

## Slack - Jenkins Integration:

When we are in a Jenkins pipeline, we might need manual approval in some stages. As we are using Slack, so we are going to use Slack API (python) to send notification.

### Steps:

Let's say you have two jobs.

1. First job will do provisioning of resources (Azure WebApp) and sends notification to Slack channel
2. Second job will do app build and deployment to Azure WebApp. To do so, it waits for the approver to trigger the build from Slack channel by using a "slash command" explained below.

### First Job:

Below is the Python piece of code for Slack channel which is used to send notification post completion of First job.

> Run "pip3 install slackclient" to install the slackclient module before running the below code.

```
-----  
from slackclient import SlackClient  
import os  
slack_token = os.environ["SLACK_API_TOKEN"]  
  
sc = SlackClient(slack_token)  
  
attach_json = [  
{  
    "text": "Please check the output and provide appropriate response",  
    "fallback": "You are unable to choose a game",  
    "callback_id": "wopr_game",  
    "color": "#CC0000",  
    "attachment_type": "default",  
    "actions": [  
        {  
            "name": "Jenkinsbuild",  
            "type": "button",  
            "text": "Yes",  
            "style": "primary",  
            "value": "Yes",  
            "confirm": {  
                "title": "Note: Command is channel specific",  
                "text": "Provide /build command in messages tab to trigger the build for Catalog App",  
                "ok_text": "Okay"
```

```

        }
    },
    {
        "name": "Jenkinsbuild",
        "type": "button",
        "text": "No",
        "style": "danger",
        "value": "No"
    }
]
}
]
out = sc.api_call(
    "chat.postMessage",
    channel="CB60D2X8D",
    text=":jenkins: - JENKINS",
    attachments=attach_json
)

print (out)

```

-----  
**Note:** SLACK\_API\_TOKEN is an ENV variable.

**Output:**



- JENKINS

Please check the output and provide appropriate response

Yes

No

## Build Notifications are channel specific



Provide /build command in messages tab to trigger the build for Catalog App

Cancel

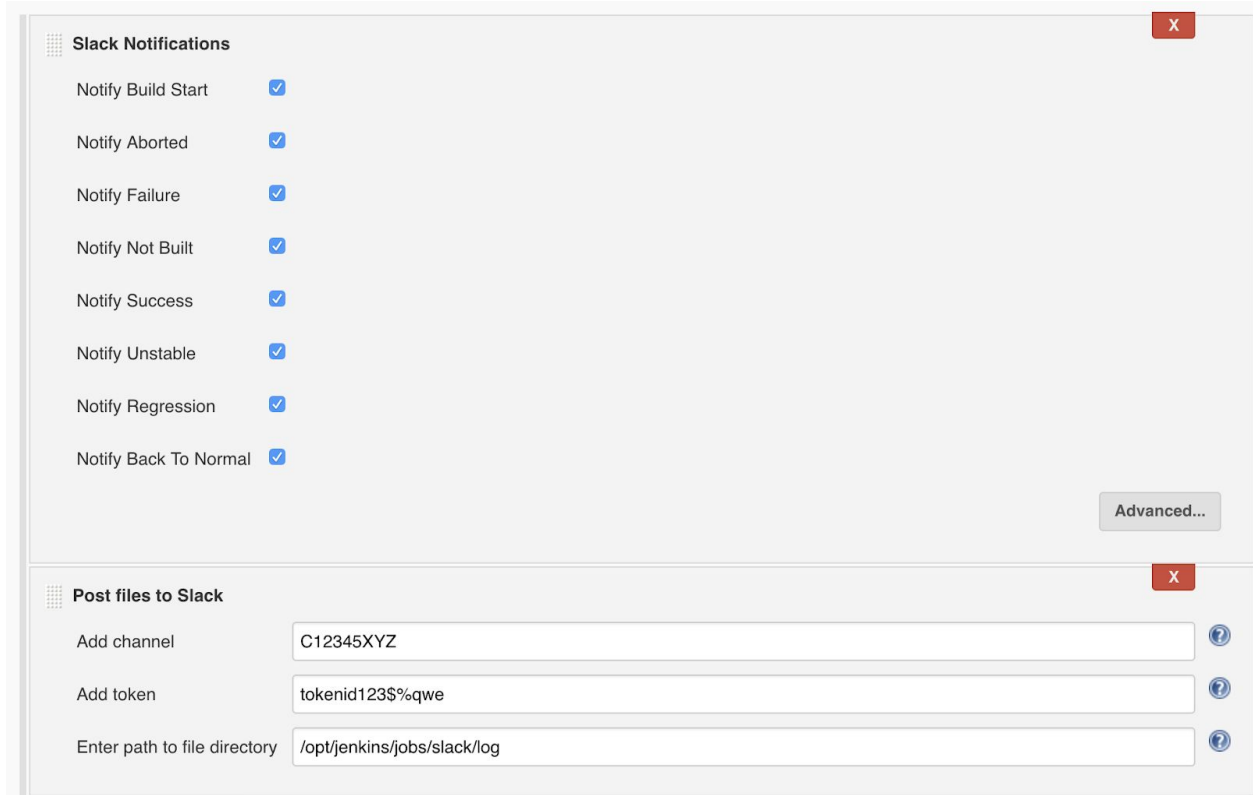
Okay

## Second Job:

> Install [Build Token Root Plugin](#) in Jenkins

> Install the Slack plugins and configure the respective job to get the output and job build status to your channel.

- a. Slack+File+Uploader+Plugin and
- b. Slack+Plugin for Notification



The image shows two configuration panels from the Jenkins web interface. The top panel, titled "Slack Notifications", has a red close button (X) in the top right corner. It contains a list of notification events, each with a checkbox that is currently checked:

- Notify Build Start
- Notify Aborted
- Notify Failure
- Notify Not Built
- Notify Success
- Notify Unstable
- Notify Regression
- Notify Back To Normal

An "Advanced..." button is located at the bottom right of this panel. The bottom panel, titled "Post files to Slack", also has a red close button (X) in the top right corner. It contains three input fields:

- "Add channel" with the value "C12345XYZ"
- "Add token" with the value "tokenid123\$%qwe"
- "Enter path to file directory" with the value "/opt/jenkins/jobs/slack/log"

Each input field has a help icon (?) to its right.

> Use the below url to trigger job remotely

<http://jenkinsurl.com/buildByToken/build?job=jobname&token=tokenID>

> In slack (<https://app.slack.com/>), Go to Slash commands App, then Slack integration page set like screenshot below

## Integration Settings

Command

Commands should be a single word (and can't be blank). Example: /deploy

URL

The URL to request when the slash command is run.

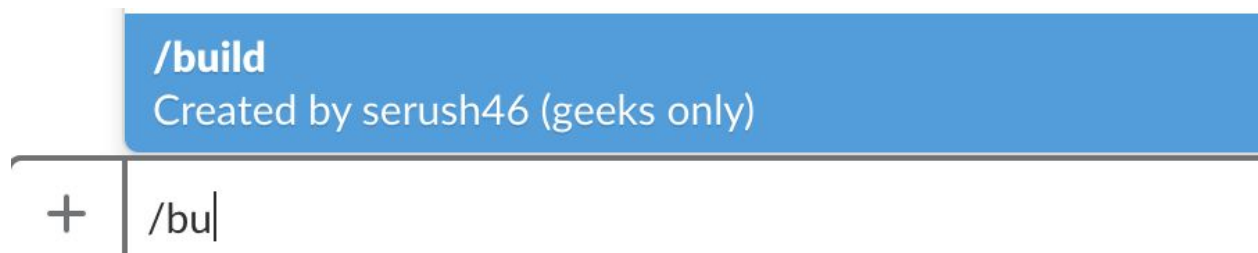
Method

Should we do a POST or GET to the above URLs?

Token

This token will be sent in the outgoing

> Now you can use command /build in slack to start this jenkins job



**Note:** We can't pass arguments through message tab.

## Jenkins Output:



jenkins APP 11:57 AM

slack - #43 Started by remote host 54.164.194.74 ([Open](#))  
[GEEKS - SLACK]



suresh dhanapal 11:57 AM

added this Plain Text snippet: [log](#) ▼

```
1 Started by remote host 54.152.0.39
2 Building in workspace /var/lib/jenkins/workspace/slack
3 [slack] $ /bin/sh -xe /tmp/jenkins338551917005157482.sh
4 + date
5 Wed Jul 18 11:42:13 IST 2018
```



jenkins APP 11:57 AM

slack - #43 Success after 1.7 sec ([Open](#))  
[GEEKS - SLACK]



Message #jenkins



### Note:

To make this entire setup to work we need to make jenkins public like using Load balancer or proxy.