Module-8: Jenkins Assignment - 2

You have been asked to:

- Add 2 nodes to Jenkins master
- Create 2 jobs with the following jobs:
- Push to test
- Push to prod
- Once a push is made to the test branch copy Git files to the test server
- Once a push is made to the master branch copy Git files to the prod server

Answer

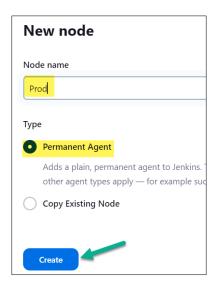Create the new EC2 instances one for Prod and another for Test.

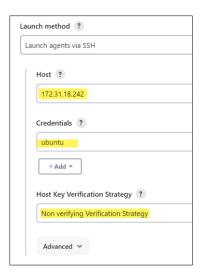|							
☐	Prod	i-0d67ca2f83a60ff08	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed.	View alarms +	ap-south-1a
☐	Test	i-033ab7e1c6692321b	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed.	View alarms +	ap-south-1a

Install the Java in both nodes.

```
sudo apt update
sudo apt install openjdk-11-jdk -y
```

After successful installation of Java on both the nodes, go to Jenkins and Manage Jenkins → Nodes → New Node

New node

Node name

Prod

Type

🔘 **Permanent Agent**

Adds a plain, permanent agent to Jenkins.
other agent types apply — for example suc
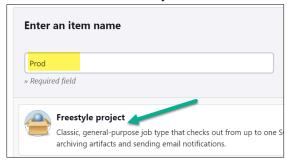
◯ Copy Existing Node

Create

Add the name as **Prod** and Click **Create**
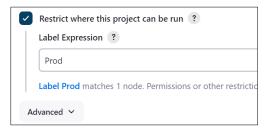Set Remote root directory: **/home/Ubuntu/Jenkins/**

Click **Save**
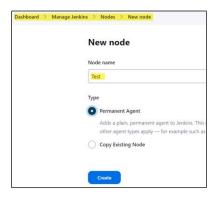
+New items create a **New** job

Click Ok

Restrict project to Prod instance

Branch **Master**
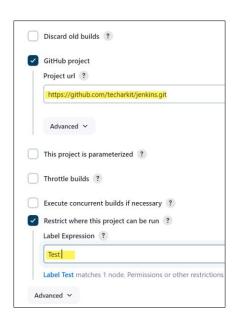Select GitScm webhook
Click **Apply** and **Save**

In a similar way to the above Add Test Node and Test Job, the branch name is test

Test
Select SSH Authentication and provide the Test node IP Address
Click Save.

Add New Job

☐ Discard old builds ?

☑ GitHub project
   Project url ?

   https://github.com/techarkit/jenkins.git

   Advanced ⌄

☐ This project is parameterized ?

☐ Throttle builds ?

☐ Execute concurrent builds if necessary ?

☑ Restrict where this project can be run ?

   Label Expression ?

   Test

   Label Test matches 1 node. Permissions or other restrictions

   Advanced ⌄

Source Code Management

◯ None

● Git ?

   Repositories ?

      Repository URL ?

      https://github.com/techarkit/jenkins.git

      Credentials ?

      - none -

      + Add ▾

      Advanced ⌄

   Add Repository

   Branches to build ?

      Branch Specifier (blank for 'any') ?

      */test

   Add Branch

Build Triggers

☐ Trigger builds remotely (e.g., from scripts) ?

☐ Build after other projects are built ?

☐ Build periodically ?

☑ GitHub hook trigger for GITScm polling ?

☐ Poll SCM ?

Now both the nodes and pipelines are ready.

```
git status
touch prodfile
git checkout master
git add .
git commit -m "Adds New prodfile"
git push origin master
```

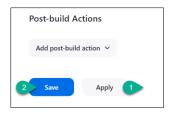Once the push-triggered pipeline will be executed, similar way push the code to test branch test pipeline will be executed.

Build History of Jenkins

S	Build	Time Since ↑	Status
⊘	Test #3	47 sec	stable
⊘	job1 #4	2 min 47 sec	stable
⊘	Test #2	3 min 17 sec	back to normal
⊗	Test #1	6 min 7 sec	broken since this build
⊘	Prod #1	6 min 7 sec	stable
⊘	job1 #3	6 min 7 sec	stable
⊘	job1 #2	8 days 2 hr	stable
⊘	job1 #1	8 days 2 hr	stable

S	W	Name ↓	Last Success	Last Failure
⊘	☀	job1	3 min 17 sec #4	N/A
⊘	☀	Prod	6 min 37 sec #1	N/A
⊘	⛅	Test	1 min 17 sec #3	6 min 37 sec #1

S	Name ↓	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space
🖥	Built-In Node	Linux (amd64)	In sync	4.09 GiB	❗ 0 B	4.09 GiB
🖥	jenkins-s	Linux (amd64)	In sync	4.81 GiB	❗ 0 B	4.81 GiB
🖥	Prod	Linux (amd64)	In sync	4.84 GiB	❗ 0 B	4.84 GiB
🖥	Test	Linux (amd64)	In sync	4.79 GiB	❗ 0 B	4.79 GiB
	Data obtained	27 min	27 min	27 min	27 min	27 min