

## Kaltura LMS Integration for Canvas (LTI 1.3) at the sub-account level

Last Modified on 12/10/2024 11:49 am IST



This article is designated for administrators.

#### **About**

This guide explains how to add the Kaltura LMS Integration for Canvas with LTI version 1.3 at the sub-account level. For more information on hierarchical structure of Canyas accounts, click here.

The integration uses a set of LTI external tools, manually added through LTI Developer Keys in Canvas. The keys are populated using a JSON block to enable the LTI Tool Provider and configure tool placements within Canvas.

#### Canvas LTI tool placement restrictions

When adding third-party applications at the sub-account level, the following restrictions apply:

- 1. **Global navigation** placement is not available for sub-account-level applications.
- 2. A Canvas LTI Developer Key supports only **one** tool placement.

These limitations affect the placement of Kaltura's My Media and Media Gallery tools in Canvas. This guide outlines Kaltura's recommended approach to address these restrictions, which includes creating two LTI Developer Keys and one LTI API Key in Canvas.

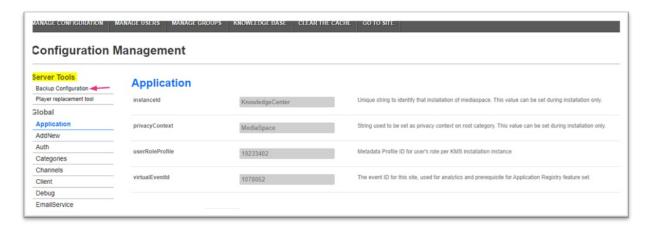
# **Prerequisites**

- 1. Kaltura administrator account
- 2. KAF instance for Canvas, minimum version 5.99.46
- 3. Canvas administrator account

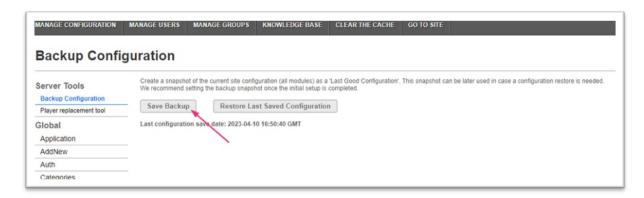
# Step 1 - Backup your KAF configuration

- 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 in KAF

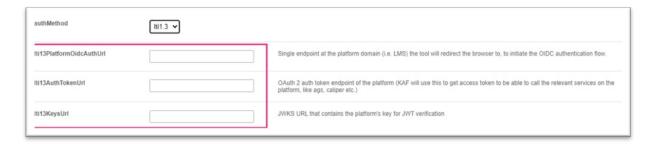
- 1. In your Configuration Management console, navigate to the Hosted module.
- 2. On the Hosted module page, locate the **authMethod** field and select **Iti1.3** from



the dropdown.



An additional section displays exposing the Kaltura LTI 1.3 configuration settings.



3. Configure the following fields:

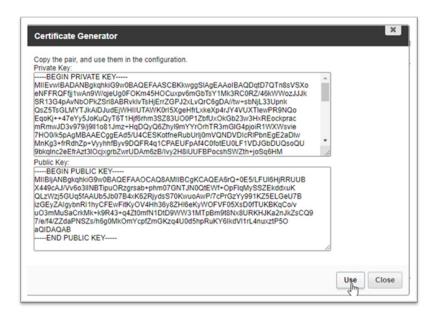
: The value for "your\_Canvas\_Domain" will be the domain displayed when a user is working in your Canvas instance, for example, canvas.myuniversity.edu.

- 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** to generate private and public keys.



5. In the Certificate Generator window, click **Use** to save the key pairs to the **Iti13ServicePrivateKey** and **Iti13ServicePublicKey** fields.





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

### Step 3 - Generate the Canvas LTI developer key JSON

A If you are using a KAF domain other than .kaltura.com, such as a vanity domain or alias, make sure to use it as the input for your\_KAF\_URL.

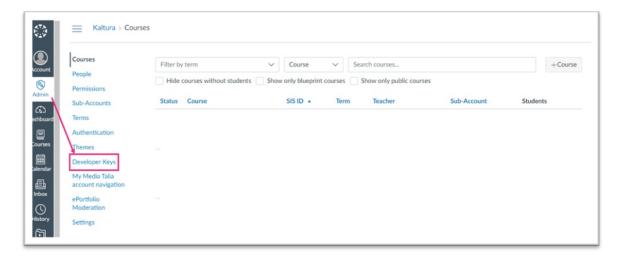
Enter the following URL in your browser:
 https://{your\_KAF\_URL}/canvas/config/create-json-for-instance.
 https://12345.kaf.kaltura.com/canvas/config/create-json-for-instance

The JSON that is displayed will be used in the next steps to populate the LTI 1.3 Configuration field in the LTI developer keys.

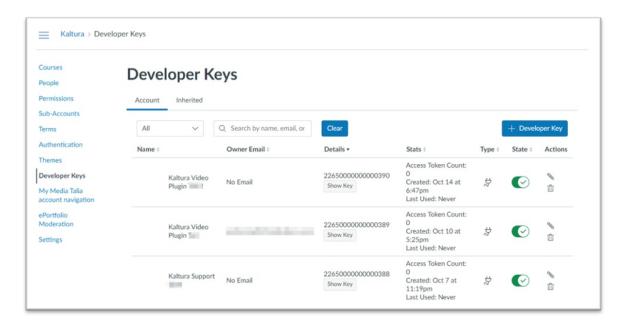
# Step 4 - Create a Canvas LTI developer key for all Kaltura tools except My Media

- 1. Log into your Canvas instance as an administrator.
- 2. Click the **Admin** tab.
- 3. In the Admin navigation panel click on the top-level account for your Canvas hierarchy.
- 4. In the Account navigation panel click the **Developer Keys** tab.

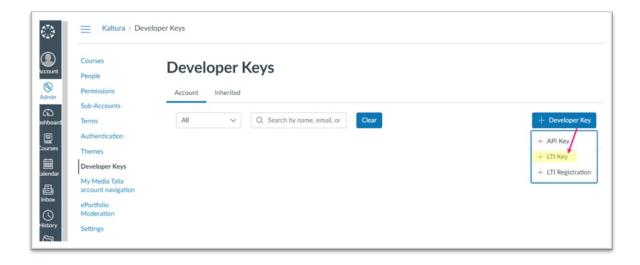




The **Developer Keys** page displays.

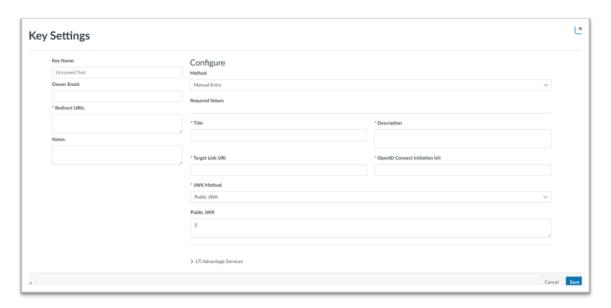


5. Click +Developer Key and select + LTI Key from the drop-down list.





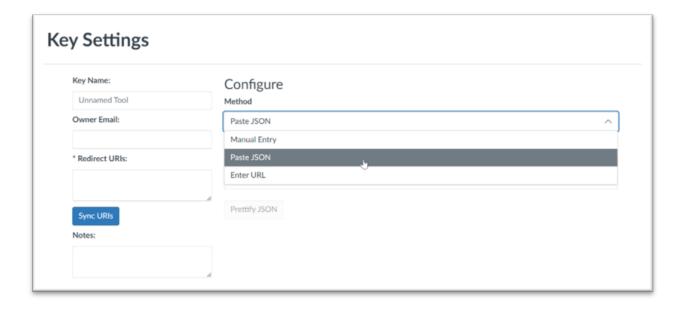
The **Key Settings** page displays.



- 6. Configure the following:
- Key Name Enter the key name (Example: Kaltura LTI 1.3 no My Media.
- Owner email optional
- Redirect URIs -Enter https://{your\_KAF\_URL}/hosted/index/oauth2-launch.
   Example: https://12345.kaf.kaltura.com/hosted/index/oauth2-launch

A If you are using a KAF domain other than .kaltura.com, such as a vanity domain or alias, make sure to use it as the input for your\_KAF\_URL.

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





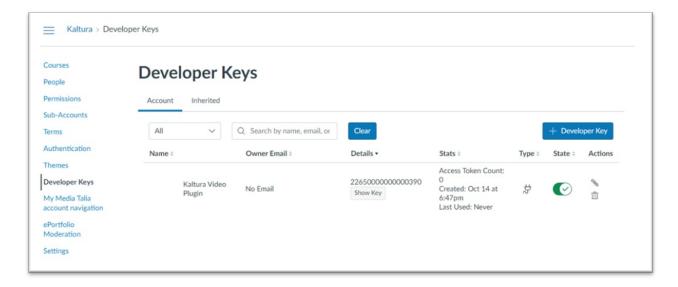
7. For the **LTI 1.3 Configuration** field, go to the browser tab used in Step 3 - Generate the Canvas LTI developer key JSON, and copy the JSON code between the first and last brackets { }, then paste it between the brackets in the LTI 1.3 Configuration field.

```
{
    "title": "Penn State University Testing",
    "scopes": [
        "https://purl.imsglobal.org/spec/lti-ags/scope/lineitem",
        "https://purl.imsglobal.org/spec/lti-ags/scope/lineitem.readonly",
        "https://purl.imsglobal.org/spec/lti-ags/scope/result.readonly",
        "
        "target link uri": "https://psudiscovery-test1.kaf.kaltura.com",
        "oids initiation url": "https://psudiscovery-test1.kaf.kaltura.com/hosted/index/oids-init"

Tohere
```

8. Scroll to the bottom of the page and click **Save**.

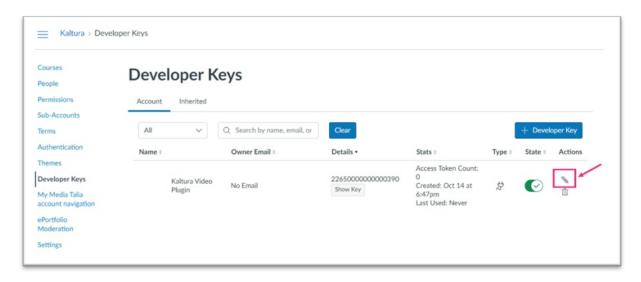
The new LTI developer key will now be listed on the Developer Keys page. If the **State** is set to off (red), it means the key is disabled. To enable the key, click the toggle (green).



# Step 5 - Configure the Kaltura LTI 1.3 – no My Media LTI developer key

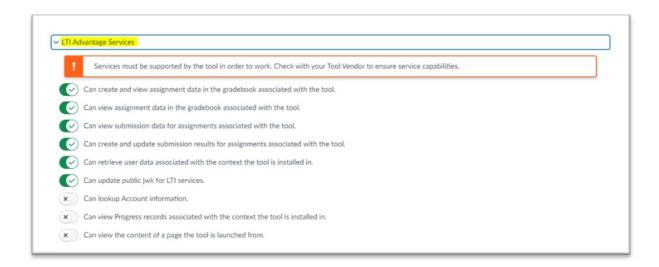
1. Edit the LTI developer key you created in Step 4 by clicking on the **pencil icon** to the far right of the key.





The **Key Settings** page displays.

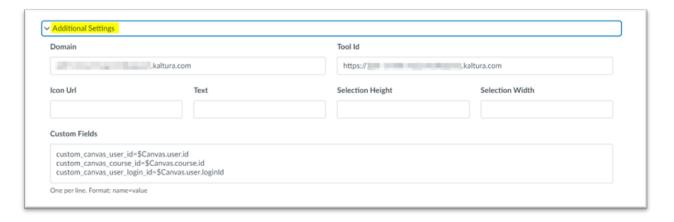
- 2. In the **Method** field, change to **Manual entry**
- 3. Update the Title field.
- 4. Update the **Description field.**
- 5. Scroll down to the **LTI Advantage Services** section and click to expand the section.



- 6. 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.



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



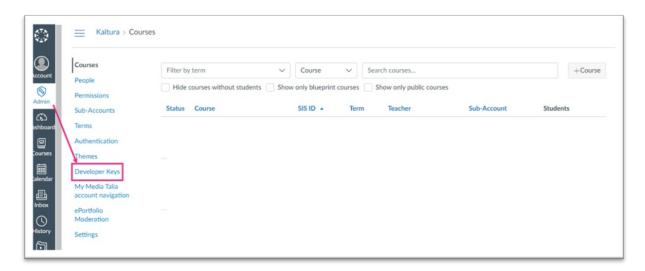
- 8. Review the following fields:
  - Domain your KAF domain without https://
  - Tool Id your KAF URL including https://
  - Icon Url, Text, Selection Height, Selection Width leave blank
  - Custom Fields Include the following three custom parameters
    - custom\_canvas\_user\_id=\$Canvas.user.id
    - custom\_canvas\_course\_id=\$Canvas.course.id
    - custom canvas user login id=\$Canvas.user.loginId
- 9. Remove the Global Navigation Placement by clicking on the Global Navigation bubble.
- 10. 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.
  - **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.
- 11. Scroll to the bottom of the page and click **Save**.

# Step 6 - Create a Canvas LTI developer key for My Media

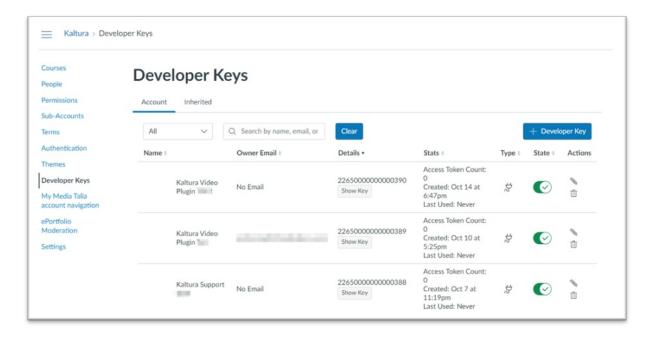
- 1. Log into your Canvas instance as an administrator.
- 2. Click the Admin tab.



- 3. In the Admin navigation panel click on the top-level account for your Canvas hierarchy.
- 4. In the Account Navigation panel click the **Developer Keys** tab.

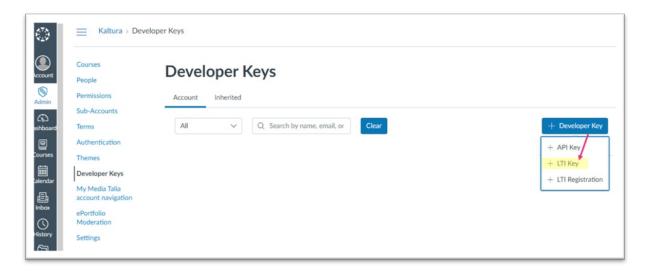


The **Developer Keys** page displays.

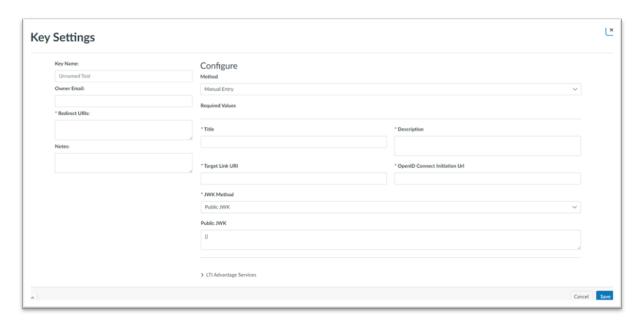


5. Click +Developer Key and select + LTI Key from the drop-down list.





#### The **Key Settings** page displays.



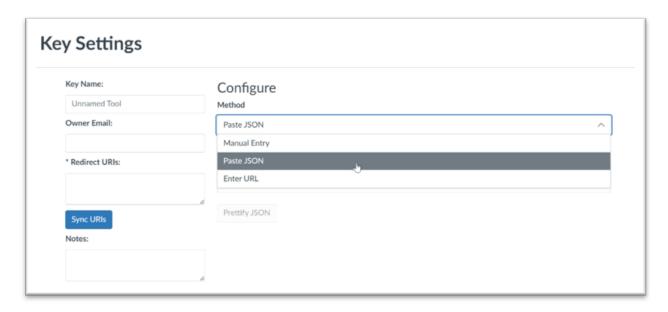
#### 6. Configure the following:

- **Key Name** Enter the key name, Example: Kaltura LTI 1.3 My Media only).
- 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 are using a KAF domain other than .kaltura.com, such as a vanity domain or alias, make sure to use it as the input for your\_KAF\_URL.

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





7. For the **LTI 1.3 Configuration** field, go to the browser tab used in Step 3 - Generate the Canvas LTI developer key JSON, and copy the JSON code between the first and last bracket { } and paste it between the brackets in the LTI 1.3 Configuration field.

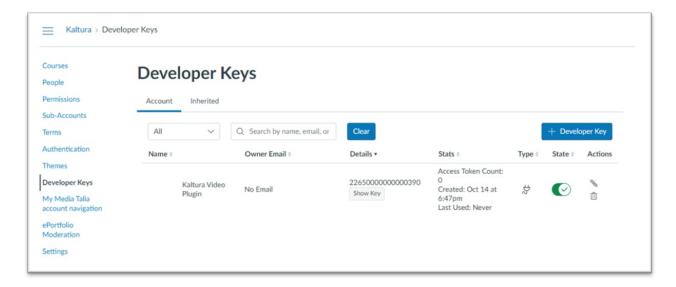
```
{
    "title": "Penn State University Testing",
    "scopes": [
        "https://purl.imsglobal.org/spec/lti-ags/scope/lineitem",
        "https://purl.imsglobal.org/spec/lti-ags/scope/lineitem.readonly",
        "https://purl.imsglobal.org/spec/lti-ags/scope/result.readonly",
        "https://purl.imsglobal.org/spec/lti-ags/scope/result.readonly",
        "target link uri": "https://psudiscovery-test1.kaf.kaltura.com",
        "oidc initiation url": "https://psudiscovery-test1.kaf.kaltura.com/hosted/index/oidc-init"

To here
```

8. Scroll to the bottom of the page and click **Save**.

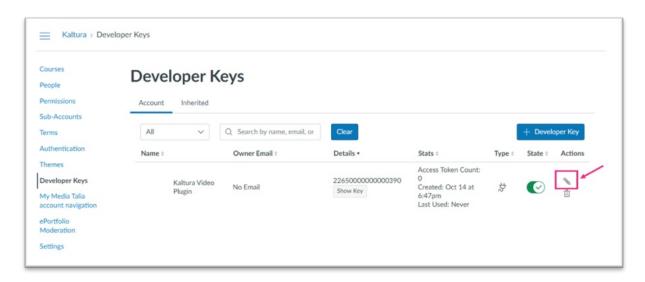
The new LTI developer key will now be listed on the Developer Keys page. If the **State** is set to off (red), it means the key is disabled. To enable the key, click the toggle (green).





# Step 7 - Configure the Kaltura LTI 1.3 - My Media only LTI developer key

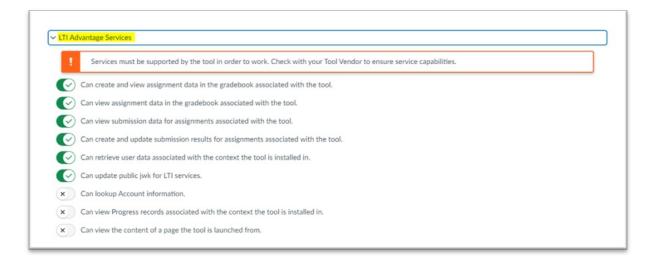
1. Edit the LTI developer key you created in Step 6 by clicking on the **pencil icon** to the far right of the key.



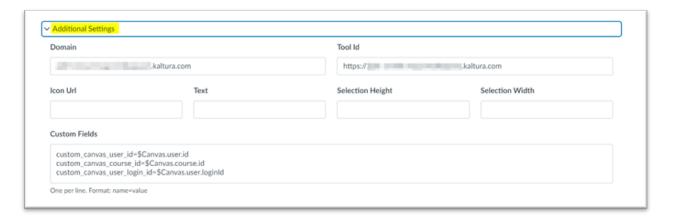
The **Key Settings** page displays.

- 2. In the **Method** field, change to **Manual entry**
- 3. Update the Title field.
- 4. Update the **Description field.**
- 5. Scroll down to the **LTI Advantage Services** section and click to expand the section.





- 6. 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.
- 7. Click **Additional Settings** to expand the section.



- 8. 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



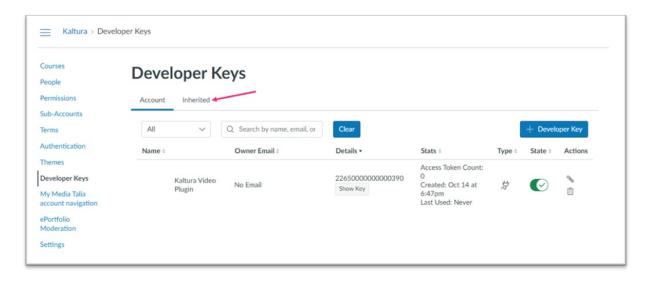
- custom canvas course id=\$Canvas.course.id
- custom canvas user login id=\$Canvas.user.loginId
- 9. Remove all the Placements except the Global Navigation Placement by clicking the placement bubbles.
- 10. Review and edit the **Text** field for the Global Navigation placement as needed:
  - Global Navigation: For the Kaltura My Media tool in the global left-hand navigation.
- 11. Scroll to the bottom of the page and click **Save**.

# Step 8 - Configure the Canvas API Developer Key

#### Option 1 - Inherited API Key

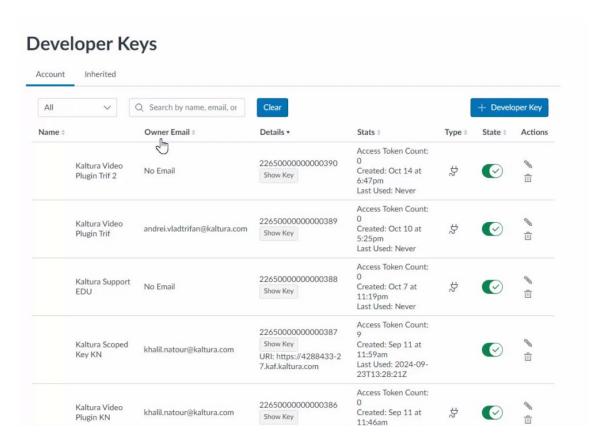
: If your KAF domain is on \*.kaltura.com, you can use the existing inherited Kaltura key without creating a new API key. You may, however, prefer to use a Scoped API Developer Key. In that case, jump to **Option 2** below.

- 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.



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



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



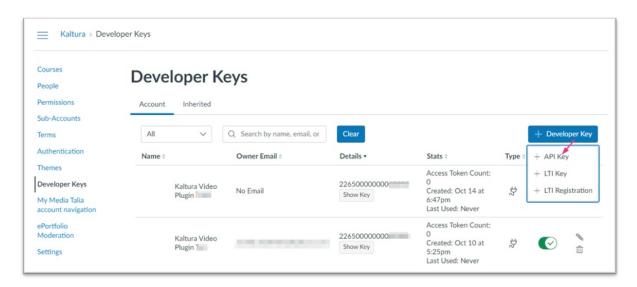
Continue to Step 9.



#### Option 2 - Scoped API developer key

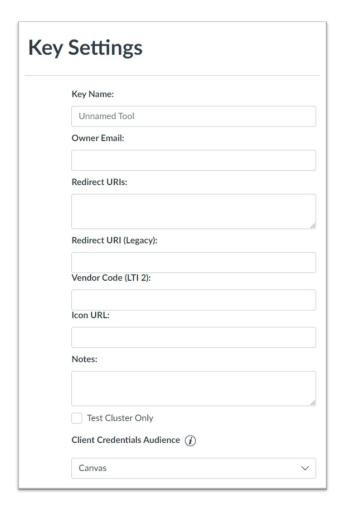
If your KAF domain is not on \*.kaltura.com, or you prefer added security, you'll need to create a Scoped API Developer Key.

- 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.



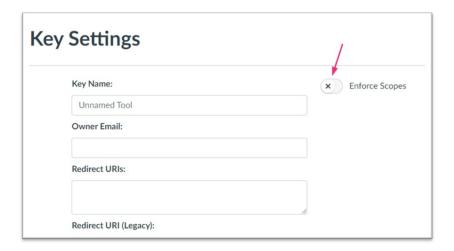
The **Key Settings** page displays.



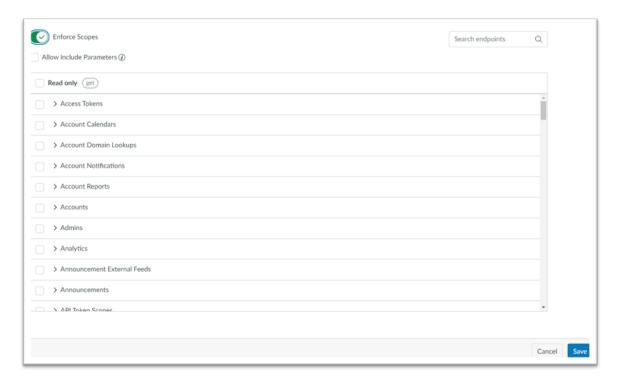


- 4. Enter the following:
  - Key Name Kaltura Scoped Key
  - Owner Email optional
  - Redirect URLs Enter your KAF URL starting with https:// .Use your vanity domain if you have implemented one.
  - Redirect URL (Legacy) Enter your KAF URL starting with https://.Use your vanity domain if you have implemented 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.





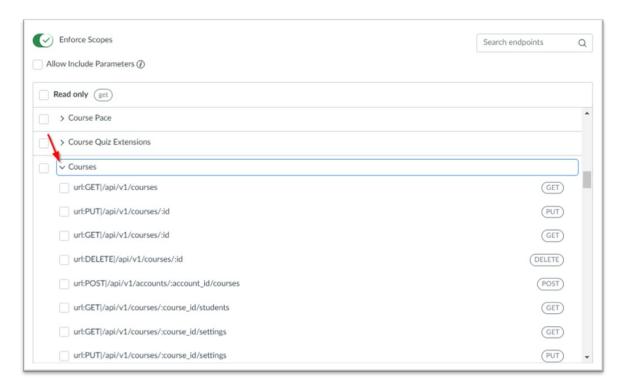
The Enforce Scopes section expands.



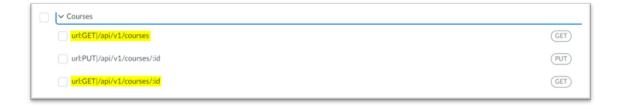
Leave Allow Include Parameters unchecked

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]?



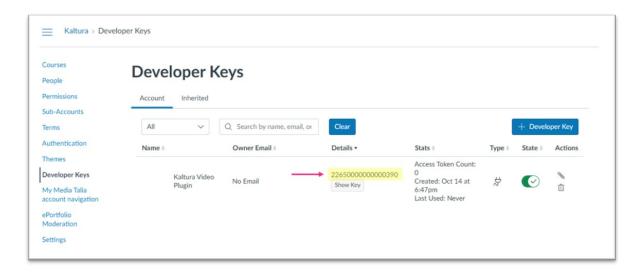


10. Click **Switch to On**. When the key is enabled, it's green.



## Step 9 – Add the LTI Developer Keys to your KAF

- In Canvas, navigate to the **Developer Keys** page (https://{your Canvas base URL}/accounts/1/developer keys).
- 2. On the **Developer Keys** page, locate the listing for the developer key you created in Step 4 Create a Canvas LTI developer key for all Kaltura tools except My Media and copy the **Client ID** from the **Details** column.



- Log into your KAF 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**.

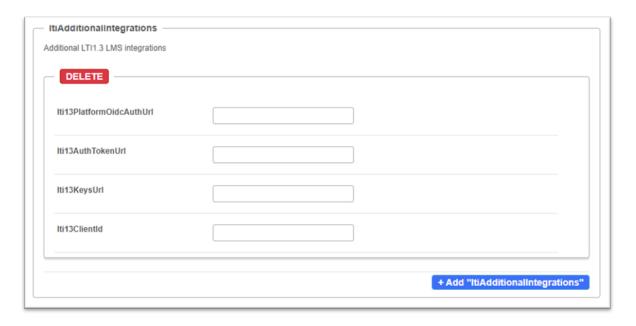




Scroll down to the **ItiAdditionalIntegrations** section and click on + Add "ItiAddditionalIntegrations"



- 7. Configure the following fields within the **ltiAdditionalIntegrations** section:
  - The value for "your\_Canvas\_Domain" will be the domain displayed when a user is working in your Canvas instance. Example. canvas.myuniversity.edu.
- 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



- 8. Return to the Canvas Developer Key page and locate the listing for the developer key you created in Step 6 Create a Canvas LTI developer key for the Kaltura My Media tool and copy the **Client ID** from the **Details** column.
- 9. Return to the Hosted module's **ItiAdditionalIntegrations** settings and paste in the



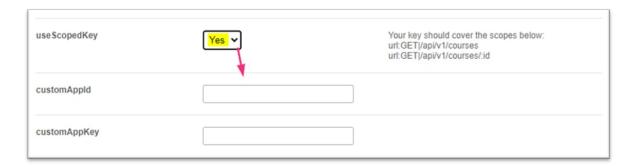
#### Client ID to the Iti13ClientId value.

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

## Step 10 - Add the API Developer Key to your KAF

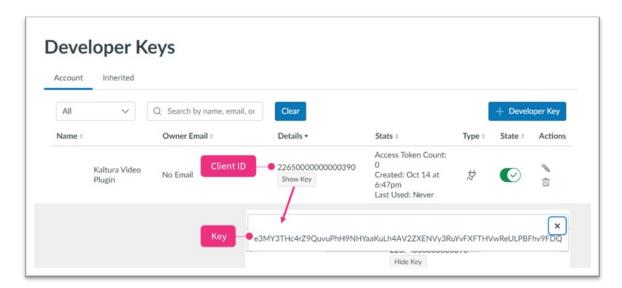
⚠ Only complete this step if you used Option 2 – Scoped API developer key above.

- Log into your KAF 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 by navigating to the Developer Keys page and locate the Canvas API developer key you created.





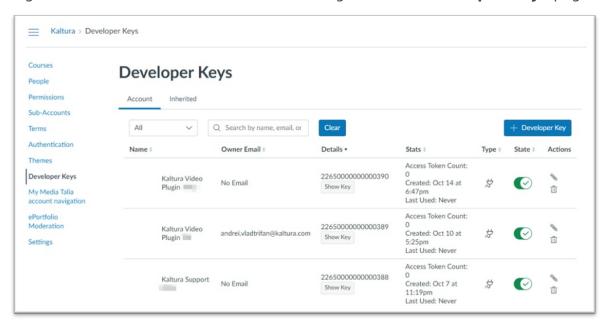
- 5. Copy the Client ID and paste into the **customAppld** field in the Canvas module.
- 6. Click **Show Key**, copy the key and paste it into the **customAppKey** field.



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

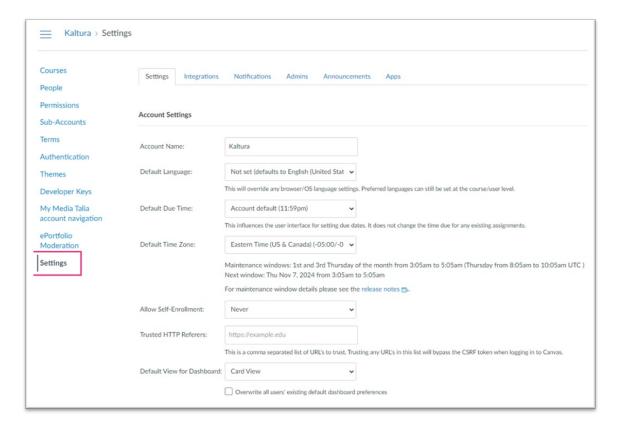
## Step 11 – Add the Kaltura Apps in your Canvas Sub-Account

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



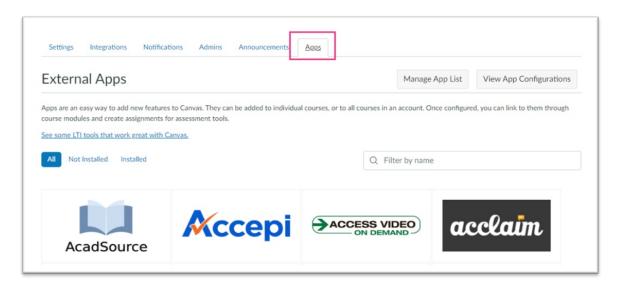
- 2. On the **Developer Keys** page, locate the Kaltura LTI 1.3 no My Media LTI Developer Key you created and copy the **Client ID** from the **Details** column.
- 3. In the Account navigation panel select **Sub-Accounts**, and then click on the Sub-account you want to add the Kaltura Apps to.
- 4. In the Sub-Account navigation panel scroll to the bottom and click on the **Settings** tab (https://{your Canvas base URL}/accounts/1/settings#tab-settings).





The Settings page displays.

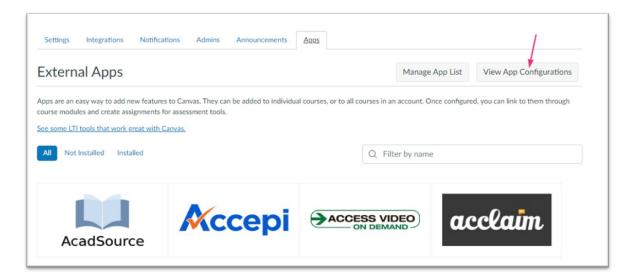
5. On the Settings page, click the **Apps** tab.



The External Apps page displays.

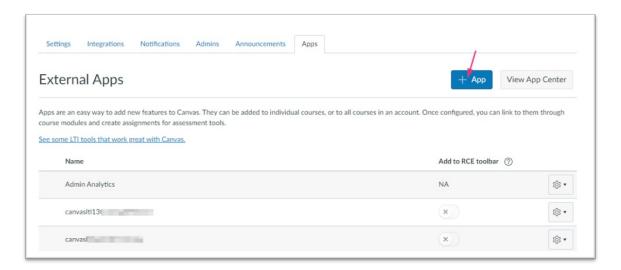
6. Click View App Configurations.





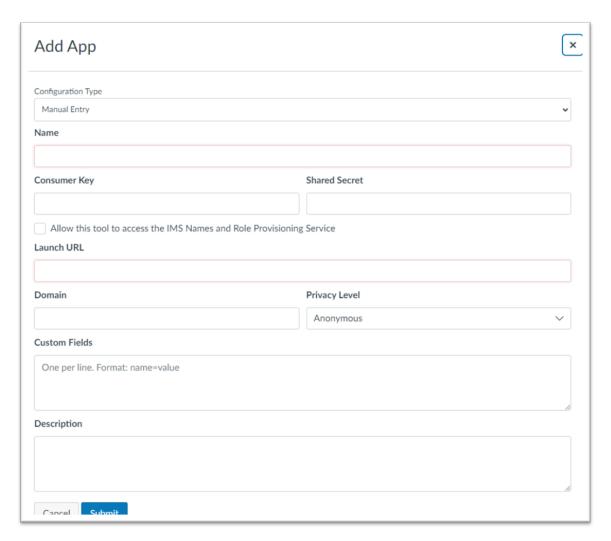
A list of apps displays.

#### 7. Click +App.

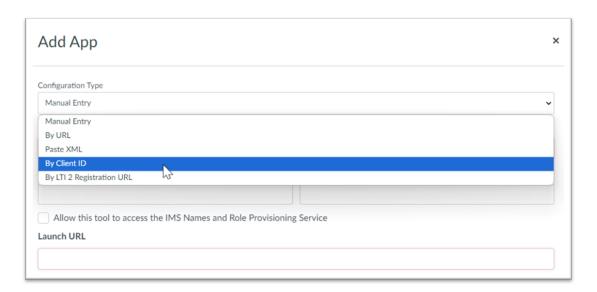


The Add App page displays.





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



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





- 10. Click Submit.
- 11. Return to the Canvas **Developer Keys** page, and locate the Kaltura LTI 1.3 My Media only LTI Developer Key you created and copy the **Client ID** from the **Details** column.
- 12. Repeat steps **3-10** of **Step 11**.

#### Step 12 - 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 KAF 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 **ItiUserIdAttribute** setting.
- 4. Set **ItiUserIdAttribute** to custom canvas user login id.



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