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. In order 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

Your i	nstitution name > Permissions	
Courses	Course Roles Account Roles	
count Users	\frown	
Statistics	Add Role	
dmin Permissions	Permissions	Account Admin
· Outcomes	ACCOUNT PERMISSIONS	
nboard Rubrics	Add/remove other admins for the	~
Grading	account Become other users	
urses Question Bank	KS Contraction of the second sec	×
Sub-Accounts		~
endar Terms	Manage (add / edit / delete) courses	4
Authentication	Manage SIS data	~
box Themes	Manage account-level settings	~
2 Developer Key	/S Manage developer keys	~
Ally UC Berke	Manage global announcements	~
Admin Tools	Manage observers for users	~
Settings	Manage permissions	1
	Manage storage quotas	4
	Manage webhooks	1
	Modify login details for users	4

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	
Base Type:	\$	
	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:

	Your institutio	n name > Permissions		
	Courses	Course Roles Account	t Roles	
Account	Users			
۲	Statistics	Add Role		\frown
Admin	Permissions	Permissions	Account Admin	Ally 💉 🕄
	Outcomes	ACCOUNT PERMISSIONS		
Dashboard	Rubrics	Add/remove other		
	Grading	admins for the account	×	×
Courses	Question Banks	Become other	4	
Ê	Sub-Accounts	users	· · · · · · · · · · · · · · · · · · ·	
Calendar	Terms	Import SIS data	✓	×
	Authentication	Manage (add / edit / delete)	v	×
INDOX	Themes	courses		
	Developer Keys	Manage SIS data	~	×
	Ally Central Florida	Manage account- level settings	×	 ✓
	Ally California Community	Manage developer keys	~	×
	Colleges Ally Clark	Manage global announcements	✓	×

Screenshot 3: The permissions page with the new Ally column

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 4: 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 U	ser	×
Full Name:*	Ally	
	This name will be used by teachers for g	jrading.
Display Name:	Ally	
	People will see this name in discussions	, messages and comments.
Sortable Name:	Ally	
	This name appears in sorted lists.	
Email: *	an.address.you.own@inst.edu	
Email the use	r about this account creation	
View Privacy Po	licy	Cancel Add User

Figure 5: 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

Courses	Settings Quotas	Notifications Admir	Announcements	Reports	Apps	Feature Options
Users						
Statistics	Account Admir	าร				
Permissions	John Doe)	8			
Outcomes	Account Admin					
Rubrics	+ Account Admins					
Grading						
Question Banks						
Sub-Accounts						
Terms						
Authentication						
Themes						
Developer Keys						
Ally UC Berkeley						
Admin Tools						

Screenshot 6: 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 dropdown
- 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
Accoun	t Admir	ns					
	Doe nt Admin nst.edu		٢				
Add Ac	count A	Admins					
Add More A	lly)	\$				
	a list of email a you.own@in:	ddresses to add users. st.edu					
Sample format:	Example Stude	ent" <student@example< td=""><td>e.com>, "Lastna</td><td>me, Firstname" <firstlast@e< td=""><td>example.com>, ju</td><td>ustAnEmailAc</td><td>Idress@example.com</td></firstlast@e<></td></student@example<>	e.com>, "Lastna	me, Firstname" <firstlast@e< td=""><td>example.com>, ju</td><td>ustAnEmailAc</td><td>Idress@example.com</td></firstlast@e<>	example.com>, ju	ustAnEmailAc	Idress@example.com
							Cancel Continue

Figure 7: The "Add Account Admin" form

- If the user was found, click the "OK Looks Good" button
 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.

Admen	Ally's Set			
Ramin Carl	tings Full Name:*			
@	rtíoios Display Name:	Ally This name will be used for grading.		
A REAL PROPERTY AND A REAL			ages and comments.	
hooerd	Sortable Name	c Ally This name appears in sorted lists.		
	Language:	System Default (English (US))		
ourses	Time Zone:	London		
iii kendar	Web Serv	vices		
<u>B</u>	Carivas can mak what we mean.	e your life a lot easier by tying itself in v	ith the web tools you already use. Click any of the services in	"Other Services" to a
^{∞∞}	Let fellow cou	urse/group members see which servic	es I've linked to my profile	
telp	Registered	Services	Other Services	
	No Registere	d Services	Click any service below to register:	
			Coogle Drive	
			Skype	
			Linkedin	
			Twitter	
			Delicious	

Screenshot 8: 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

New Acc	cess Token		×
Gener	rate an Access To	oken	
resources application	kens are what allow third-party on your behalf. These tokens a as as needed, but if you're dev enerate the token from here.	are normally creat	ed automatically for
Purpose:	Ally.ac integration		
Expires:			
	leave blank for no expiration		
		Cancel	Generate Token

Figure 9: 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

ccess tokens	can be used to allow other applications to make API calls on your behalf. You can also generate
ccess tokens	and *use the Canvas Open API* to come up with your own integrations.
Token: 🤇	8516~vzjleeNic2ilOZtsDsUyzoEffbZH5BTp5EtoSoQvp3f8lpodqakHVI7EgV5j8DoU Sepy 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.
App:	User-Generated
Purpose:	Ally.ac integration
Created:	Sep 2 at 3:10pm
Last Used:	
Expires:	never

Figure 10: The "Access Token" details dialog that appears when a token has been successfully generated