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

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

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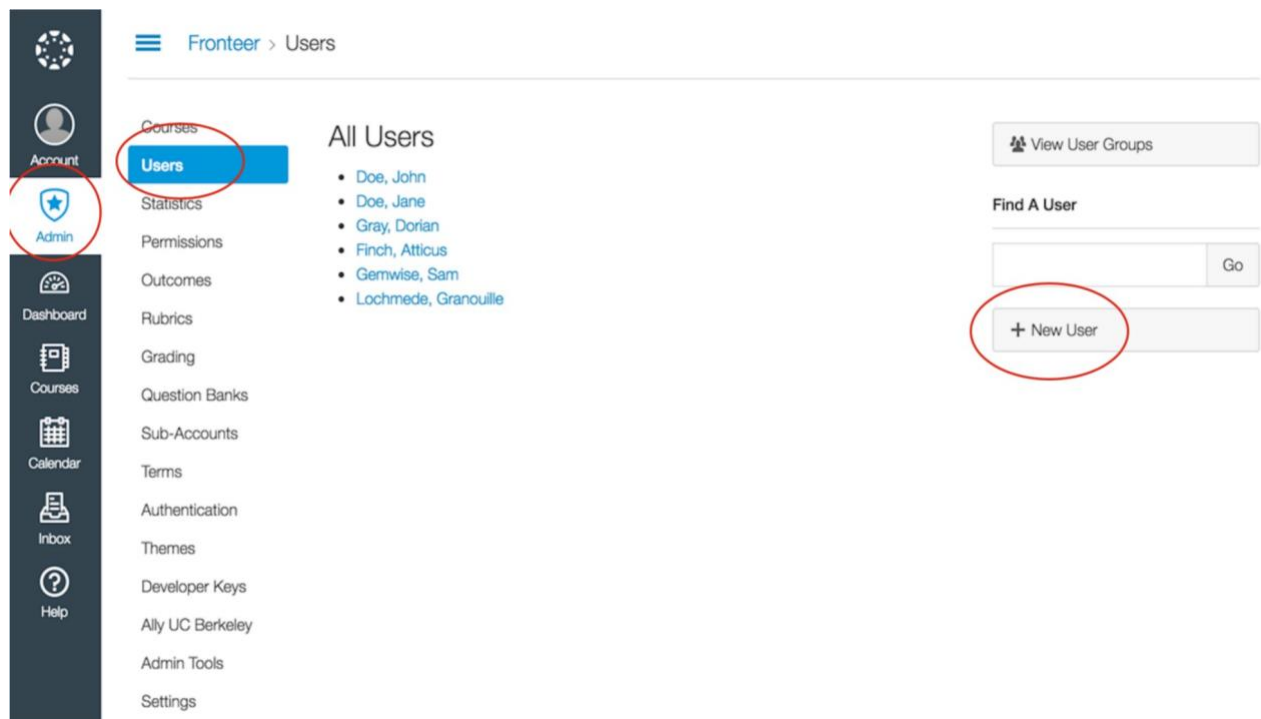
Screenshot 3: The users page with the "Add User" button highlighted

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
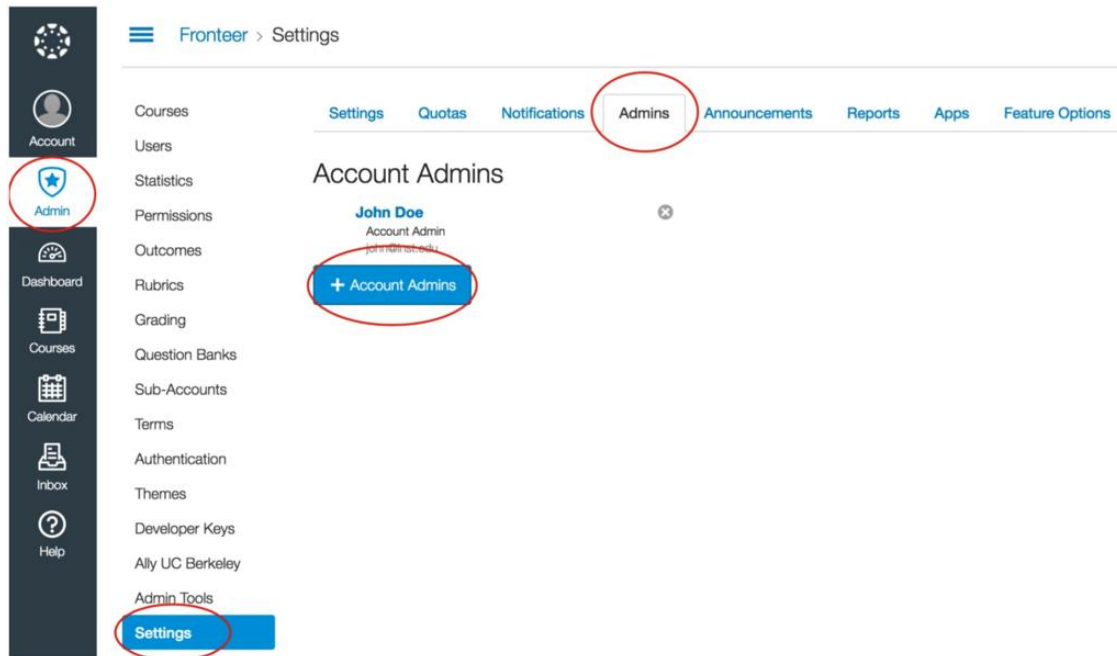

Figure 4: The "Add new user" dialog that appears when the "Add User" button is clicked

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...""

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.
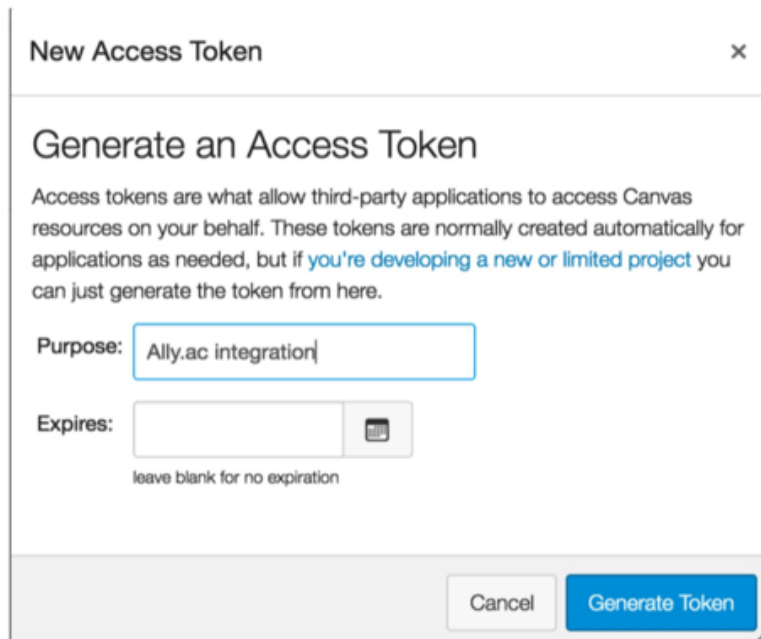
Steps:

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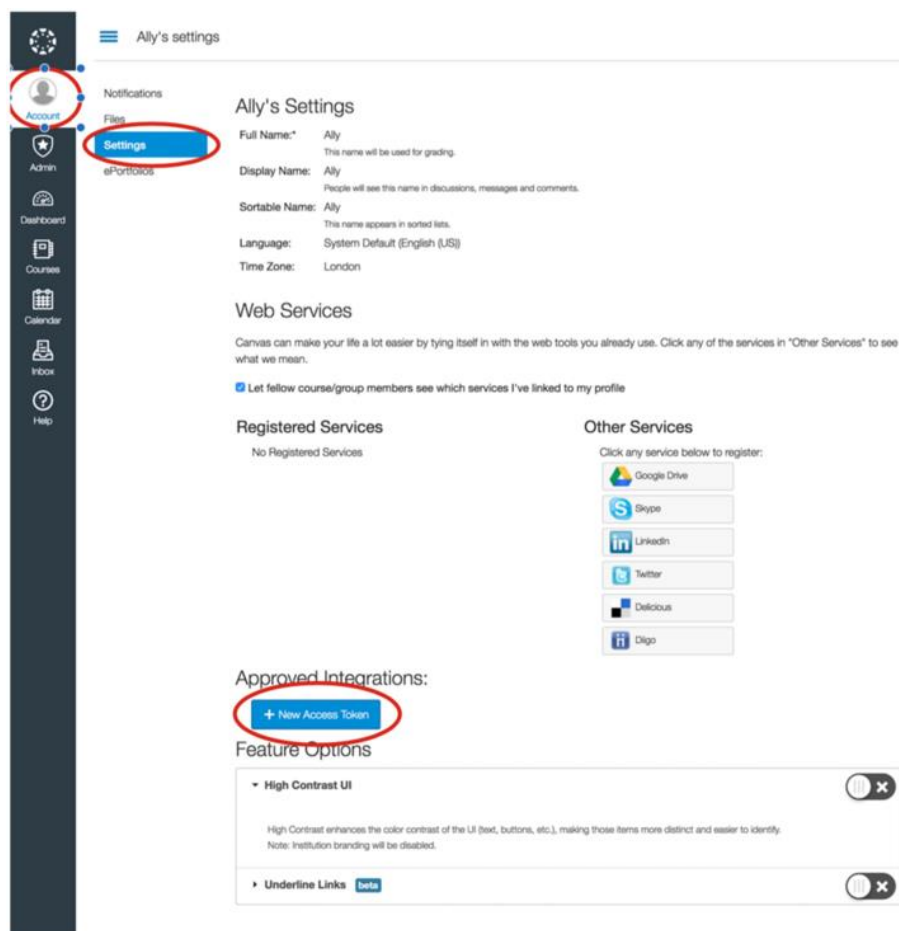
Screenshot 7: The user settings page where an Access Token can be generated

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.
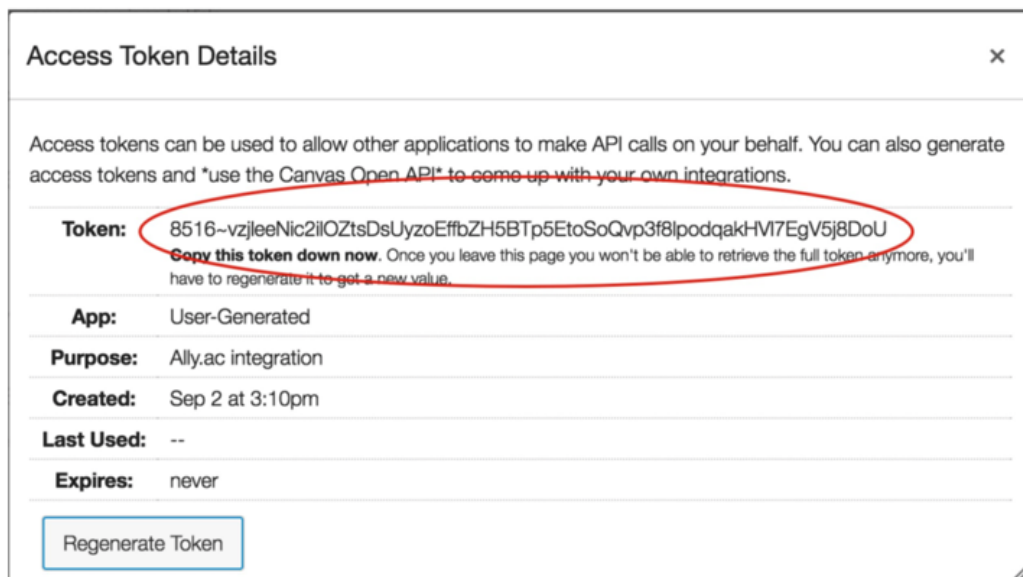
5. Click the "Generate Token" button

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

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