

Video Analytics for PPE Detection

- APPE Detection System -

Beta Version

Slack Notifications Setup

**Energy & Chemicals
Training Centre**
SINGAPORE POLYTECHNIC

**Data Science &
Analytics Centre**
SINGAPORE POLYTECHNIC

Sponsored by TIEFA

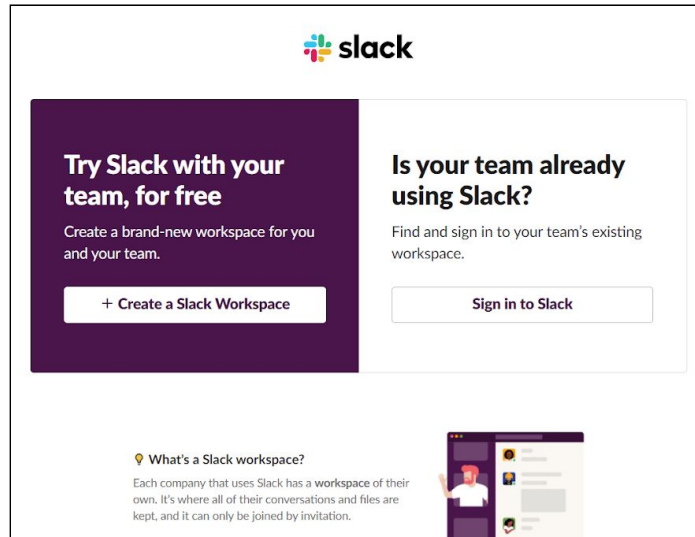
Overview

This document will explain how to setup your Slack workspace, configure a Slack bot to send notifications, and assign channels which the bot will send notifications to. This process will take approximately 10 minutes to complete and at the end of this tutorial, you will be able to receive notifications from Slack.

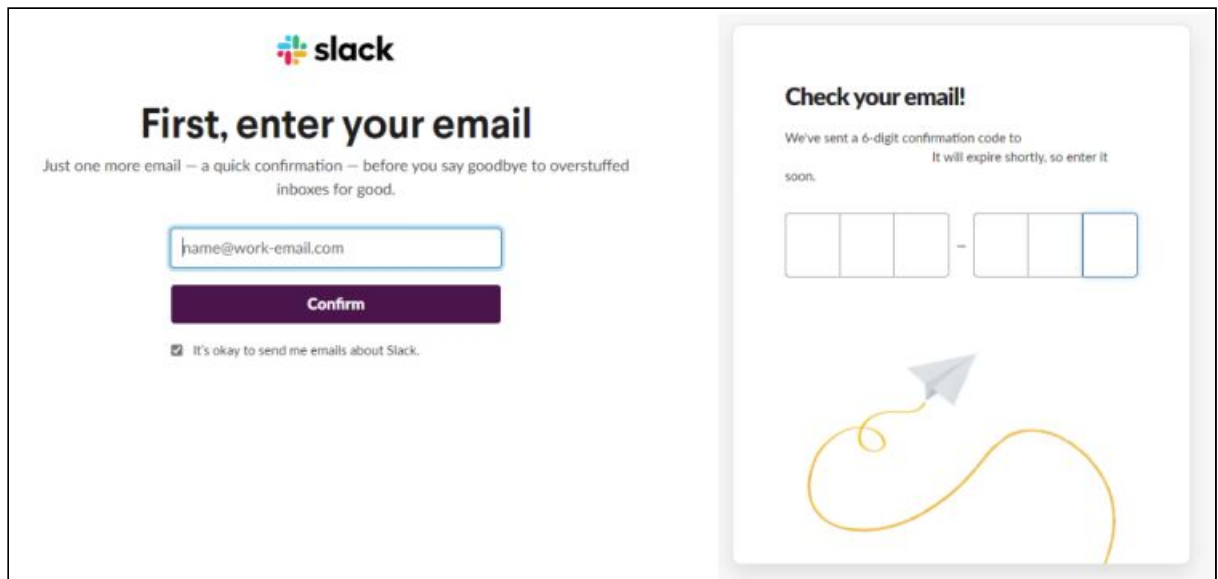
1. Creating a Slack workspace and channel

-- Skip to Section 2 if you already have a slack workspace --

1. If you don't have an existing workspace for the PPE Detection System, go to <https://slack.com/get-started#/> on your browser and click on the 'Create a Slack Workspace' button.

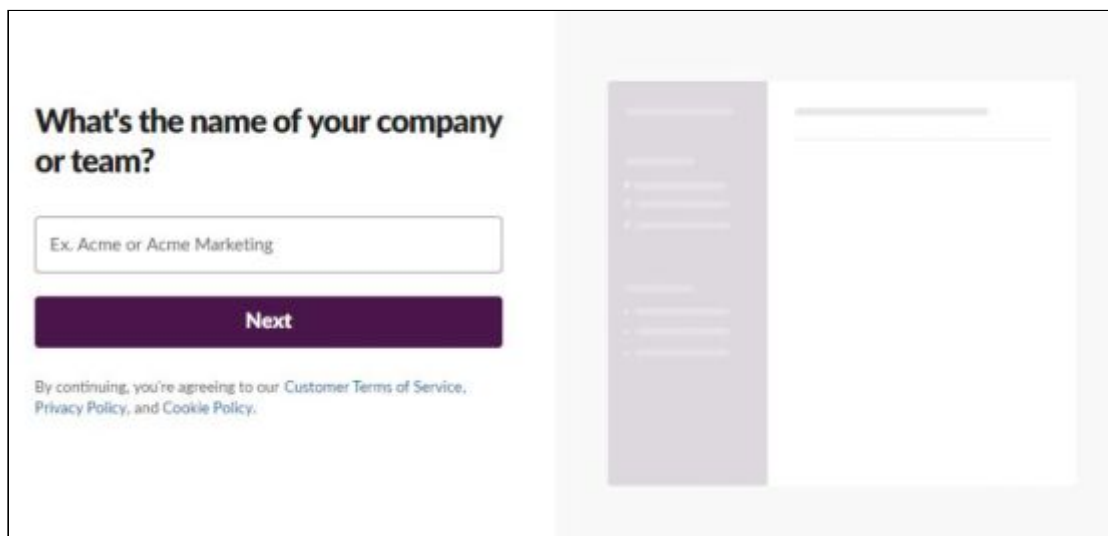


2. Enter your email and verify it by entering a six-digit code sent to your email.



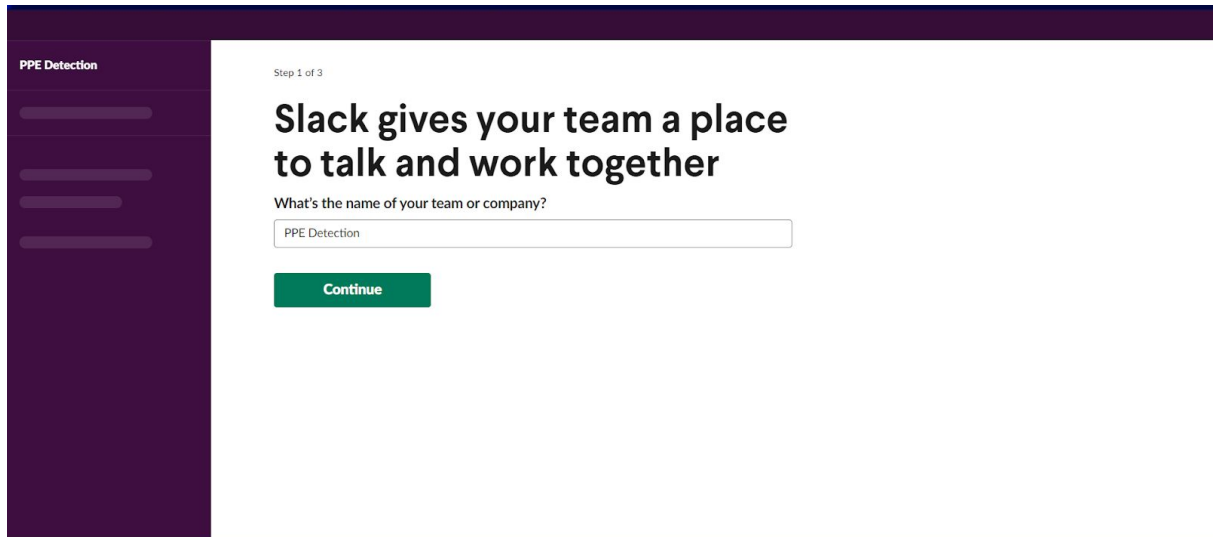
The image shows the Slack email verification interface. On the left, the Slack logo is at the top, followed by the heading "First, enter your email". Below this is a subtext: "Just one more email — a quick confirmation — before you say goodbye to overstuffed inboxes for good." A text input field contains the placeholder "name@work-email.com". Below the field is a dark purple button labeled "Confirm". At the bottom of this section is a checkbox with the text "It's okay to send me emails about Slack." On the right, a grey-bordered box contains the heading "Check your email!". Below it, text says "We've sent a 6-digit confirmation code to" and "It will expire shortly, so enter it soon." Below this text is a six-digit code input field, represented by two groups of three boxes separated by a hyphen. At the bottom of the right box is a graphic of a paper airplane with a yellow trail.

3. Name your workspace.



The image shows the Slack workspace naming interface. On the left, the heading "What's the name of your company or team?" is displayed. Below it is a text input field with the placeholder "Ex. Acme or Acme Marketing". Below the field is a dark purple button labeled "Next". At the bottom of this section is a line of text: "By continuing, you're agreeing to our [Customer Terms of Service](#), [Privacy Policy](#), and [Cookie Policy](#)." On the right, a grey-bordered box shows a preview of the workspace interface, including a sidebar with a list of channels and a main content area.

- Briefly describe your project



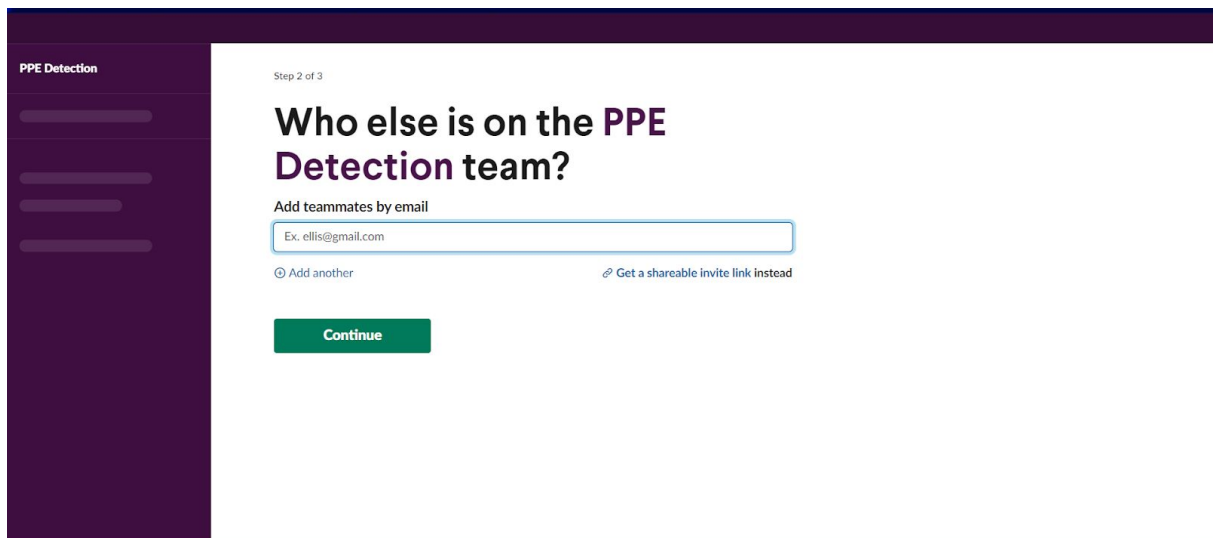
Step 1 of 3

Slack gives your team a place to talk and work together

What's the name of your team or company?

Continue

- A channel and a workspace should now be generated. In this step, you may add other team members into this project, or press 'Skip for now'. After that, click on 'Continue'.



Step 2 of 3

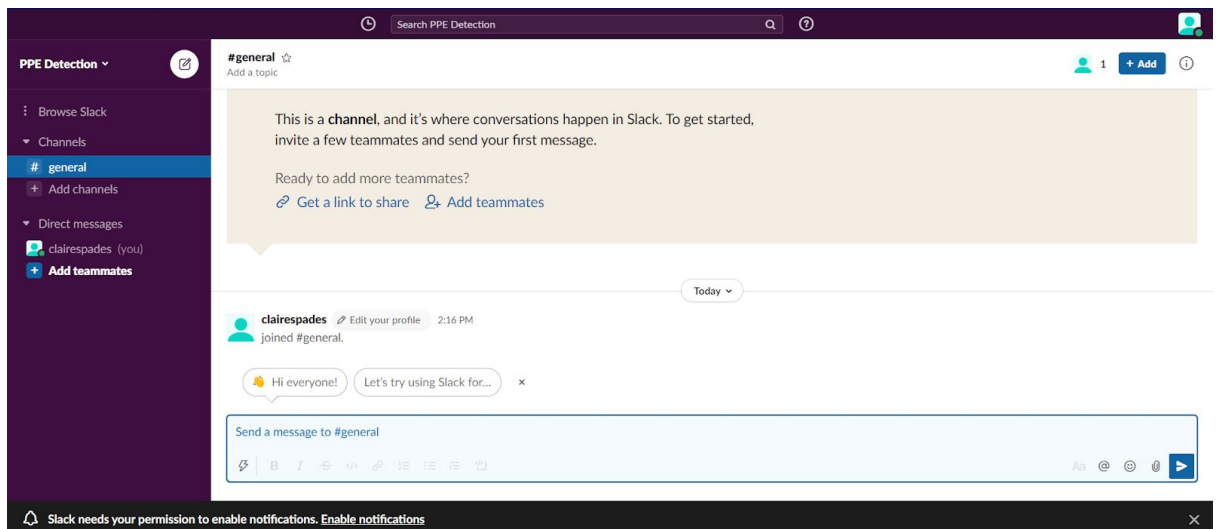
Who else is on the PPE Detection team?

Add teammates by email

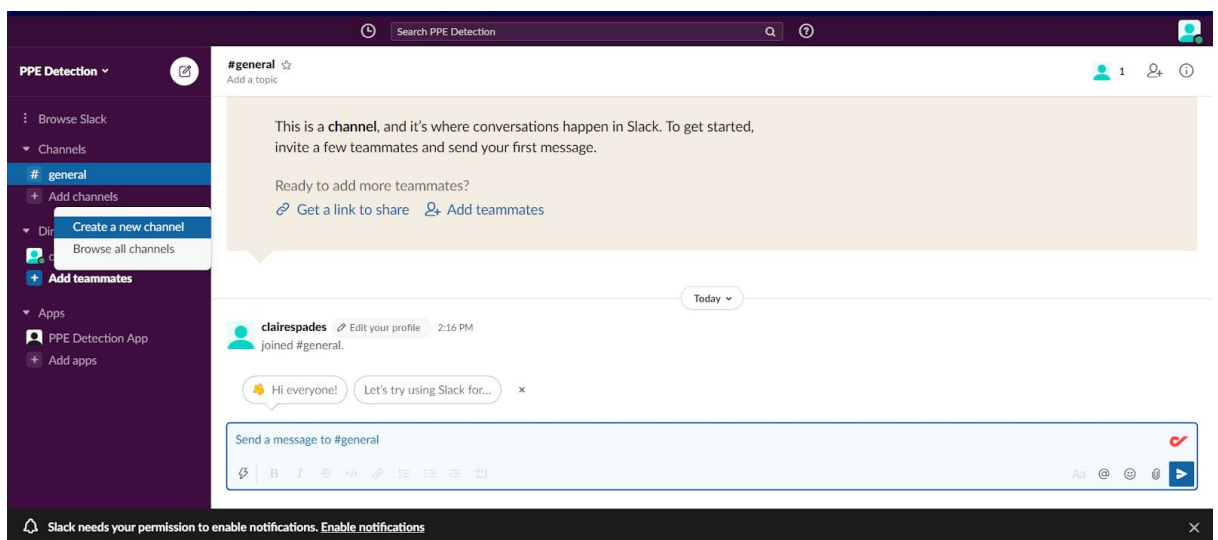
[Add another](#) [Get a shareable invite link instead](#)

Continue

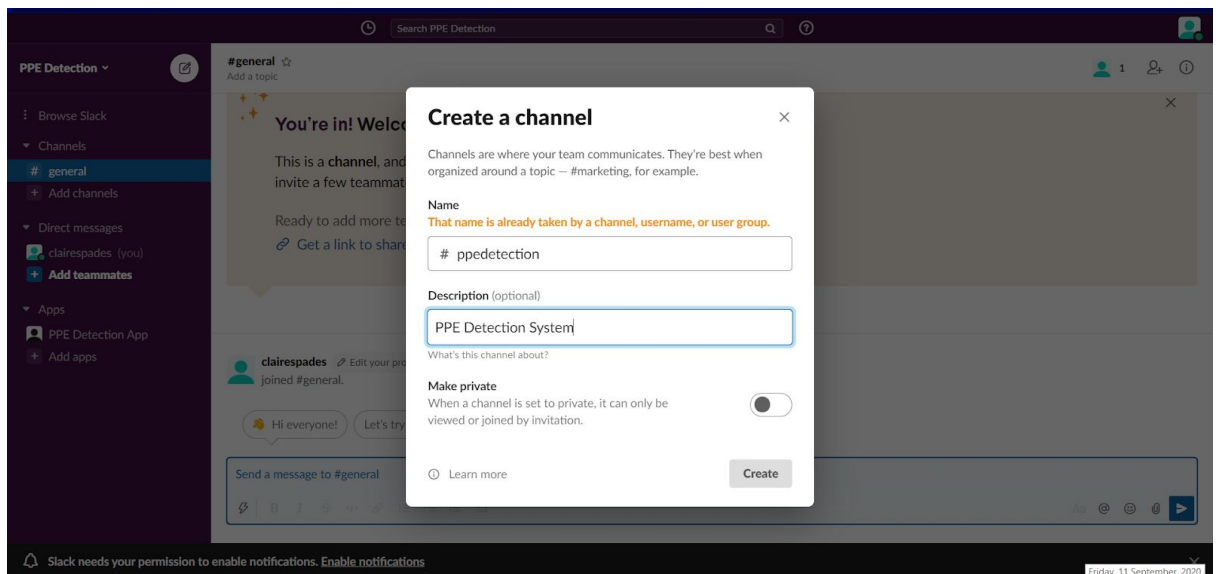
6. Your slack workspace should appear like this.



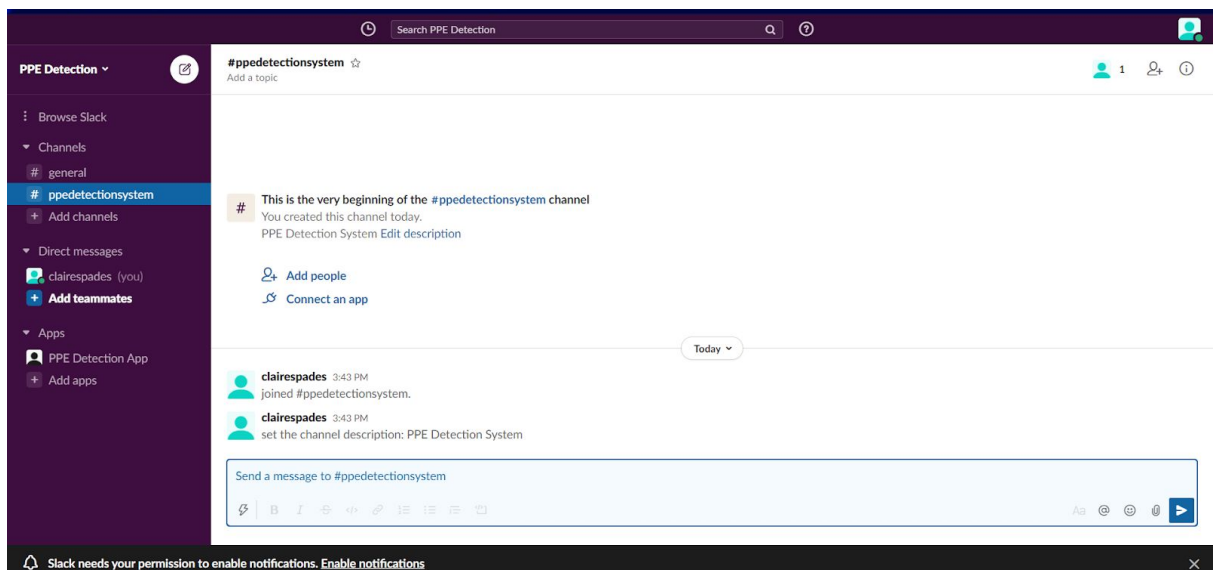
7. Create a new channel by clicking on 'Add channel'



8. Fill in the fields with your preferred channel name and description

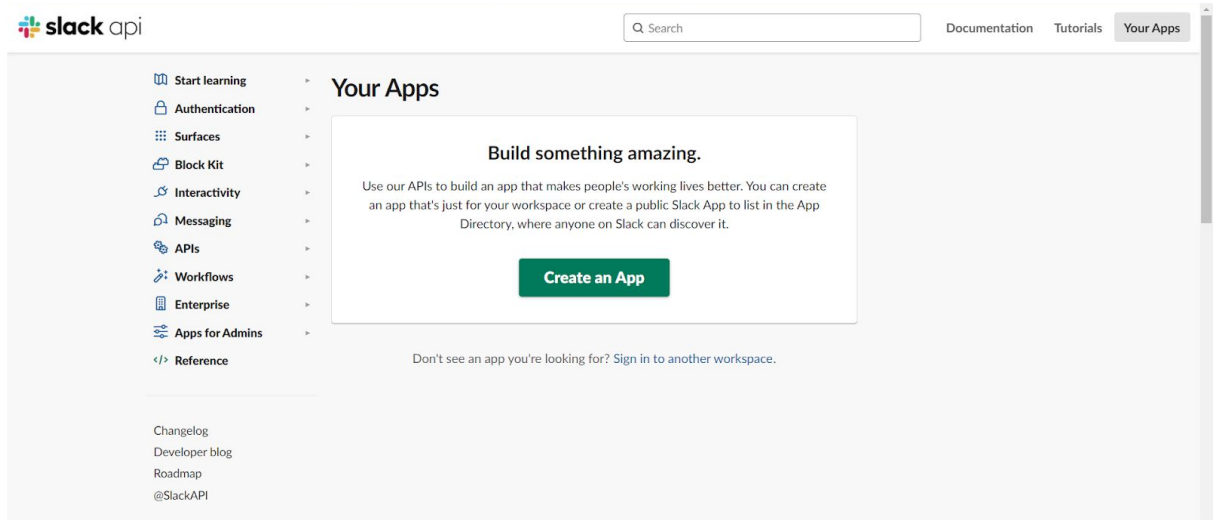


9. Click 'Create' and the following screen should appear.

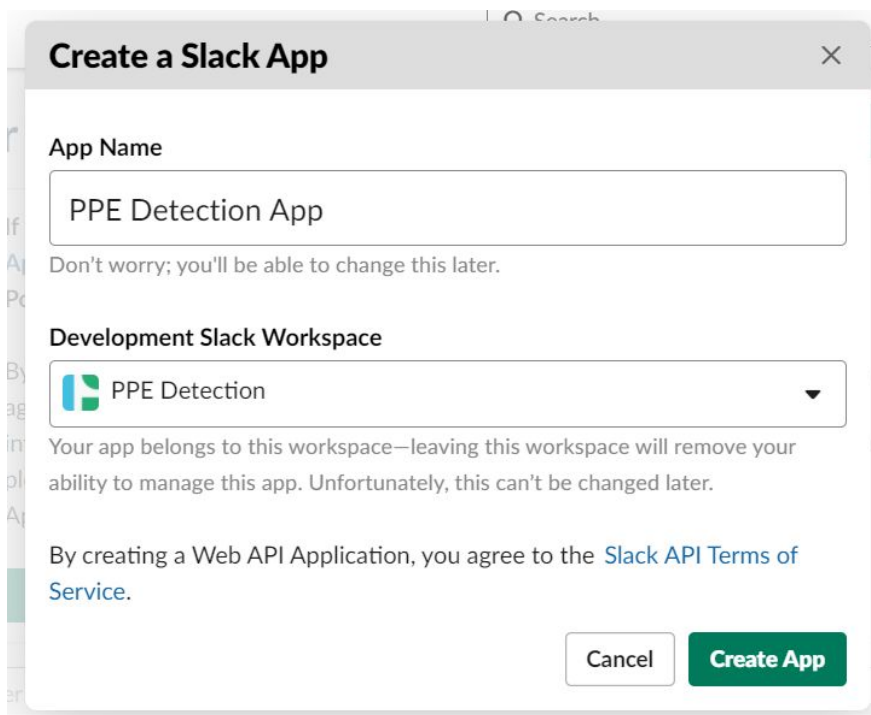


2. Creating a bot for use with your Slack workspace

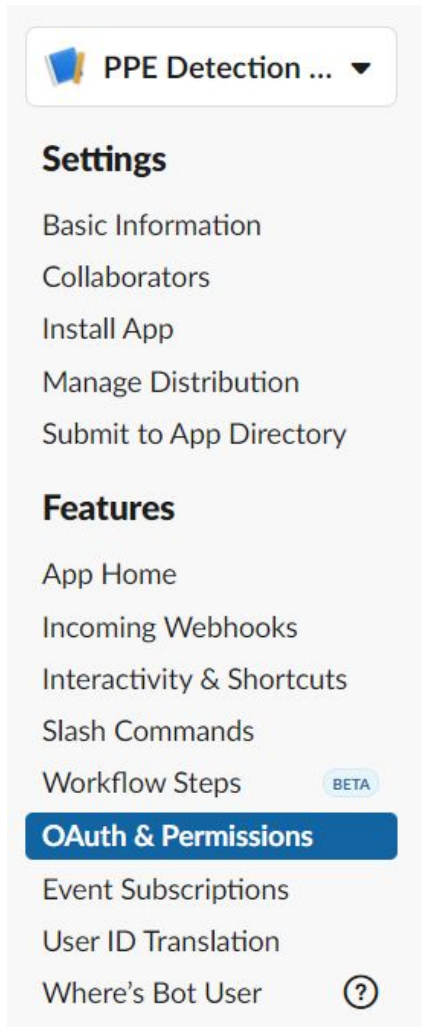
1. Go to <https://api.slack.com/apps> on a new tab and click on the 'Create an App' button as circled in the screenshot.



2. Name your app and select your Slack workspace (an existing one, or one that you have just created). After that, select 'Create App'.



3. After the app is created, you will need to create a permission scope. For that, click on the 'OAuth & Permissions' section of the dashboard as circled in the screenshot.



4. In the OAuth & Permissions section, scroll down to Scopes. Under 'Bot Token Scopes', select 'Add an OAuth Scope'.

Scopes

A Slack app's capabilities and permissions are governed by the [scopes](#) it requests.

Bot Token Scopes

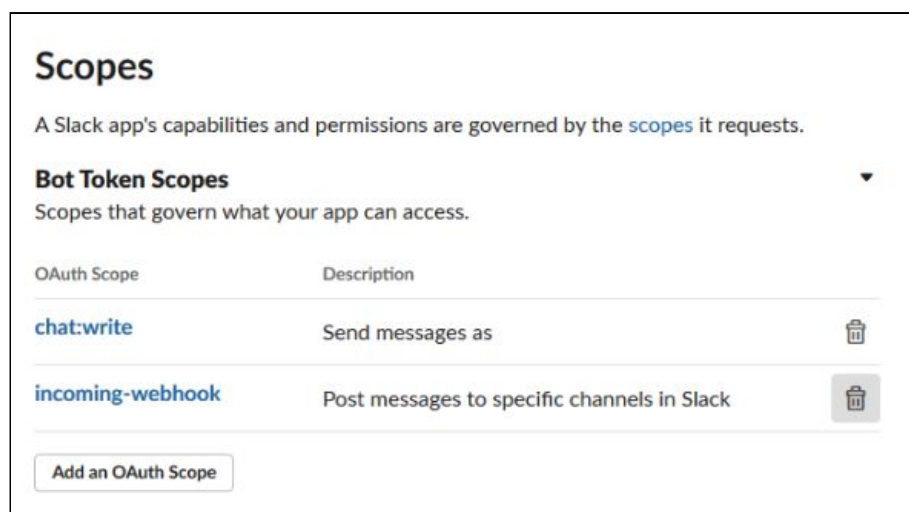
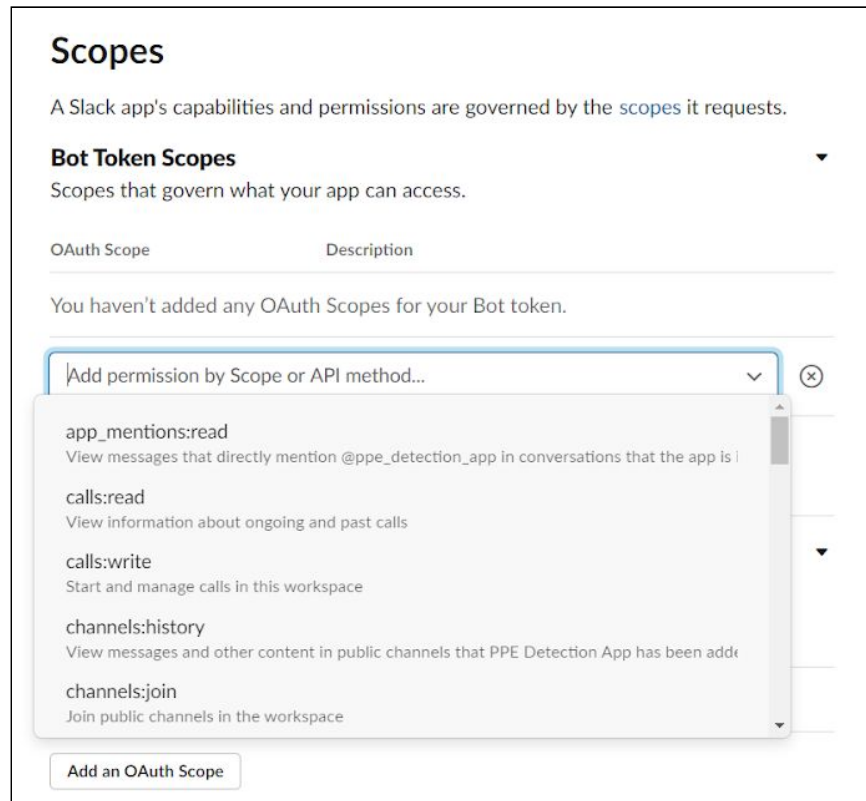
Scopes that govern what your app can access.

OAuth Scope	Description
You haven't added any OAuth Scopes for your Bot token.	

Add an OAuth Scope

5. A drop-down menu will appear. Select the following options:

- **chat:write**
- **Incoming-webhook**



6. Scroll up and select 'Install App to Workspace'.

OAuth Tokens & Redirect URLs

These [OAuth Tokens](#) will be automatically generated when you finish connecting the app to your workspace. You'll use these tokens to authenticate your app.

Install App to Workspace

7. In this screen, select the channel where you want the bot to post the notifications in. After that, click 'Allow'.

This app was created by a member of your workspace, PPE Detection.

PPE Detection App is requesting permission to access the PPE Detection Slack workspace



What will PPE Detection App be able to do?



Perform actions in channels & conversations



Cancel

Allow

- You will be redirected to the following page with the bot token (Save this bot token as it will be used later)

OAuth & Permissions

OAuth Tokens & Redirect URLs

Tokens for Your Workspace

These tokens were automatically generated when you installed the app to your team. You can use these to authenticate your app. [Learn more.](#)

Bot User OAuth Access Token

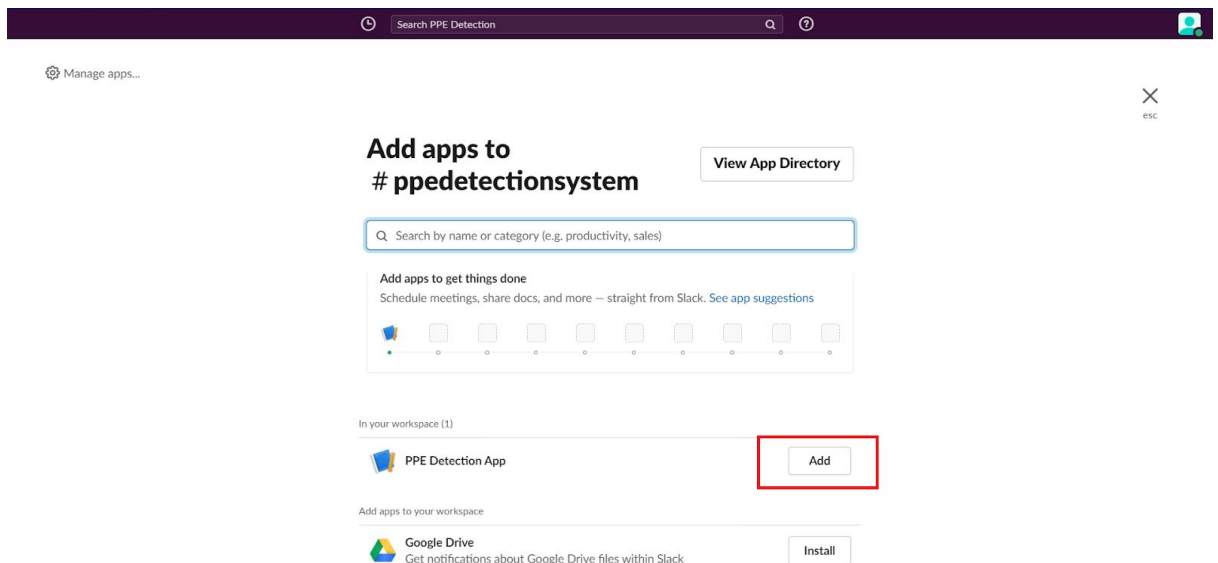
`xoxb-1369489196417-1369525463585-CpTCK6poy0pidVby1LxcRxa9` Copy

Reinstall App

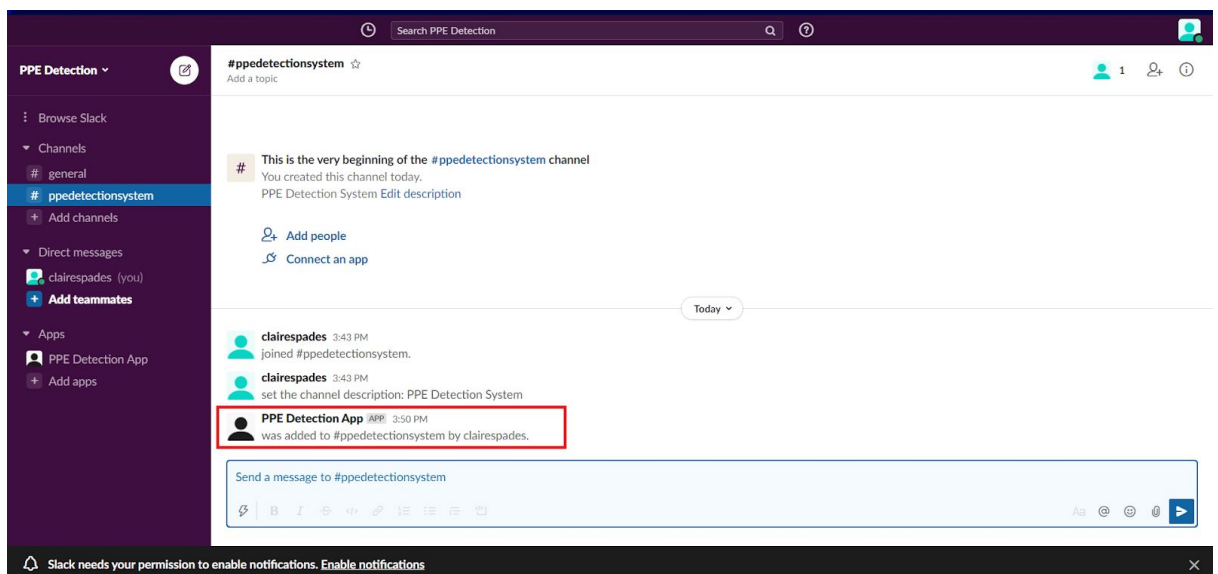
- Return back to the slack workspace channel that you created and click 'Connect an app'

The screenshot shows the Slack interface for a workspace. On the left is a sidebar with a search bar and a list of channels and direct messages. The main area displays the channel #ppedetectionssystem. At the top of the channel view is a search bar and a star icon. Below this is a description of the channel. Two buttons, 'Add people' and 'Connect an app', are visible, with 'Connect an app' highlighted by a red rectangle. The channel history shows two messages from 'clairespades'. At the bottom is a message input field and a status bar with a notification about enabling notifications.

10. Add the bot to the channel by clicking on 'Add' at the bot in your workspace



11. The following screen should appear to indicate that the bot has been added successfully to the channel.



12. With this, you have completed the steps to create and link a Slack bot to your workspace.

3. Adding Slack OAuth Access Token using Safety Manager Dashboard

1. Load the Dashboard and click on 'Slack Notifications'.

The screenshot shows the 'Energy & Chemicals Training Centre' dashboard. The left sidebar has a menu with 'Dashboard', 'PPE Selection', 'Manage Logs', 'Slack Notifications' (highlighted), and 'Settings'. The main content area is titled 'Slack Notifications' and contains a 'Set up Slack Workspace/Channel' section. This section has two main input fields: 'OAuth Access Token' with a 'SAVE' button and 'Channel ID' with an 'ASSIGN' button. Below these are two tables. The first table, 'Access Tokens', has a 'DELETE TOKEN' button and lists three tokens: 'xorb-xxxxx', 'xoxb-xxxxxxxx-xxxxx-EllW', and 'xoxb-xxxxxxxx-xxxxx-f41r'. The second table, 'Channel ID', has an 'UNASSIGN CHANNEL' button and lists two channels: 'C013GUNQR05' and 'C013GUNQR05'. The bottom right of the page shows 'Rows per page: 10' and '1-1 of 1'.

2. Back in the **Safety Manager dashboard**, paste the OAuth Access Token you recorded from Section 2, step 8 and click 'Save'. A pop-up message will notify you if the operation was successful.

This screenshot shows a close-up of the 'OAuth Access Token' input field. The field contains the text 'xoxb-1369489196417-1369525463585-CpTCK6poy0pidVb'. To the right of the input field is a blue button with a download icon and the text 'SAVE'.

3. If the access token is successfully added, the access token will appear in the table below

OAuth Access Token

SAVE

xorb-xxxxx

DELETE TOKEN

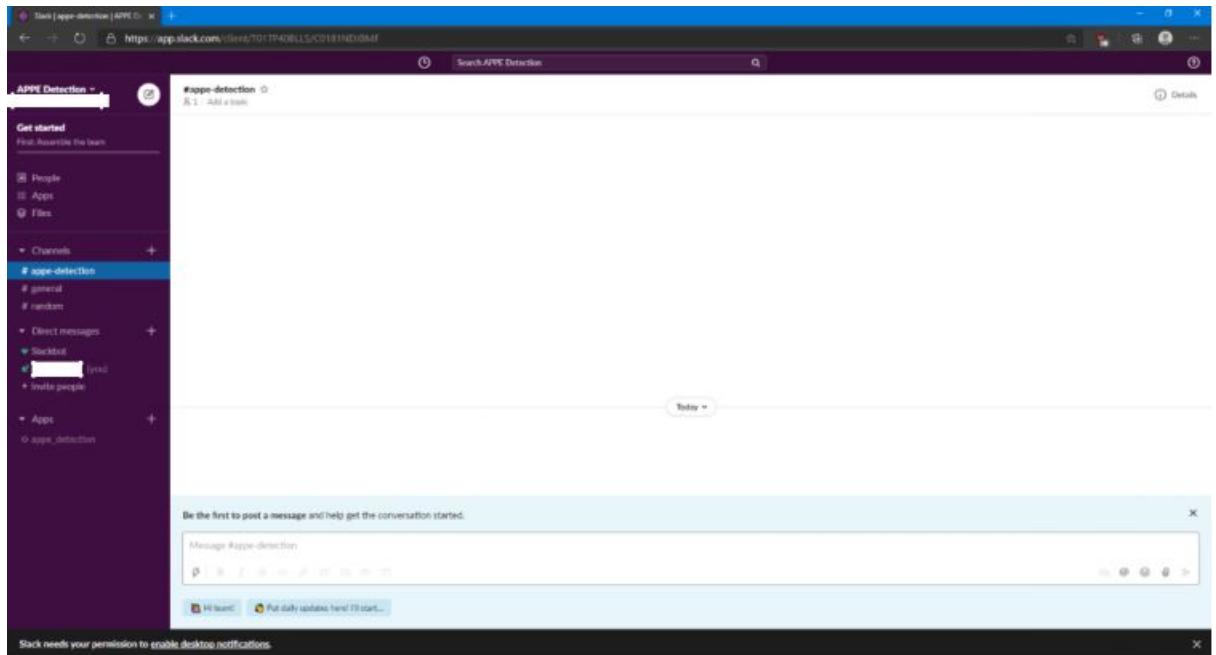
<input type="checkbox"/>	Access Tokens
<input type="checkbox"/>	xoxb-xxxxxxxxxx-xxxxxx-Rxa9

Rows per page: 10 1-1 of 1 < >

4. With this, you have successfully added a Slack OAuth Access Token.

4. Assigning an access token to a channel ID

1. Go to your Slack workspace (an existing workspace or a new one) and select the channel that your bot has been linked to.



2. In the address bar, copy the string of text after the last backslash as shown in the red rectangle in the screenshot.



- On the dashboard, use the dropdown menu to select the access token that you want to assign your Channel ID to. If there is only one access token added, it will be chosen by default. After that, click 'Assign'. A pop-up message will notify you if the operation was successful.

Channel ID

↓ ASSIGN

xoxb-xxxxxxxx-xxxx-Rxa9

C01AVED5ZPB

- If the access token is successfully added, the access token will appear in the table below

Channel ID

↓ ASSIGN

xoxb-xxxxxxxx-xxxx-Rxa9

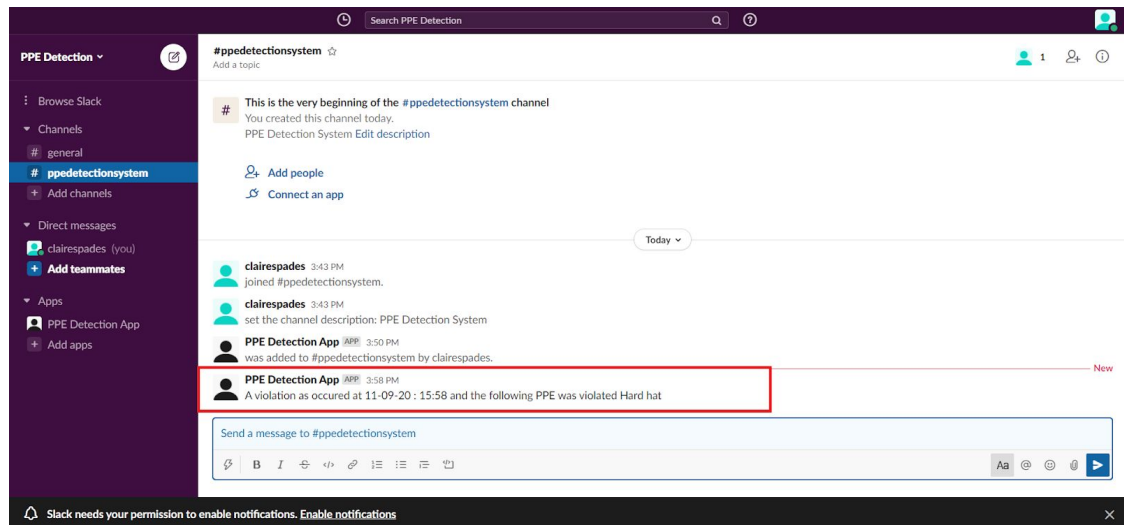
Enter Channel ID here

UNASSIGN CHANNEL

<input type="checkbox"/>	Access Tokens	Channel ID
<input type="checkbox"/>	xoxb-xxxxxxxx-xxxx-Rxa9	C01AVED5ZPB

Rows per page: 10 1-1 of 1 < >

5. Make sure the setup is successful, open the visitor app, test it with a non-compliant visitor. This message should appear in the channel by the bot you assigned



6. With this, you have successfully assigned a channel to a Slack OAuth Access Token (Slack bot).

-- End of Setup --

Troubleshooting

Message does not appear in the channel assigned

- Check the permissions you had assigned to the bot (Creating a bot for use with your Slack workspace, Step 6)
- Assigned the right access token to a channel at the Safety Manager App