Set up the Kaltura LMS Extensions LTI 1.3 integration at the Canvas sub-account level

Content updated: 12/03/2024

This article is designated for administrators.

About

This article explains how to set up the **Kaltura LMS Extensions LTI 1.3 integration at the Canvas sub-account level**.

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

For more information on hierarchical structure of Canvas accounts, visit this Instructure article What is the hierarchical structure for Canvas accounts?

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 Scoped API Developer Key in Canvas.

Prerequisites

1. Kaltura administrator account
2. Kaltura LMS Video integration for Canvas, version 5.99.46 or later
3. Canvas administrator account

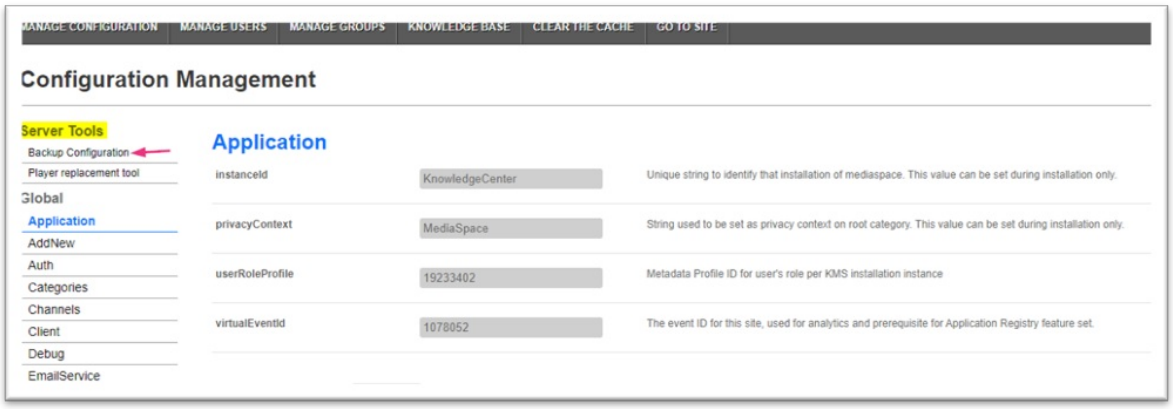
Step 1 - Backup your configuration

1. Log into your Configuration Management console

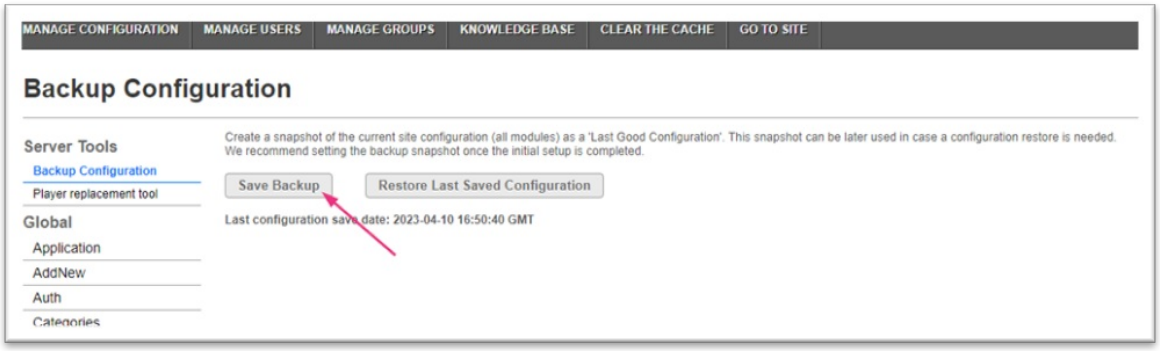
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(https://{your_KAF_base_URL}/admin).

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.

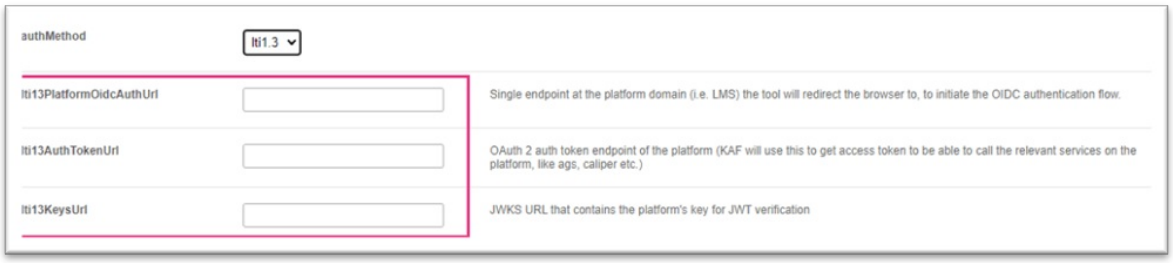
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Step 2 - Enable LTI 1.3

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.



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.

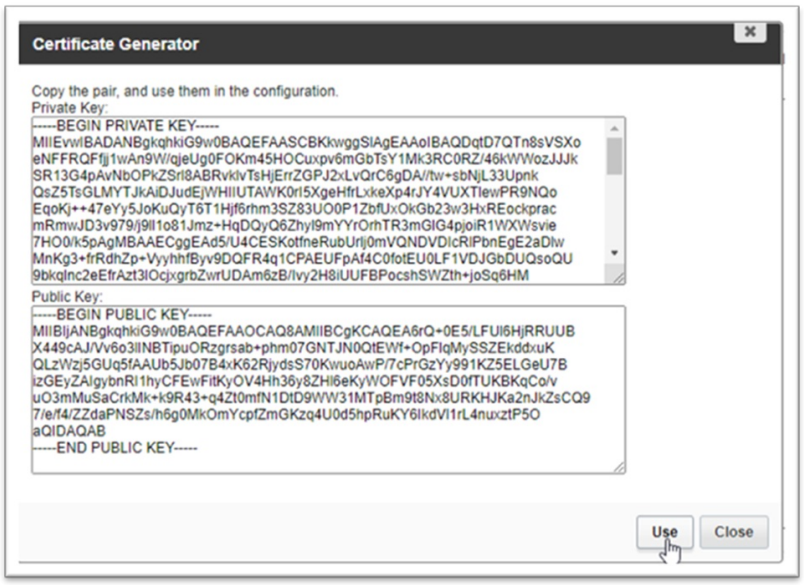
- **lti13PlatformOidcAuthUrl** = https://{your_Canvas_Domain}/api/lti/authorize_redirect
- **lti13AuthTokenUrl** = https://{your_Canvas_Domain}/login/oauth2/token
- **lti13KeysUrl** = https://{your_Canvas_Domain}/api/lti/security/jwks

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 **lti13ServicePrivateKey** and **lti13ServicePublicKey** fields.

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

Step 3 - Generate the Canvas LTI developer key JSON

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.

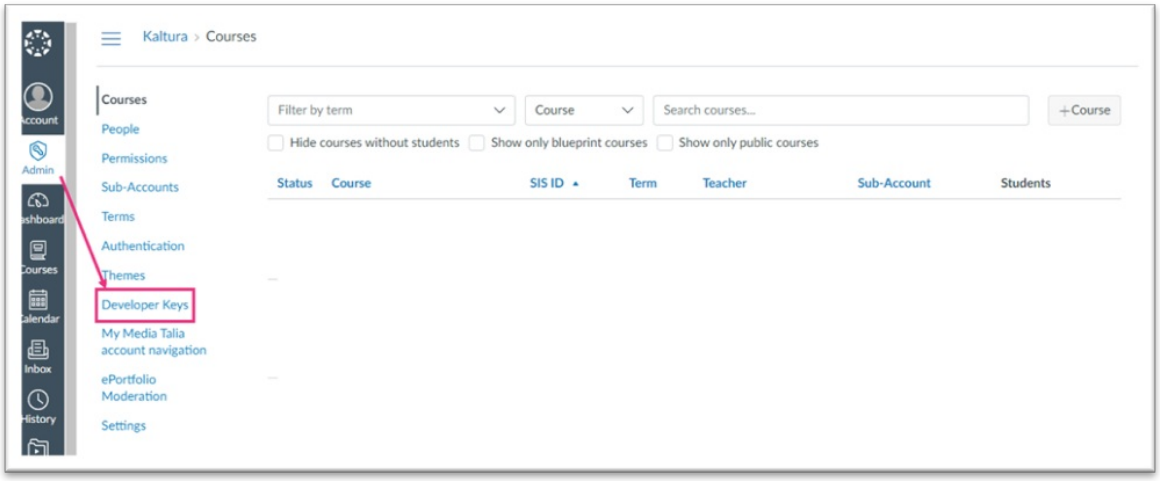
- Enter the following URL in your browser: https://{your_KAF_URL}/canvas/config/create-json-for-instance. Example: *https://12345.kaf.kaltura.com/canvas/config/create-json-for-instance*

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.

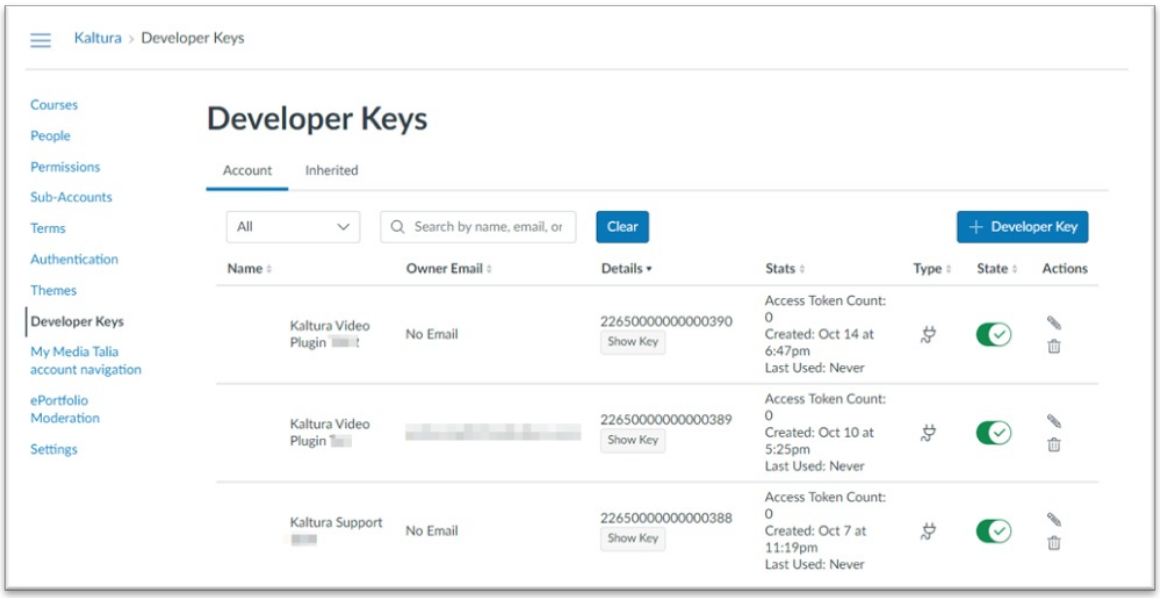
Step 4 - Create a Canvas LTI developer key for all Kaltura tools except My Media

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.

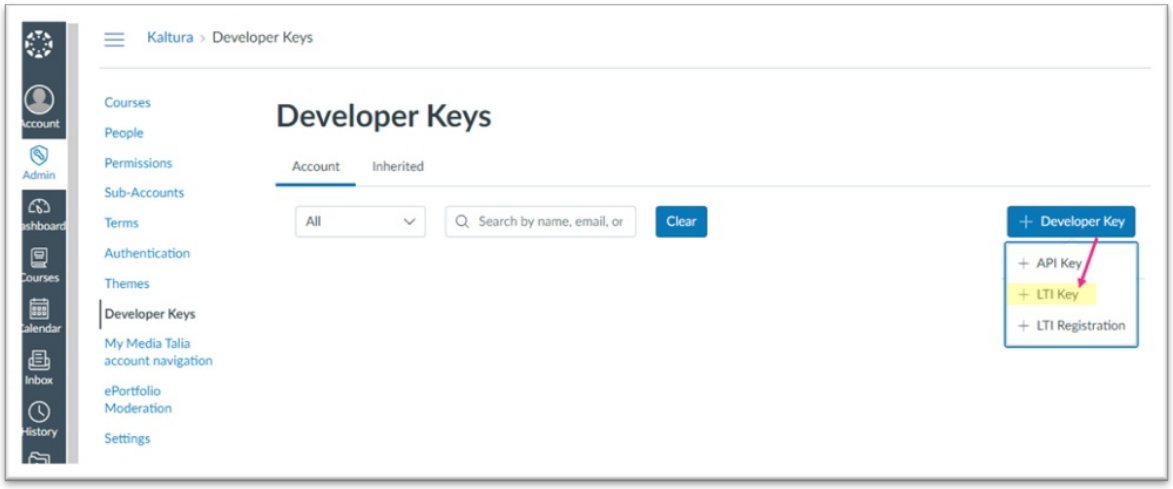
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The **Developer Keys** page displays.

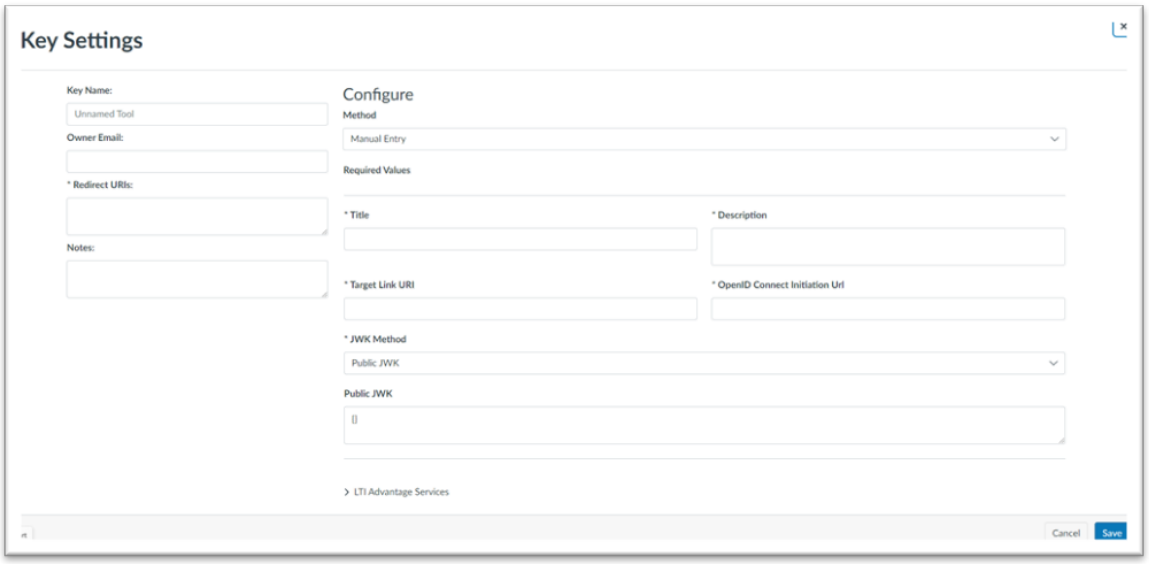


5. Click **+Developer Key** and select **+ LTI Key** from the drop-down list.



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The **Key Settings** page displays.



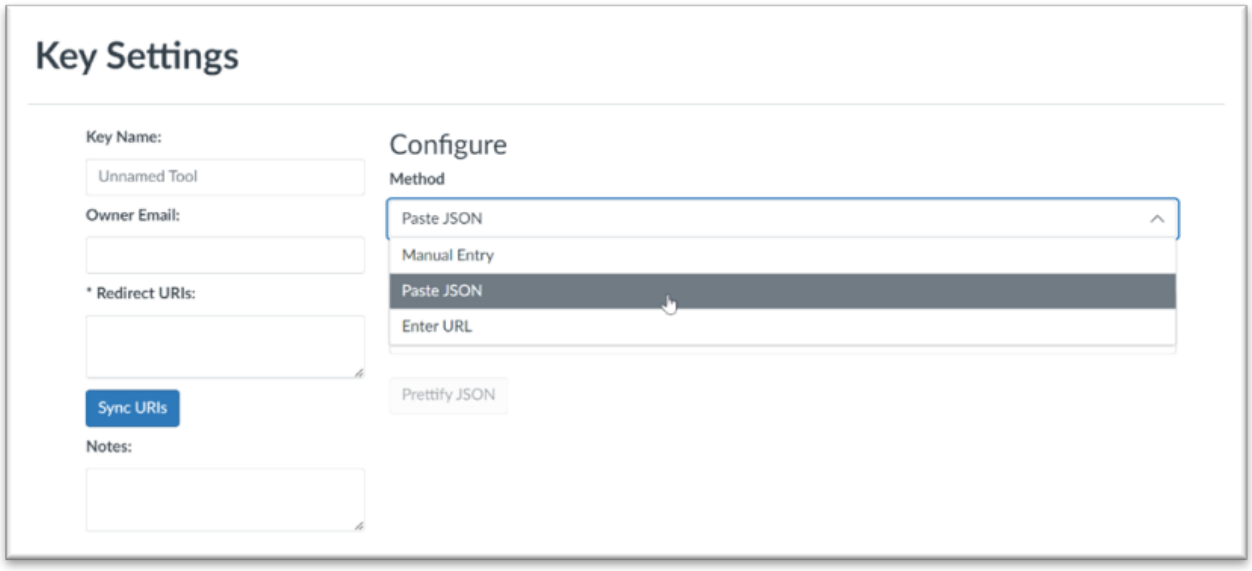
6. Configure the following:

- **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*

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.

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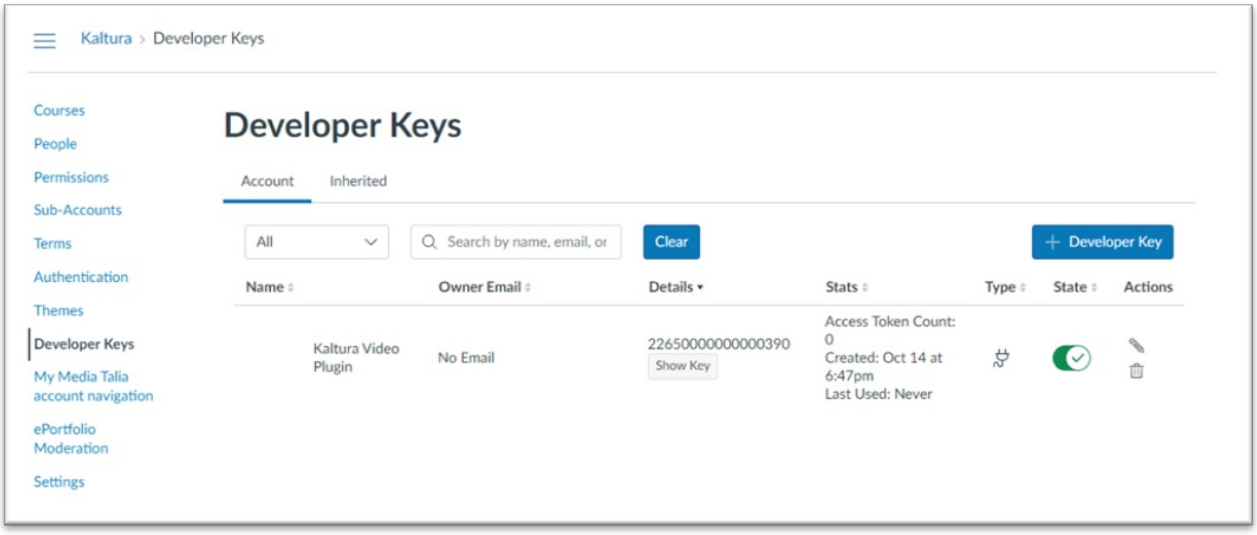
7. For the **LTI 1.3 Configuration** field, go to the browser tab used in Step 3 - Generate the Canvas LTI developer key JSON, and copy the JSON code between the first and last brackets { }, then paste it between the brackets in the LTI 1.3 Configuration field.



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

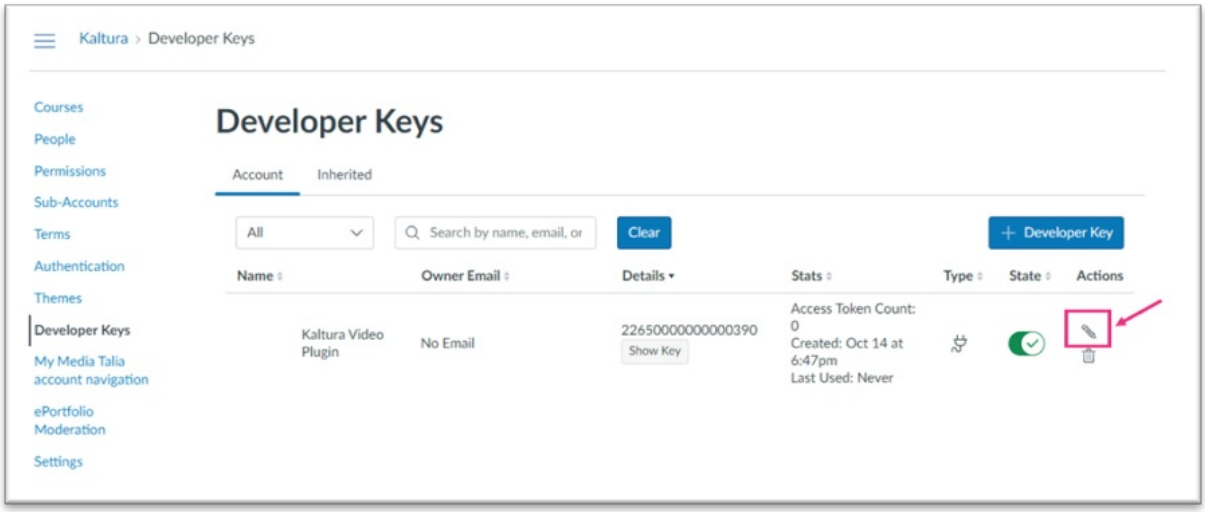
The new LTI developer key will now be listed on the Developer Keys page. If the **State** is set to off (red), it means the key is disabled. To enable the key, click the toggle (green).

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

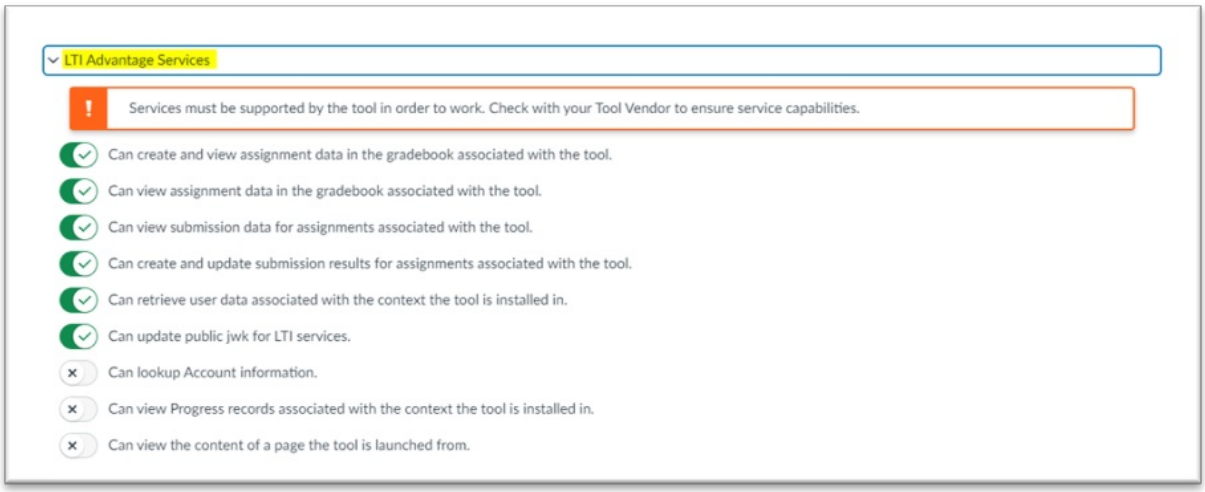
1. Edit the LTI developer key you created in Step 4 by clicking on the **pencil icon** to the far right of the key.



   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.

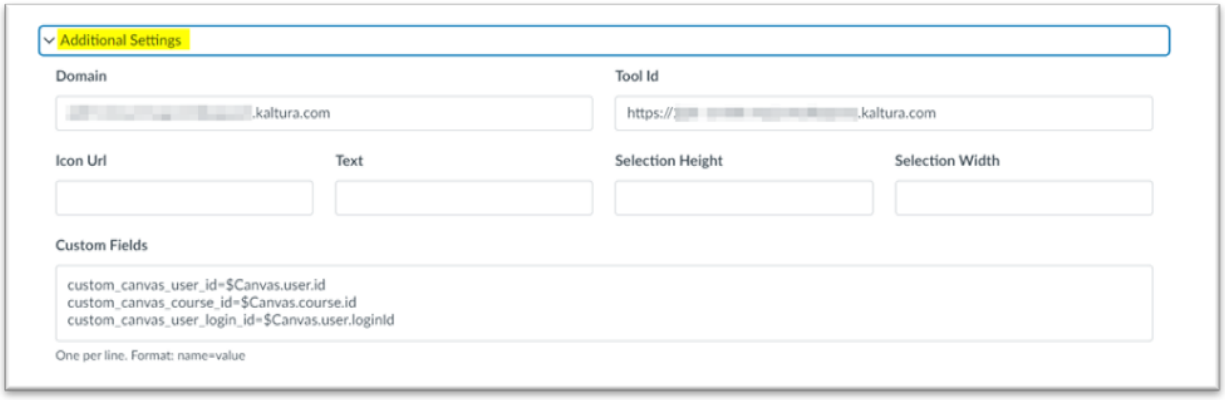
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6. Make sure the following **LTI Advantage Services** are turned on in addition to others that are enabled:

- *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`

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- `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.

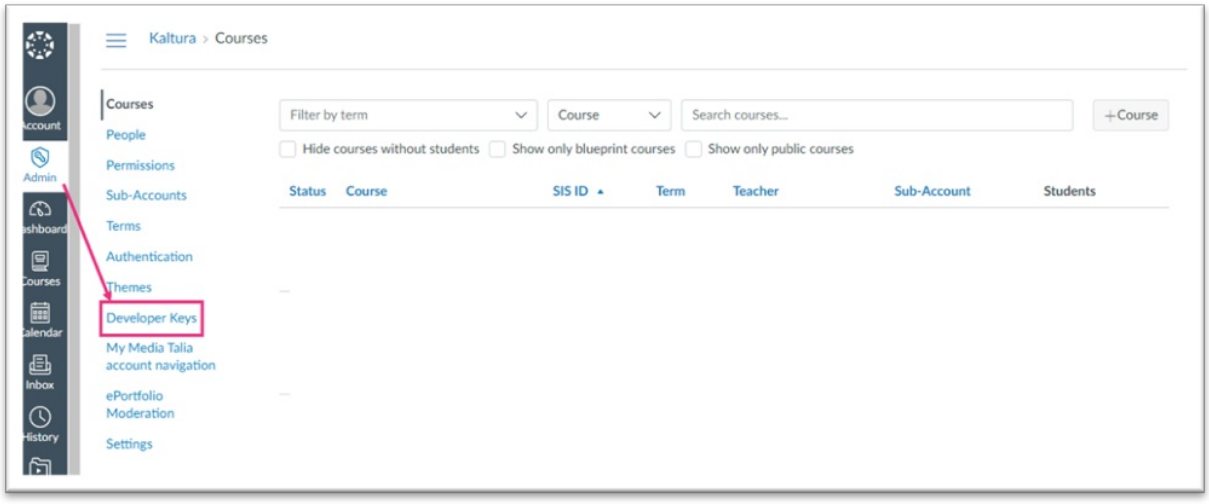
10. Review and edit the **Text** field for each tool placement as needed:

- **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**.

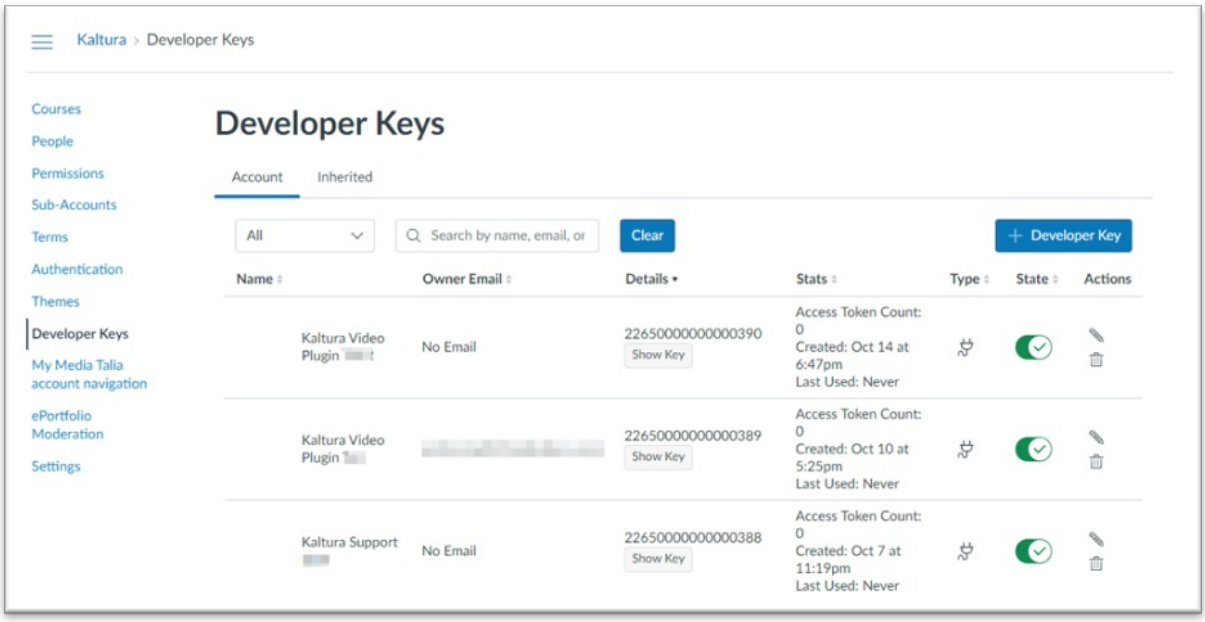
Step 6 - Create a Canvas LTI developer key for My Media

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.

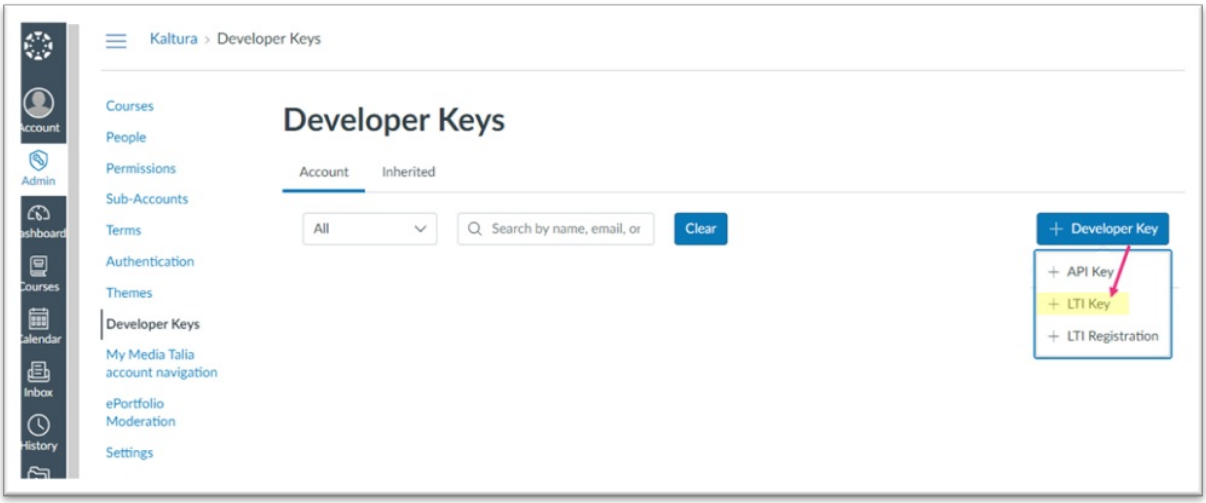


The **Developer Keys** page displays.

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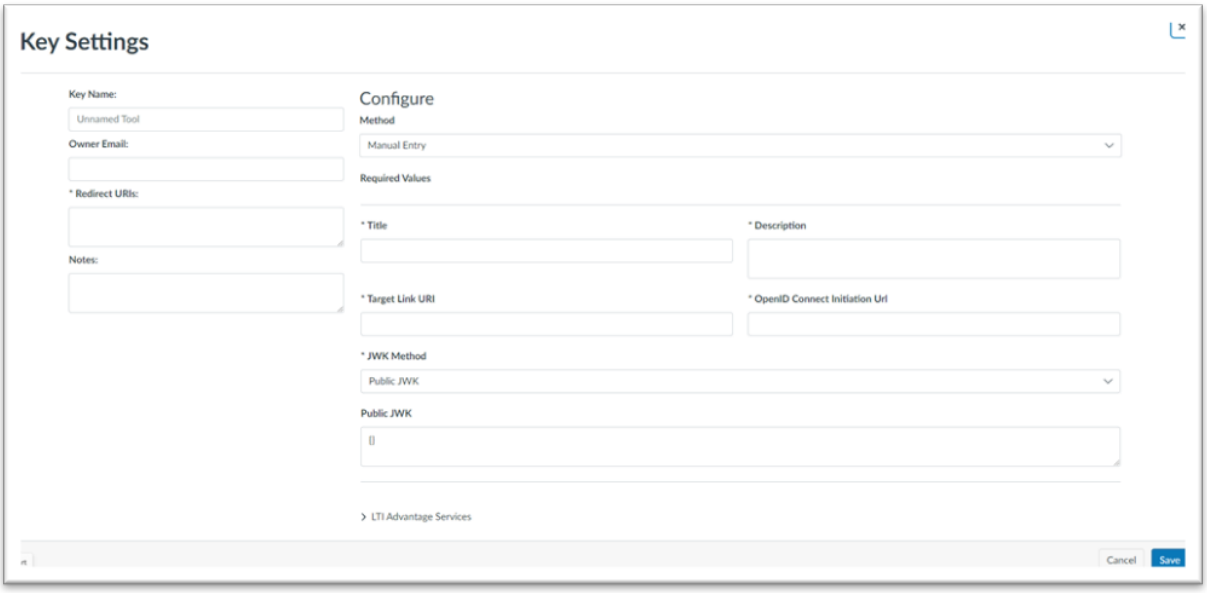


5. Click **+Developer Key** and select **+ LTI Key** from the drop-down list.



The **Key Settings** page displays.

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6. Configure the following:

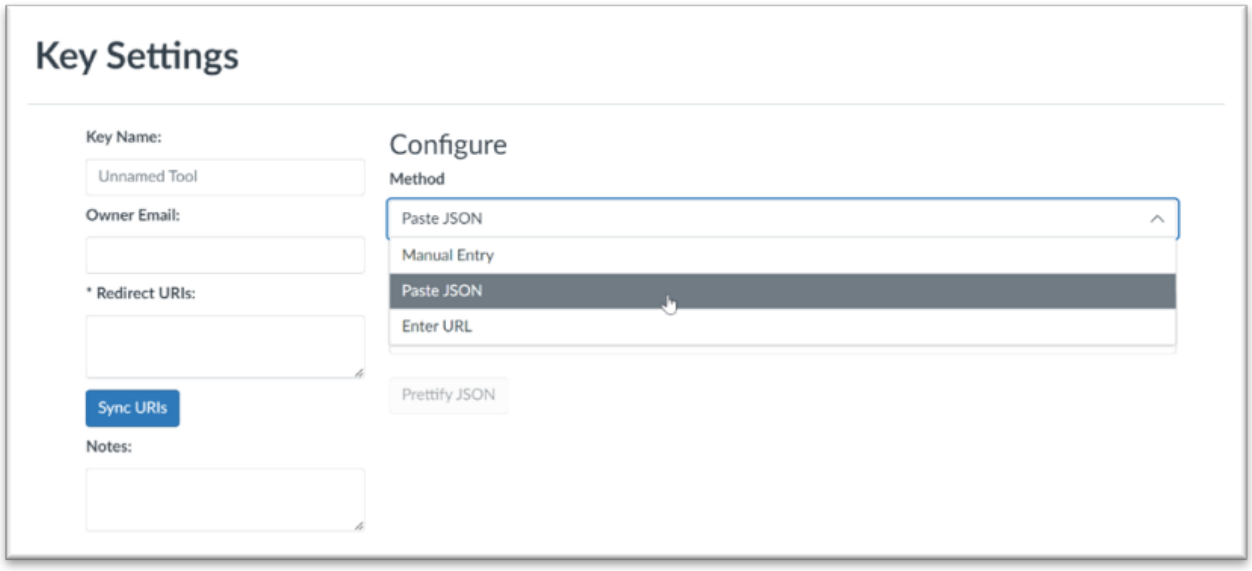
- **Key Name** - Enter the key name, Example: `Kaltura LTI 1.3 – My Media only)`.
- **Owner email** – optional
- **Redirect URIs** - Enter `https://{your_KAF_URL}/hosted/index/oauth2-launch`

  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.

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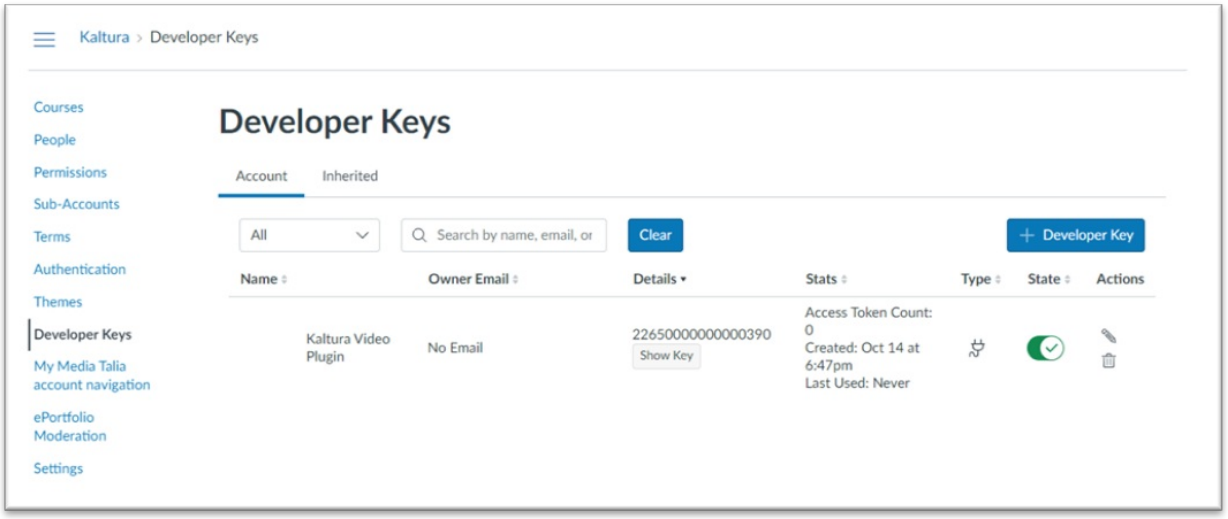
7. For the **LTI 1.3 Configuration** field, go to the browser tab used in Step 3 - Generate the Canvas LTI developer key JSON, and copy the JSON code between the first and last bracket { } and paste it between the brackets in the LTI 1.3 Configuration field.



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

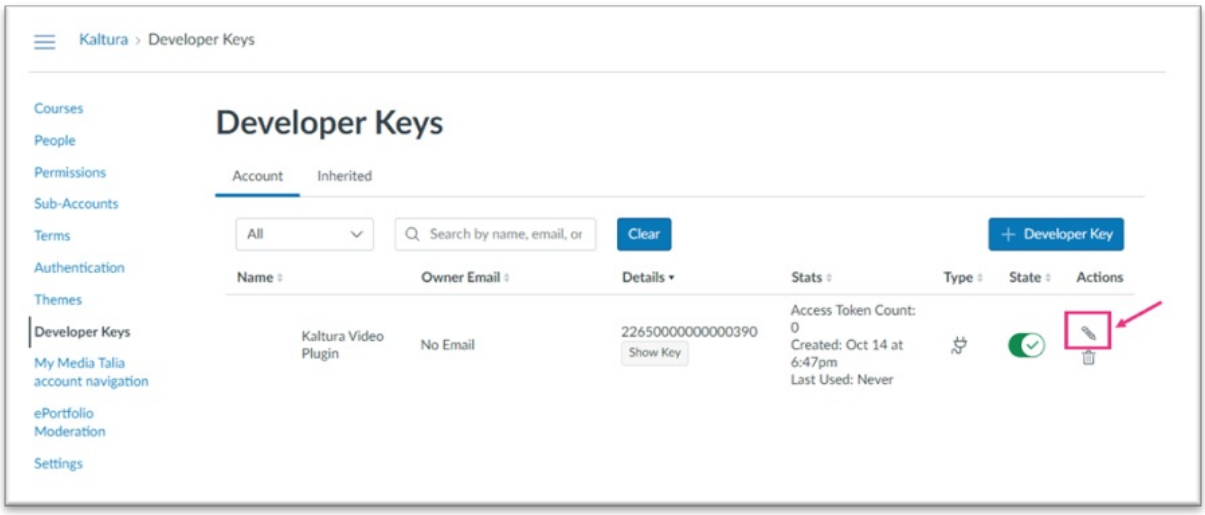
The new LTI developer key will now be listed on the Developer Keys page. If the **State** is set to off (red), it means the key is disabled. To enable the key, click the toggle (green).

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

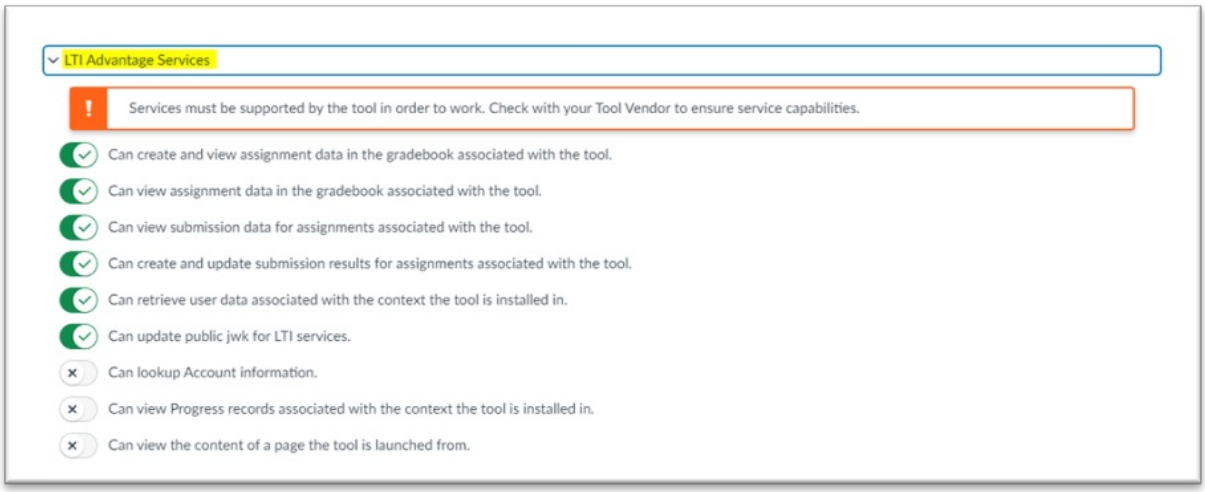
1. Edit the LTI developer key you created in Step 6 by clicking on the **pencil icon** to the far right of the key.



   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.

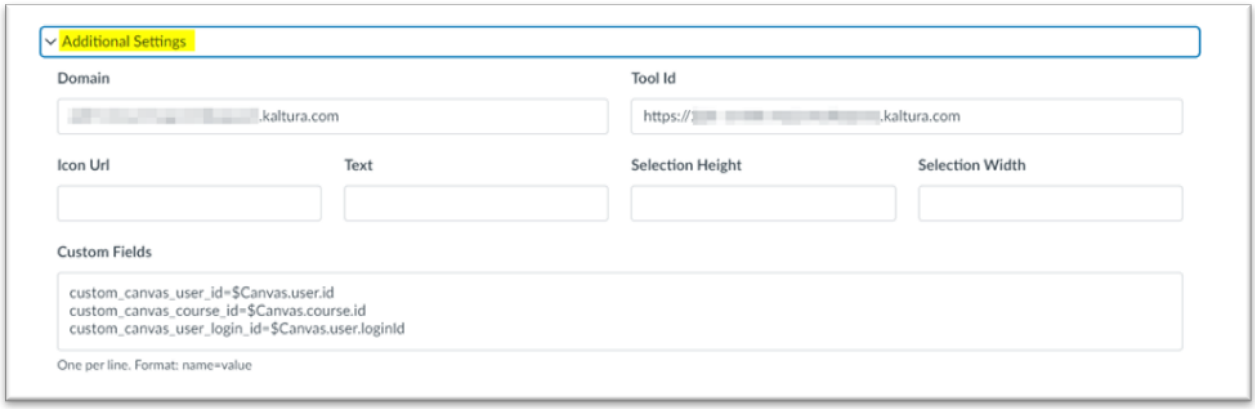
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6. Make sure the following **LTI Advantage Services** are turned on in addition to others that are enabled:

- *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`

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- custom_canvas_course_id=$Canvas.course.id
- custom_canvas_user_login_id=$Canvas.user.loginId

9. Remove all the Placements except the Course Navigation Placement and the Global Navigation Placement by clicking the placement bubbles.

10. Expand the Course Navigation Placement and the Global Navigation Placement settings.

11. Delete each of the settings for the Course Navigation Placement.

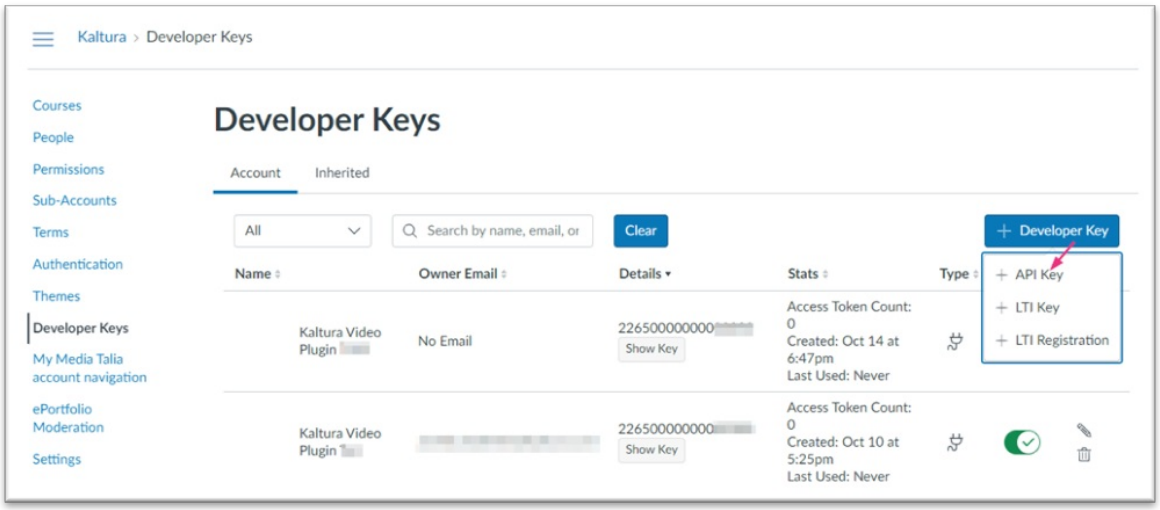
12. Copy each of the settings for the Global Navigation Placement to each of the corresponding settings in the Course Navigation Placement.

13. Delete the Global Navigation Placement by clicking the placement bubble.

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

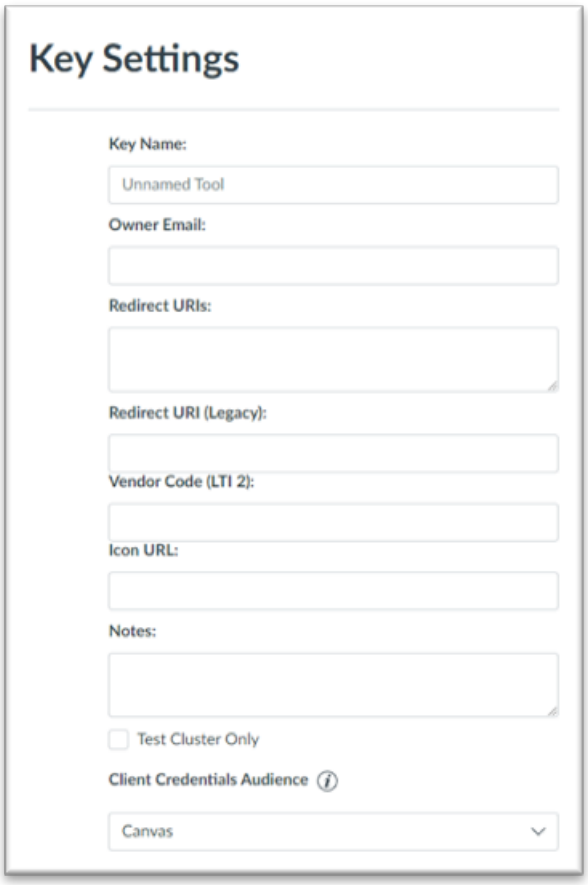
Step 8 - Create a Scoped API Developer Key

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



The 'Key Settings' page displays.

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4. Configure the following:

- **Key Name** - *Kaltura Scoped API Key*
- **Owner Email** - Optional
- **Redirect URLs** - Enter the following four KAF URLs:

  - For {your_KAF_base_URL}, use your PID-based KAF domain or your KAF domain alias or vanity domain, if applicable.
  - Make sure there is no / (slash) at the end of the URL.

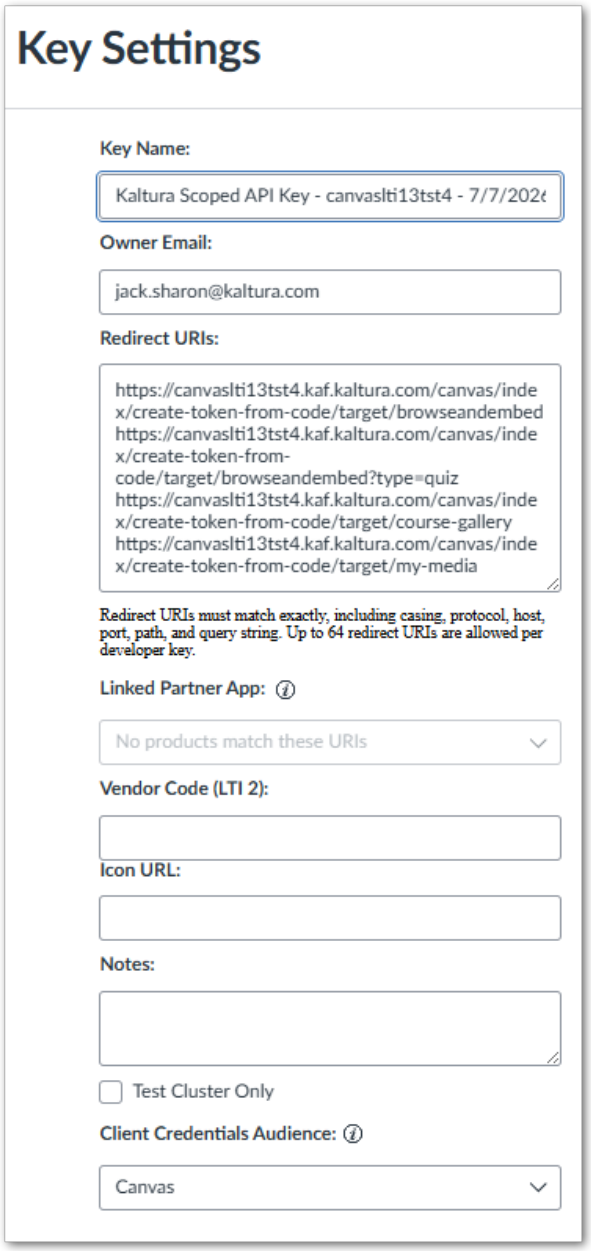
  - https://{your_KAF_base_URL}/canvas/index/create-token-from-code/target/browseandembed
  - https://{your_KAF_base_URL}/canvas/index/create-token-from-code/target/browseandembed?type=quiz
  - https://{your_KAF_base_URL}/canvas/index/create-token-from-code/target/course-gallery
  - https://{your_KAF_base_URL}/canvas/index/create-token-from-code/target/my-media

- **Vendor Code (LTI 2)** - Leave blank
- **Icon URL** - Optional
- **Notes** - Optional

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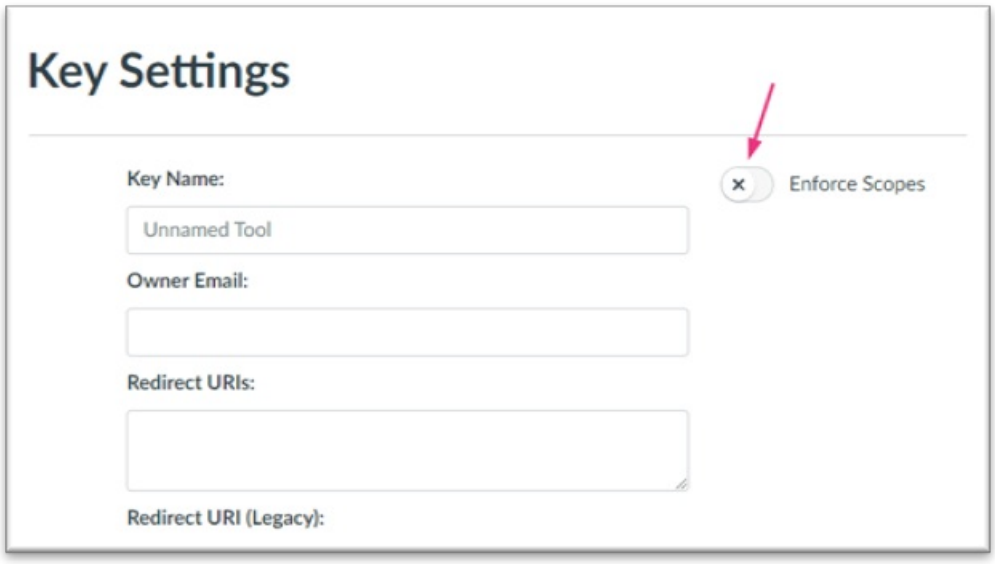
- **Test Cluster Only** - Leave unchecked
- **Client Credentials Audience** - Select **Canvas**

Your Key Settings will now look similar to the following:

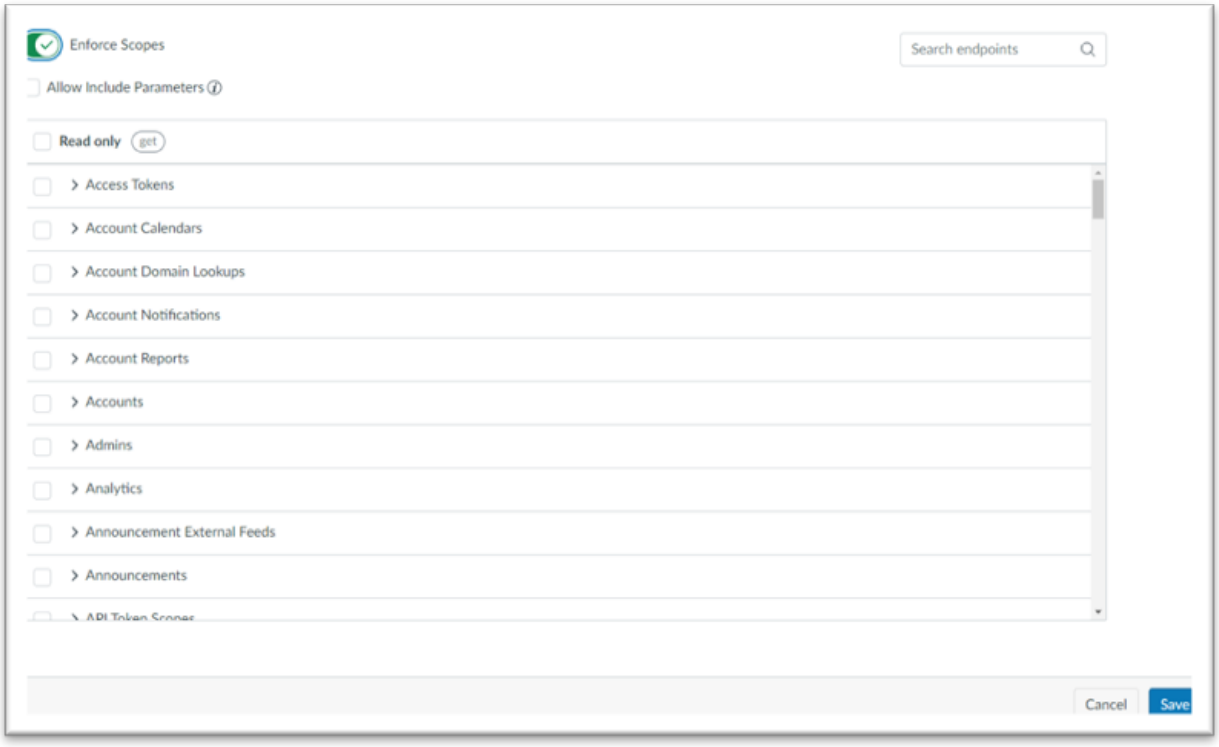


5. Scroll to the top of the page. If **Enforce Scopes** is not enabled (the toggle is not green and checked), click the toggle to enable it.

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The 'Enforce Scopes' section expands.



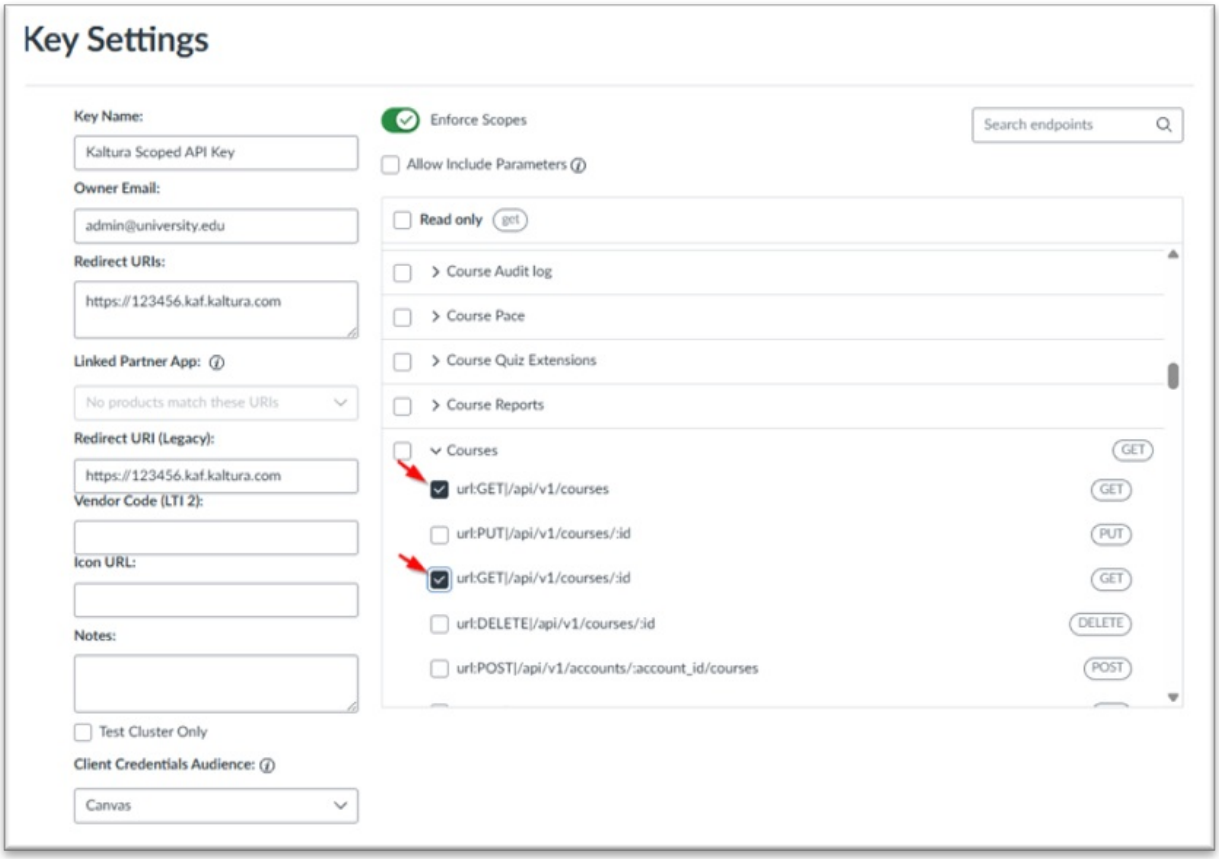
Leave **Allow Include Parameters** unchecked.

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

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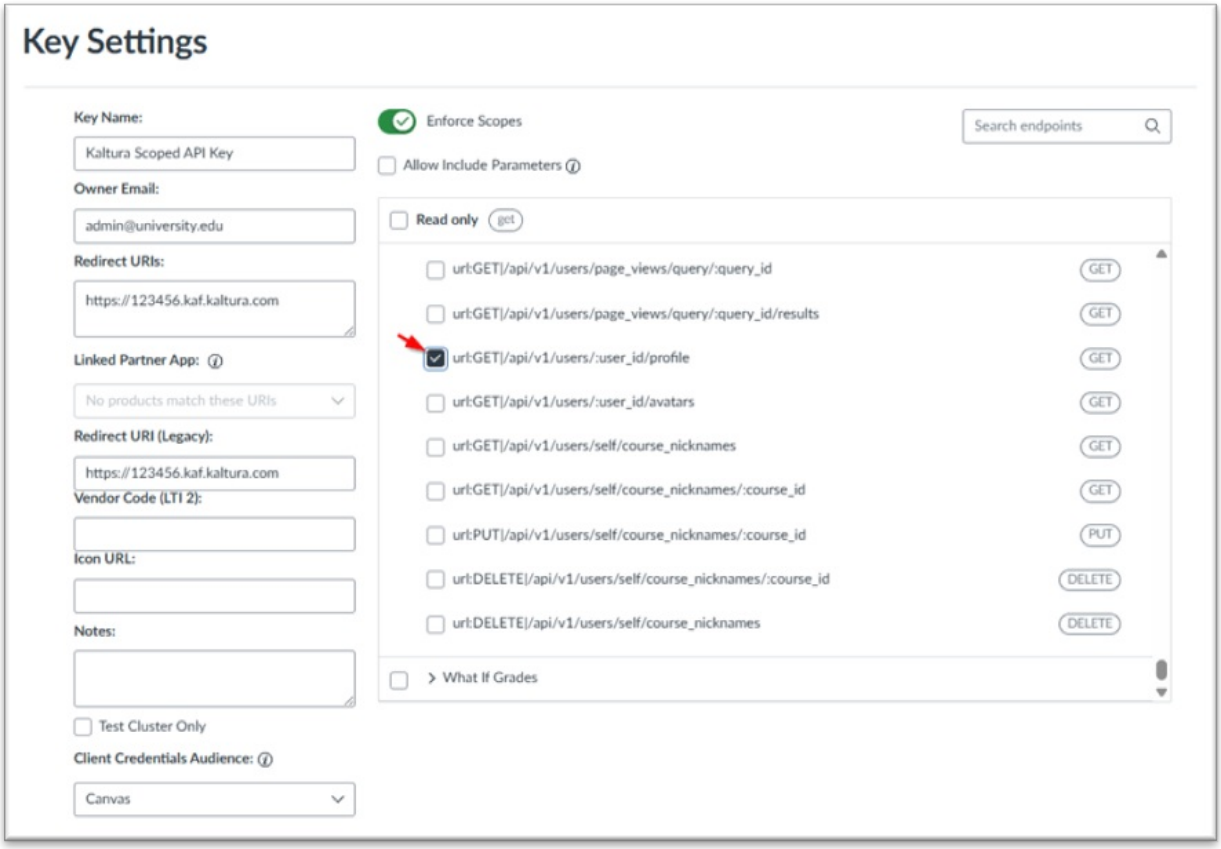


8. Scroll down to **Users** and click to expand.

9. Check the following scope:

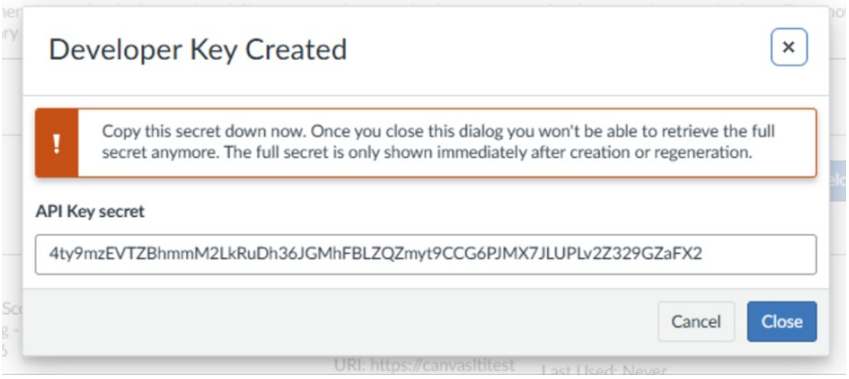
- `url:GET|/api/v1/users/:user_id/profile`

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10. Click **Save**.

The 'Developer Key Created' message displays:



11. Copy the API Developer Key secret and store it in a secure location.

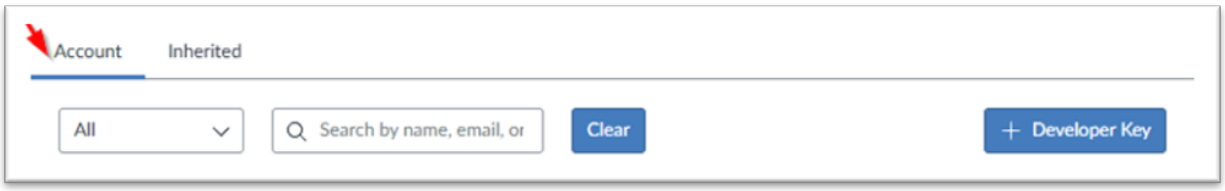
Make sure to copy the API Developer Key secret before closing the dialog box. After the dialog box is closed, the secret can no longer be viewed.

12. Click **Close**.

The 'Developer Keys' page displays.

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13. Select the **Account** tab.



14. Locate the Scoped API Developer Key you created and click the **State** toggle to turn on the key.

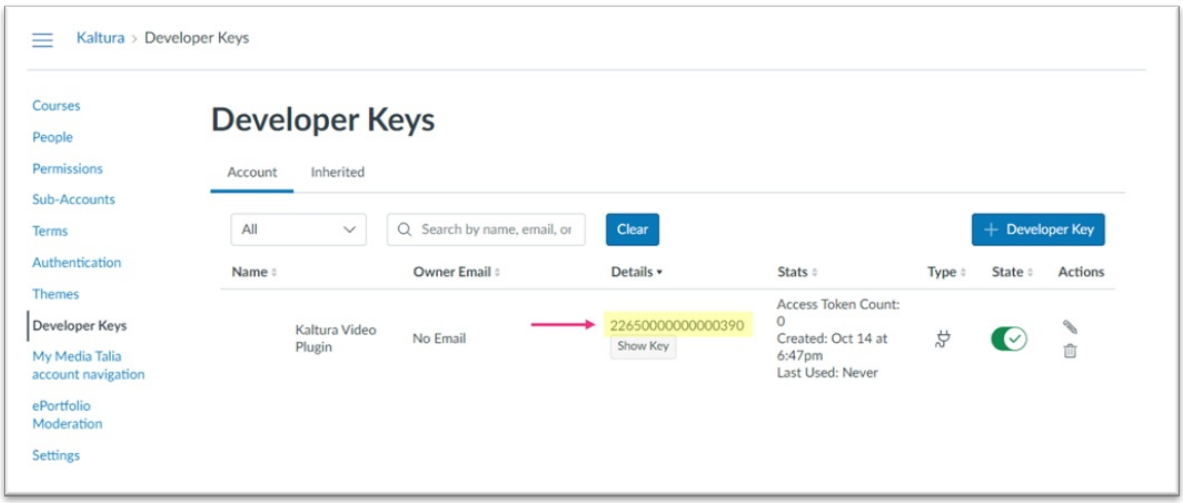
A confirmation message appears.

15. Click **Switch to On**.

When enabled, the toggle turns green.

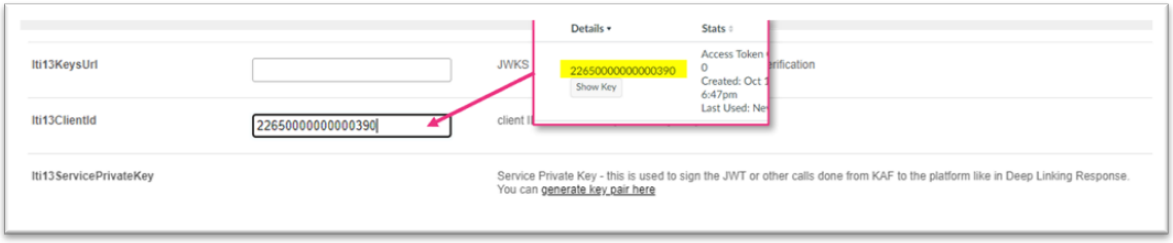
Step 9 – Add the LTI Developer Keys to your KAF

1. 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.



3. Log into your KAF Configuration Management page (https://{your_KAF_base_URL}/admin).
4. Navigate to the Hosted module (https://{your_KAF_base_URL}/admin/config/tab/hosted).
5. Scroll down to the **lti13ClientID** field and paste in the **Client ID**.

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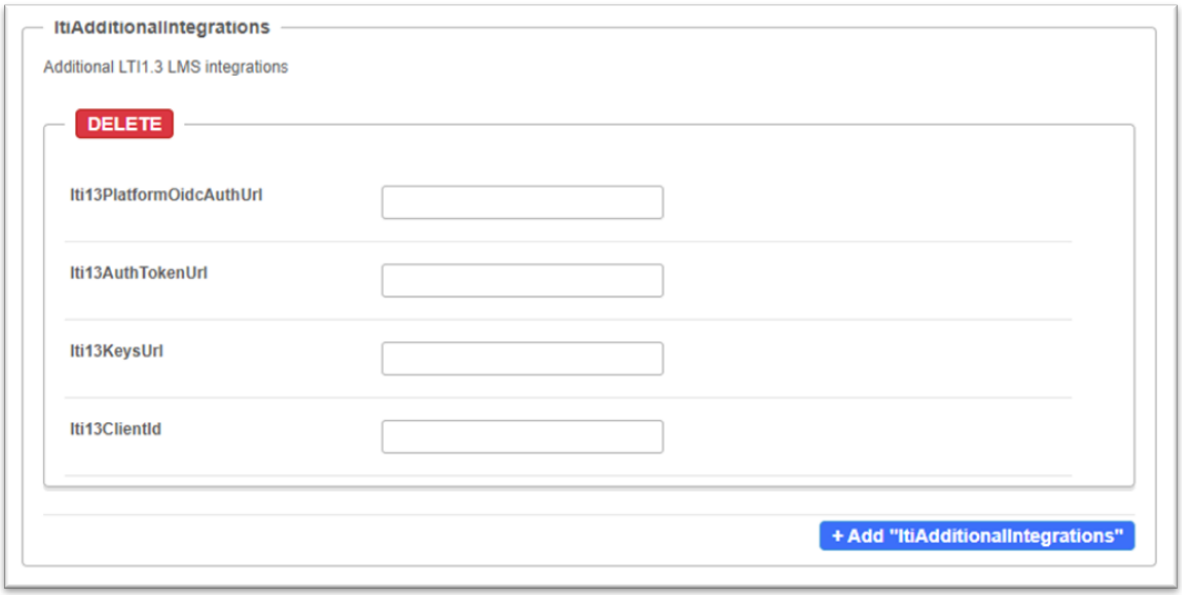
6. Scroll down to the **ltiAdditionalIntegrations** section and click on **+ Add "ltiAdditionalIntegrations"**



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.

- **lti13PlatformOidcAuthUrl** = https://{your_Canvas_Domain}/api/lti/authorize_redirect
- **lti13AuthTokenUrl** = https://{your_Canvas_Domain}/login/oauth2/token
- **lti13KeysUrl** = 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

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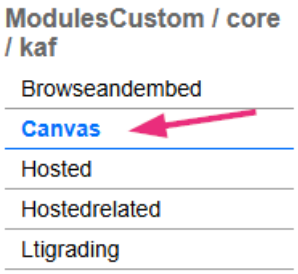
tool and copy the **Client ID** from the **Details** column.

9. Return to the Hosted module's **ltiAdditionalIntegrations** settings and paste in the **Client ID to the lti13ClientId value.**

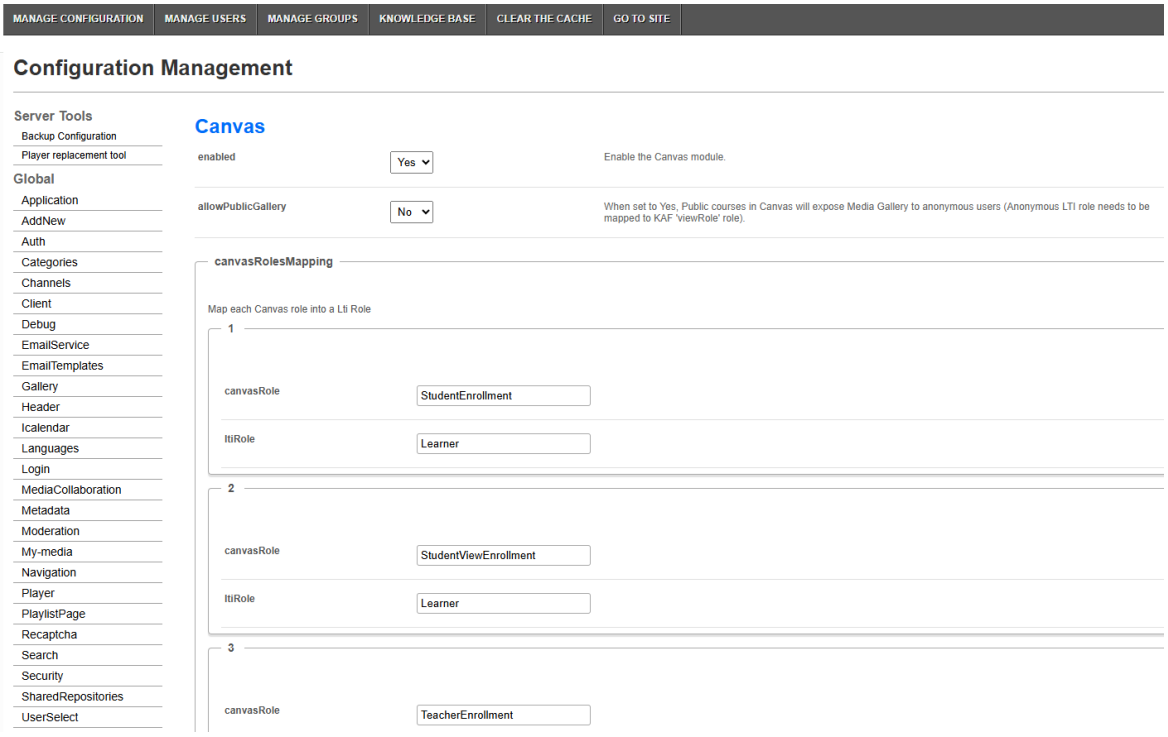
10. Scroll to the bottom of the Hosted module and click **Save**.

Step 10 - Set API Developer Key in Canvas module

1. Log into your KAF Configuration Management console and open the **Canvas** module. You can also navigate directly: (https://{your_KAF_base_URL}/admin/config/tab/canvas).



The 'Canvas' page displays.



2. Scroll down to the **useScopedKey** field and set it to 'Yes'.

This exposes the Canvas Account API Developer Key settings.

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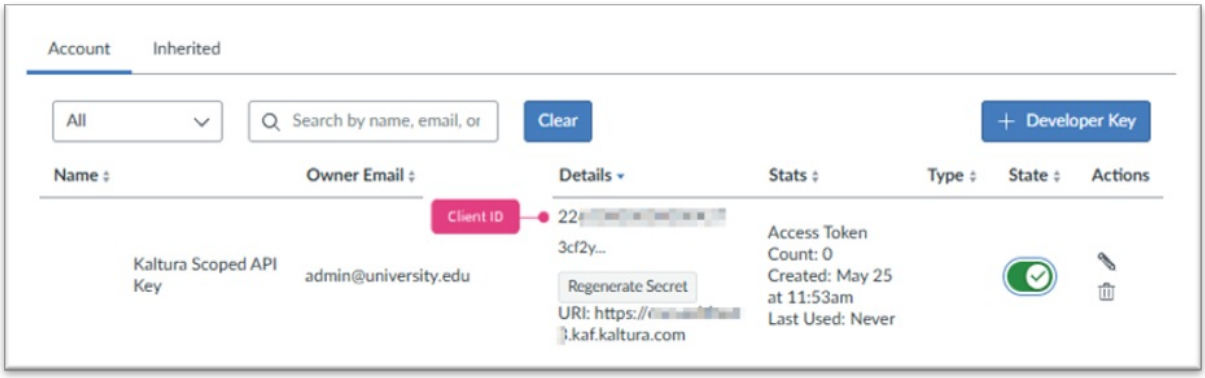


3. Set the **enableUserProfileScope** field to 'Yes'.

   This setting works with the Canvas user profile scope configured when creating the Scoped API Developer Key and helps prevent repeated authorization prompts when users switch between Canvas environments or Kaltura tools.

4. Fill in the **customAppId** and **customAppKey** fields using the **Client ID** and **API Developer Key** secret you created for the Scoped API Developer Key above:

- In Canvas, navigate to the **Developer Keys** page and locate the Canvas API Developer Key you created.
- Copy the **Client ID** and paste it into the **customAppId** field in the Canvas module.



- Copy the API Developer Key secret that you saved when creating the Scoped API Developer Key and paste it into the **customAppKey** field in the Canvas module.

  The Canvas module **useScopedKey** section should now look like this:

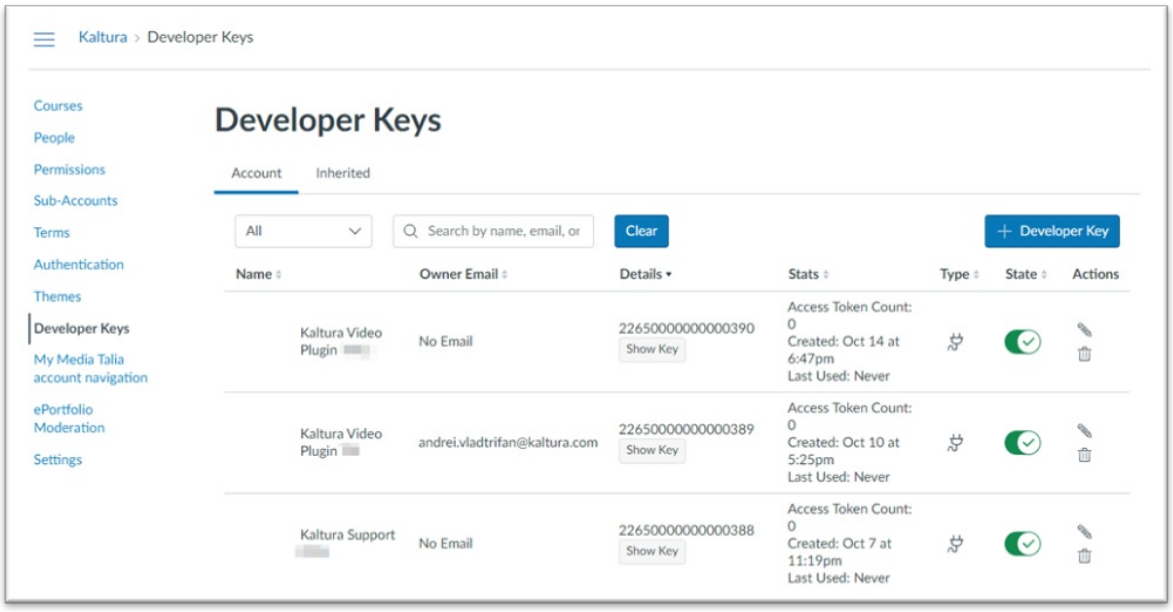
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5. Scroll to the bottom of the Canvas module and click **Save**.

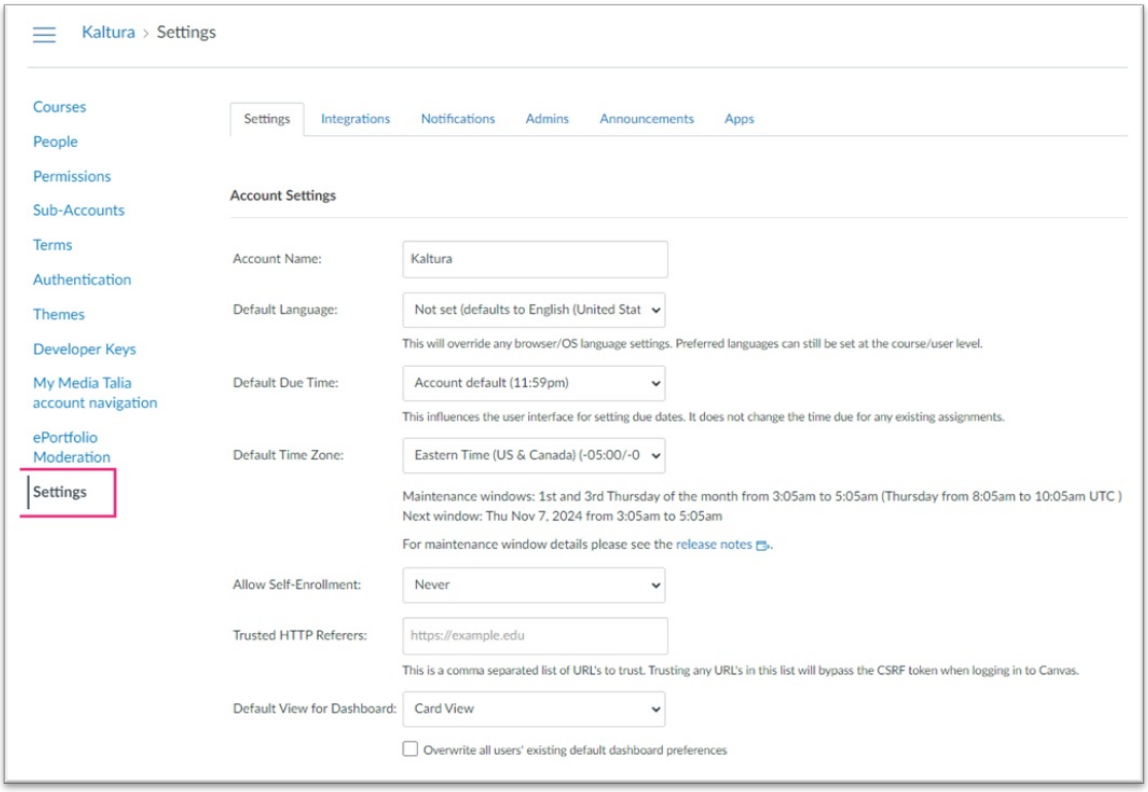
Step 11 – Add the Kaltura Apps in your Canvas sub-account

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



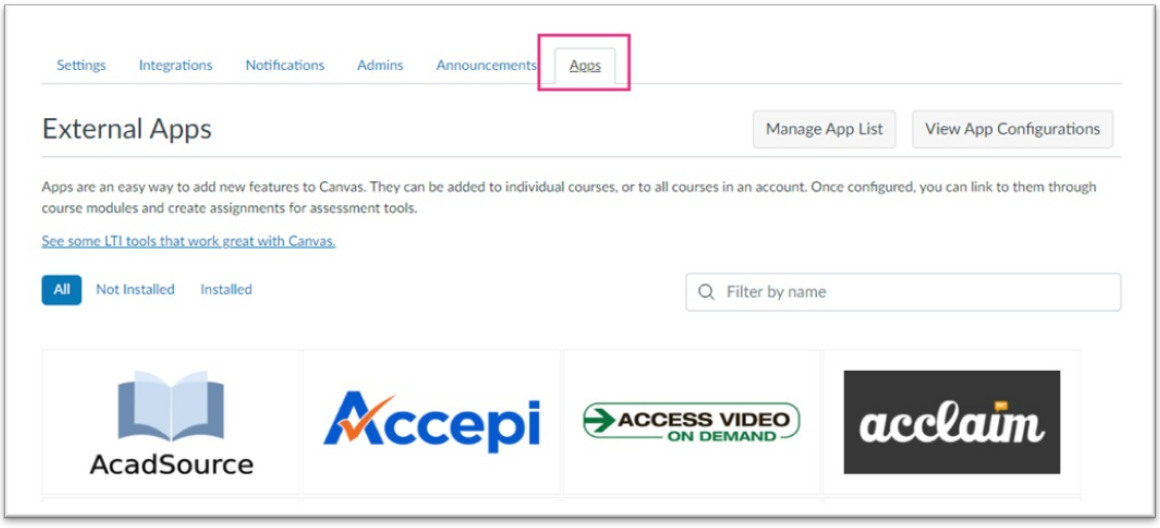
2. On the **Developer Keys** page, locate the Kaltura LTI 1.3 – no My Media LTI Developer Key you created and copy the **Client ID** from the **Details** column.
3. In the Account navigation panel select **Sub-Accounts**, and then click on the Sub-account you want to add the Kaltura Apps to.
4. In the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

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The Settings page displays.

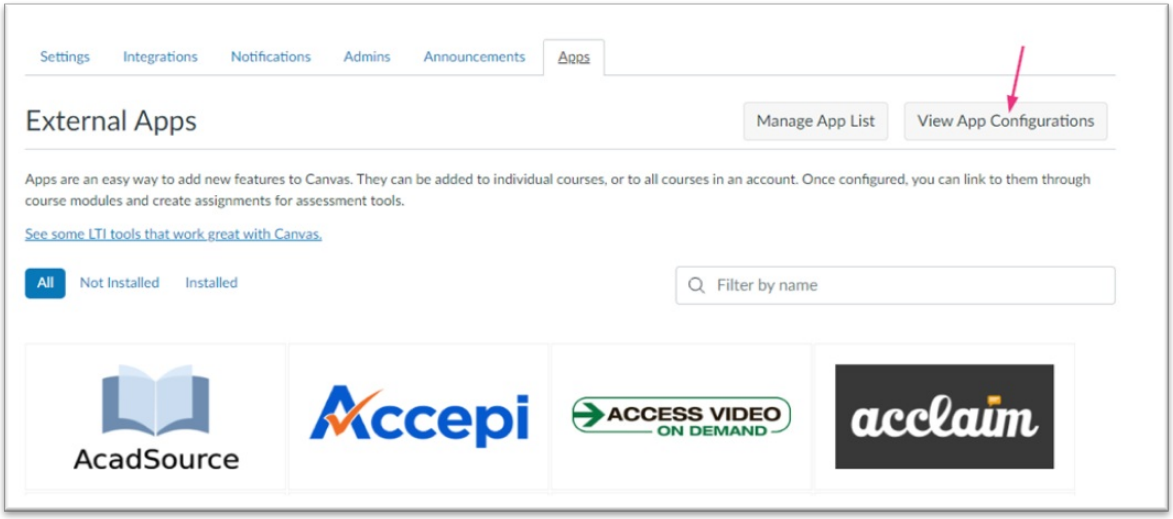
5. On the Settings page, click the **Apps** tab.



The External Apps page displays.

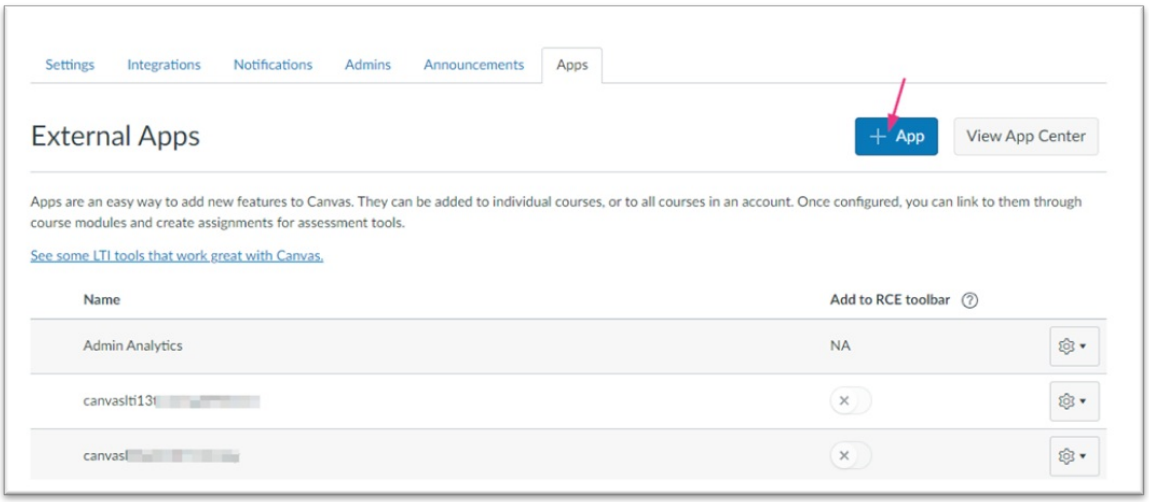
6. Click **View App Configurations**.

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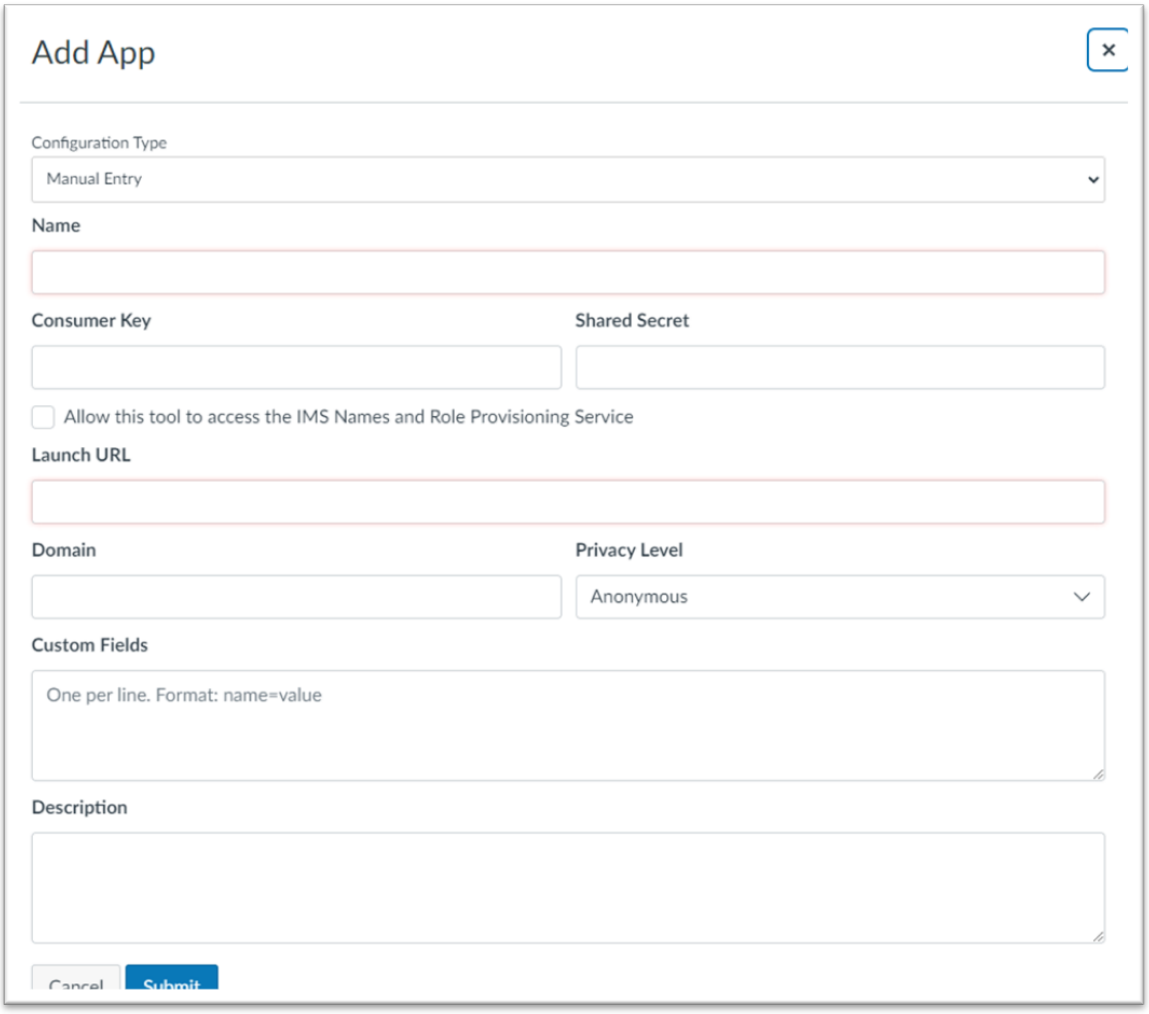
A list of apps displays.

7. Click **+App**.

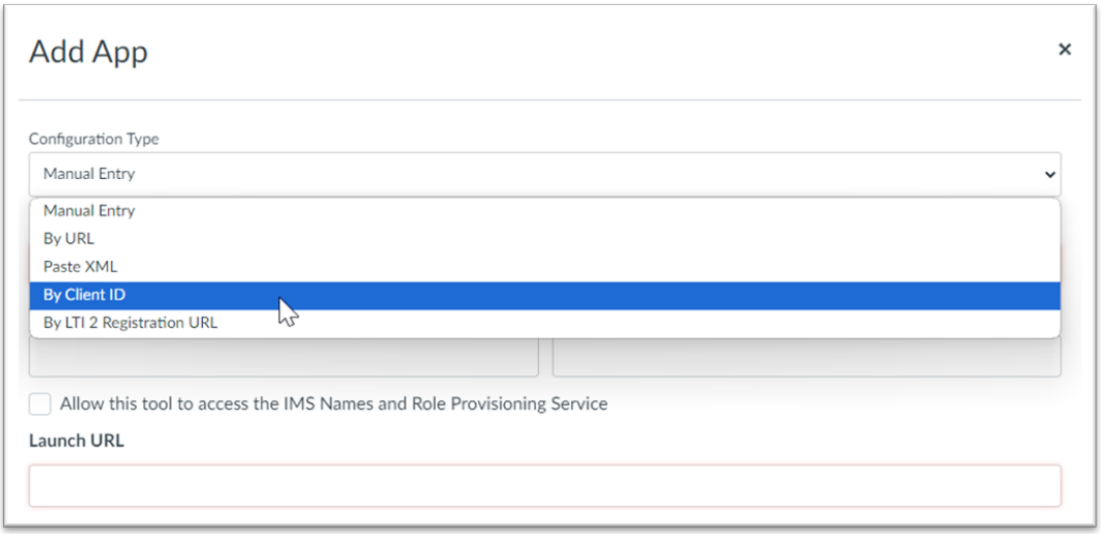


The **Add App** page displays.

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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.

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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

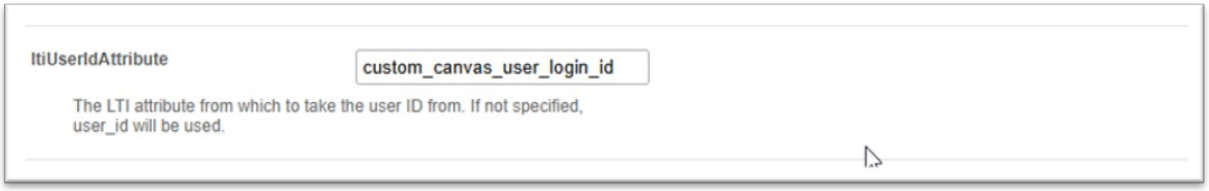
The default Kaltura User ID is your Canvas User ID, which is often the same as the user's email address. If your organization uses a different value for User IDs, please refer to Configuring the Kaltura User ID Value to Use with Your LMS Integration before proceeding.

With the Kaltura LMS Video 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 Hosted module.

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

1. Log into your KAF Configuration Management page (`https://{your_KAF_base_URL}/admin`).
2. Navigate to the Hosted module (`https://{your_KAF_base_URL}/admin/config/tab/hosted`).
3. Scroll down to the **ltiUserIdAttribute** setting.
4. Set **ltiUserIdAttribute** to `custom_canvas_user_login_id`.

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

- For roles and permissions, see Manage roles and permissions in LMS Video integrations.
- For account-level setup, see Kaltura LMS Video integration for Canvas - Installation and setup (LTI 1.3).

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