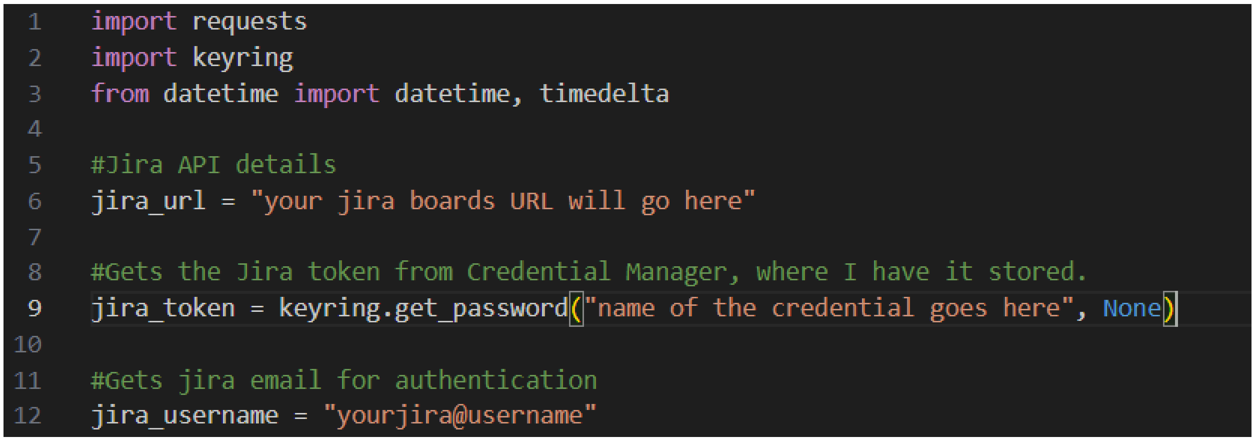
Overview

This Python script checks Jira for issues in the "Needs Review / Reviewing" column. It sends a reminder message to a specified Discord channel using a webhook.

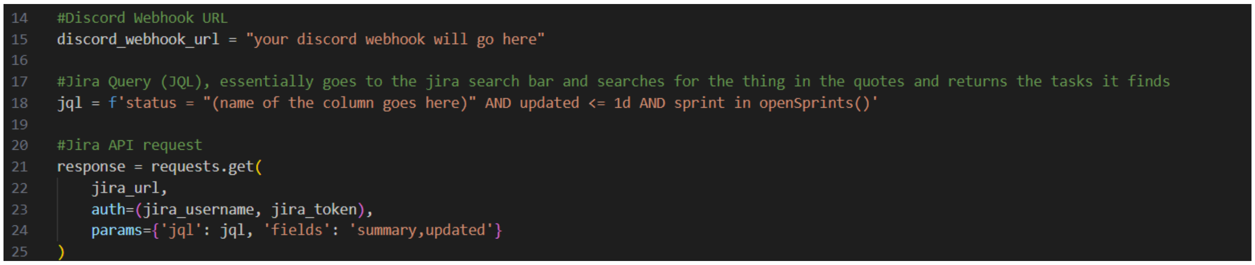
Requirements

- Python 3.7 or newer
- pip (Python package installer)
- Required libraries:
  - `Requests (lets you access the jira board)`
  - `Keyring  (lets you access passwords in credential manager. not technically needed if you want to hardcode the jira token.)`

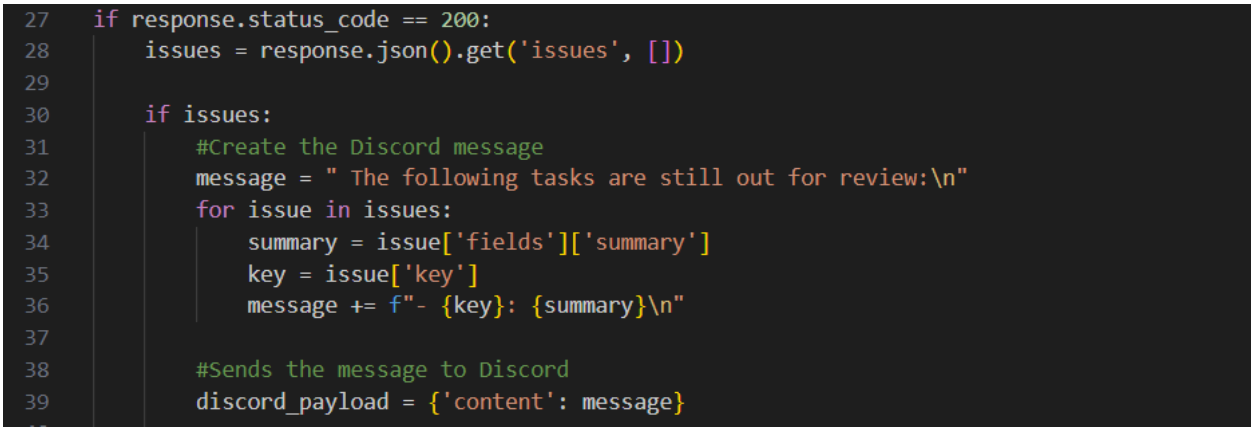
Script



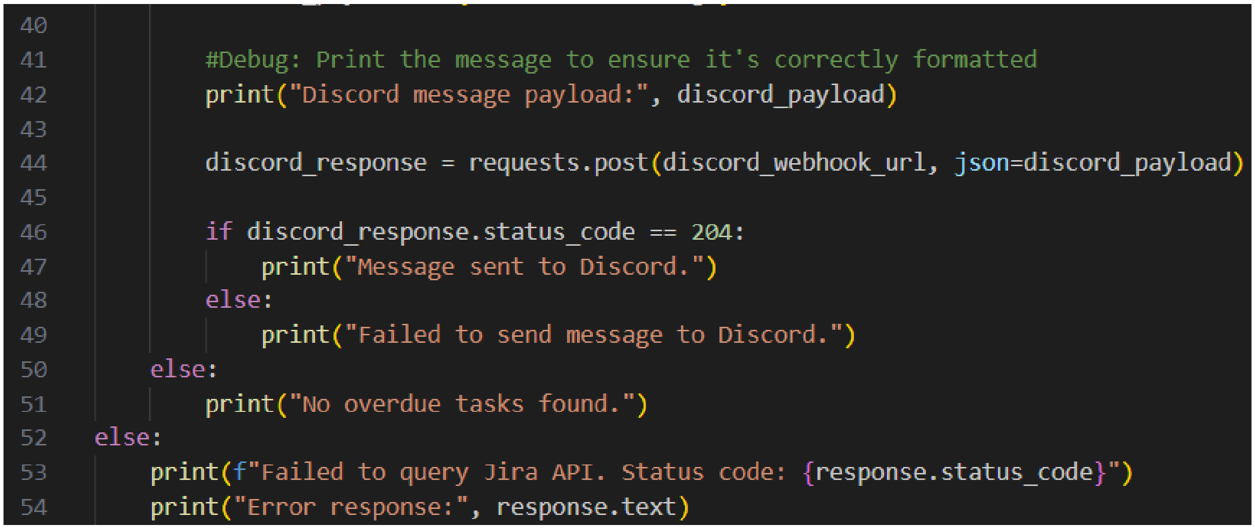
```python
import requests
import keyring
from datetime import datetime, timedelta

#Jira API details
jira_url = "your jira boards URL will go here"

#Gets the Jira token from Credential Manager, where I have it stored.
jira_token = keyring.get_password("name of the credential goes here", None)

#Gets jira email for authentication
jira_username = "yourjira@username"
```



```python
#Discord Webhook URL
discord_webhook_url = "your discord webhook will go here"

#Jira Query (JQL), essentially goes to the jira search bar and searches for the thing in the quotes and returns the tasks it finds
jql = f'status = "(name of the column goes here)" AND updated <= 1d AND sprint in openSprints()'

#Jira API request
response = requests.get(
    jira_url,
    auth=(jira_username, jira_token),
    params={'jql': jql, 'fields': 'summary,updated'}
)
```

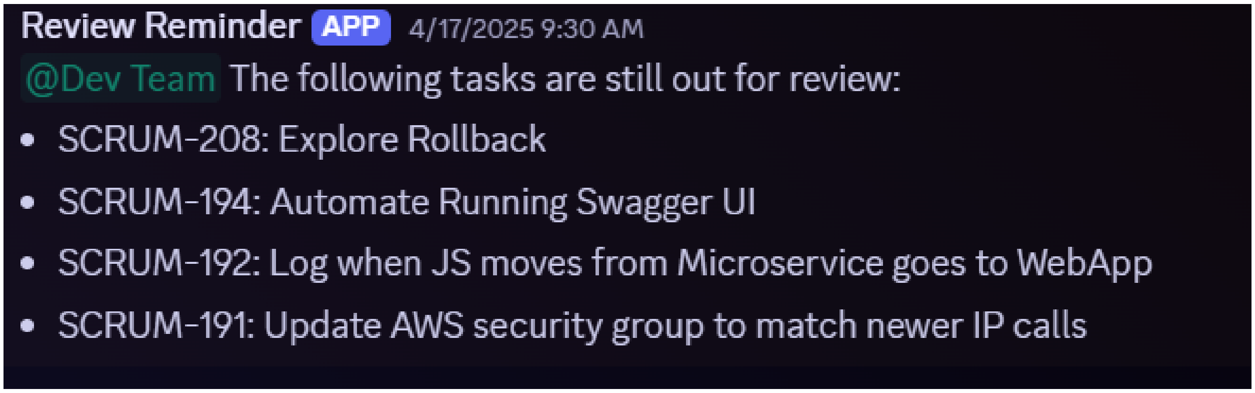


```python
if response.status_code == 200:
    issues = response.json().get('issues', [])

    if issues:
        #Create the Discord message
        message = " The following tasks are still out for review:\n"
        for issue in issues:
            summary = issue['fields']['summary']
            key = issue['key']
            message += f"- {key}: {summary}\n"

        #Sends the message to Discord
        discord_payload = {'content': message}
```



```python

        #Debug: Print the message to ensure it's correctly formatted
        print("Discord message payload:", discord_payload)

        discord_response = requests.post(discord_webhook_url, json=discord_payload)

        if discord_response.status_code == 204:
            print("Message sent to Discord.")
        else:
            print("Failed to send message to Discord.")
    else:
        print("No overdue tasks found.")
else:
    print(f"Failed to query Jira API. Status code: {response.status_code}")
    print("Error response:", response.text)
```

The discord message it sends should look like the following (but without the ‘@Dev Team’):



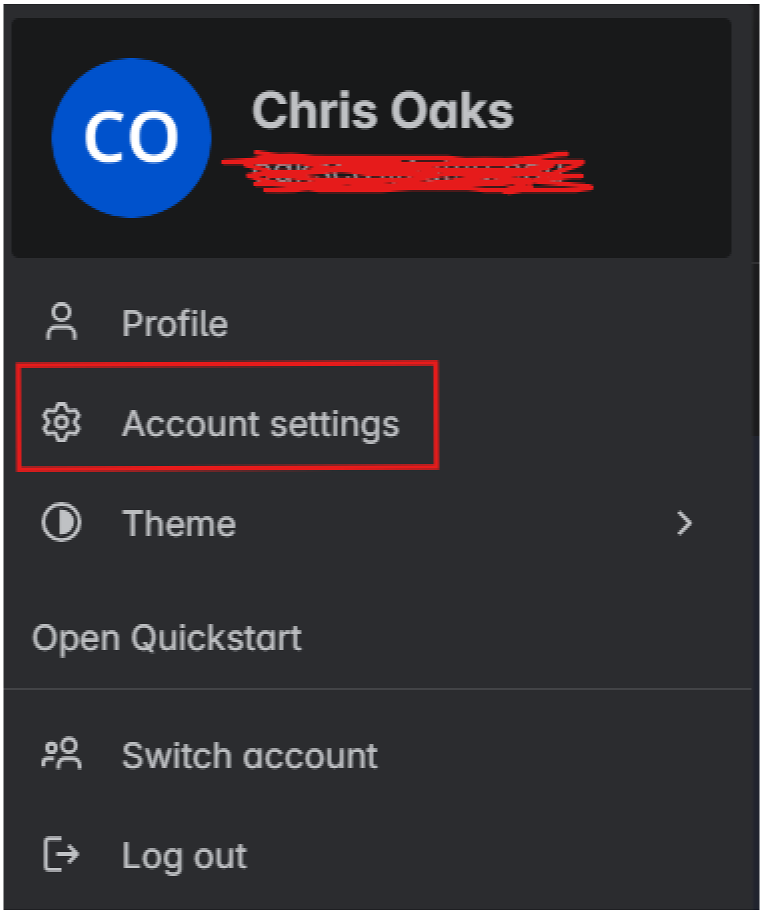
Review Reminder APP 4/17/2025 9:30 AM

@Dev Team The following tasks are still out for review:

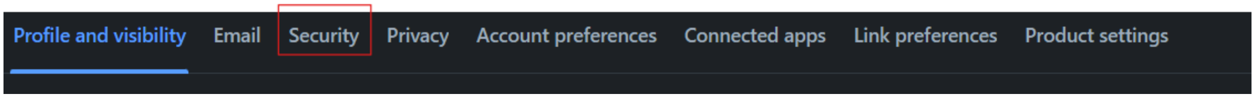
- SCRUM-208: Explore Rollback
- SCRUM-194: Automate Running Swagger UI
- SCRUM-192: Log when JS moves from Microservice goes to WebApp
- SCRUM-191: Update AWS security group to match newer IP calls

How to Get Jira Token

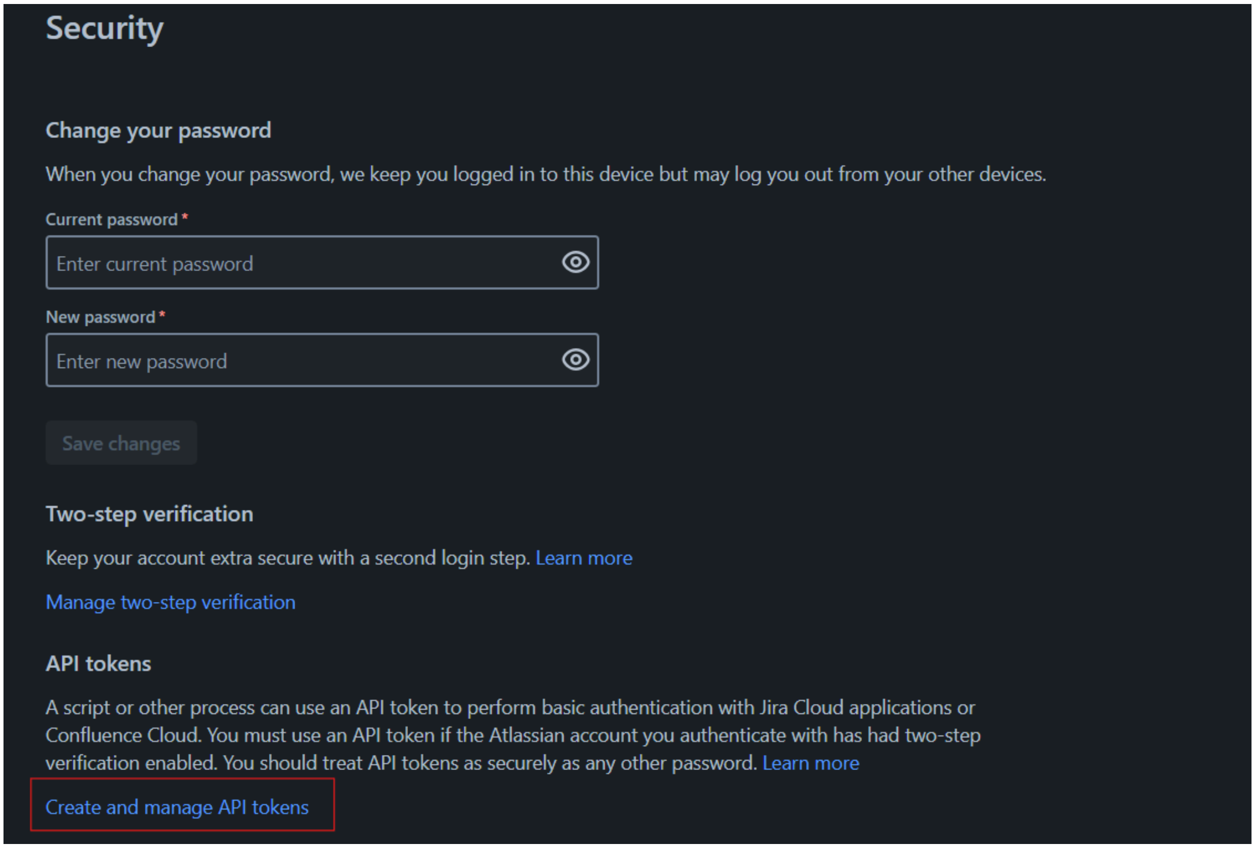
First, go to your account settings.



This will take you to a new page where you should see your profile settings. From the different tabs at the top, click on the “Security” one.



This will then take you to a page that lets you change your password, enable two step verification, or create/manage API tokens. The latter is what we will be using. Click the link that says “Create and manage API tokens”



Security

Change your password

When you change your password, we keep you logged in to this device but may log you out from your other devices.

Current password *

Enter current password

New password *

Enter new password

Save changes

Two-step verification

Keep your account extra secure with a second login step. Learn more

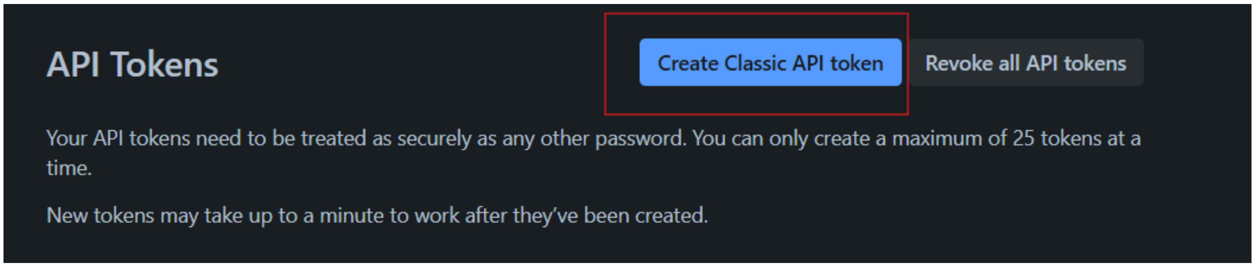
Manage two-step verification

API tokens

A script or other process can use an API token to perform basic authentication with Jira Cloud applications or Confluence Cloud. You must use an API token if the Atlassian account you authenticate with has had two-step verification enabled. You should treat API tokens as securely as any other password. Learn more

Create and manage API tokens

This will take you to the following page, where you will want to click on the blue ‘Create Classic API token” button.

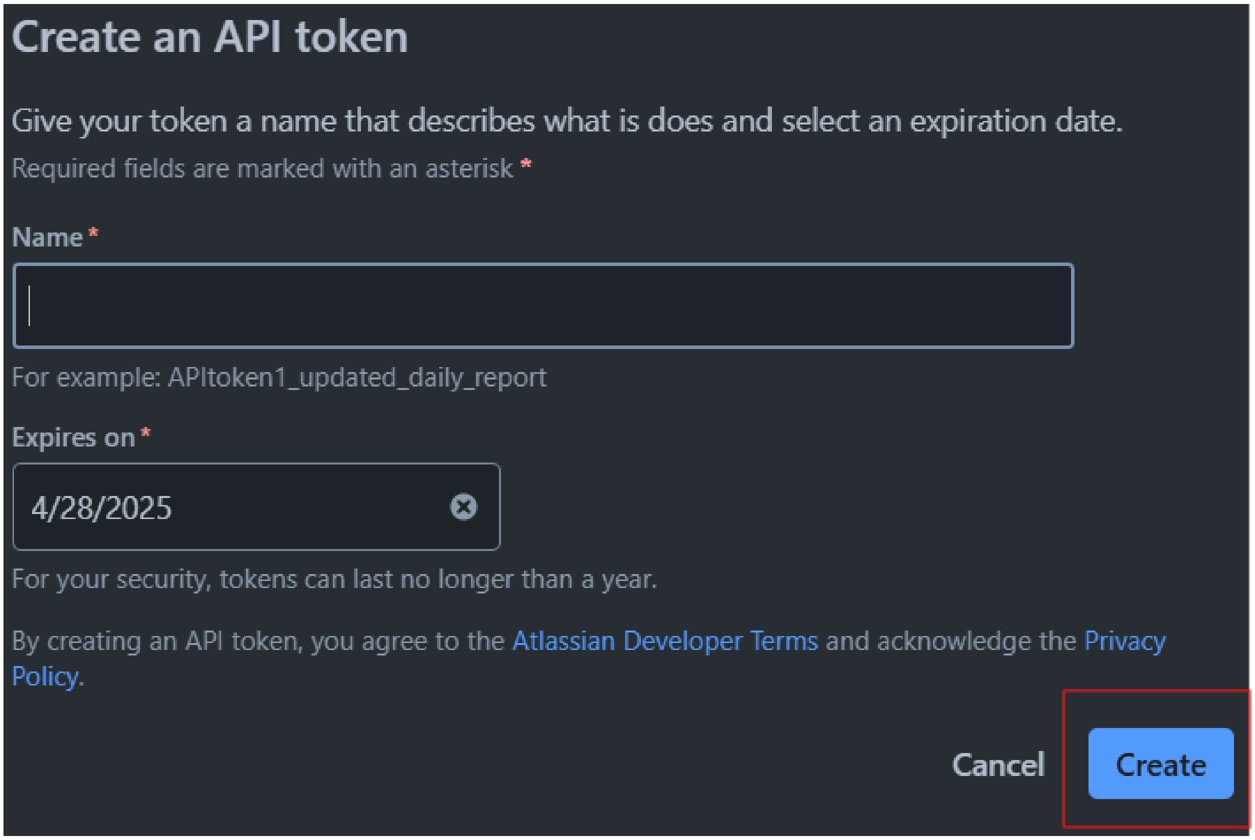


API Tokens

Your API tokens need to be treated as securely as any other password. You can only create a maximum of 25 tokens at a time.

New tokens may take up to a minute to work after they've been created.

Next, give it a name and tell it when to expire. Once that's done, hit the create button. Make sure you copy the token and put it somewhere safe. I stored mine in the credential manager as a password, which is why I used the keyring.



Create an API token

Give your token a name that describes what is does and select an expiration date.

Required fields are marked with an asterisk *

Name *

For example: APItoken1_updated_daily_report

Expires on *

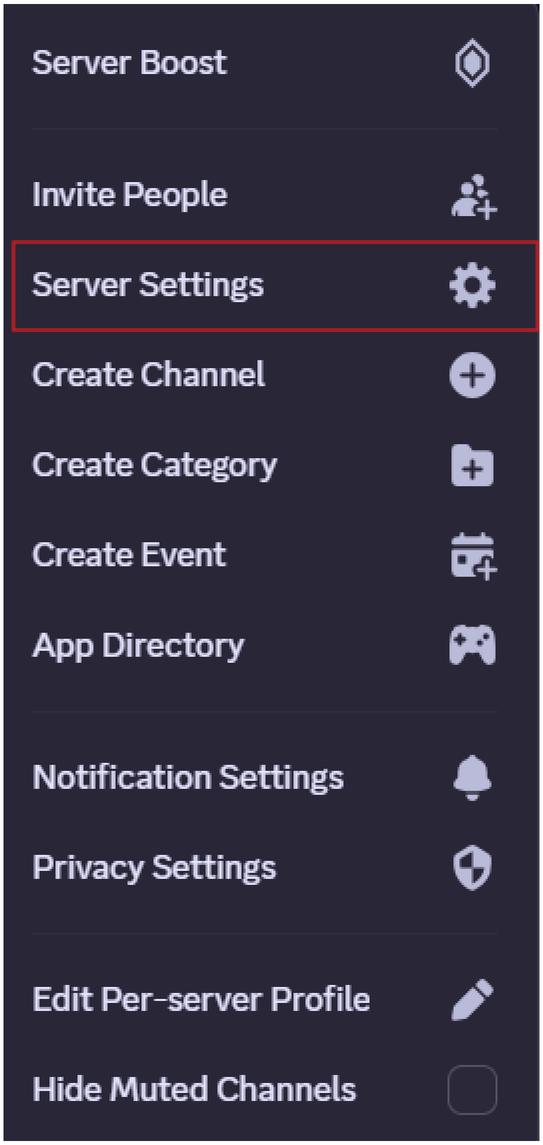
4/28/2025

For your security, tokens can last no longer than a year.

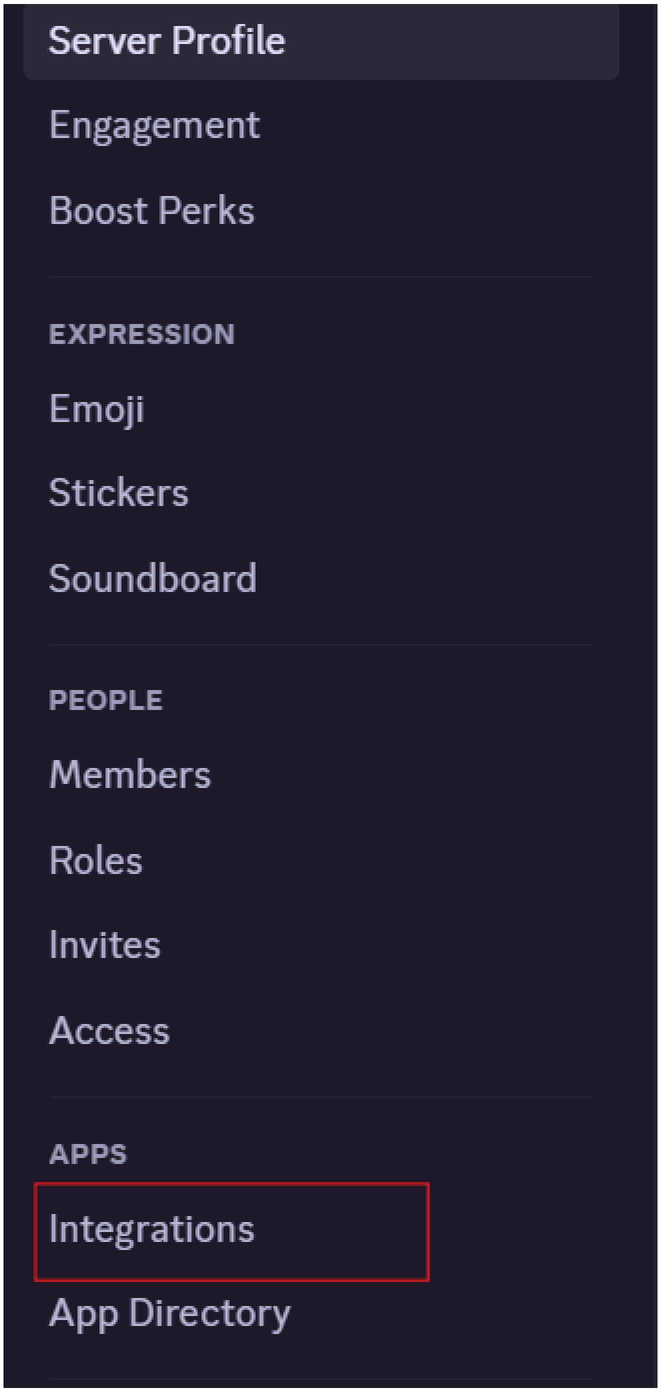
By creating an API token, you agree to the Atlassian Developer Terms and acknowledge the Privacy Policy.

How to Get Discord Webhook

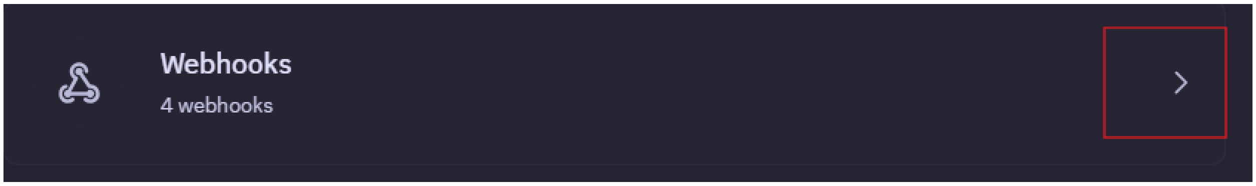
Go to the Server Settings



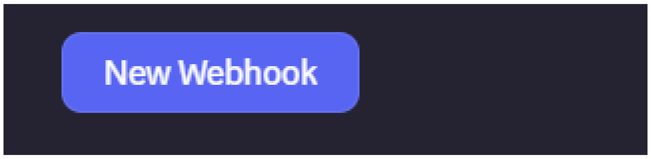
Under the “Apps” section, click on the first one which should be “Integrations”



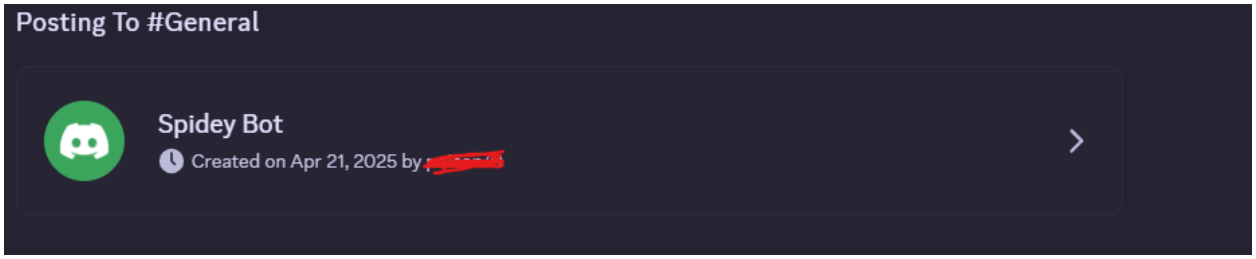
Next, click the arrow next to the “Webhooks” section. This will take you to a list of all of your webhooks.



From there, hit the “New Webhook” button.



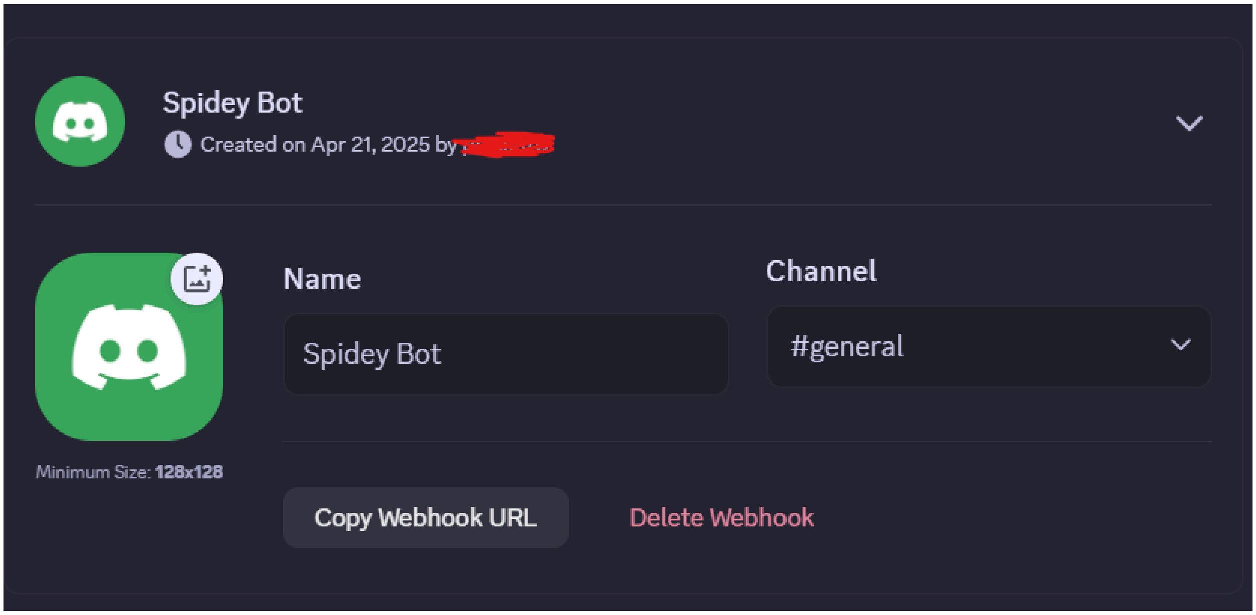
This will then make a webhook that looks like the following:


Posting To #General

Spidey Bot

Created on Apr 21, 2025 by [redacted]

Clicking on the arrow it has will open up the following drop down menu, where you can name it and tell it what discord channel it has access to.


Spidey Bot

Created on Apr 21, 2025 by [redacted]

Name: Spidey Bot

Channel: #general

You want to hit the “Copy Webhook URL” button and paste that in the script. Its probably not a bad idea to store this somewhere safe as well, but I was lazy.