- Access to a Moodle environment with site administrator role.
- A Kaltura account - Please contact your Kaltura representative for your Kaltura account details.
- Installation of the Kaltura Video Package for Moodle on your Moodle environment. For installation instructions, see [Kaltura Video Package V4 for Moodle Version 2.8 –3.0 Installation and Upgrade Guide](#).
- KAF Admin Console – please ask your Kaltura representative for credentials to access your KAF Admin Console instance.

Before You Begin

You will need to create a Moodle root category in the KMC, if not already created for you by your Kaltura representative.

To create the Moodle root category in the KMC

1. Log into the KMC.
2. Select the **Content** tab and then select the **Categories** tab.
3. Click **Add Category**.
4. On the New Category window, select the position of the root category and save your new category.
5. Click **Apply**.
6. In the Metadata tab, enter metadata for your new category and click Save.



The screenshot shows a 'New Category' window with a 'Metadata' tab selected. The form contains the following fields and controls:

- Name:** Moodle
- Description:** (empty text area)
- Tags:** (empty text area)
- Reference ID:** (empty text area)
- Detail:**
 - Key:** (empty text input) with a blue 'x Remove' button to its right.
 - Value:** (empty text input)
- + Add** (blue text link)

At the bottom of the window, there are two buttons: **Save** and **Save & Close**.

Mandatory Configuration

After installing the Kaltura Video Package for Moodle you will need to specify the root category you [created](#) under the Categories module.

Module	Fields	Description
Categories	RootCategory	Select the category you created in the KMC.

The root category should not be changed after the plugin is configured.

Be certain that the sharedRepositoryCategoryId field is updated in the **Hosted** module. If it is not updated the following message is displayed:

```
sharedRepositoryCategoryId 23011851  
Your shared repository category requires mandatory update!  
Click here to update
```

Press “Click here to update” to update the Shared Repository.

This step is only required one time after installation or migration of the Kaltura Video Package for Moodle.

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[collapsed title="Sakai"]

Sakai

The following items are required to setup the Kaltura Video Package for Sakai:

- Access to a Sakai environment with site administrator role.
- A Kaltura account - Please contact your Kaltura representative for your Kaltura account details.
- Installation of the Kaltura Video Tool for Sakai on your Sakai environment. For installation instructions, see [Kaltura Video Tool V5 for Sakai Installation and Upgrade Guide](#) .
- KAF Admin Console – please ask your Kaltura representative for credentials to access your KAF Admin Console instance.

Before You Begin

You will need to create a Moodle root category in the KMC, if not already created for you by your Kaltura representative.

☰ To create the Sakai root category in the KMC

1. Log into the KMC.
2. Select the **Content** tab and then select the **Categories** tab.
3. Click **Add Category**.
4. On the New Category window, select the position of the root category and save your new category.

The screenshot shows a 'New Category' dialog box. The title bar reads 'New Category' with a help icon and a close icon. On the left side, there is a 'Metadata' tab. The main content area is titled 'Select the parent category under which the new category will appear'. It features a radio button labeled 'No Parent' which is selected. To the right of this is a search box labeled 'Search Categories'. At the bottom right of the main area is a 'Next >' button. At the bottom center of the dialog are two buttons: 'Save' and 'Save & Close'.

5. Click **Next**.
6. In the metadata tab, enter metadata for your new category and click Save.

New Category

Metadata

Category ID: 64257491

Name: Sakai

Description: Use as KAF Root Category

Tags:

Reference ID:

Detail:

Key: x Remo

Value:

+ Add

Save Save & Close

Mandatory Configuration

After installing the Kaltura Video Package for Moodle you will need to specify the root category you [created](#) under the Categories module.

Module	Fields	Description
Categories	RootCategory	Select the category you created in the KMC.

The root category should not be changed after the plugin is configured.

MANAGE CONFIGURATION MANAGE USERS KNOWLEDGE BASE CLEAR THE CACHE GO TO SITE

Configuration Management

Developer Tools

How to enable "Developer Tools"?

Global

Application

Auth

Categories

Channels

Client

Debug

Gallery

Header

Languages

Metadata

Moderation

Navigation

Categories

rootCategory

MediaSpace ▼

LMS root

MediaSpace

Blackboard_KAF

Canvas KAF

D2L

Moodle

Sakai KAF

restricted

Restrict categories to specific roles. Only users with the specified role can view media in the restricted category. Only users with adminRole or the restricted category.

Which root category does MediaSpace use for all categories be defined in the KMC.
Note: If you change the root category, the old root category context and entitlements that were configured. If you wish the KMC and remove the privacy context from Settings > Settings

Save

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Understanding the Setup Process

Kaltura offers an out-of-the-box solution that enables users to view, record, upload, publish, search, and share video directly from their KMS/KAF environment. This translates into time and money saved for your organization, improved student engagement, creativity and learning results, as well as ease of use for students, faculty and teaching assistants.

The Kaltura Application Framework (KAF) Admin Console

KMS and the LMS are implemented on top of the Kaltura Application Framework (KAF), a feature rich framework that allows flexible and streamlined integration of Kaltura’s video solutions and products into 3rd party applications. KAF is hosted and served directly from the Kaltura cloud servers and once integrated into your environment, presents different video components and workflows to users.

At the backend, the Kaltura Application Framework provides a flexible and extensible administration panel, called “KAF Admin Console”. The KAF Admin Console offers full control over the user experience and when interacting with videos inside KAF.

KAF Modules

Your KAF/KMS instance is composed of multiple **KAF modules**, such as “Application”, “Player”, and

“Auth”. Each module controls a different aspect of your KMS/LMS integration. A KAF module is composed of a set of **configuration fields**. All KAF modules are listed on the left menu in your KAF/KMS Admin Console instance.

The screenshot shows the Configuration Management page. At the top, there is a navigation bar with links: MANAGE CONFIGURATION, MANAGE USERS, KNOWLEDGE BASE, CLEAR THE CACHE, GO TO SITE, and LOGOUT. Below this is the 'Configuration Management' header. On the left is a navigation menu with categories: Developer Tools, Global, and Modules. The 'Hosted' module is selected, and its configuration fields are listed in a table. A search box for configuration is in the top right. Red arrows highlight 'KAF Modules' and 'Configuration fields'.

Field Name	Value	Description
enableLike	Yes	Enable the Hosted module.
enableLike	No	Enable the 'Like' feature for entries.
allowEditPublished	Yes	Enable editing of published entries
allowDeletePublished	Yes	Enable deletion of published entries
enableEntryDelete	Yes	Enable deleting the media from MediaSpace
enablePresentations	Yes	Enable users to create and display video-presentations?
enableViews	No	Enable showing number of views per entry.
showPageTitles	Yes	Show page titles
expandButton	Auto	Player expand button. Auto is on only if there are modules providing an entry sidebar.
manPublish	Yes	Enable publish to a list of categories - from the menu, media, and upload. Disable this if you do not have access to the list of categories.

Your KAF/KMS Admin Console may display modules and configuration fields that are not listed in this guide, some of which may be disabled. It is important that you do not modify the configuration of the disabled modules (and not enable them) without consulting your Kaltura representative.

[collapsed title=Brightspace by D2L]

The following KAF modules are required for configuring the Kaltura Video Extension for Brightspace by D2L and are described in this guide:

Configuration Management: Global Modules

- [Application](#)
- [Auth](#)
- [Categories](#)
- [Channels](#)
- [Client](#)
- [Debug](#)
- [Gallery](#)
- [Header](#)
- [Metadata](#)
- [Moderation](#)

- [Player](#)
- [Security](#)
- [Widgets](#)
- [Search](#)
- [MediaCollaboration](#)
- [PlaylistPage](#)

Configuration Management: Configuration Modules

- [Addcontent](#)
- [Attachments](#)
- [Captions](#)
- [CaptureSpace](#)
- [ChannelPlaylists](#)
- [Chapters](#)
- [Cielo24](#)
- [Clipper](#)
- [Comments](#)
- [Downloadmedia](#)
- [Embed](#)
- [EmbedPlaylist](#)
- [Publish](#)
- [SidemyMedia](#)
- [Thumbnails](#)
- [Userreports](#)

Configuration Management: Channel Modules

- [Channelmoderation](#)

Configuration Management: Entry Type Modules

- [Audioentry](#)
- [Imageentry](#)
- [Quiz](#)
- [D2L](#)
- [Hosted](#)
- [Hosted Related](#)

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[collapsed title=Blackboard Ultra]

The following KAF modules are required for configuring the Kaltura Video Tool for Blackboard Ultra and are described in this guide:

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[collapsed title="Canvas"]

The following KAF modules are required for configuring the Kaltura Video Extension for Canvas and are described in this guide:

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[collapsed title="KAF LTI"]

The following KAF modules are required for configuring the Kaltura Application Framework (KAF) LTI integration and are described in this guide:

Global Modules

- [Application](#)
- [Debug](#)

Configuration Modules

- [Addcontent](#)

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KAF Administration: Actions and Configurable Fields

Your KAF account comes pre-configured with the following settings. Items marked with * should not be changed.

General Settings

Module	Fields	Description
Application	InstanceId, privacyContext, userRoleProfile	Internal constant identifiers of your KAF instance. Please note that privacyContext should be empty.
Auth	sslSettings	All site (set to None if SSL is not used)
Debug	serviceUrl	https://www.kaltura.com (set to http://www.kaltura.com if SSL is not used)
	VerifySSL	Yes (set to No if SSL is not used)
Security	allowLoadInframe	Yes*
Addcontent	enabled	Yes*
Userreports	enabled	Yes*
Publish	enabled	Yes*
Browseandembed	enabled	Yes*
Ltigemeric/Sakai	enabled	Yes*

Module	enabled Fields enableLike	Yes* Description Yes/No
Hosted		
	enableViews	Yes/No
	allowEditPublished	Set to <i>No</i> if you want to prevent users from editing entries after they have been published to a course Media Gallery or embedded using the Browse, Search and Embed module.
	allowDeletePublished	Set to <i>No</i> if you want to prevent users from deleting entries after they have been published to a course Media Gallery or embedded using the Browse, Search and Embed module.
	enableEntryDelete	Set to <i>No</i> to completely prevent users from deleting entries
	manPublish	Yes* (Unless publish plugin was integrated).
	authMethod	Lti

Roles and Permissions

See [Common Use Cases of Role Configuration](#) for recommendations for common role configurations in the Kaltura Application Framework Generic LTI Integration.

Introduction to Role Mapping

The Kaltura Application Framework LMS integrations implement role mapping from LMS roles to Kaltura roles via [LIS roles](#) . Each role that is assigned to a user in the LMS is mapped to one of the roles defined in the [LIS standard](#). When a user is assigned with a role in an LMS course – Instructor or Learner, Access or Maintain for example –the LMS translates this role to an LIS role which is then sent to KAF. On KAF’s side, a dedicated module provides flexible mapping between LIS roles and Kaltura roles, allowing a granular control over the behaviour of the different Kaltura Video Package components in the LMS.

This process is described in the following workflow.

1. Users are [assigned a LMS](#) course-level role after being assigned to a course.
2. [The LMS sends the corresponding LIS role to Kaltura](#).
3. [KAF Grants Permissions](#) according to mapping.

Assign a LMS Course-level Role

Users are assigned a LMS role when added to courses.

The LMS Sends the Corresponding LIS Role to Kaltura

When a user accesses a Course-level Kaltura module, such as *Media Gallery* or the *Browse, Search and Embed*, the LMS sends the corresponding LIS role to Kaltura, according to the following mapping:

LMS Course-level role	LIS role
Learner	Learner
Instructor	Instructor

For example the mapping in Sakai is as follows:

Sakai Site-level role	LIS role
Access	Learner
Maintain	Instructor

KAF Grants Permissions According to the Mapping

On the KAF Admin Console side, each LIS role can be mapped back to Kaltura roles. KAF grants different permissions according to the mapping provided in the Hosted module in the KAF Admin Console.

For example:

The screenshot shows the 'ItiRolesMapping' interface with two entries. Entry 1 is for the 'Learner' role. Red arrows point from the 'Learner' text, the 'privateOnlyRole' dropdown, and the 'CONTRIBUTOR' dropdown to three red-bordered text boxes. The first box says 'LIS role sent by Sakai. According to the user's role in Sakai.' The second box says 'KAF Applicative role, set by the administrator to define permissions outside of site context (My Media, Browse, Search and Embed)'. The third box says 'KAF Contextual role, set by the administrator to define permissions inside site context (Media Gallery, Browse, Search and Embed)'. Entry 2 is for the 'Instructor' role, with 'privateOnlyRole' and 'MANAGER' dropdowns.

As displayed, each LIS role is mapped in Kaltura to two roles – an **Applicative Role** (`kmsRole`) and a **Contextual Role** (`kmsContextualRole`). These roles correspond to different cases/scenarios in the Kaltura Application Framework Generic LTI Integration. Setting these roles changes the permissions a user has in the following scenarios:

- **Applicative role (KMSRole)** - Defines the user roles and permissions in Kaltura widgets that are out of course context (for example: My Media)

- - **anonymousRole** – Not relevant to the Kaltura Application Framework Generic LTI Integration and should not be used.
 - **viewerRole** – The user will not have access to My Media, and will not be able to upload new content to either My Media, Media Gallery or using the Embed Kaltura Media text-editor button.
 - **privateOnlyRole** – The user will have access to My Media and will have the ability to create new content.
 - **adminRole, unmoderatedAdminRole** – Not relevant to the Kaltura Application Framework Generic LTI Integration and should not be used.
- **Contextual role (KMScontextualrole)** - Defines the user roles and permission in Kaltura widgets when in a course (site) context (for example: Media Gallery)
- - **Member:** The user will be able to view content in Media Galleries of courses to which the user is enrolled, but will not be able to contribute (publish) to the galleries.
 - **Contributor:** The user has Member permissions with the ability to publish content to the Media Gallery.
 - **Moderator:** The user has Contributor permissions with the ability to moderate content added to the Media Gallery.
 - **Manager:** The user has Moderator permissions with the ability edit the Media Gallery settings, and view the course gallery analytics.

From the Kaltura module's perspective, the permissions are as follows:

- **My Media**

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- **Applicative role:** If viewerRole, the user will not have access to My Media and will not be able to upload new content. If privateOnlyRole the user will be able to have its own My Media repository to where he can upload his own private content.
- **Contextual role:** does not impact My Media.

- **Media Gallery**

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- **Applicative role:** If the user has a contextual role that allows publishing/adding content to the Media Gallery (see the following table), and the user has an Applicative role of **privateOnlyRole**, the user will be able to upload new content or contribute content from its own private My Media repository.
- **Contextual role:** Determines the role of the user inside the Media Gallery (note – users can access a course Media Gallery after they have access to the course page in the LMS, regardless of their Kaltura role.

Role	Permissions
Member	If the user has Member contextual role, the user will be treated as a “viewer only” in the Media Gallery, and will only be able to view content, and will not be able to contribute content to the Gallery (regardless of the user’s Applicative role).
Contributor	Users with Contributor role can view Media Gallery entries and upload and contribute entries from My Media (if applicative role is privateOnlyRole). Students are usually assigned Member or Contributor contextual roles.
Moderator	Moderator role allows the users to moderate content published to a Media Gallery (and to contribute new content). Teaching Assistants usually have Moderator contextual roles.
Manager	A Manager role provides full access to the Media Gallery, including the ability to moderate content, edit the Media Gallery’s settings and metadata, and access the Media Gallery Analytics. Instructors usually have Manager contextual roles

- **Browse, Search and Embed** (rich-text editor button)
- - **Applicative role:** If **viewerRole**, the user will not have access to My Media and will not be able to create new content. If **privateOnlyRole** the user will be able to have their own My Media repository to where they can upload their private content.
 - **Contextual role:** does not impact Embed Kaltura Video.

Summary of Default LMS -> LIS -> Kaltura Roles Mapping

LMS	LIS role	Default Kaltura applicative role (kmsRole)	Default Kaltura contextual role (kmsContextualRole)
Learner	Learner	privateOnlyRole	CONTRIBUTOR
Instructor	Instructor	privateOnlyRole	MANAGER
Administrator	Administrator	privateOnlyRole	MANAGER

Summary of Default Sakai -> LIS -> Kaltura Roles Mapping

Sakai role	LIS role	Default Kaltura applicative role (kmsRole)	Default Kaltura contextual role (kmsContextualRole)
Student	Learner	privateOnlyRole	CONTRIBUTOR
Instructor	Instructor	privateOnlyRole	MANAGER
Maintain	Instructor	privateOnlyRole	MANAGER
Access	Learner	privateOnlyRole	CONTRIBUTOR
Teaching Assistant	Learner	privateOnlyRole	CONTRIBUTOR

Sakai role	LIS role	Default Kaltura applicative role (kmsRole)	Default Kaltura contextual role (kmsContextualRole)
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This section provides recommendations for common role configuration in the Kaltura Application Framework Generic LTI Integration.

The following use cases are described:

- [Allowing Students to Upload Content](#)
- [Allowing Faculty Only to Upload and Create New Content](#)

Allowing Students to Upload Content

Description: Allow all users to author new content (upload, webcam recording, screencast recording, etc.) and publish to courses, Media Galleries, regardless of their contextual role.

LMS Side Configuration

No special configuration is required on the LMS side for this case.

Sakai Side Configuration

No special configuration is required on the Sakai side for this case. Assign all students to the Sakai Access role and teachers to the Sakai maintain Role.

KAF Side Configuration

In your KAF instance, configure the following mapping under the Hosted module:

ItiRole	kmsRole	kmsContextualRole
Learner	privateOnlyRole	CONTRIBUTOR
Instructor	privateOnlyRole	MANAGER

Allowing Faculty Only to Upload and Create New Content

Description: Allow only faculty members to create and upload new media. Students should not have access to My Media and should not be able to contribute to any course Media Gallery.

LMS-side Configuration

To accomplish this configuration, the My Media link should be hidden to all logged in users but Teachers.

It is important to hide the My Media link. If students are able to access the My Media link, an “Access Denied” message will be displayed as they are prevented from accessing My Media by the KAF-side configuration (see below).

KAF Side Configuration

In your KAF instance, configure the following mapping under the Hosted module:

ItiRole	kmsRole	kmsContextualRole
Learner	viewRole	MEMBER
Instructor	privateOnlyRole	MANAGER