

# Kaltura Application Framework (KAF) for LTI Setup Guide

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This guide describes how to setup the Kaltura Video integration within your LMS with the Kaltura Application Framework (KAF) settings.

Information on how to control user roles and permissions using the KAF Admin Console is also provided.

## Prerequisites

The following items are required to setup the 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 [KAF LTI Integration Guide](https://dyzz9obi78pm5.cloudfront.net/app/image/id/5d821c0bec161c6560145f8a/n/kaf-lti-integration-guide.pdf). (<https://dyzz9obi78pm5.cloudfront.net/app/image/id/5d821c0bec161c6560145f8a/n/kaf-lti-integration-guide.pdf>)
  - KAF Admin Console – please ask your Kaltura representative for credentials to access your KAF Admin Console instance.

## Understanding the Setup Process

The KAF LTI Integration offers an out-of-the-box solution that enables users to view, record, upload, publish, search, and share video directly from their LMS 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 KAF Admin Console

The Generic KAF LTI Integration is implemented on top of the 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 LMS 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 instance is composed of multiple **KAF modules**, such as "Application", "Player", and "Auth". Each module controls a different aspect of your 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 Admin Console instance.

## Configuration Management

Developer Tools Search Configuration

How to enable 'Developer Tools'?

**Hosted** KAF Modules  Yes  No Enable the Hosted module.

**Global**

|                    |                      |  |  |
|--------------------|----------------------|--|--|
| Application        | enableLike           | <input type="checkbox"/> No <input type="checkbox"/> Yes                               | Enable the 'Like' feature for entries. <span style="border: 1px solid red; padding: 2px;">Configuration fields</span>                        |
| Auth               |                      |  |  |
| Categories         |                      |  |  |
| Channels           | allowEditPublished   | <input type="checkbox"/> Yes <input type="checkbox"/> No                               | Enable editing of published entries  |
| Client             |                      |  |  |
| Debug              |                      |  |  |
| Gallery            | allowDeletePublished | <input type="checkbox"/> Yes <input type="checkbox"/> No                               | Enable deletion of published entries   |
| Header             |                      |  |  |
| Metadata           | enableEntryDelete    | <input type="checkbox"/> Yes <input type="checkbox"/> No                               | Enable deleting the media from MediaSpace  |
| Moderation         |                      |  |  |
| Navigation         | enablePresentations  | <input type="checkbox"/> Yes <input type="checkbox"/> No                               | Enable users to create and display video-presentations?  |
| Player             |                      |  |  |
| Roles              |                      |  |  |
| Security           | enableViews          | <input type="checkbox"/> No <input type="checkbox"/> Yes                               | Enable showing number of views per entry.  |
| SharedRepositories |                      |  |  |
| Widgets            | showPageTitles       | <input type="checkbox"/> Yes <input type="checkbox"/> No                               | Show page titles   |
| <b>Modules</b>     |                      |  |  |
| Addcontent         |                      |  |  |
| Addisplaylists     | expandButton         | <input type="checkbox"/> Auto <input type="checkbox"/> Yes <input type="checkbox"/> No | Player expand button. Auto is on only if there are modules providing an entry sidebar.   |
| Bootswatch         |                      |  |  |
| Captions           | manPublish           | <input type="checkbox"/> Yes <input type="checkbox"/> No                               | 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. |

**NOTE:** Your KAF 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.

## 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  |
|---|---|--|
| <b>Application</b><br>( <a href="https://knowledge.kaltura.com/help/application">https://knowledge.kaltura.com/help/application</a> ) | InstanceId, privacyContext, userRoleProfile | Internal constant identifiers of your KAF instance. Please note that privacyContext should be empty.   |
| <b>Auth</b> ( <a href="https://knowledge.kaltura.com/help/auth">https://knowledge.kaltura.com/help/auth</a> )                         | sslSettings                                 | All site (set to None if SSL is not used)  |
| <b>Debug</b> ( <a href="https://knowledge.kaltura.com/help/debug">https://knowledge.kaltura.com/help/debug</a> )                      | serviceUrl                                  | <a href="https://www.kaltura.com">https://www.kaltura.com</a><br>( <a href="https://www.kaltura.com/">https://www.kaltura.com/</a> ) (set to <a href="http://www.kaltura.com">http://www.kaltura.com</a> if SSL is not used) |
|   | VerifySSL                                   | Yes (set to No if SSL is not used)   |

| Module   | Fields  | Description  |
|--|---|--|
| <b>Security</b><br><a href="https://knowledge.kaltura.com/help/modified-global-modules-security">https://knowledge.kaltura.com/help/modified-global-modules-security</a> | allowLoadInIframe   | Yes*   |
| <b>Addcontent</b><br><a href="https://knowledge.kaltura.com/help/addcontent">https://knowledge.kaltura.com/help/addcontent</a>   | enabled   | Yes*   |
| <b>Userreports</b><br><a href="https://knowledge.kaltura.com/help/userreports">https://knowledge.kaltura.com/help/userreports</a>  | enabled   | Yes*   |
| <b>Publish</b> ( <a href="https://knowledge.kaltura.com/help/publish">https://knowledge.kaltura.com/help/publish</a> )   | enabled   | Yes*   |
| <b>Browseandembed</b><br><a href="https://knowledge.kaltura.com/help/browseandembed">https://knowledge.kaltura.com/help/browseandembed</a>                               | enabled   | Yes*   |
| <b>Ltgeneric</b>   | enabled   | Yes*   |
|  | enabled   | Yes*   |
|  | enableLike  | Yes/No   |
|  | 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. |
|  | <b>Hosted</b> ( <a href="https://knowledge.kaltura.com/help/hosted">https://knowledge.kaltura.com/help/hosted</a> ) | allowDeletePublished   |

| Module | Fields            | Embed module.<br>Description                                       |
|--------|-------------------|--|
|        | enableEntryDelete | Set to <i>No</i> to completely prevent users from deleting entries |
|        | manPublish        | Yes* (Unless publish plugin was integrated).                       |
|        | authMethod        | Lti  |

## Configuring Modules

**NOTE: Some fields are displayed only when you select a specific value for a different field. The group's configurable fields follow the group name.**

### To modify KAF configuration modules

In the KAF Admin window select the Manage Configuration tab.

**NOTE: Related KAF modules: >Application, Auth, Client, Security, Categories, Addcontent, Publish, Browseandembed, Ltigeneric, Hosted**

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

### Global

- [Application](https://knowledge.kaltura.com/help/application) (https://knowledge.kaltura.com/help/application)
- [Auth](https://knowledge.kaltura.com/help/auth) (https://knowledge.kaltura.com/help/auth)
- [Channels](https://knowledge.kaltura.com/help/modified-global-modules-channels) (https://knowledge.kaltura.com/help/modified-global-modules-channels)
- [Client](https://knowledge.kaltura.com/help/client) (https://knowledge.kaltura.com/help/client)
- [Debug](https://knowledge.kaltura.com/help/debug) (https://knowledge.kaltura.com/help/debug)
- [Gallery](https://knowledge.kaltura.com/help/gallery) (https://knowledge.kaltura.com/help/gallery)
- [Metadata](https://knowledge.kaltura.com/help/metadata) (https://knowledge.kaltura.com/help/metadata)
- [Moderation](https://knowledge.kaltura.com/help/moderation) (https://knowledge.kaltura.com/help/moderation)
- [Player](https://knowledge.kaltura.com/help/modified-global-modules-player) (https://knowledge.kaltura.com/help/modified-global-modules-player)
- [Security](https://knowledge.kaltura.com/help/modified-global-modules-security) (https://knowledge.kaltura.com/help/modified-global-modules-security)
- [Widgets](https://knowledge.kaltura.com/help/widgets) (https://knowledge.kaltura.com/help/widgets)
- [Search](https://knowledge.kaltura.com/help/modified-global-modules-search) (https://knowledge.kaltura.com/help/modified-global-modules-search)
- [MediaCollaboration](https://knowledge.kaltura.com/help/media-collaboration) (https://knowledge.kaltura.com/help/media-collaboration)
- [PlaylistPage](https://knowledge.kaltura.com/help/playlistpage) (https://knowledge.kaltura.com/help/playlistpage)

### Modules

- [Addcontent](https://knowledge.kaltura.com/help/addcontent) (https://knowledge.kaltura.com/help/addcontent)

- [Attachments](https://knowledge.kaltura.com/help/attachments) (https://knowledge.kaltura.com/help/attachments)
- [Captions](https://knowledge.kaltura.com/help/mod-configuration-management-modules-kms-management-consolekaf-admin-captions) (https://knowledge.kaltura.com/help/mod-configuration-management-modules-kms-management-consolekaf-admin-captions)
- [Comments](https://knowledge.kaltura.com/help/comments) (https://knowledge.kaltura.com/help/comments)
- [Disclaimer](https://knowledge.kaltura.com/help/disclaimer) (https://knowledge.kaltura.com/help/disclaimer)
- [Downloadmedia](https://knowledge.kaltura.com/help/downloadmedia) (https://knowledge.kaltura.com/help/downloadmedia)
- [Embed](https://knowledge.kaltura.com/help/embed) (https://knowledge.kaltura.com/help/embed)
- [EmbedPlaylist](https://knowledge.kaltura.com/help/embedplaylist) (https://knowledge.kaltura.com/help/embedplaylist)
- [SidemyMedia](https://knowledge.kaltura.com/help/sidemymedia) (https://knowledge.kaltura.com/help/sidemymedia)
- [Thumbnails](https://knowledge.kaltura.com/help/thumbnails) (https://knowledge.kaltura.com/help/thumbnails)
- [Userreports](https://knowledge.kaltura.com/help/userreports) (https://knowledge.kaltura.com/help/userreports)

## Modules/Channels

- [Channelmoderation](https://knowledge.kaltura.com/help/channelmoderation) (https://knowledge.kaltura.com/help/channelmoderation)

## Modules/Entry Types

- [Audioentry](https://knowledge.kaltura.com/help/audioentry) (https://knowledge.kaltura.com/help/audioentry)
- [Imageentry](https://knowledge.kaltura.com/help/imageentry) (https://knowledge.kaltura.com/help/imageentry)
- [Youtube](https://knowledge.kaltura.com/help/entrytypes-kms-management-consolekaf-admin-youtube) (https://knowledge.kaltura.com/help/entrytypes-kms-management-consolekaf-admin-youtube)

## Modules/Custom/Core/KAF

- [Browseandembed](https://knowledge.kaltura.com/help/browseandembed) (https://knowledge.kaltura.com/help/browseandembed)
- [Ltigemeric](#)
- [Hosted](https://knowledge.kaltura.com/help/hosted) (https://knowledge.kaltura.com/help/hosted)
- [Quiz](https://knowledge.kaltura.com/help/entrytypes-kms-management-consolekaf-admin-quiz) (https://knowledge.kaltura.com/help/entrytypes-kms-management-consolekaf-admin-quiz)

## Roles and Permissions

See [Common Use Cases of Role Configuration](https://kaltura.sharepoint.com/community-team/Shared%20Documents/Knowledge%20Management/Final%20Documents%20-%20Ready%20for%20Publishing/KAF/LTI/Setup_Guide/KAF_LTI_Setup_Guide.docx#_Common_Use_Cases) (https://kaltura.sharepoint.com/community-team/Shared%20Documents/Knowledge%20Management/Final%20Documents%20-%20Ready%20for%20Publishing/KAF/LTI/Setup\_Guide/KAF\_LTI\_Setup\_Guide.docx#\_Common\_Use\_Cases) for recommendations for common role configurations in the Kaltura Application Framework Generic LTI Integration.

## Introduction to Role Mapping

The Kaltura Application Framework Generic LTI Integration implements role mapping from LMS roles to Kaltura roles via [LIS roles](http://www.imsglobal.org/lti/blti/bltiv1p0/ltiBLTIimgv1p0.html) (http://www.imsglobal.org/lti/blti/bltiv1p0/ltiBLTIimgv1p0.html). Each role that is assigned to a user in the LMS is mapped to one of the roles defined in the [LIS standard](http://www.imsglobal.org/lti/blti/bltiv1p0/ltiBLTIimgv1p0.html#_Toc261271984). (http://www.imsglobal.org/lti/blti/bltiv1p0/ltiBLTIimgv1p0.html#\_Toc261271984) When a user is assigned with a role in a LMS course – Instructor or Learner 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 |

#### 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:

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 <b>Member</b> 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 <b>Contributor</b> 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   | <b>Moderator</b> 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 <b>Manager</b> 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)

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- **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   |

### Common Use Cases of Role Configuration

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.

### KAF Side Configuration

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

| ItiRole | kmsRole         | kmsContextualRole |
|---------|-----------------|-------------------|
| Learner | privateOnlyRole | CONTRIBUTOR       |



|                       |                            |                              |
|-----------------------|----------------------------|------------------------------|
| ItiRole<br>Instructor | kmsRole<br>privateOnlyRole | kmsContextualRole<br>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           |