

## Follett Willo Overview

Follett Willo is a course delivery tool that provides a universal connection point between the Learning Management System and publisher content. This seamless integration provides codeless access to course materials and enables single sign-on access. Willo can also enable various levels of privacy and anonymization to protect student and faculty data. Please reach out to your Follett Integration Specialist for more information on the anonymization features available.

## Implementation Process

Follett Willo utilizes LTI 1.1, LTI 1.3, and API to integrate into your Canvas instance. Your Follett Integration Specialist will work with you to implement the Follett Willo tools in Canvas.

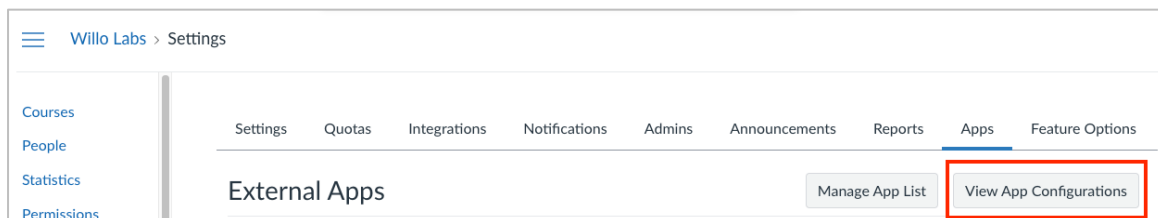
### Implementation Steps

1. [Configure Follett Willo LTI 1.1 in Canvas](#) (Canvas Admin)
2. [Configure Follett Willo LTI 1.3 in Canvas](#) (Canvas Admin)
3. [Configure Follett Willo API in Canvas and Willo Dashboard](#) (Canvas Admin)
4. [Complete Connection Configuration in Follett](#) (Follett Integration Specialist)
5. [Test Follett Willo Launches](#) (Canvas Admin and Follett Integration Specialist)

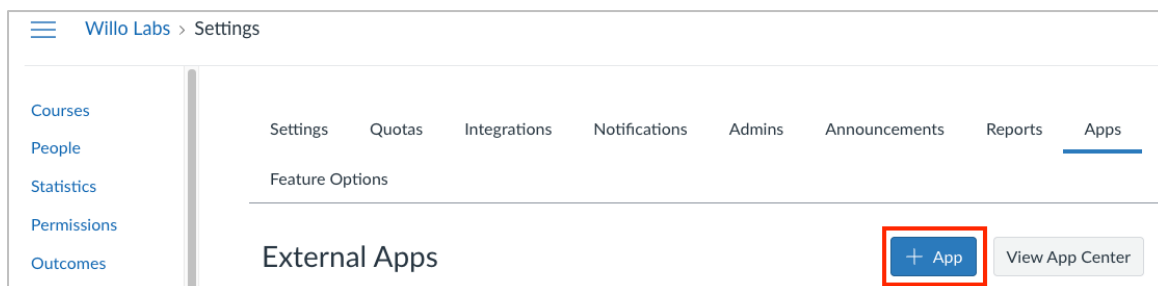
## Configuring Follett Willo LTI 1.1 in Canvas

### Add App Configuration (Settings > Apps)

1. Log into Canvas as an Administrator, navigate to **Admin** tab, and select **Settings**.
2. Select the **Apps** tab and then **View App Configurations**.



3. Click on the **+ App** icon.



4. Select **XML Configuration** and input the following details:
  - a. Name: Follett Willo Digital Delivery 1.1
  - b. Key/Secret: *Provided by Follett Integration Specialist*
  - c. XML: *Download XML file from link provided by Follett Integration Specialist*

**Add App**

Configuration Type  
Paste XML

Name \*  
Follett Willo Digital Delivery 1.1

Consumer Key  
KEY

Shared Secret  
SECRET

XML Configuration \*

```
<?xml version="1.0" encoding="UTF-8"?>
<cartridge_basiclti_link xmlns="http://www.imsglobal.org/xsd/imsltic_v1p0"
xmlns:blti="http://www.imsglobal.org/xsd/imsbasiclti_v1p0" xmlns:lticm="http://www.imsglobal.org/xsd/imslticm_v1p0"
xmlns:lticp="http://www.imsglobal.org/xsd/imslticp_v1p0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.imsglobal.org/xsd/imsltic_v1p0 http://www.imsglobal.org/xsd/lti/ltiv1p0/imsltic_v1p0.xsd
http://www.imsglobal.org/xsd/imsbasiclti_v1p0 http://www.imsglobal.org/xsd/lti/ltiv1p0/imsbasiclti_v1p0.xsd
http://www.imsglobal.org/xsd/imslticm_v1p0 http://www.imsglobal.org/xsd/lti/ltiv1p0/imslticm_v1p0.xsd
http://www.imsglobal.org/xsd/imslticp_v1p0 http://www.imsglobal.org/xsd/lti/ltiv1p0/imslticp_v1p0.xsd">
<blti:title>Follett Willo Digital Delivery 1.1</blti:title>
<blti:launch_url>https://app.willolabs.com/onelink/</blti:launch_url>
<blti:custom>
<lticm:property name="canvas_course_startat">$Canvas.course.startAt</lticm:property>
<lticm:property name="canvas_term_startat">$Canvas.term.startAt</lticm:property>
<lticm:property name="canvas_term_name">$Canvas.term.name</lticm:property>
<lticm:property name="canvas_course_previous_ids">$Canvas.course.previousCourseIds</lticm:property>
<lticm:property name="canvas_person_timezone">$Person.address.timezone</lticm:property>
</blti:custom>
<blti:extensions platform="canvas.instructure.com">
<lticm:property name="tool_id">Follett Willo Digital Delivery 1.1</lticm:property>
<lticm:property name="domain">app.willolabs.com</lticm:property>
<lticm:property name="privacy_level">public</lticm:property>
</blti:extensions>
</cartridge_basiclti_link>
```

Cancel Submit

5. Click **Submit**.

## Configuring Follett Willo LTI 1.3 in Canvas

### Add LTI Developer Key (Developer Keys)

1. Log into Canvas as an Administrator, navigate to the **Admin** tab, and select **Developer Keys**.
2. Click **+ Developer Key** and select **+ LTI Key**.

**Developer Keys**

Account Inherited




All Search by name, email Clear

Name	Owner Email	Details	Stats
Follett Discover (CustomerSupport)	No Email	11447000000000359 Show Key	+ API Key + LTI Key + LTI Registration

3. Define the following properties:
  - a. Key Name: Follett Willo Digital Delivery 1.3
  - b. Owner Email: support@willolabs.com
  - c. Redirect URIs: *Choose based on your institution's country*
    - i. US Institutions: https://app2.willolabs.com/lti/launch
    - ii. CA Institutions: https://ca2.willolabs.com/lti/launch
  - d. Notes: *Optional*
  - e. Method: Paste JSON
  - f. LTI 1.3 Configuration: *Download JSON file from link provided by Follett Integration Specialist*

```
{
  "title": "Follett Willo Digital Delivery 1.3",
  "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/score",
    "https://purl.imsglobal.org/spec/lti-nrps/scope/contextmembership.readonly",
    "https://canvas.instructure.com/lti/public_jwk/scope/update",
    "https://canvas.instructure.com/lti/account_lookup/scope/show",
    "https://canvas.instructure.com/lti-ags/progress/scope/show"
  ],
  "extensions": {
    {
      "platform": "canvas.instructure.com",
      "settings": {
```

4. Click **Save**.
5. Locate the newly created key and toggle it to the **ON** state.
6. Note the **Client ID**.

Follett Willo Digital Delivery 1.3 (PROD)	support@willolabs.com		Access Token Count: 0		 
		Show Key	Created: Oct 25, 2022 at 2:31pm		
			Last Used: Never		

## Add App Configuration (Settings > Apps)

1. Navigate to the **Admin** tab and select **Settings**.
2. Select the **Apps** tab and then **View App Configurations**.
3. Click on the **+ App** icon.
4. Define the following properties:
  - a. Configuration Type: By Client ID
  - b. Enter the **Client ID** from [Step 6](#) of the previous section.
5. Click **Submit**.
6. Locate the newly created app, select the settings icon, click on **Deployment Id**, and note the Deployment Id.



7. Send the **Canvas Base URL**, the **Client ID**, and the **Deployment Id** to the Follett Integration Specialist to complete setup.

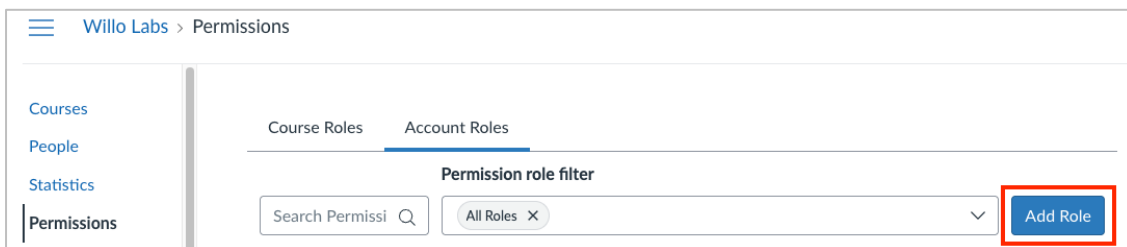
## Configure Follett Willo API in Canvas and Authorize API

### [Optional] Setup Custom Account Role and User for API Authorization (Permissions)



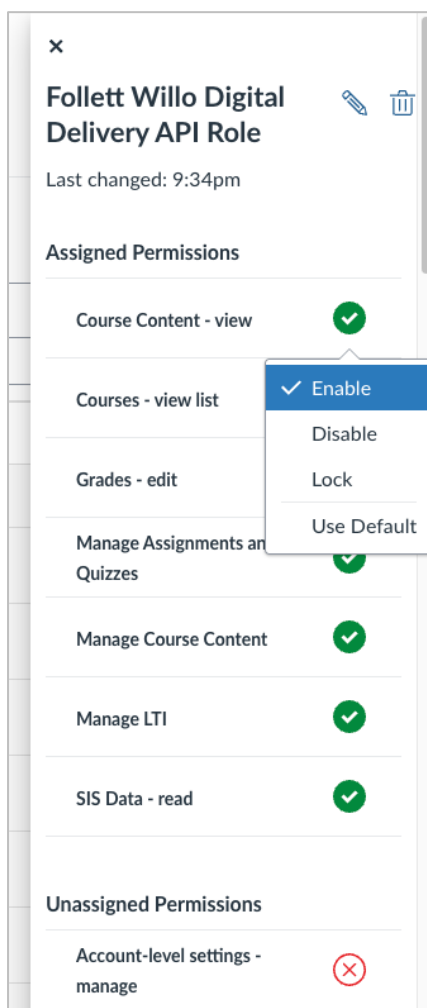
You may provide authorization to the API using your personal Canvas admin user account. If that is the case, you can skip to the [Create API Key](#) section. Please follow the steps in this section if you'd like to create a specific system role and user account for Follett Willo Digital Delivery.

1. Log into Canvas as an Administrator and navigate to the **Admin** tab.
2. Select Permissions, then Account Roles, and Add Role.



3. Input a **Role Name** (sugg. Follett Willo Digital Delivery API Role) and then click **Save**.

4. Click into the newly created role and assign the following permissions by clicking the **x** next to each permission in the righthand panel, followed by **Enable**. You'll see a green checkbox, and the permissions will be added to the top of the panel under **Assigned Permissions**.
  - a. Course Content – view
  - b. Courses – view list
  - c. Grades – edit
  - d. Manage Assignments and Quizzes
  - e. Manage Course Content
  - f. Manage LTI
  - g. SIS Data – read



5. When complete, click the **x** to close the right navigation.
6. Navigate back to the **Admin** tab, choose **Settings**, and then **Admins**.
7. Scroll to the bottom and click **+ Account Admins**.

- From the **Add More** dropdown menu, select the new account role you created above.



Add Account Admins

Add More Account Admin  
**Follett Willo Digital Delivery API Role**

Copy and paste a list of email addresses to add users.

Sample format: "Example Student" <student@example.com>, "Lastname, Firstname" <firstlast@example.com>, justAnEmailAddress@example.com

- Add an **email address** (rec. add **+follettwillloapi** to your institutional email) and click **Continue**, followed by **OK Looks Good, Add This 1 User**.



Add Account Admins

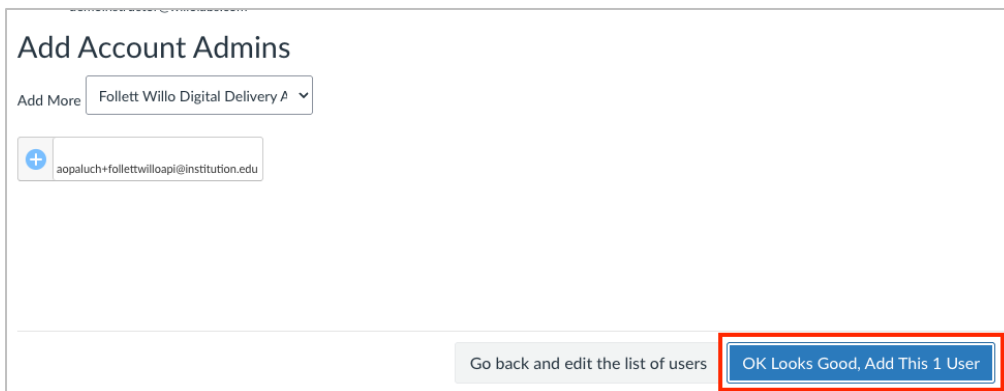
Add More Follett Willo Digital Delivery API Role

Copy and paste a list of email addresses to add users.

aopaluch+follettwillloapi@institution.edu

Sample format: "Example Student" <student@example.com>, "Lastname, Firstname" <firstlast@example.com>, justAnEmailAddress@example.com

Cancel Continue...



Add Account Admins

Add More Follett Willo Digital Delivery API Role

+ aopaluch+follettwillloapi@institution.edu

Go back and edit the list of users **OK Looks Good, Add This 1 User**

- You will receive a confirmation email to complete the admin registration process.

- NOTE:** If you see the message below, click **No**.

*Welcome Aboard!*

*<email address> is a new account, but you are currently logged in as <email address of personal Canvas admin user>.*

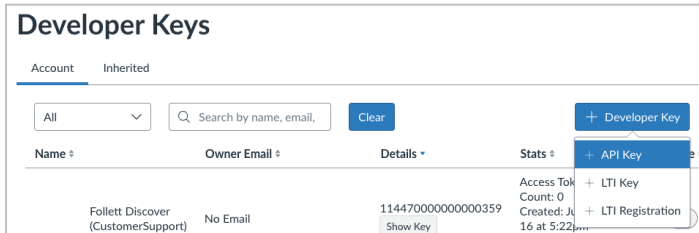
*Would you like to add this email address to your current account?*

- Create a password and click **Register** to complete the registration process.

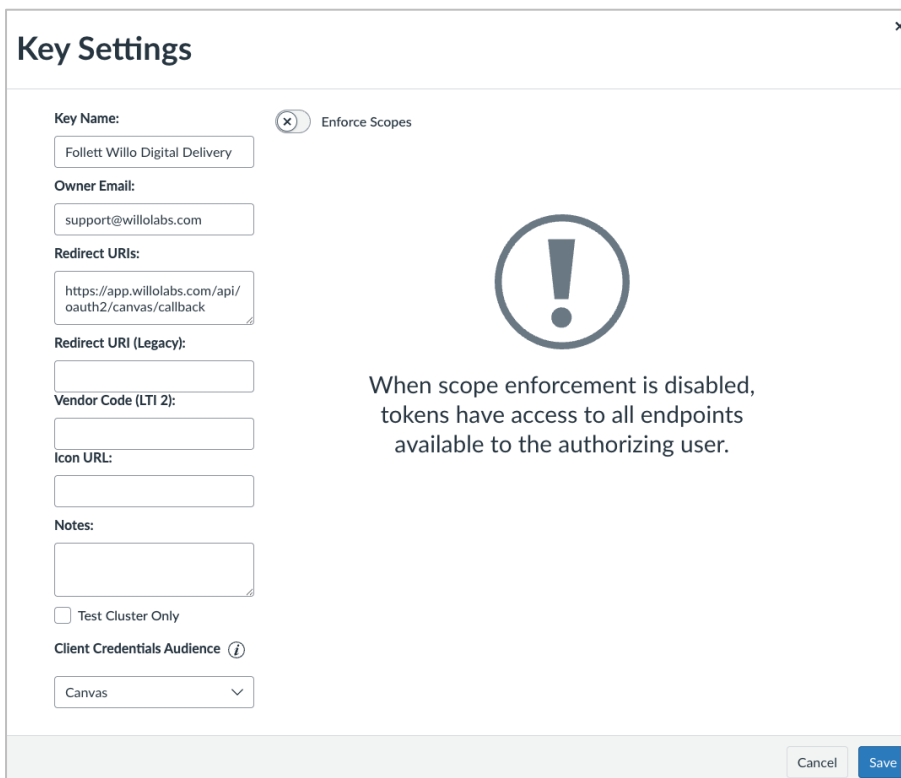
- Use this new admin login to complete the [Authorize API](#) steps below.

## Add API Developer Key (Developer Keys)

1. Log into Canvas as an Administrator, navigate to the **Admin** tab, and select **Developer Keys**.
2. Click **+ Developer Key** and select **+ API Key**.

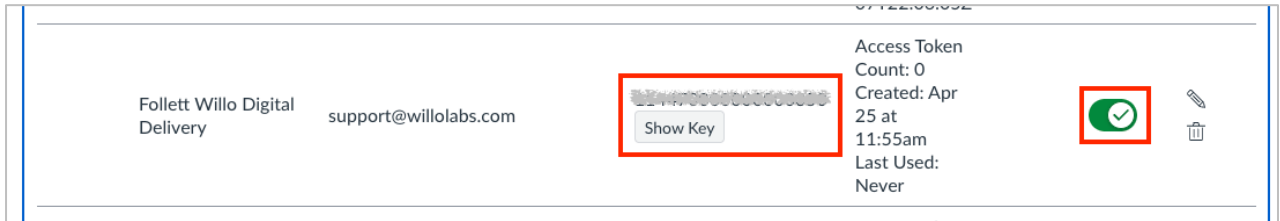


3. Define the following properties:
  - a. Key Name: Follett Willo Digital Delivery
  - b. Owner Email: support@willolabs.com
  - c. Redirect URIs: *Choose based on your institution's country*
    - i. US Institutions: <https://app.willolabs.com/api/oauth2/canvas/callback>
    - ii. CA Institutions: <https://ca.willolabs.com/api/oauth2/canvas/callback>



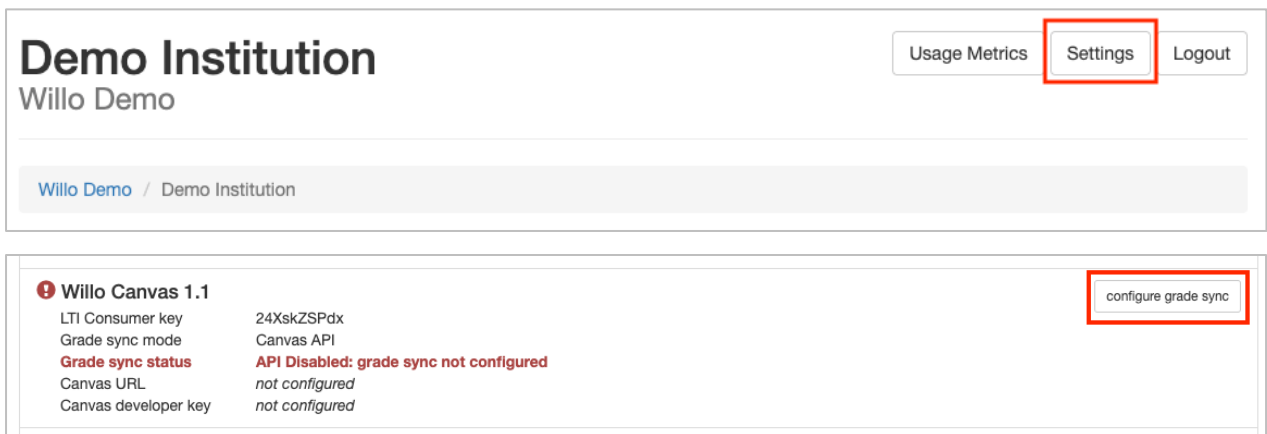
*We support scoped API keys. If you wish to enforce scopes, please reach out to your Follett Integration Specialist for a list of scopes required to support this integration.*

4. Click **Save**.
5. Toggle the State of the newly created key to **ON** and record the **Client ID** (the shown value) and **Key** (click **Show Key** to view value).



## Authorize API (Follett Willo Customer Access Dashboard)

1. Log into the appropriate Follett Willo Dashboard using your email address:
  - a. US Institutions: <https://app.willolabs.com/customer-access/>
  - b. CA Institutions: <https://ca.willolabs.com/customer-access/>
2. You will receive an email with a link to log in. Click on the link within the email and click **Follett**, then **Settings**, and then **configure grade sync** beside the Canvas 1.1 setup
  - a. **NOTE:** You will need to repeat these steps for the Canvas 1.3 setup as well.



3. Click **Edit Configuration** and define the following properties:
  - a. Canvas URL: Your institution's Canvas base URL (e.g. <https://school.instructure.com>)
  - b. Developer key: ID: *The API Client ID recorded from [Step 5](#) above*
  - c. Developer key: key: *The API Key recorded from [Step 5](#) above*
  - d. Enforce Scopes: None
    - i. **NOTE:** If you've chosen to [enforce scopes](#) in the previous step, your Follett Integration Specialist will advise on which option to choose in this dropdown.

Willo Demo / Demo Institution / Settings / Willo Canvas 1.1

## Grade Sync Configuration

for Willo Canvas 1.1

Grade sync mode: Canvas API

Grade sync status: **API Disabled: grade sync not configured**

Canvas URL:

Developer key: ID:

Developer key: key:

Enforce scopes:

[Edit Configuration](#)

#### 4. Click **Save Configuration**.

Willo Demo / Demo Institution / Settings / Willo Canvas 1.1

## Grade Sync Configuration

for Willo Canvas 1.1

Grade sync mode: Canvas API

Grade sync status: **API Disabled: grade sync not configured**

Canvas URL:

Developer key: ID:

Developer key: key:

Enforce scopes:

[Save Configuration](#)

#### 5. Click on the green **Login to grant access or refresh tokens** button to authorize use of the API key using your admin account.

- a. **NOTE:** If you are previously signed into the Canvas, it will automatically log you in as that user. If you created a [custom account role and user](#), be sure to log in as that user in this step.

Willo Demo / Demo Institution / Settings / Willo Canvas 1.1

Configuration was updated successfully.

## Grade Sync Configuration

for Willo Canvas 1.1

Grade sync mode: Canvas API

Grade sync status: **API Disabled: login required**

[Login to grant access or refresh access tokens](#)

Canvas URL:

Developer key: ID:

Developer key: key:

Enforce scopes:

[Edit Configuration](#)

6. Going back to the Follett Willo Dashboard, refresh the page and the grade sync status will update from Disabled to **API Enabled**.

Willo Demo / Demo Institution / Settings / Willo Canvas 1.1

### Grade Sync Configuration

for Willo Canvas 1.1

Grade sync mode: Canvas API

Grade sync status: **API Enabled**

Login to grant access or refresh access tokens

Canvas URL:

Developer key: ID:

Developer key: key:

Enforce scopes:

7. Click on the **Settings** breadcrumb to repeat Steps 3-6 for the Canvas 1.3 setup using the same **Client ID** and **Key**.
  - a. **NOTE:** You may see a red warning message that LTI Advantage is disabled. As soon as your Follett Integration Specialist has finished configuration setup, this warning will disappear, and it will say **Advantage Enabled**.

Demo Institution

Willo Demo

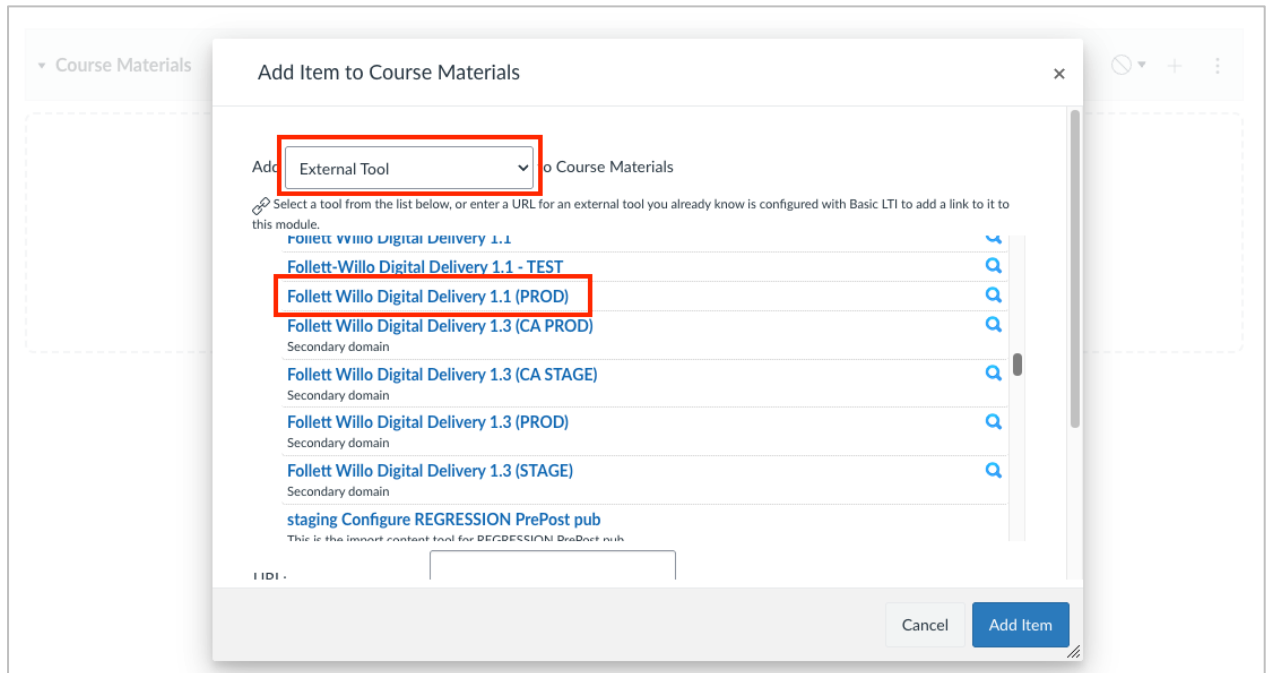
Willo Demo / Demo Institution **Settings** Willo Canvas 1.1

## Complete Configuration in Follett

To establish a LTI 1.3 connection, your Follett Integration Specialist will need to complete the Follett configuration using the Client ID and Deployment Id generated by Canvas. Please email your Canvas connection details to your Integration Specialist If you have not already done so. They will contact you when the connection is completed and ready for the testing phase.

## Test Follett Willo Launches

1. Navigate to a sandbox course in Canvas and click on the **Modules** area.
2. Create a new module or navigate to the desired module, click on the **+** button, choose **External Tool** from the "Add" dropdown, and select the **Follett Willo Digital Delivery 1.1/1.3** placement.



3. Click **Continue in a New Window** and then input the product token provided by your Follett Integration Specialist.
  - a. **NOTE:** You will be provided a separate product token for each LTI version and will need separate Canvas sandbox courses to test each version. Alternatively, you can navigate to **Settings** within the Canvas course and click **Reset Course Content** to completely reset the sandbox. You will lose any assignments or content by doing so.
4. Click **Verify**, then **Confirm**, and then **Course Management**. Depending on the version, you may have to click **Add Product Links** and then select all the links and **Return Link(s) to LMS**.
5. If successful, links should populate in the modules area.