

Generating an Ally Access token in Instructure Canvas

Ally needs to be able to sync data such as courses and files from the Canvas REST API to generate reports and provide instructor feedback. To do this securely, an access token needs to be generated.

In this guide you will create a special user who has the correct permissions to retrieve the necessary data (and only that data) for the Ally service. This guide assumes you have administrator access on your Canvas installation.

Step 1: Create a new account role

Having a new account role allows you to define the permissions the Ally service will have. While you can see specifically which permissions are granted to the Ally service in the Canvas administration interface, at a high level these permissions allow Ally to download term, course, and file information for generating accessibility feedback and alternative versions. It also allows Ally to delete and replace file content which are important operations in helping instructors remediate their course content.

Steps:

1. Sign into your Canvas installation with an administrator account
2. Navigate to the account management (click on the "Admin" icon in the left hand navigation and then select your account in the window that slides open)
3. Navigate to the "Permissions" page
4. Select the "Account Roles" tab

Account

Admin

Dashboard

Courses

Calendar

Inbox

Help

≡ Your Institution Name > Permissions

Courses

People

Statistics

Permissions

Outcomes

Rubrics

Grading

Question Banks

Sub-Accounts

Terms

Authentication

SIS Import

Themes

Developer Keys

Canvas Data Portal

Course Roles

Account Roles

Search Permissions

All Roles x

Permissions	Ally
Account-level settings - manage	⊗
Admins - add / remove	⊗
Courses - add / edit / delete	⊗
Courses - view list	✔
Developer Keys - manage	⊗
Global Announcements - add / edit / delete	⊗

Screenshot 1: Standard permissions page, located under account management

5. Click the "Add Role" button
6. Save a role named "Ally". Once saved, a new column named "Ally" should have been added to the table

× New Account Role

Role Name:

Ally

Cancel Save

Screenshot 2: The "New Account Role" dialog that appears when the "Add Role" button is clicked

7. In the "Ally" column, enable the following permissions:

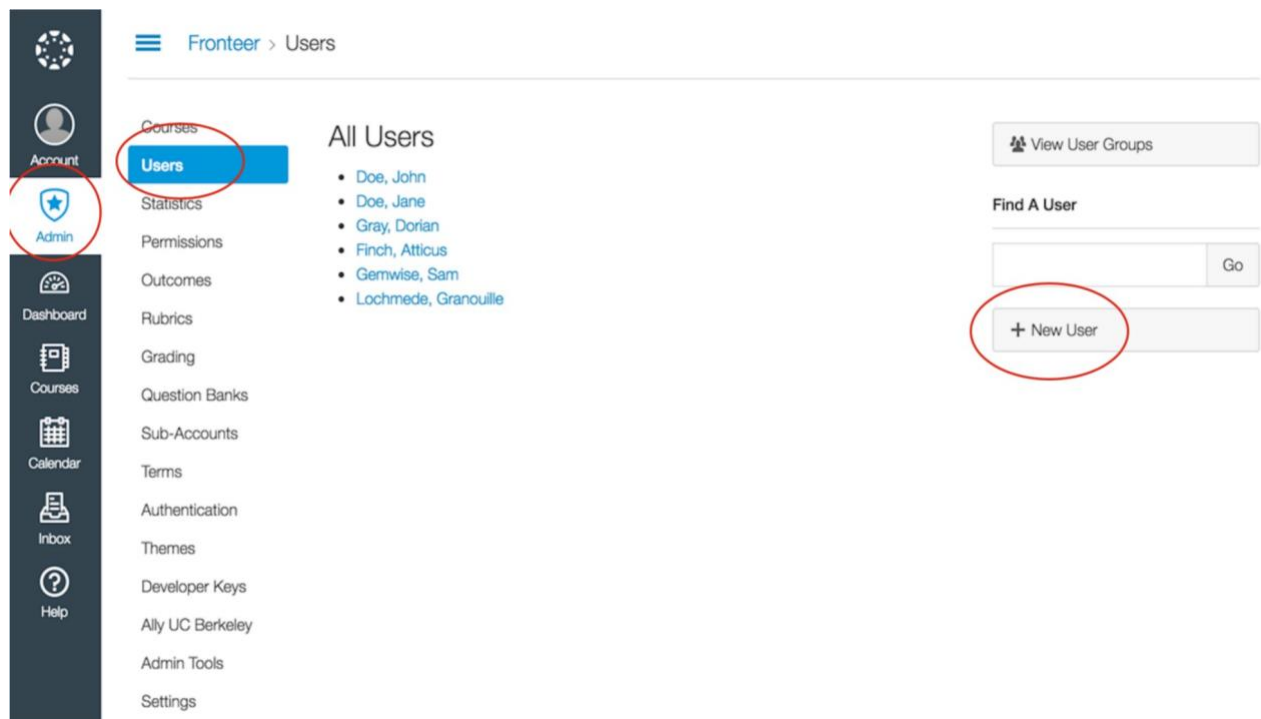
- Courses - view list
- Users - act as
- Announcements - view
- Assignments and Quizzes - add / edit / delete
- Course Content - add / edit / delete
- Course Content - view
- Course Files - add / edit / delete
- Discussions - moderate
- Discussions - view
- Pages - add / edit / delete

Step 2: Create a new user

It's considered best practice to create a new user for each integration with Canvas. If users for your institution are created directly in Canvas, please follow these instructions to do so. However, if users are managed in an external system such as SIS or LDAP, please follow the process for creating users for use in Canvas for your institution, then continue to **Step 3**.

If users are created directly in Canvas for your institution, please complete the following:

1. Navigate to the "Users" page under your account management
2. Click the "New User" button and add a new user called "Ally"



Screenshot 3: The users page with the "Add User" button highlighted

3. Make sure the "Email the user about this account creation" checkbox is ticked
4. Verify the account by following the link you received in your email inbox

Add a New User ×

Full Name:*
This name will be used by teachers for grading.

Display Name:
People will see this name in discussions, messages and comments.

Sortable Name:
This name appears in sorted lists.

Email: *

Email the user about this account creation

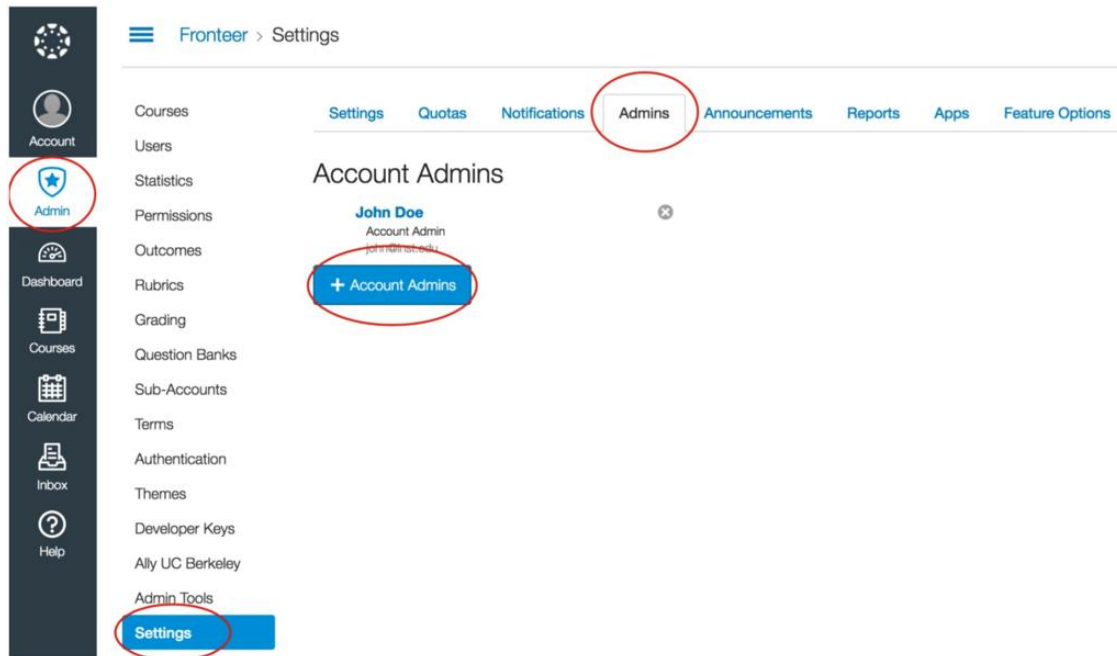
[View Privacy Policy](#)

Figure 4: The "Add new user" dialog that appears when the "Add User" button is clicked

Step 3: Grant the new user the "Ally" role

Steps:

1. Navigate to the "Settings" page under your account management
2. Select the "Admins" tab
3. Click the "+ Account Admins" button to add the user



Screenshot 5: The "Admins" tab of the account settings page with the "Account Admins" button highlighted

4. In the form that popped open, ensure the "Ally" role is selected in the drop-down
5. If users are created directly in Canvas at your institution, you will be prompted to enter the email address of the user that you created in the previous section. If your user was created in an external system such as SIS or LDAP, please enter the identifier of the user requested by Canvas in the field
6. Click "Continue..."

Settings Quotas Notifications Admins Announcements Reports Apps Feature Options

Account Admins

John Doe
Account Admin
john@inst.edu

Add Account Admins

Add More Ally

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

an.address.you.own@inst.edu

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

Cancel Continue...

Figure 6: The "Add Account Admin" form

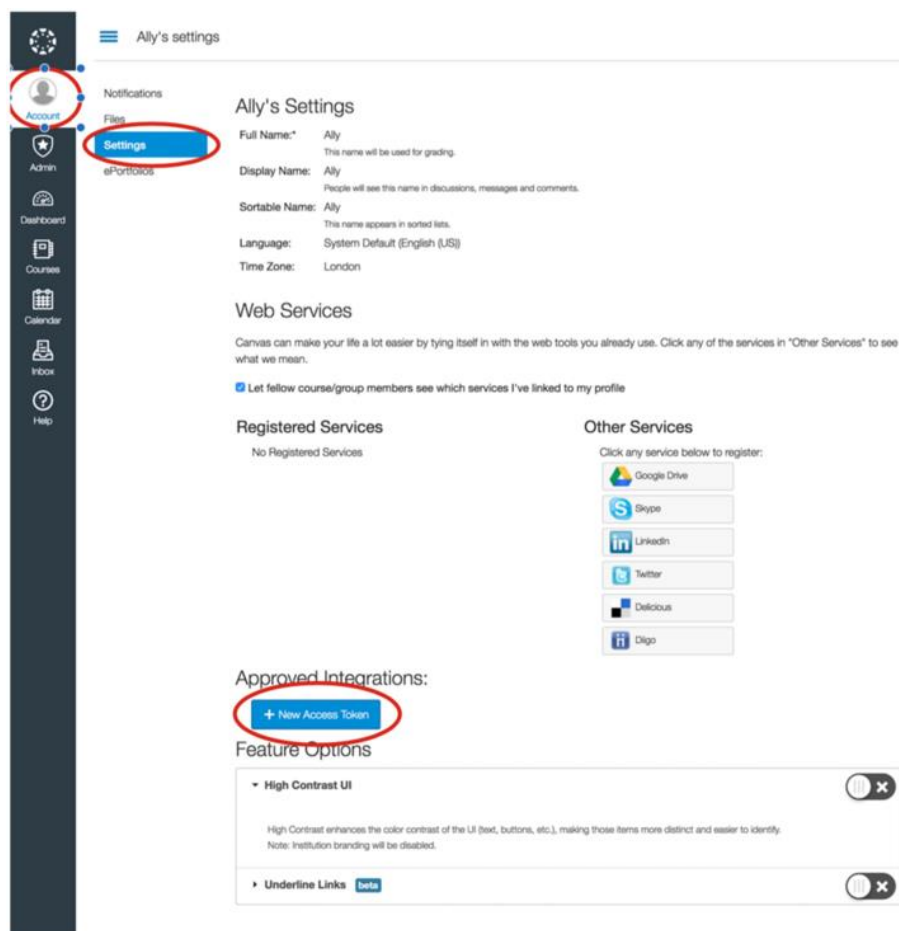
7. If the user was found, click the "OK Looks Good" button
8. Ensure the "Ally" user was added to the list

Step 4: Generate an access token

In this final step, we'll generate an access token that can be used by the Ally service to safely and securely interact with the REST API.

Steps:

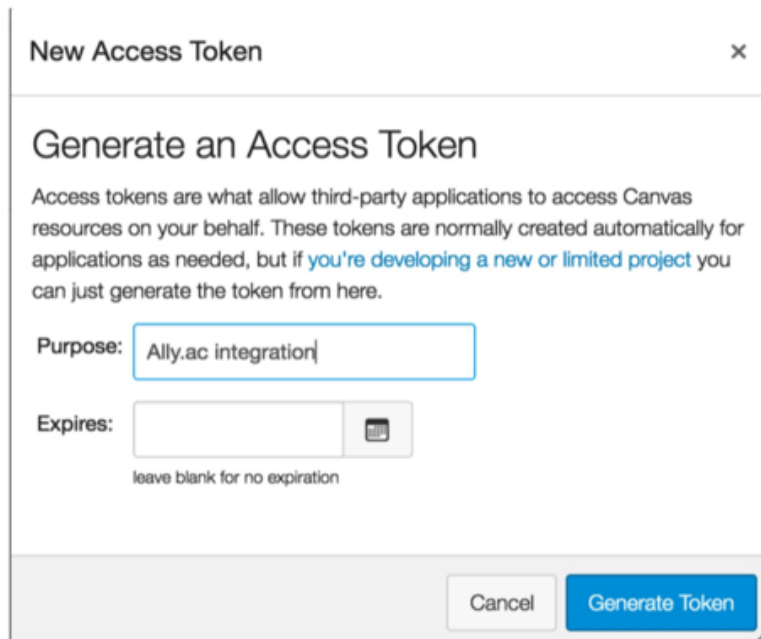
1. Sign in as the "Ally" user. Note that masquerading as the "Ally" user won't work for these steps as Canvas forbids administrators setting up an access token on another user's behalf.
2. Navigate to the user's settings by clicking "Account" in the left hand navigation followed by clicking on the "Settings" link in the new window.



Screenshot 7: The user settings page where an Access Token can be generated

3. Click on the "New Access Token" button
4. Enter "Ally.ac integration" as the purpose of the token, the expiration timestamp field can be left blank.

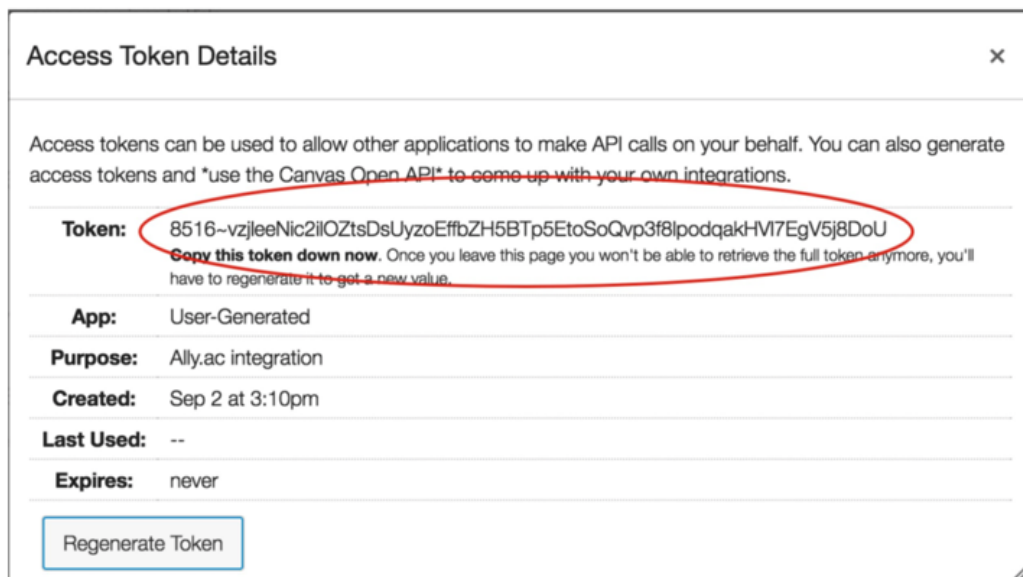
5. Click the "Generate Token" button



The screenshot shows a modal dialog titled "New Access Token" with a close button (X) in the top right corner. Below the title is the heading "Generate an Access Token". A paragraph of text explains that access tokens allow third-party applications to access Canvas resources and that they are normally created automatically, but can be generated manually for new or limited projects. There are two input fields: "Purpose:" with the text "Ally.ac integration" and "Expires:" which is currently empty. Below the "Expires:" field is a calendar icon and the text "leave blank for no expiration". At the bottom of the modal are two buttons: "Cancel" and "Generate Token".

Figure 8: The "Generate an Access Token" modal that appears when the "+ New Access Token" button is clicked

6. A new window should appear that contains the access token. Please copy this token now, as once you leave this page you will no longer be able to access it



The screenshot shows a dialog titled "Access Token Details" with a close button (X) in the top right corner. It contains a paragraph of text explaining that access tokens can be used for API calls and that they can be generated manually. Below this is a list of details for a generated token: "Token:" followed by a long alphanumeric string "8516~vzjleeNic2ilOZtsDsUyzoEffbZH5BTp5EtoSoQvp3f8lpodqakHVI7EgV5j8DoJ", "App:" "User-Generated", "Purpose:" "Ally.ac integration", "Created:" "Sep 2 at 3:10pm", "Last Used:" "--", and "Expires:" "never". A red oval highlights the token string and the text "Copy this token down now. Once you leave this page you won't be able to retrieve the full token anymore, you'll have to regenerate it to get a new value." Below the details is a "Regenerate Token" button.

Figure 9: The "Access Token" details dialog that appears when a token has been successfully generated