slack

PYCON
CLEVELAND **2018**

Let's build a Slack bot!
github.com/slackapi/pycon

Requirements: Python 2/3, pip, ngrok, and a dev Slack workspace

Who am I?
Jason Roche

@Roach

Hi! I'm Jason Roche. I go by Roche (Roach) because, honestly, there were way too many Jasons born in the 1980s.

I'm a GIF enthusiast and Developer Advocate at # slack

My team works on Tools, SDKs, Tutorials, Documentation, Workshops, and other educational content.

What can the Slack platform do for you?

Slack offers many paths to programatically interact with your workspaces.

What apps *do* is up to you — perform one distinct task incredibly well or orchestrate concerts between Slack features & your internal accounting service.

Our APIs enable you to:

- Send **rich & timely notifications** with **Webhooks** and the **Web API**.

- Let users **perform workflows** with **interactive messages** & **slash commands**.

- Build **internal integrations** exclusively for your team or distribute with **OAuth**.

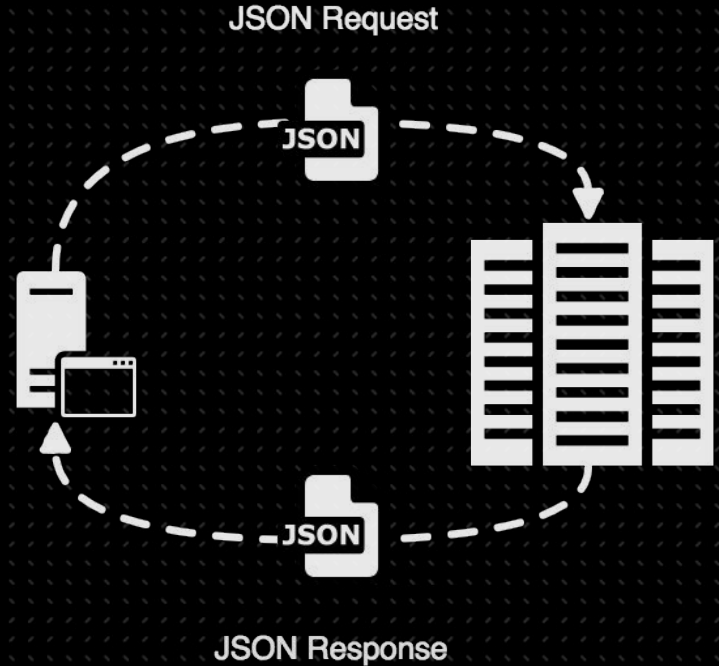- Monitor workspace change in real-time using the **RTM**, and **Events APIs**.

Slack Web API

Query information, post messages, *change things!* with the Web API.

Use it on the fly for ad-hoc queries or as part of a more complex tapestry of platform features.

It's all HTTP-RPC methods and not quite REST.

```
api.slack.com/web
api.slack.com/methods
```

JSON Request

JSON

JSON

JSON Response

Slack Events API

The Events API is a subscription model for apps and bots to process & react to activities in Slack.

All you need is a Slack app and a secure place for Slack to send your events.

Features:
- Events are sent as HTTP requests
- Standard webserver load-balancing practices
- Only subscribe to the events your app needs
- Limit your app's scopes to only those needed
- Most up to date collection of Slack workspace and user events

api.slack.com/events-api

Slack Events API servers

Load balancer

Application Webservers
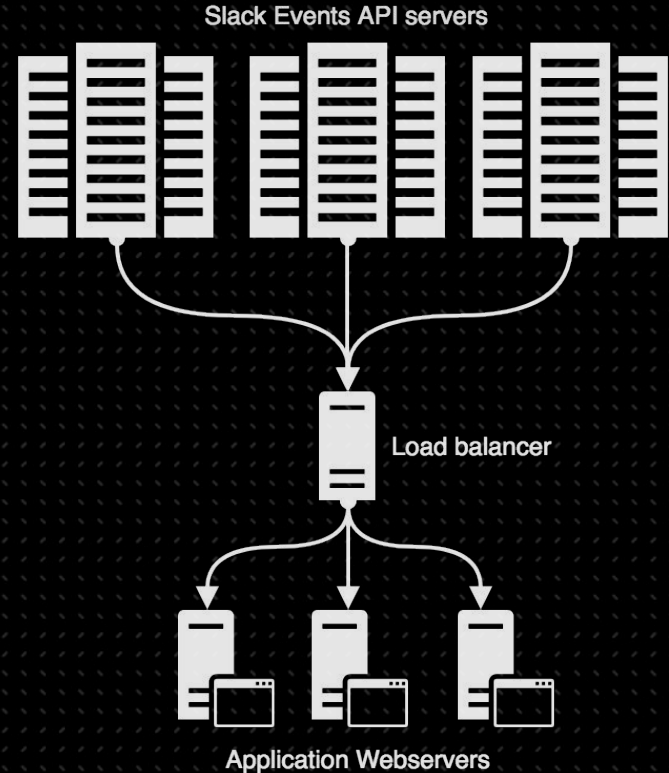
Slack RTM API

The Real Time Messaging API is a WebSocket-based API that allows you to receive events from Slack in real time and send messages as users. It's sometimes referred to as simply the "RTM API".

Doesn't require an HTTP server

Does require an always-on websocket connection

May not contain many newer Slack Event types, like bot_mention

`api.slack.com/rtm`

RTM Websocket
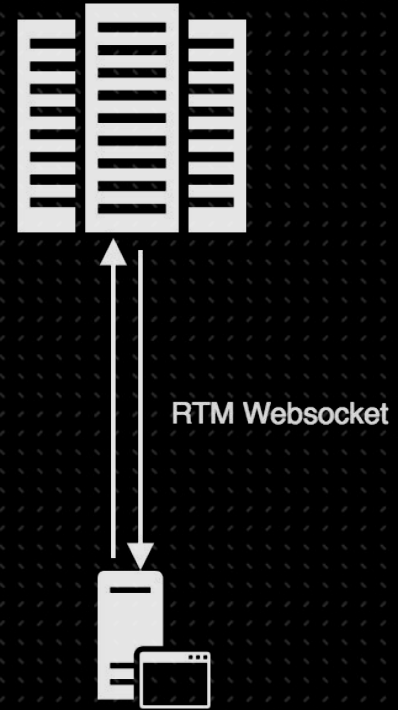
Why are we here, together, right now?

🟦 slack 😍 🐍 python

We are developers who love Python.

We are developers and we love Python.

From one-off scripts to internal tools, we use Python for all sorts of things.

We know that you probably do, **too** and we'd like to make it as seamless as possible for you to build your projects on Slack.

Python SlackClient

The Slack client enables you to interact with the Web API to post messages, reactions, upload files, etc.

Slack Events API Adapter

The Events API Adapter allows you to receive Slack Events API events as subscribable events in your Python app.

Python Examples

We're always adding features to the APIs, and always adding new examples.

For this project, we only need:

Python SlackClient

Whether you're building a custom app for your team, or integrating a third party service into your Slack workflows, Slack Developer Kit for Python allows you to leverage the flexibility of Python to get your project up and running as quickly as possible.

Supports: **Web API**, **RTM API**

Python Events API Adapter

The Slack Events Adapter is a Python-based solution to receive and parse events from Slack's Events API. This library uses an event emitter framework to allow you to easily process Slack events by simply attaching functions to event listeners.

Supports: **Events API**

Ngrok — HTTP tunneling

Ngrok is an awesome tool that allows you to expose a local webserver to the internet without having to expose ports to the world. It's especially helpful for developing webhook-style API apps.

ngrok.com

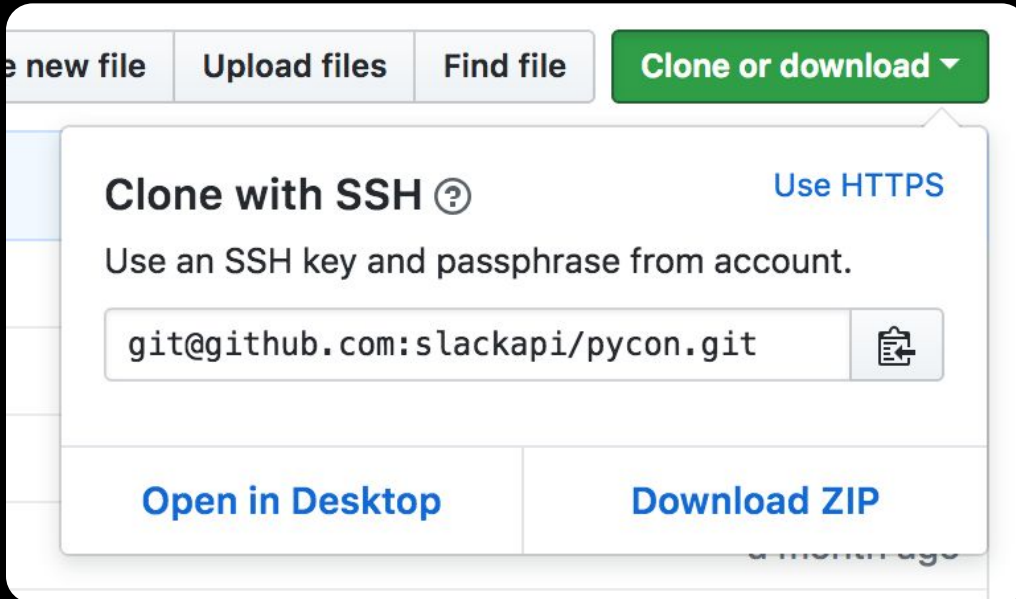**Note: Run this in a separate terminal window from the python app**

$ ngrok http 3000
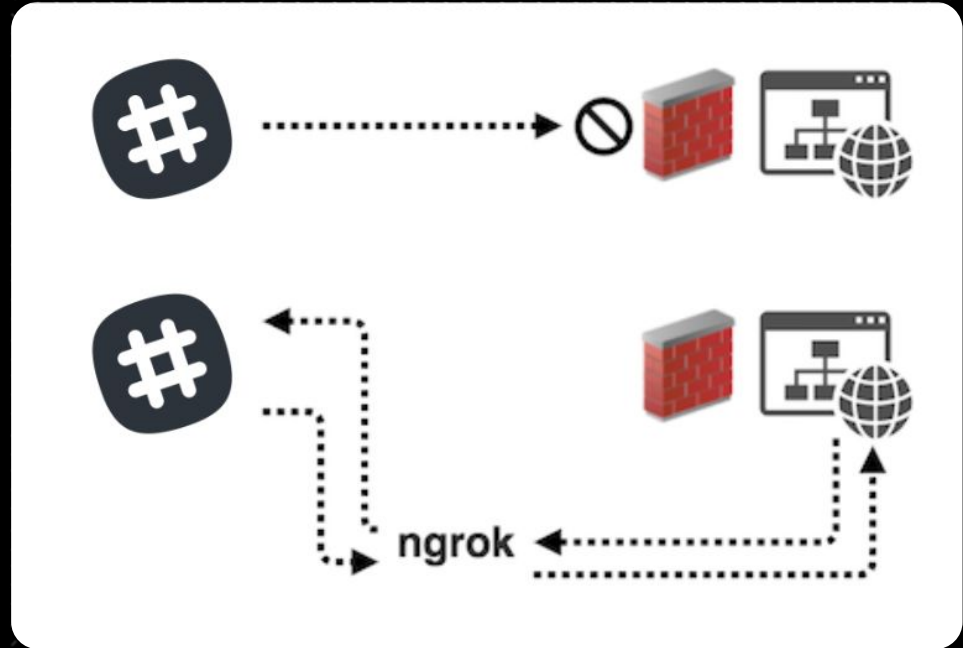
Download the Pycon example app

Git clone or download the example app repo:

github.com/slackapi/pycon

LIVE DEMO

I REGRET NOTHING

github.com/slackapi/pycon

Platform roadmap on Trello

↘ **Stay in touch!**

- Read our docs **api.slack.com**

- Check out the **Platform Changelog** for updates

Have a technical question?
Reach out to **developers@slack.com** or chat with us at **@SlackAPI**

I know what you *really* came here for...