

Day 22 : Getting Started with Jenkins

This is [#90DaysOfDevops](#) challenge under the guidance of [Shubham Londhe](#) sir.

Day 22 TASK

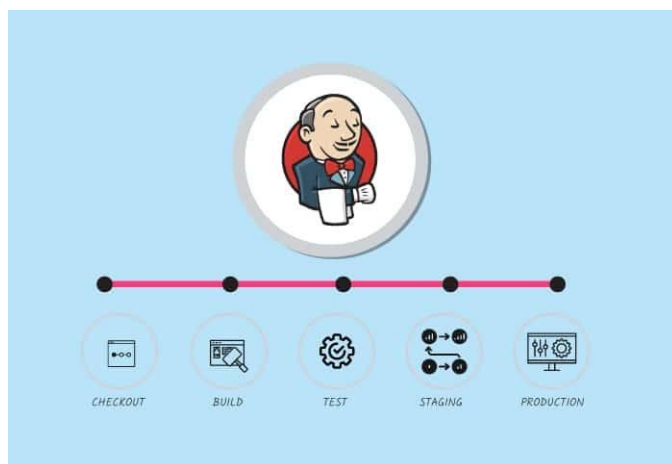
check this for task:

<https://github.com/LondheShubham153/90DaysOfDevOps/tree/master/2023/day22>

What is Jenkins?

- Jenkins is an open source continuous integration-continuous delivery and deployment (CI/CD) automation software DevOps tool written in the Java programming language. It is used to implement CI/CD workflows, called pipelines.
- Jenkins is a tool that is used for automation, and it is an open-source server that allows all the developers to build, test and deploy software. It works or runs on java as it is written in java. By using Jenkins we can make a continuous integration of projects(jobs) or end-to-endpoint automation.
- Jenkins achieves Continuous Integration with the help of plugins. Plugins allow the integration of Various DevOps stages. If you want to integrate a particular tool, you need to install the plugins for that tool. For example Git, Maven 2 project, Amazon EC2, HTML publisher etc.

Steps to Create a freestyle pipeline to print “Hello World!!”



Step 1: Create an AWS EC2 instance and SSH into it.

Instances (1) Info				
<input type="text" value="Find instance by attribute or tag (case-sensitive)"/>				
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type
<input type="checkbox"/>	raj	i-06f702a19a9875d1f	Running	t2.micro

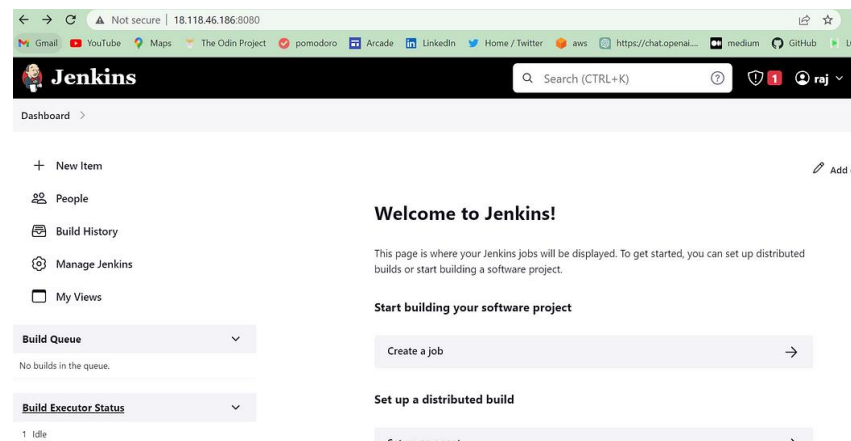
Step 2: Install Jenkins on the EC2 instance.

For steps to install jenkins check:

<https://www.trainwithshubham.com/blog/install-jenkins-on-aws>


```
ubuntu@ip-172-31-7-185:~$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2023-03-20 15:18:15 UTC; 32s ago
     Main PID: 5534 (java)
        Tasks: 43 (limit: 1143)
      Memory: 314.4M
         CPU: 43.316s
```


Step 3: Access Jenkins on the browser using the public IP of the EC2 instance and 8080 port.





Step 4: Create a new item in Jenkins using freestyle project type.

Step 5: Give a name to the Project “HelloProject”

**Jenkins**

 **1**


 **raj**

 **log out**


Dashboard > All >

Enter an item name

» Required field


**Freestyle project**


This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.


**Pipeline**


Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.


Step 6: In the configuration section, in the “Build” section, add an “Execute shell” build step.


 General

 Source Code Management


 Build Triggers

 Build Environment

 Build Steps

 Post-build Actions

Build Steps

 **Execute shell** ?


Command


See [the list of available environment variables](#)


Step 7: Add the command to print “Hello World”.


Dashboard > HelloProject > Configuration


Configure


 General

 Source Code Management

 Build Triggers

 Build Environment


 Build Steps

 Post-build Actions

☐ Terminate a build if it's stuck

☐ With Ant ?

Build Steps


 **Execute shell** ?

Command

See [the list of available environment variables](#)

`echo "Hello World !! "`

Step 8: “Save” it to create the project.

**Jenkins**

Search (CTRL+K)

Dashboard > HelloProject >

Status

Changes

Workspa

Build scheduled

Build Now

Configure

Delete Project

Rename

Build History

trend

Project HelloProject

Permalinks

Step 9: Now click on the “Build Now” to run the project.

Build Now

Configure

Delete Project

Rename

Build History


trend

Filter builds...





#1
Mar 20, 2023, 9:06 PM

Atom feed for all Atom feed for failures

Step 10: Check the console output for “Hello World” message.

**Jenkins**

Search (CTRL+K)

 raj  log out

Dashboard > HelloProject > #1 > Console Output

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete build '#1'

Console Output

Started by user raj

Running as SYSTEM

Building in workspace /var/lib/jenkins/workspace/HelloProject

[HelloProject] \$ /bin/sh -xe /tmp/jenkins6038732175521181764.sh

+ echo Hello World !!

Hello World !!

Finished: SUCCESS

Please, feel free to drop any questions in the comments below. I would be happy to answer them.

If this post was helpful, please do follow and click the clap

_Thank you for reading

_Rajani