

## Kaltura LMS integration for Canvas - Upgrading from LTI 1.1 to LTI 1.3

Last Modified on 11/21/2024 6:32 pm IST



This article is designated for administrators.

#### **About**

This guide explains how to upgrade the Kaltura LMS integration for Canvas from LTI 1.1 to LTI 1.3. The integration is implemented using LTI external tools, added via an LTI Developer Key in Canvas.

#### Changes in user experience

Canvas does not support multiple tools by the same vendor in the same tool placement. With LTI 1.3, you can no longer have both My Media and Media Gallery together in the course navigation as was possible with LTI 1.1. For more information, see section Canvas LTI tool placements.



Kaltura has built LTI 1.3 support into KAF, allowing you to upgrade from LTI 1.1 without changing existing media embeds created with the Kaltura Browse, Search, and Embed tool.

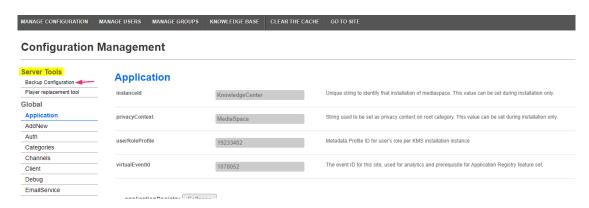
# **Prerequisites**

- A Kaltura administrator account
- A KAF instance for Canvas, minimum version 5.99.46
- A Canvas administrator account

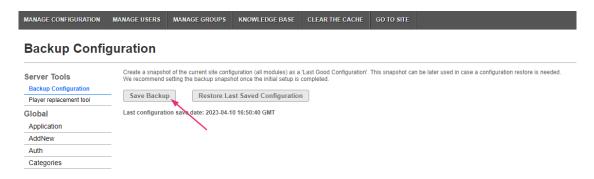
# Step 1 - Backup your KAF configuration

- 1. Log into your KAF Configuration Management console (https://{your\_KAF\_base\_URL}/admin).
- 2. Under Server Tools, click Backup Configuration.





3. On the Backup Configuration page, click **Save Backup**.



A confirmation message displays: *Are you sure you want to save current configuration? Remember that previous backups will be deleted.* 

4. Click Yes, Save.



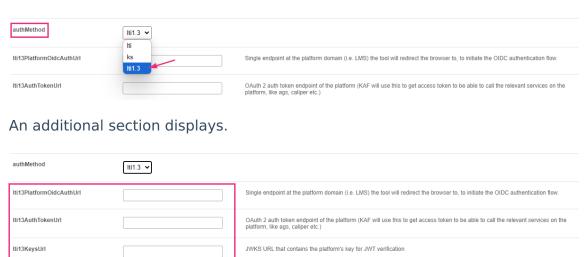
Once the backup is complete, you'll see a confirmation message: *Configuration file* was saved successfully.

The backup page will display the 'last configuration save date', which reflects the date when the configuration settings were last modified, not the date the backup was performed.

### Step 2 - Enable LTI 1.3

- 1. In your Configuration Management console, navigate to the Hosted module.
- 2. On the Hosted module page, locate the **authMethod** field and select **lti1.3** from the dropdown.





- 3. Configure the following fields:
- Iti13PlatformOidcAuthUrl =
   https://{your Canvas Domain}/api/lti/authorize redirect
- **Iti13AuthTokenUrl** = https://{your\_Canvas\_Domain}/login/oauth2/token
- Iti13KeysUrl = https://{your\_Canvas\_Domain}/api/lti/security/jwks
- 4. Scroll down to the LTI3service section and click Generate key pair here.



This generates the keys.

5. In the Certificate Generator window, click **Use** to have the key pairs saved to the **lti13ServicePrivateKey** and **lti13ServicePublicKey** fields.



6. Scroll to the bottom of the Hosted module page and click **Save**.



# Step 3 - Generate LTI developer key JSON

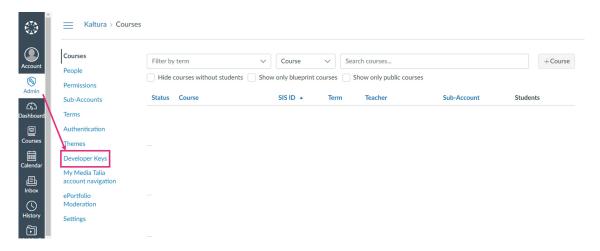
Enter the following URL in your browser: https://{your\_KAF\_URL}/canvas/config/createjson-for-instance Example: https://12345.kaf.kaltura.com/canvas/config/create-json-forinstance

If you're using a KAF domain other than .kaltura.com, make sure to use it as the input for your\_KAF\_URL.

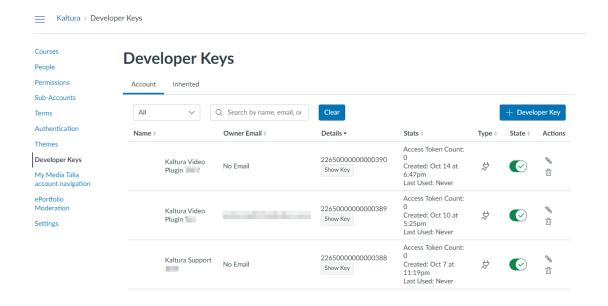
The JSON will be used in the next step to create the LTI developer key.

## Step 4 - Create LTI developer key

- 1. Log into your Canvas instance as an administrator.
- 2. Click the Admin tab.
- 3. Click the **Developer Keys** tab.

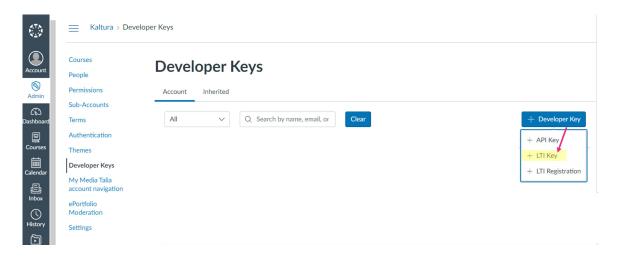


The **Developer Keys** page displays.

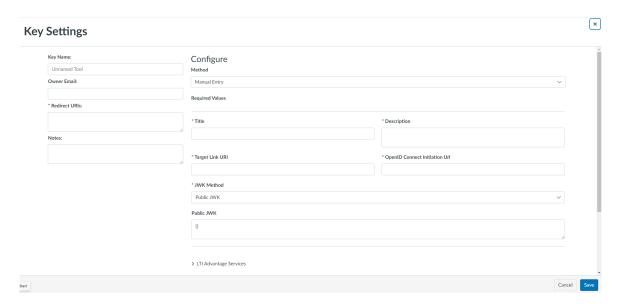




4. Click **+Developer Key** and select **+ LTI Key** from the drop-down list.



The **Key Settings** page displays.



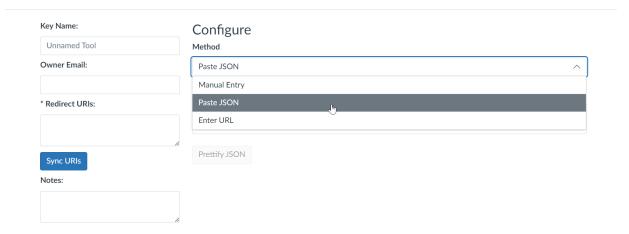
- 5. Configure the following:
- Key Name Enter 'Kaltura Video Plugin'.
- Owner email optional
- Redirect URIs Enter https://{your\_KAF\_URL}/hosted/index/oauth2-launch
   Example: https://12345.kaf.kaltura.com/hosted/index/oauth2-launch

⚠ If you're using a KAF domain other than .kaltura.com, make sure to use it as the input for your\_KAF\_URL.

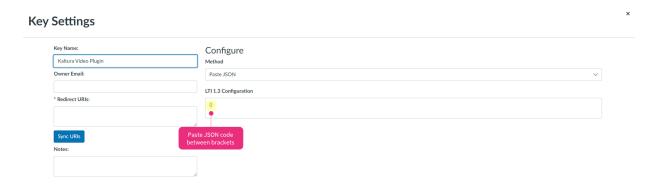
- Notes optional
- **Method** Select **Paste JSON** from the drop-down list.



## **Key Settings**

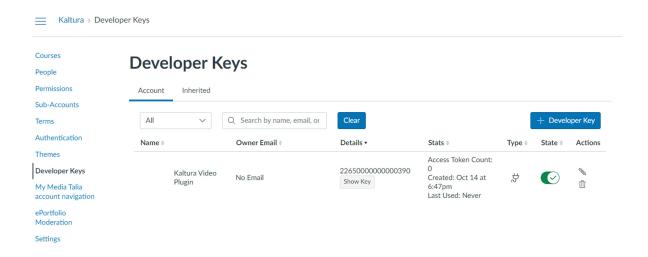


6. In the **LTI 1.3 Configuration** field, copy the JSON code from the previous section (Generate LTI Developer Key JSON) and paste it <u>between the brackets</u>.



7. Scroll down and click Save.

The new LTI developer key will now be listed on the Developer Keys page. If the **State** is set to off (red), it means the key is disabled. To enable the key, click the toggle (green).

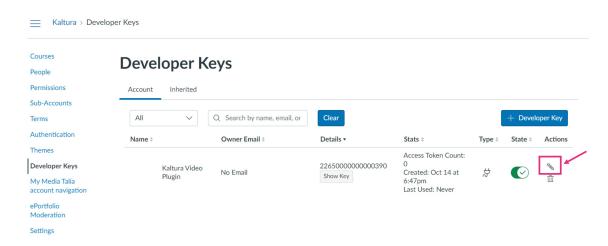




## Step 5 - Configure LTI developer key LTI advantage services

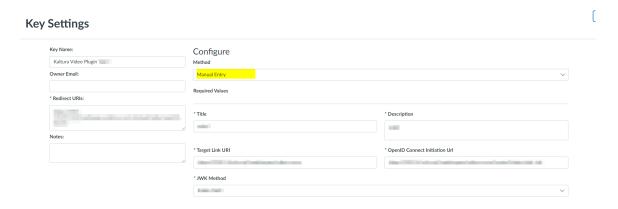
In order for the LTI developer key to work properly, certain LTI advantage services must be enabled.

1. Edit the LTI developer key you created by clicking on the **pencil icon** to the far right of the key.



The **Key Settings** page displays.

2. In the Method field, change to Manual entry.



3. Scroll down to the **LTI Advantage Services** section and click to expand the section.

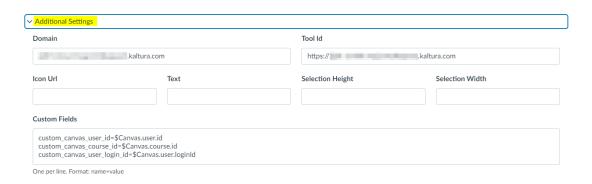


✓ LTI Advantage Services		
1	Services must be supported by the tool in order to work. Check with your Tool Vendor to ensure service capabilities.	
Ø	Can create and view assignment data in the gradebook associated with the tool.	
	Can view assignment data in the gradebook associated with the tool.	
	Can view submission data for assignments associated with the tool.	
<b>O</b>	Can create and update submission results for assignments associated with the tool.	
<b>O</b>	Can retrieve user data associated with the context the tool is installed in.	
<b>O</b>	Can update public jwk for LTI services.	
×	Can lookup Account information.	
×	Can view Progress records associated with the context the tool is installed in.	
×	Can view the content of a page the tool is launched from.	

- 4. Make sure the following **LTI Advantage Services** are turned on in addition to others that are enabled:
- Can create and view assignment data in the gradebook associated with the tool.
- Can view assignment data in the gradebook associated with the tool.
- Can view submission data for assignments associated with the tool.
- Can create and update submissions for assignments associated with the tool.
- Can retrieve user data associated with the context the tool is installed in.
- Can update publish jwk for LTI services.
- 5. Click **Save** if you have made any changes.

# Step 6 - Confirm values in the LTI developer key additional settings

1. Click **Additional Settings** to expand the section.



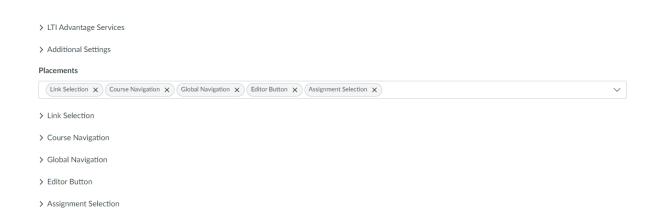
- 2. Review the following fields:
- Domain your KAF domain without the https://
- Tool Id your KAF URL including https://
- Icon Url, Text, Selection Height, Selection Width leave blank
- **Custom Fields** include the following three custom parameters:
  - custom\_canvas\_user\_id=\$Canvas.user.id



- custom\_canvas\_course\_id=\$Canvas.course.id
- custom\_canvas\_user\_login\_id=\$Canvas.user.loginId

#### Step 7 - Confirm or edit LTI developer key placement settings

⚠ Clicking on the bubble in the placements box will delete the placement. To edit a placement, click on the icon to the left of each placement listed.



Canvas only allows each placement to be used once per developer key. The JSON file generated by Kaltura includes five placements.

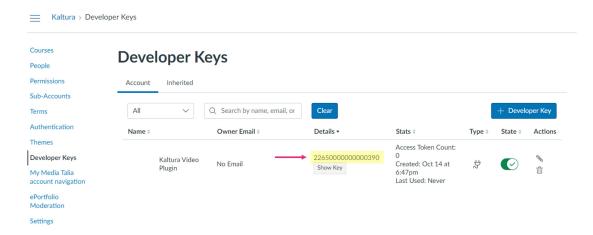
Review and edit the **Text** field for each tool placement as needed:

- **Link Selection**: For the Kaltura Browse Search and Embed tool, used to create video pages.
- Course Navigation: For the Kaltura Course Media Gallery.
- **Global Navigation**: For the Kaltura My Media tool in the global left-hand navigation.
- **Editor Button**: For the Kaltura Browse Search and Embed tool in the Canvas Rich Content Editor.
- Assignment Selection: For the Kaltura Interactive Video Quiz in the Canvas Assignment tool.

# Step 8 - Set the 'Iti13ClientID' value for the LTI developer key

- In Canvas, navigate to the Developer Keys page
   (https://{your\_Canvas\_base\_URL}/accounts/1/developer\_keys)
- On the **Developer Keys** page, locate the listing for the developer key you created in Step 4 - Create LTI Developer Key and copy the **Client ID** from the **Details** column.





- Log into your Configuration Management page (https://{your\_KAF\_base\_URL}/admin).
- Navigate to the Hosted module (https://{your KAF base URL}/admin/config/tab/hosted).
- 5. Scroll down to the **Iti13ClientID** field and paste in the **Client ID**.



6. Scroll to the bottom of the Hosted module and click **Save**.

# Step 9 - Configure the Kaltura user ID value

The default Kaltura User ID is your Canvas User ID, which is often the same as the user's email address. If your organization uses a different value for User IDs, please refer to Configuring the Kaltura User ID Value to Use with Your LMS Integration before proceeding.

With the Kaltura LMS integration, user ID records are passed from the LMS to Kaltura during the LTI Launch. When using LTI 1.3 authentication, admins can configure which LTI attribute to use for the user ID in the KAF Hosted module.

Kaltura uses a custom parameter in Canvas to store the User ID value. To set this up:

- Log into your Configuration Management page (https://{your\_KAF\_base\_URL}/admin).
- Navigate to the Hosted module (https://{your\_KAF\_base\_URL}/admin/config/tab/hosted).
- 3. Scroll down to the **ltiUserIdAttribute** setting.



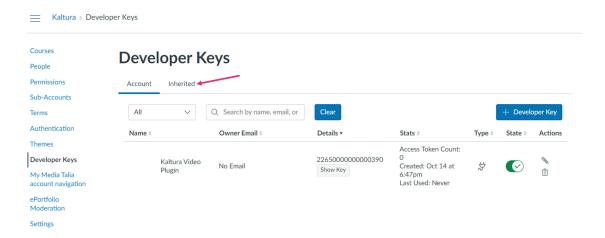
- 4. Set ItiUserIdAttribute to custom\_canvas\_user\_login\_id.
- 5. Scroll to the bottom of the Hosted module and click **Save**.

## Step 10 - Set the API developer key

#### Option 1 - Inherited API Key

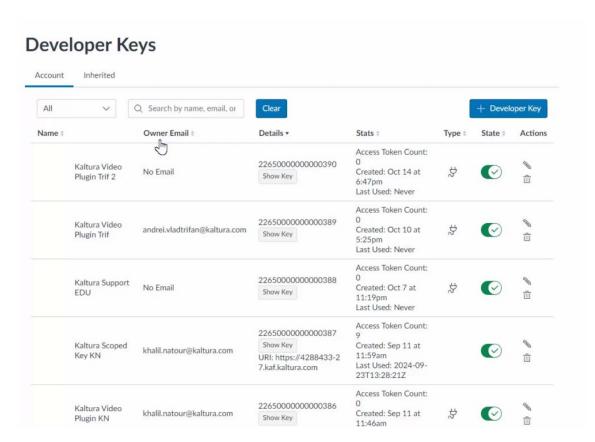
: If your KAF domain is on \*.kaltura.com, you can use the existing inherited Kaltura key without creating a new API key. You may, however, prefer to use a Scoped API Developer Key. In that case, jump to **Option 2** below.

- 1. Log into Canvas as an administrator.
- 2. Navigate to the Developer Keys page.
- 3. On the **Developer Keys** page, click the **Inherited** tab.



4. Scroll down and click Show All Keys.

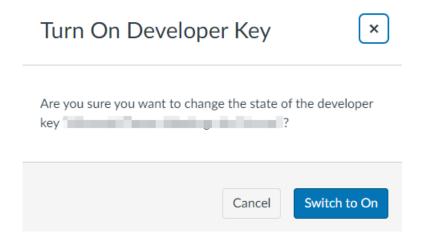




5. Scroll to the listing for the Kaltura key and click the toggle to enable it.



6. A confirmation message displays: *Are you sure you want to change the state of the developer key [name]?* 



7. Click **Switch to On**. When the key is enabled, it turns green.



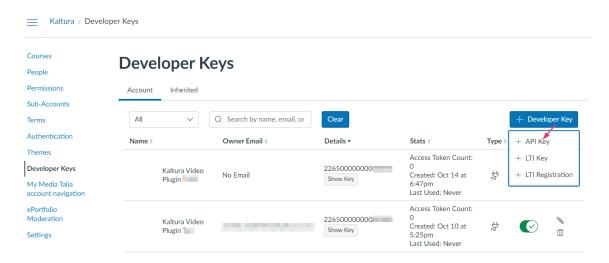


Go to Step 12 - Add Kaltura tools.

#### Option 2 - Scoped API developer key

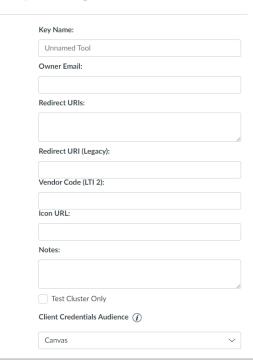
: If your KAF domain is not on \*.kaltura.com, or you prefer added security, you'll need to create a Scoped API Developer Key.

- 1. Log into Canvas as an administrator.
- 2. Navigate to the Developer Keys page.
- 3. On the **Developer Keys** page, click on **+ Developer Key** and select **+ API Key** from the drop-down list.



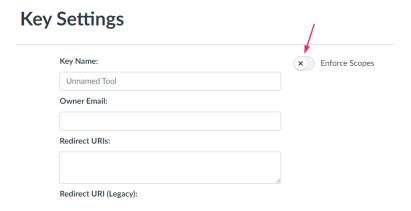
The **Key Settings** page displays.

## **Key Settings**



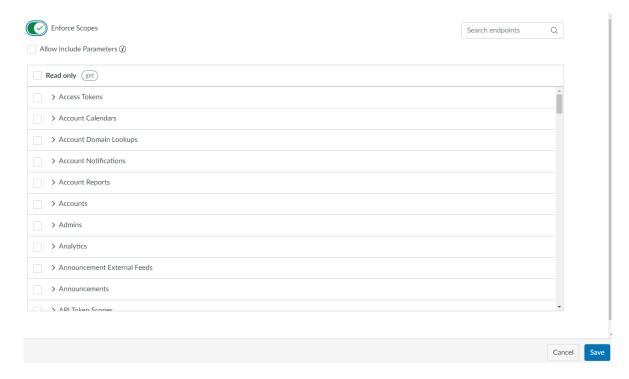


- 4. Enter the following:
  - Key Name 'Kaltura Scoped Key'
  - o Owner Email Optional
  - Redirect URLs Enter your KAF URL starting with https:// .Use your vanity domain if you have implemented one.
  - Redirect URL (Legacy) Enter your KAF URL starting with https:// .Use your vanity domain if you have implemented one (the value should be the same as used in the Redirect URLs field).
  - Vendor Code (LTI 2) Leave blank.
  - Icon URL Optional
  - Notes Optional
  - **Test Cluster Only** Leave unchecked.
  - Client Credentials Audience Canvas should be selected.
- 5. Scroll to the top and click on **Enforce Scopes** to display all the available scopes.



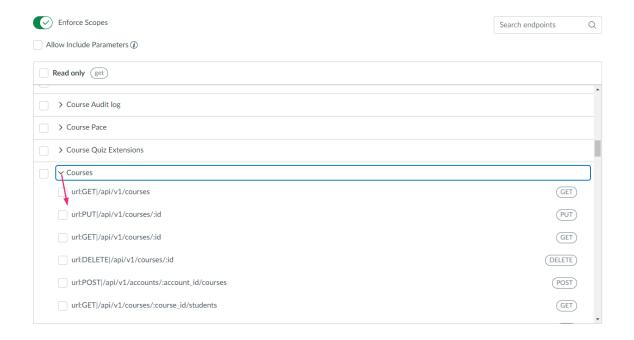
The Enforce Scopes section expands.





#### Leave Allow Include Parameters unchecked

6. Scroll down to **Courses** and click to expand.



- 7. Check the following scopes:
  - url:GET|/api/v1/courses
  - url:GET|/api/v1/courses/:id

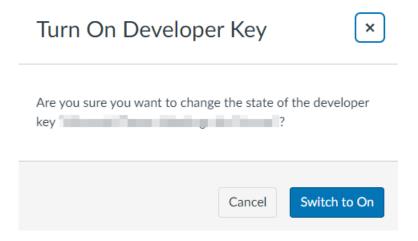




- 8. Click Save.
- 9. Click the toggle to enable the key.



A confirmation message displays: *Are you sure you want to change the state of the developer key [name]?* 

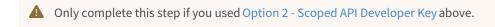


10. Click **Switch to On**. When the key is enabled, it's green.



# Step 11 - Set the API developer key in the Canvas module

The Iti13ClientID value in the Hosted module tells KAF which Canvas LTI developer key to connect to.



- Log into your Configuration Management page (https://{your KAF base URL}/admin).
- Navigate to the Canvas module (https://{your KAF\_base\_URL}/admin/config/tab/canvas).
- 3. In the useScopedKey field, set to 'Yes'.





This will expose the **customAppId** and **customAppKey** settings.

- 4. Fill in the **customAppId** and the **customAppKey** fields using the **Key ID** and the **Key for the API Developer Key** you created in Option 2 above. You can locate the keys as follows:
  - Navigate to the Developer Keys page and locate the Canvas API developer key you created.



- 5. Copy the Client ID and paste into the **customAppld** field in the Canvas module.
- Click Show Key, copy the key and paste it into the customAppKey field.



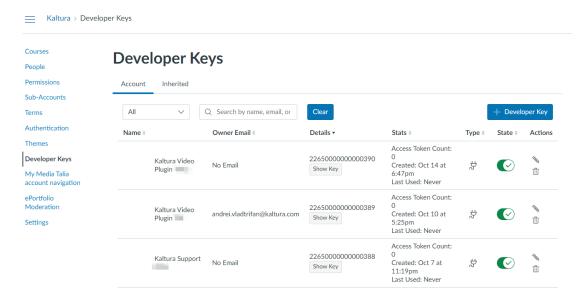
7. Scroll to the bottom of the Canvas module and click **Save**.

## Step 12 - Add Kaltura tools

Once you've completed the previous steps, you can add the Kaltura external tools.

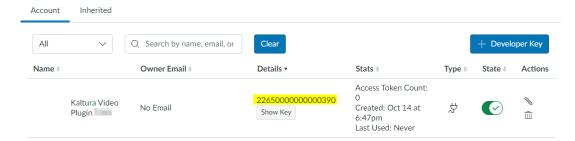


1. Log into Canvas as an administrator and navigate to the Developer Keys page.



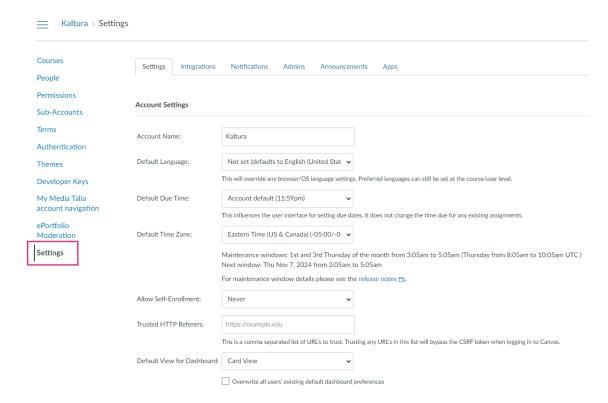
2. On the **Developer Keys** page, locate the LTI developer key you created and copy the **Client ID** from the **Details** column.

### **Developer Keys**



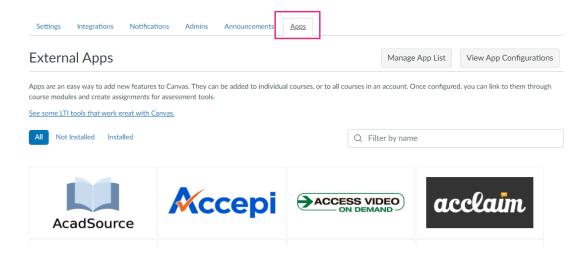
3. In the left-hand navigation, click the **Settings tab** (https://{your Canvas base URL}/accounts/1/settings#tab-settings).





The Settings page displays.

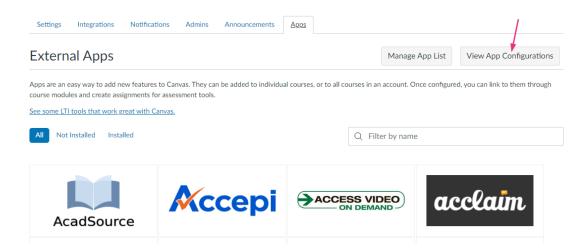
4. On the Settings page, click the **Apps** tab.



The External Apps page displays.

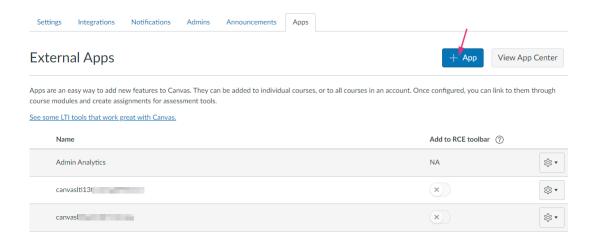
5. Click View App Configurations.





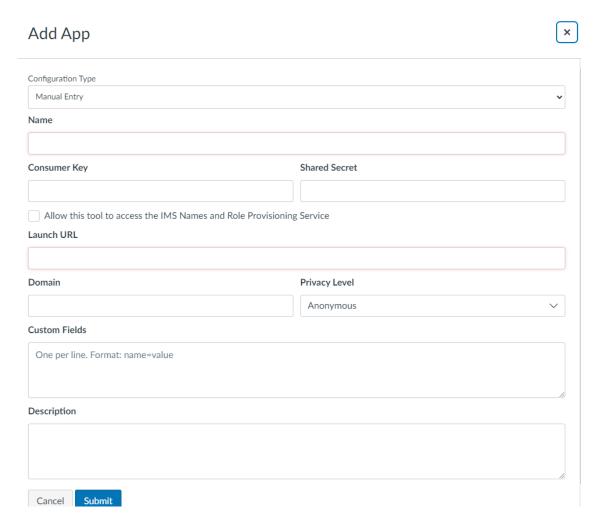
A list of apps displays.

### 6. Click +App.

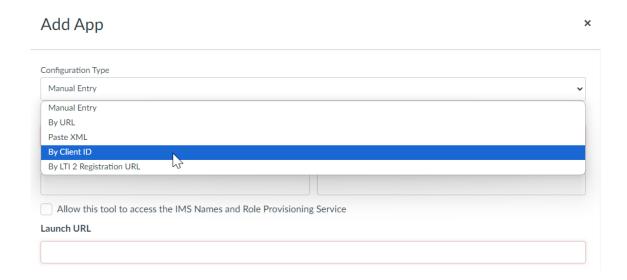


The **Add App** page displays.





7. Click on the **Configuration Type** drop-down menu and select **By Client ID**.



8. Paste the Client ID copied in Step 4 - Create LTI developer key into the **Client ID** field.



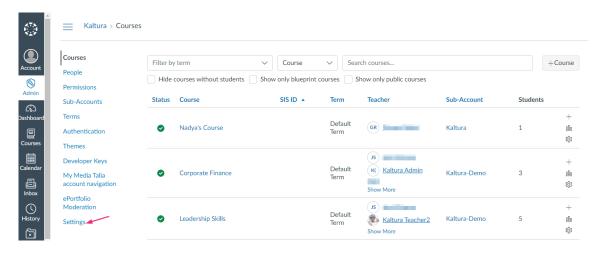


9. Click Submit.

## After the upgrade - Remove LTI 1.1 tools

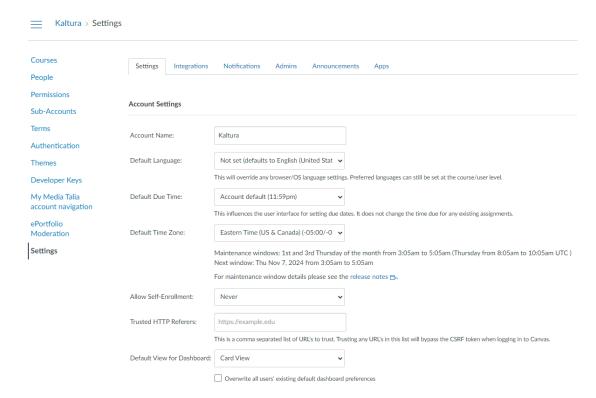
Once you've upgraded to LTI 1.3 and have tested the Kaltura LMS Integration, remove the old LTI 1.1 tools.

- 1. Log into Canvas as an administrator.
- 2. On the **Admin** tab in the navigation menu, select the account level where the Kaltura External Learning tools LTI 1.1 are installed.
- 3. In the left-hand navigation, click the **Settings** tab.

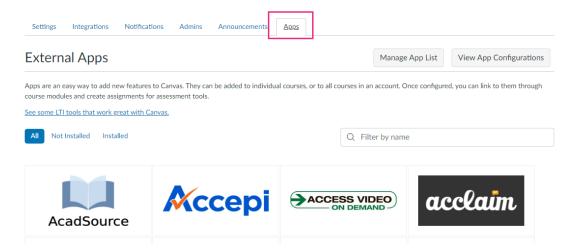


4. The **Settings** page displays.





#### 5. Click the **Apps** tab.

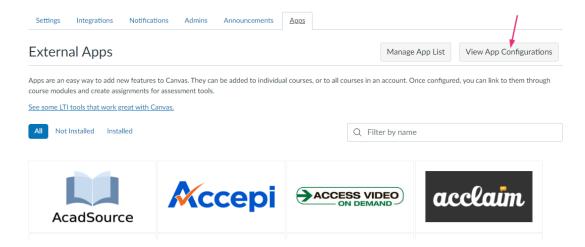


On the **External Apps** page, you'll see a list of the Kaltura External apps that have been implemented.

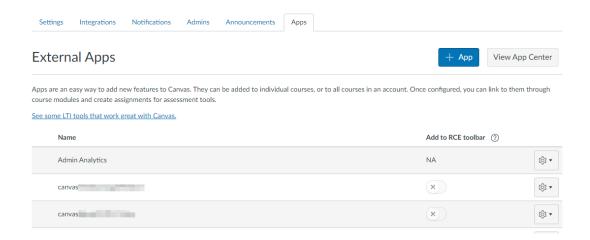
Your list may look different based on the external learning tools implemented at your institution and the name used when the tool was implemented.

#### 6. On the External Apps page, click View App Configurations.





The list of apps displays.



- 7. Find the Kaltura LTI 1.1 apps, click the gear icon next to each app, and select Delete.
- 8. Confirm the deletion in the pop-up message. The app and its placement will be removed.

# Canvas LTI tool placements

*Instructure* provides multiple placements for external tools in Canvas. The recommended Kaltura placements align with those used in earlier LTI versions. Note that placement limitations may apply depending on where the Kaltura tools are added within the Canvas account structure (account, sub-account, course). See Step 12 - Add Kaltura tools.

Below is an example of **My Media** and **Media Gallery** in a Canvas navigation menu.



