



**CONTINUOUS INTEGRATION AND CONTINUOUS
DEPLOYMENT LAB**

**Lab File
(2023-2024)**

for

5th Semester

Submitted To

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EXPERIMENT 5

Jenkins Master-Slave

Aim

To understand the Master-Slave methodology of Jenkins

Steps

1. Create a Slave Node on Jenkins

- a. Go to Dashboard > Manage Jenkins > Nodes > New Node
- b. Give a name to the node, select Permanent Agent & click Create

New node

Node name

Type



Permanent Agent

c. Provide the root directory path & label

Remote root directory ?

Labels ?

d. Provide Custom WorkDir path

Custom WorkDir path ?

Internal data directory ?

e. Run the following commands at the location of root directory

```
→ viper curl -s0 http://localhost:8080/jnlpJars/agent.jar
→ viper java -jar agent.jar -jnlpUrl http://localhost:8080/computer/viper/jenkins-agent.jnlp -secret 3c6c8978d103bab64fd8ca17e81bf7651d7444ca0cada8fa90c84816aab1aafd -workDir "/home/ayroid/Documents/Work/College/SEM5/CICD/lab/HiteshSir/exp5/viper"
```

```
Oct 06, 2023 5:01:18 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Remote identity confirmed: 12:f1:a0:a1:1c:4f:86:84:fc:d6:c6:36:bb:99:5c:2d
Oct 06, 2023 5:01:18 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connected
```

f. Your agent should be up and running

Build Queue		Built-In Node	Linux (amd64)	In sync	327.55 GB	4.00 GB	327.55 GB
		No builds in the queue.					
Build Queue			viper		N/A	N/A	N/A
last checked			25 sec	25 sec	25 sec	25 sec	25 sec

2. Create another agent following the above steps

Clouds

Node Monitoring




Build Queue

No builds in the queue.

Build Executor Status

Built-In Node

1 Idle

S	Name ↓	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Res
	Built-In Node	Linux (amd64)	In sync	327.55 GB	4.00 GB	327.55 GB	
	viper	Linux (amd64)	In sync	327.55 GB	4.00 GB	327.55 GB	
	yoru	Linux (amd64)	In sync	327.55 GB	4.00 GB	327.55 GB	
	last checked	1 min 50 sec	1 min 50 sec	1 min 50 sec	1 min 50 sec	1 min 50 sec	1 mi

3. Create a Maven Project Pipeline and restrict it to run on one of the agents

Post Steps

Build Settings

Post-build Actions

☒ Restrict where this project can be run ?

Label Expression ?

Label viper matches 1 node. Permissions or other restrictions provided by plugins may further reduce that list.

4. Run a build to verify the pipeline

Manage Jenkins	✓	☀	CICD-LAB5-AGENT-1	2 min 21 sec #1	N/A	16 sec	▶
My Views							

5. Create another Maven Project Pipeline on the 2nd agent

☒ Restrict where this project can be run ?

Label Expression ?

Label 'yoru' matches 1 node. Permissions or other restrictions provided by plugins may further

6. Run a build to verify both the agents

Manage Jenkins	✓	☀	CICD-LAB5-AGENT-1	22 sec #2	N/A	7.9 sec	▶
My Views	✓	☀	CICD-LAB5-AGENT-2	22 sec #1	N/A	14 sec	▶