

# API Basics

Utilization, Quiz Versions, and Postman

# What is API?

API is the acronym for Application Programming Interface. This allows us to search data to look for information that might not show in the user interface of Canvas. (example: if a user is not getting email notifications)



# How do I access it?

You will have to know what you are searching for but typically the API can be accessed by putting /api/v1 in your URL followed by the thing you are searching for.

It may look something like this;

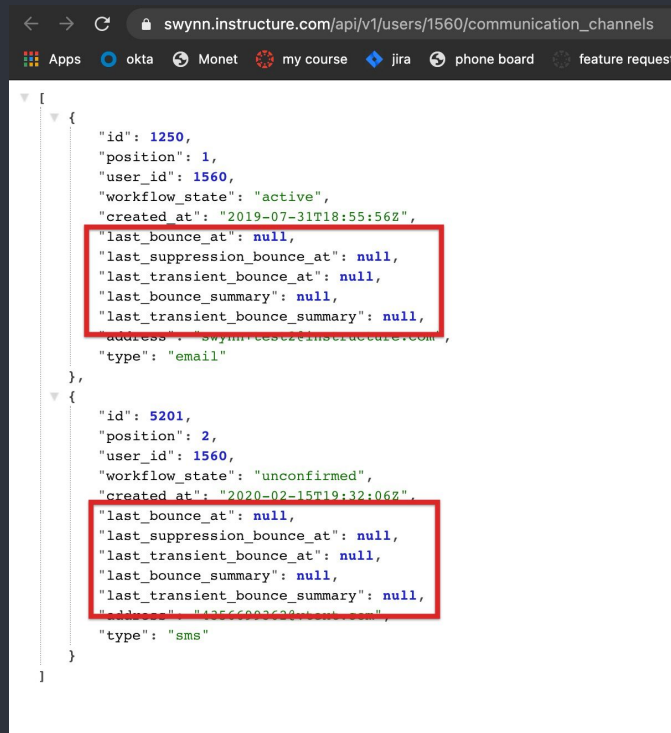
[https://swynn.instructure.com/api/v1/users/1560/communication\\_channels](https://swynn.instructure.com/api/v1/users/1560/communication_channels)

This API call shows how you would check if a user's email has bounced in our system

# How do I use it?

Once you have entered in the correct URL with the information you are wanting to search and hit enter, it will display the information.

- As you can see from these screenshots neither one of these have bounced and one is still unconfirmed



# Paginating

Not all information will immediately display in the API due to default limits set in place on the data that is returned. This will require you to have to “paginate” the results in order to view more data. You can do this by clicking on pagination within transmogrify where it will add `?page=1&per_page=100`. This will then allow for 100 items to be displayed within the API per page.

If looking at enrollments, you will need to look at the request headers to paginate. To do this, open inspect on the page you are on and navigate to the network tab. You will then refresh the page and click on one of the GET requests titled “enrollments”. You should then see links for “current, next, first, or last”. So if you are trying to get to the next page in the API, you will want to copy the “current” link and paste it into the URL bar. If you are trying to get to the last page in the API, you will want to copy the “last” link.

Video showing how to obtain response header link:  
<https://share.getcloudapp.com/E0uYjbw8>

# Checking Quiz Versions

You may need to check the quiz version that a quiz is currently on, or the version of the quiz that a student took in order to troubleshoot an issue. You can do this by opening the quiz in the API and looking for “version\_number”. If looking for the version on a submission, you will want to ensure you are on the submission page for that student.

Note: You are unable to check the quiz version on a New Quiz, however, you can see when it was last updated in the API.

```
1 }
2
3 {
4   "can_unpublish": true,
5   "can_update": true,
6   "require_lockdown_browser": false,
7   "require_lockdown_browser_for_results": false,
8   "require_lockdown_browser_monitor": false,
9   "lockdown_browser_monitor_data": null,
10  "speed_grader_url": "https://nfinssand.instructure.com/courses/580359/gradebook/speed_grader?assignment_id=544749",
11  "permissions": {
12    "manage": true,
13    "read": true,
14    "update": true,
15    "create": true,
16    "submit": true,
17    "preview": true,
18    "delete": true,
19    "read_statistics": true,
20    "grade": true,
21    "review_grades": true,
22    "view_answer_audits": true
23  }
24 }
25
26 "quiz_reports_url": "https://nfinssand.instructure.com/api/v1/courses/580359/quizzes/168419/reports",
27 "quiz_statistics_url": "https://nfinssand.instructure.com/api/v1/courses/580359/quizzes/168419/statistics",
28 "message_students_url": "https://nfinssand.instructure.com/api/v1/courses/580359/quizzes/168419/submission_users/message",
29 "section_count": 3,
30 "quiz_submission_versions_html_url": "https://nfinssand.instructure.com/courses/580359/quizzes/168419/submission_versions",
31 "assignment_id": 544749,
32 "one_time_results": false,
33 "only_visible_to_overrides": false,
34 "assignment_group_id": 74910,
35 "show_correct_answers_last_attempt": false,
36 "version_number": 6,
37 "has_access_code": false,
38 "post_to_sis": false,
39 "migration_id": null,
40 "question_types": {
41   "multiple_choice_question",
42   "short_answer_question",
43   "fill_in_multiple_blanks_question",
44   "multiple_answers_question"
45 }
```

# Running API Calls

You can run an API call to make changes or gather information in an account or course level outside of Canvas using an external program.

We need API token for calls, so Canvas knows it's our account making the call.

To create one, go to Account→Settings, and click “New Access Token” under Approved Integrations

Please use a different key for each tool!

\*Never give out your API token. If an Admin provides you with their token in an email, have them immediately change it.

# Using Postman

Postman is a free to use program that provides structure to API calls.

Formats API to prevent the need of manually typed API calls.

A free account is required to use, simple signup with Google Auth.

<https://www.postman.com/downloads/>

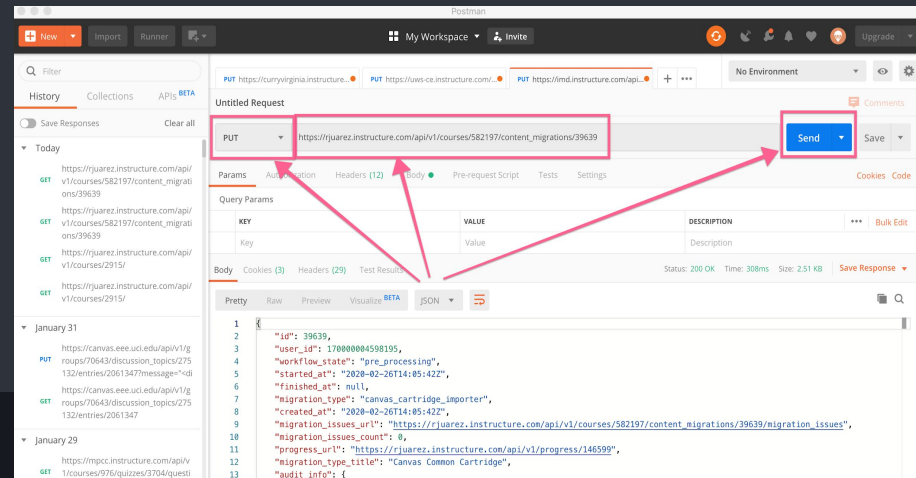
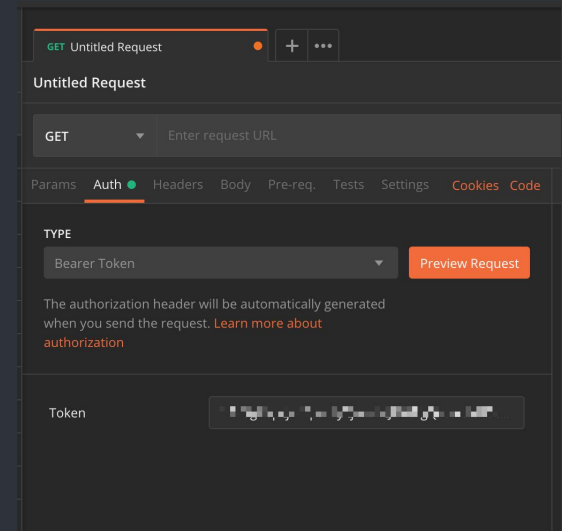


# Postman – Continued

## Adding Bearer Token:

Go to Auth, set type to Bearer, and paste in your auth token

Once you set your auth token in Postman, you can then proceed with setting up your API call by selecting the request type and the specific call URL.



# Activity

Using the API, find the current quiz version number and the version student Nancy Bowen took on the following quiz.

[https://swynn.instructure.com/courses/615/quizzes/38531?module\\_item\\_id=495932](https://swynn.instructure.com/courses/615/quizzes/38531?module_item_id=495932)

# Conclusion

- \* Reference here for specific API calls

<https://canvas.instructure.com/doc/api/index.html>

- \* It is not required to know API but it can be helpful when troubleshooting cases

# Questions?

