



Poll Everywhere & Canvas LMS LTI 1.3/LTI Advantage integration guide for Canvas system administrators

Version 1.1.0

Introduction

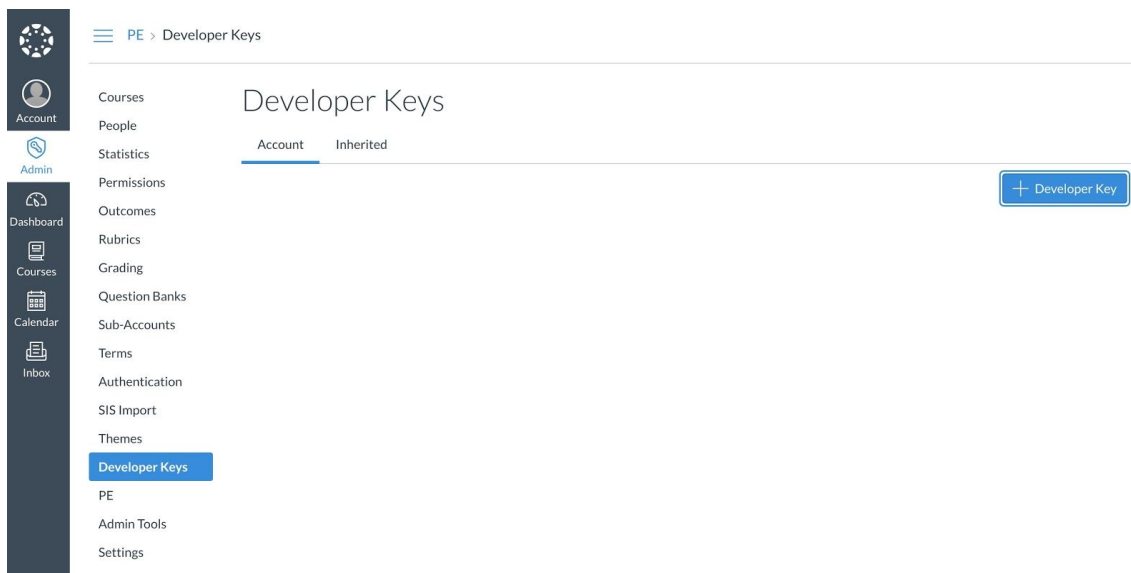
This guide is for Canvas System Administrators and describes how to integrate Poll Everywhere with a Canvas LMS system using LTI 1.3 and LTI Advantage.

Users who want to manage Developer Keys must have the “Developer Keys - manage permission.” This is only necessary for the Canvas System Administrator who will be performing the initial setup of Poll Everywhere on the LMS. The individual performing this setup will also need to be an Account Owner or Account Admin on your University’s Poll Everywhere account.

Users who want to add an LTI Advantage tool to a course must have the “LTI - add / edit / delete permission.” This will be necessary for all teachers who wish to use the LTI Advantage tools with Poll Everywhere.

Create a developer key

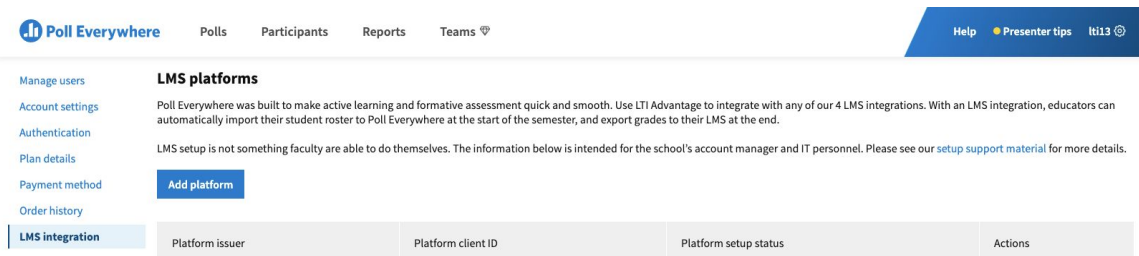
1. Start by logging into Canvas as the Canvas administrator.
2. Navigate to the Admin page of Canvas, and click over to the Developer Keys section.



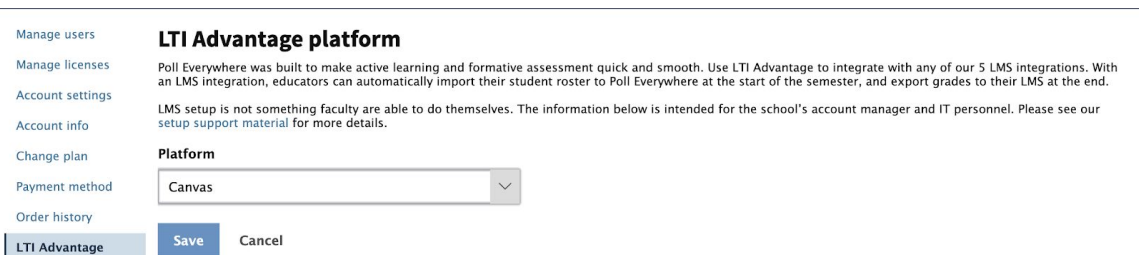
3. Click the button in the top right to create a new Developer Key, and select 'LTI key' in the drop down to bring up the Key Settings page.



4. Open a new tab, navigate to PollEverywhere.com, and login with an Account Owner or Admin profile.
5. Within your Poll Everywhere profile, click your username in the top right > Account Admin > LMS Integration. This is the page where you will manage your LTI 1.3 Platform. Select Add platform.



6. On the next page, select Canvas from the dropdown list of platform options, and Save to proceed to the Platform details page.



- The Platform details page will provide you with the information you need to create the Developer Key setup on Canvas. Copy the information from the Poll Everywhere Platform details page into your Canvas Developer Key set up. You can use the copy link icon next to each field for easy transposing.

LMS platforms

Poll Everywhere was built to make active learning and formative assessment quick and smooth. Advantage to integrate with any of our 5 LMS integrations. With an LMS integration, educators can automatically import their student roster to Poll Everywhere at the start of the semester, and export their LMS at the end.

LMS setup is not something faculty are able to do themselves. The information below is intended for school's account manager and IT personnel. Please see our [setup support material](#) for more details.

Platform

Canvas

1 Tool OpenID Connect/initialization endpoint

https://www.polleverywhere.com/lms/lti_advantage/launch

2 Tool redirect endpoint

https://www.polleverywhere.com/lms/lti_advantage/user_con

Public RSA key

```
-----BEGIN PUBLIC KEY-----
MIIBjANBgkqhkiG9w0BAQEFAAACQAMIBCGKCAQEAu2Yr1
eSjNSgRHq6wMBwr
cKmmPUvOPj9aF1tgxlelGQg5XhjAMD2dSmE2W/FjpG4+aMd
TB3t0TPCsWxay5WJ
xpwtQJpibfKg0VYoRBBvqrcURMBnAwwGmwuBQ+GNxQgyPs
```

3 Public JWK

```
{
  "kty": "RSA",
  "e": "AQAB",
  "n": "u2Yr1eSjNSgRHq6wMBwrKmm
  PUvOPj9aF1tgxlelGQg5XhjAMD2dSmE2W_FjpG4-
  aMdTB3t0TPCsWxay5WJxpwtQJpibfKg0VYoRBBvqrcURMBnA
  wwGmwuBQ-
  GNxQgyPsMhvaLqPtmBWrpdKgbNz5U8XMtjH9jK_er6lSwwf1
  2WBzLbzrIFZL7-"}

```

Key Settings

Configure

Key Name: PollEv

Owner Email: support@polleverywhere.cc

Method: Manual Entry

Required Values:

Title	Description
Poll Everywhere	Poll Everywhere - web based ARS

Notes:

Target Link URI: <https://www.polleverywhere.com>

OpenID Connect Initiation Url: <https://www.polleverywhere.com/lms/l>

JWK Method: Public JWK

Public JWK:

```
{
  "xlelGQg5XhjAMD2dSmE2W_FjpG4-
  aMdTB3t0TPCsWxay5WJxpwtQJpibfKg0VYoRBBvqrcURMBnAwwGmwuBQ-
  GNxQgyPsMhvaLqPtmBWrpdKgbNz5U8XMtjH9jK_er6lSwwf12WBzLbzrIFZL7-
  5BzYnKd83bYR8zrmOZMAa8TCsW4dyvkJUOJ7JfD47GNk7bxDGYYyh4095nplUqI
  Ec3BOB:1Njsto7FkyogQ,"alg": "RS256","use": "sig","kid": "YfwKhUUIGIth13m_MX-
  AD8xyU2l7z_7-G62TusYk4Y"}

```

Additional required fields:

- Title** - Title for the LTI Key, up to your discretion
- Description** - Description of the LTI Key, up to your discretion
- Target Link URL** - This will be the Poll Everywhere homepage: <https://www.polleverywhere.com>


Optional fields

- Key Name** - You may give the key a name to help you find it more easily in the future
- Owner Email** - Contact email for key creator or maintainer

8. In Canvas below where you completed the key field, click 'LTI Advantage Services' to expand the Developer Key permission options. Enable the following options:
- 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 submission results for assignments associated with the tool.
 - Can retrieve user data associated with the context the tool is installed in.

Key Settings x

▼ LTI Advantage Services

 Services must be supported by the tool in order to work. Check with your Tool Vendor to ensure service capabilities.

- 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 submission results for assignments associated with the tool.
- Can retrieve user data associated with the context the tool is installed in.
- Can update public jwk for LTI services.
- Can lookup Account information
- Can create subscription to data service data.
- Can show subscription to data service data.
- Can update subscription to data service data.
- Can list subscriptions to data service data.
- Can destroy subscription to data service data.
- Can list categorized event types.
- Can view feature flags

9. Below the LTI Advantage Services section, expand the option for 'Additional Settings.' Expand open this section and select 'PUBLIC' for the Privacy Level

Can list categorized event types.

Can view feature flags.

Additional Settings

Domain

Tool Id

Icon Url

Text

Selection Height

Selection Width

Custom Fields

One per line. Format: name=value

Privacy Level

PUBLIC PRIVATE

Cancel Save

10. Below the 'Additional Settings' section, you will see a field for Placements. 'Account Navigation' add 'Link Selection' will be pre-populated. Add 'Assignment Selection' to this field. As you type, you should see the option to autocomplete.

Placements

Account Navigation × Link Selection × Assignment Selection ×

> Account Navigation

> Link Selection

> Assignment Selection

Cancel Save

11. Save the Key Settings, and you will return to the Developer Keys page. Click 'On' underneath the State column to enable the Developer Key

The screenshot shows the 'Developer Keys' page in a web application. On the left is a dark sidebar with navigation icons for Account, Admin, Dashboard, Courses, Calendar, and Inbox. The main content area has a breadcrumb 'Poll Everywhere University > Developer Keys' and a list of menu items: Courses, People, Statistics, Permissions, Outcomes, Rubrics, Grading, Question Banks, Sub-Accounts, Terms, Authentication, SIS Import, Themes, Developer Keys (highlighted), Admin Tools, and Settings. The 'Developer Keys' section has two tabs: 'Account' (selected) and 'Inherited'. A blue '+ Developer Key' button is in the top right. Below is a table with columns: Name, Owner Email, Details, Stats, Type, State, and Actions. One row is visible with the following data: Name: Unnamed Tool; Owner Email: No Email; Details: 100000000000004 (with a 'Show Key' link); Stats: Access Token Count: 0, Created: Aug 8 at 1:49pm, Last Used: Never; Type: a gear icon; State: ON (highlighted in a green box) and OFF; Actions: a pencil and trash icon.

12. Copy the number underneath the Details column from the Developer Key page, and save it to a convenient place. You will need this number two more times during the setup.

This screenshot is identical to the one above, showing the 'Developer Keys' page. The only difference is that the number '100000000000004' in the 'Details' column of the table is highlighted with a green box, indicating it should be copied.

13. Back over on the Poll Everywhere, you will need to complete the remaining fields on the Platform edit page. Complete the fields using the following information.

- **Issuer:** The issuer will be 'https://canvas.instructure.com'. If you are using a test instance of Canvas, use 'https://canvas.test.instructure.com'
- **Client:** The number that you copied from the Canvas Developer Key page
- **Public key endpoint:** <root>/api/lti/security/jwks
- **OIDC authentication endpoint:** <root>/api/lti/authorize_redirect
- **Access token endpoint:** <root>/login/oauth2/token

Ž; @ For the fields containing a <root>, <root> will be the homepage of your Canvas instance. For example, if you access your canvas via https://polleverywhere-university.instructure.com then that is your <root>, and your Public Key endpoint would be: https://polleverywhere-university.instructure.com/api/lti/security/jwks

The screenshot shows a configuration form for a Canvas Developer Key. It includes several input fields with the following values:

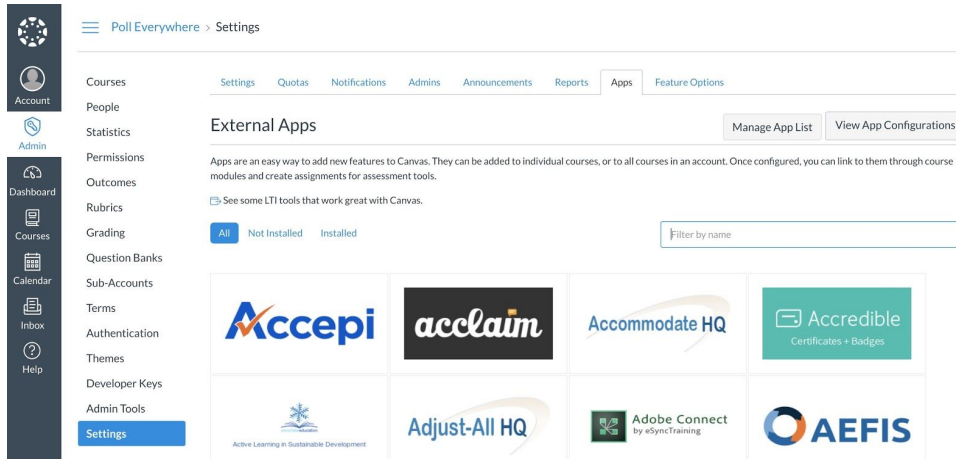
- Public JWK:** A long alphanumeric string starting with {"kty":"RSA","e":"AQAB","n":"tnQJSkrw4Y3iq4lMq5fTufUwu...".
- Issuer:** https://canvas.instructure.com
- Client:** 151620000000000002
- Public key endpoint:** https://pe-university.instructure.com/api/lti/security/jwks
- Oidc authentication endpoint:** https://pe-university.instructure.com/api/lti/authorize_redirect
- Access token endpoint:** https://pe-university.instructure.com/login/oauth2/token

At the bottom of the form are two buttons: "Save" (highlighted in blue) and "Cancel".

Click Save once you have completed all the fields. The set-up on Poll Everywhere is now complete.

Adding Poll Everywhere as an App in Canvas

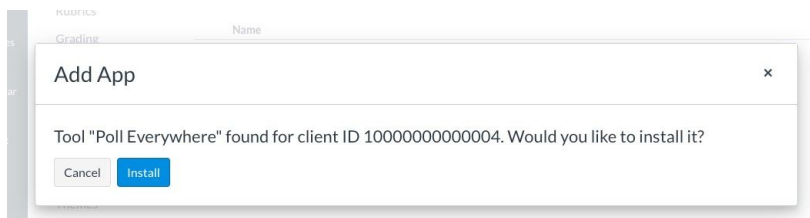
1. In Canvas, Go to Settings > Apps > View App Configurations to add an External App.



2. Click the '+ App' button at the top right to bring up the Add App popup. Select 'By Client ID' in the Configuration Type dropdown, and then add your Client ID into the next field. The Client ID is the number you copied from the Details column of the Developer key.



3. You should now see a subsequent message indicating that a tool was found and needs installing. Click the Install button to continue.



Now that the LTI 1.3 setup is complete on both the Poll Everywhere and Canvas side, it is ready to be used by your professors.