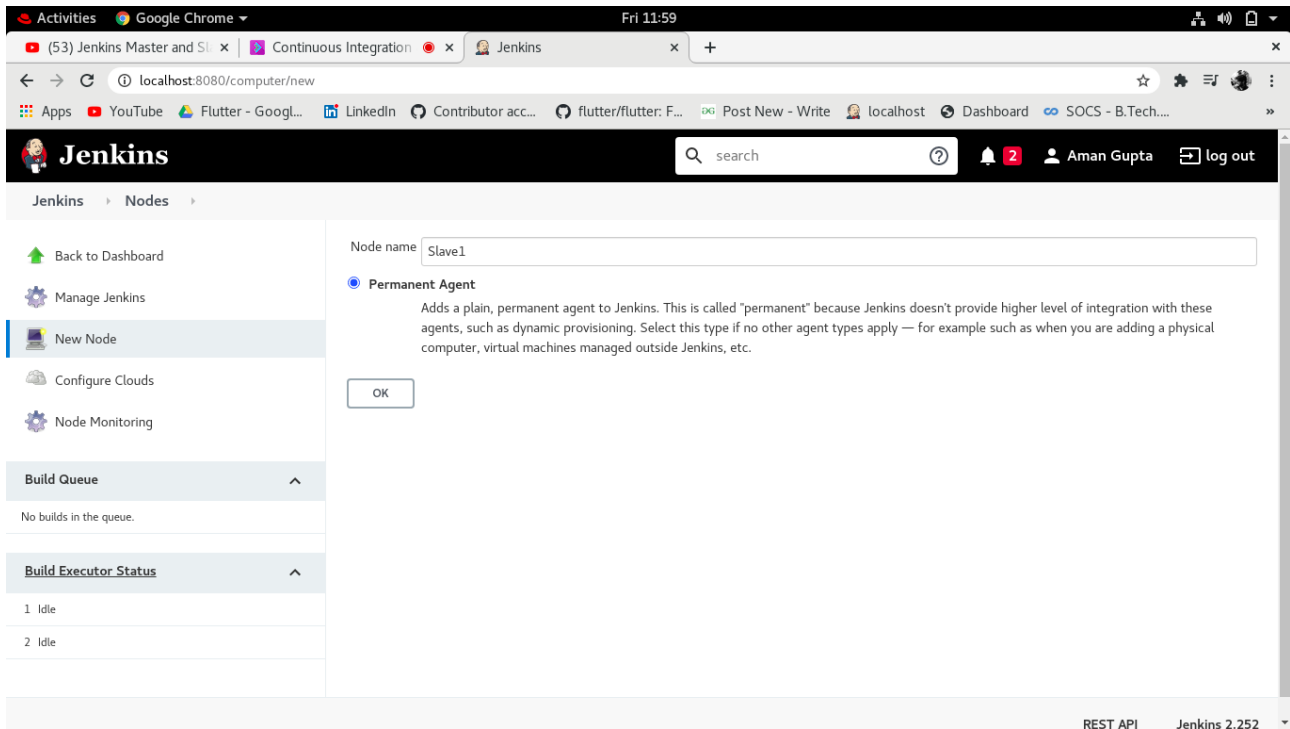


Experiment 8

Aim: Implement master slave architecture in Jenkins



This screenshot shows the Jenkins web interface at localhost:8080/computer/new. The 'Node name' field is set to 'Slave1'. The 'Permanent Agent' radio button is selected, with a description explaining that it is a plain, permanent agent. An 'OK' button is visible below the description. The left sidebar contains navigation links like 'Back to Dashboard', 'Manage Jenkins', and 'New Node'. The 'Build Queue' section shows 'No builds in the queue.' and the 'Build Executor Status' shows two idle executors.

Node name:

☒ **Permanent Agent**

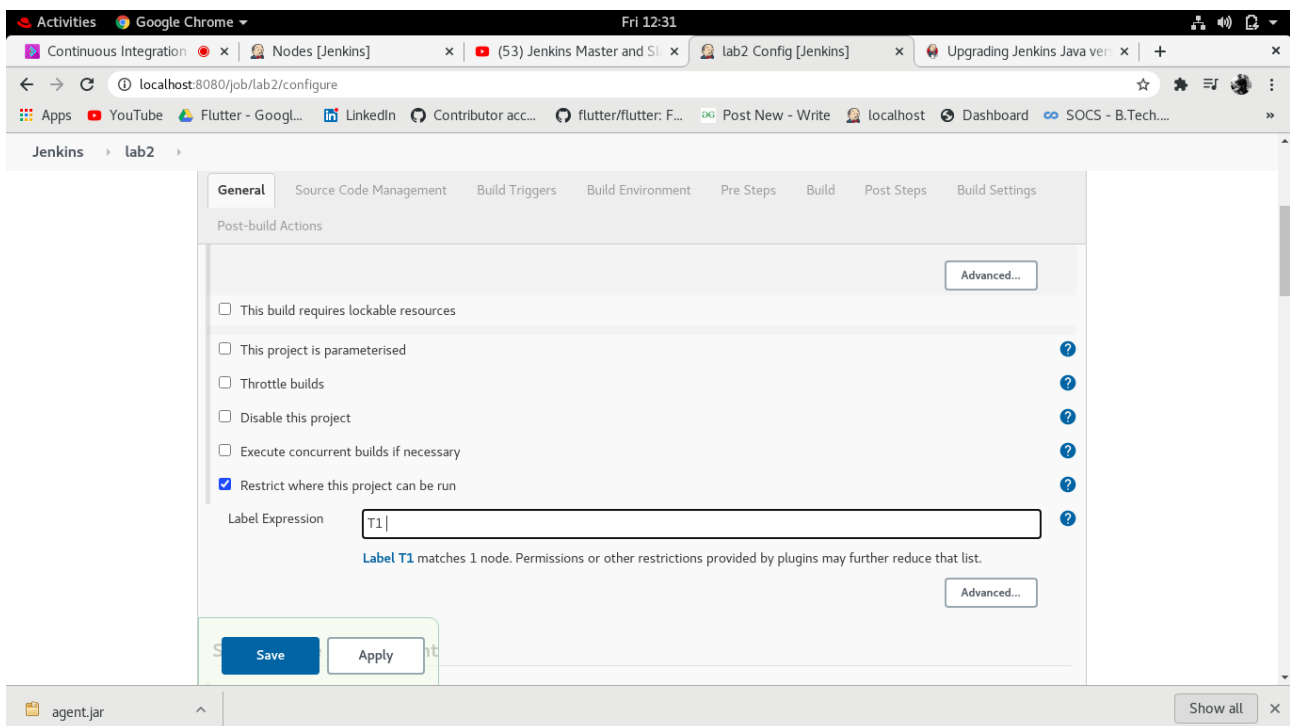
Adds a plain, permanent agent to Jenkins. This is called "permanent" because Jenkins doesn't provide higher level of integration with these agents, such as dynamic provisioning. Select this type if no other agent types apply — for example such as when you are adding a physical computer, virtual machines managed outside Jenkins, etc.

Build Queue: No builds in the queue.

Build Executor Status:

- 1 Idle
- 2 Idle

REST API Jenkins 2.252



This screenshot shows the Jenkins configuration page for a job named 'lab2' at localhost:8080/job/lab2/configure. The 'General' tab is active, showing 'Post-build Actions'. The 'Restrict where this project can be run' checkbox is checked, and the 'Label Expression' field contains 'T1'. A message below the field states 'Label T1 matches 1 node. Permissions or other restrictions provided by plugins may further reduce that list.' There are 'Save' and 'Apply' buttons at the bottom.

General Source Code Management Build Triggers Build Environment Pre Steps Build Post Steps Build Settings

Post-build Actions

☐ This build requires lockable resources

☐ This project is parameterised

☐ Throttle builds

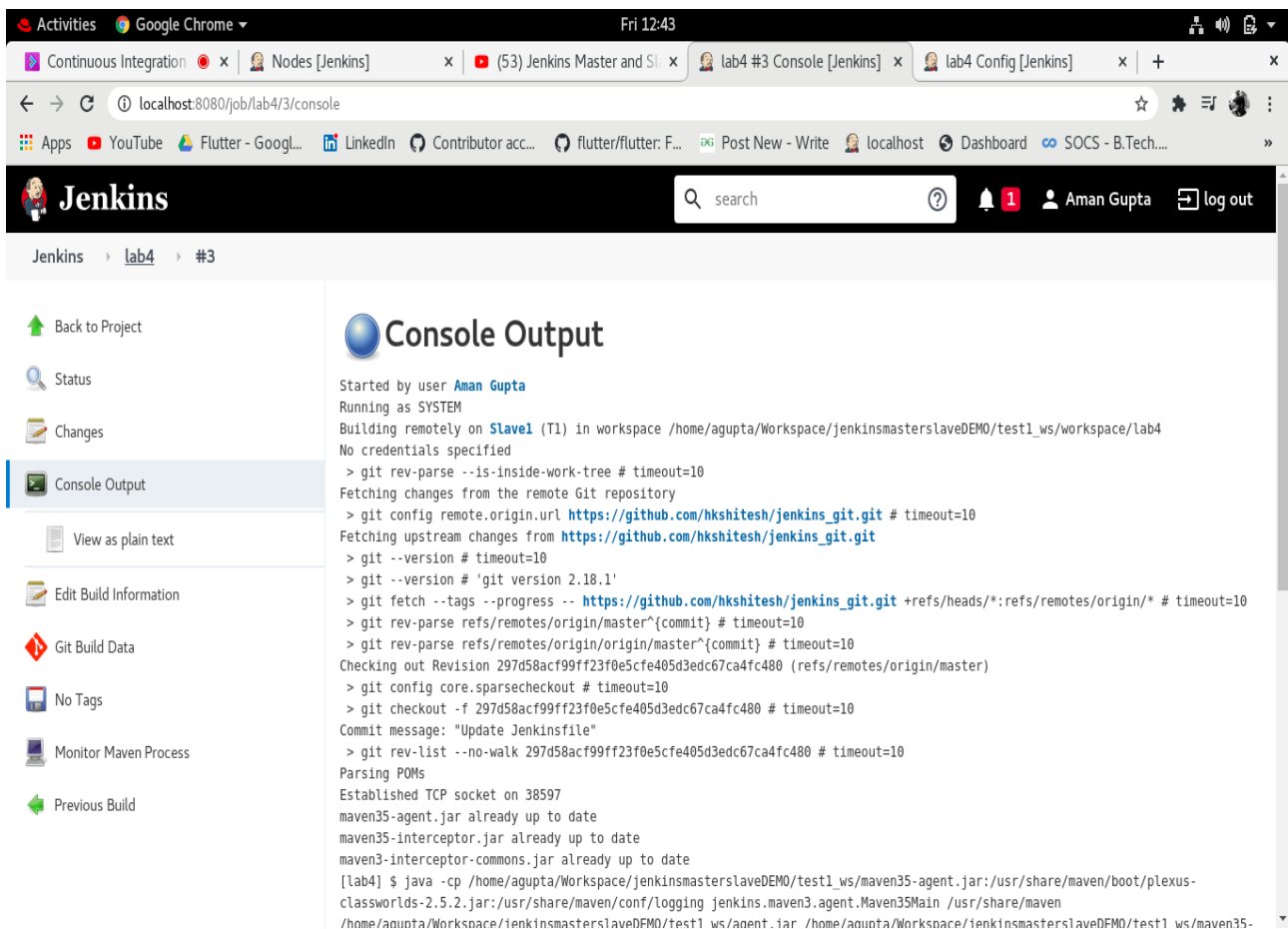
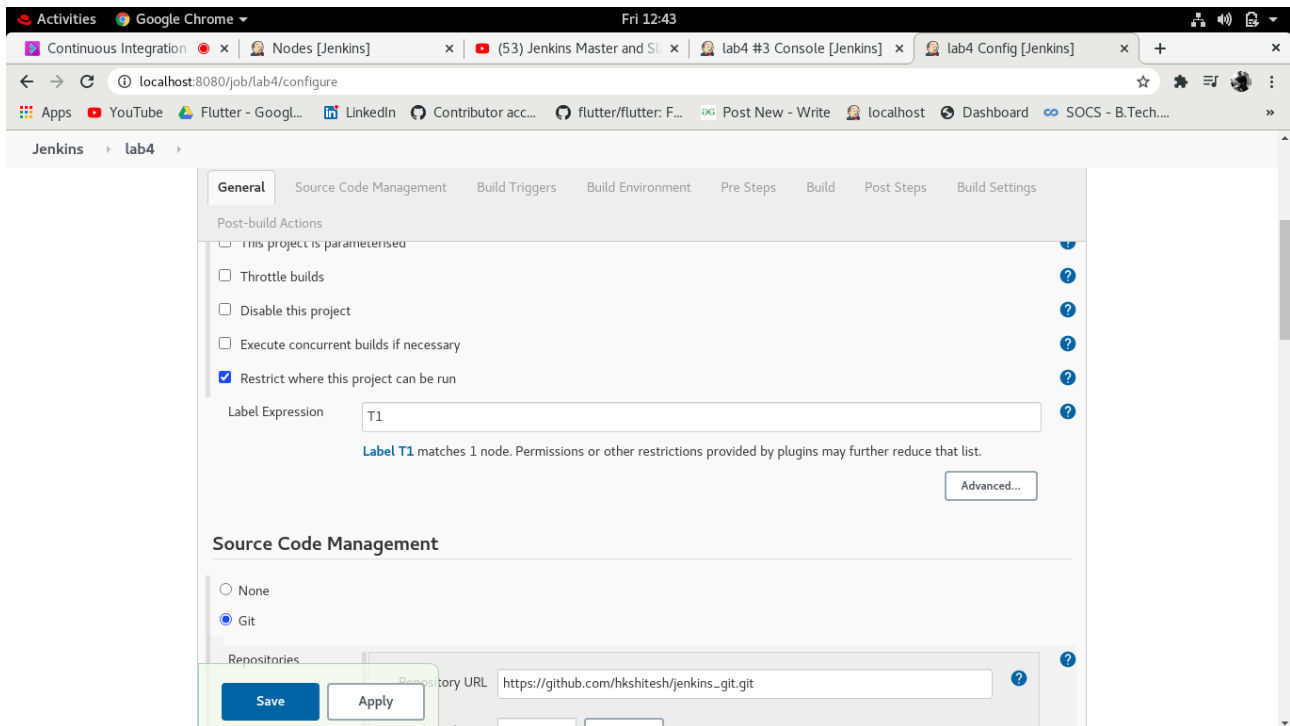
☐ Disable this project

☐ Execute concurrent builds if necessary

☒ Restrict where this project can be run

Label Expression:

Label T1 matches 1 node. Permissions or other restrictions provided by plugins may further reduce that list.



Activities Google Chrome Fri 12:43

Continuous Integration x Nodes [Jenkins] x (53) Jenkins Master and Sl x lab4 #3 Console [Jenkins] x lab4 Config [Jenkins] x +

localhost:8080/job/lab4/3/console

Apps YouTube Flutter - Googl... LinkedIn Contributor acc... flutter/flutter: F... Post New - Write localhost Dashboard SOCS - B.Tech...

Jenkins > lab4 > #3

```
maven35-agent.jar already up to date
maven35-interceptor.jar already up to date
maven3-interceptor-commons.jar already up to date
[lab4] $ java -cp /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/maven35-agent.jar:/usr/share/maven/boot/plexus-
classworlds-2.5.2.jar:/usr/share/maven/conf/logging_jenkins.maven3.agent.Maven35Main /usr/share/maven
/home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/agent.jar /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/maven35-
interceptor.jar /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/maven3-interceptor-commons.jar 38597
<===[JENKINS REMOTING CAPACITY]==>channel started
Executing Maven: -B -f /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/workspace/lab4/pom.xml clean
[INFO] Scanning for projects...
[INFO]
[INFO] -----< upes.devops.maven:jenkins_git >-----
[INFO] Building jenkins_int 0.0.1-SNAPSHOT
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ jenkins_git ---
[INFO] Deleting /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/workspace/lab4/target
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] -----
[INFO] Total time: 3.283 s
[INFO] Finished at: 2020-09-11T12:43:17+05:30
[INFO]
[INFO] -----
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/workspace/lab4/pom.xml to
upes.devops.maven/jenkins_git/0.0.1-SNAPSHOT/jenkins_git-0.0.1-SNAPSHOT.pom
channel stopped
Finished: SUCCESS
```

REST API Jenkins 2.252

Activities Google Chrome Fri 12:43

Continuous Integration x Slave1 [Jenkins] x (53) Jenkins Master and Sl x +

localhost:8080/computer/Slave1/

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Jenkins

search ? 1 Aman Gupta log out

Jenkins > Nodes > Slave1

Back to List

Status

Delete Agent

Configure

Build History

Load Statistics

Script Console

Log

System Information

Disconnect

Build Executor Status

1 Idle

Agent Slave1 (For Test1)

Mark this node temporarily offline

Agent is connected.

Labels

T1

Projects tied to Slave1

None

```
agupta@localhost:~/Workspace/jenkinsmasterslaveDEMO/test1_ws
File Edit View Search Terminal Help
[agupta@localhost test1_ws]$ java -jar agent.jar -jnlpUrl http://localhost:8080/computer/Slave1/slave-agent.jnlp -secret 547bde70b5435637465517926530304c6a746165659c794fae911b45c1dbf37a -workDir "/home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws"

Sep 11, 2020 12:59:18 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/remoting as a remoting work directory
Sep 11, 2020 12:59:18 PM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/remoting
Sep 11, 2020 12:59:18 PM hudson.remoting.jnlp.Main createEngine
INFO: Setting up agent: Slave1
Sep 11, 2020 12:59:18 PM hudson.remoting.jnlp.Main$CuiListener <init>
INFO: Jenkins agent is running in headless mode.
Sep 11, 2020 12:59:18 PM hudson.remoting.Engine startEngine
INFO: Using Remoting version: 4.5
Sep 11, 2020 12:59:18 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /home/agupta/Workspace/jenkinsmasterslaveDEMO/test1_ws/remoting as a remoting work directory
Sep 11, 2020 12:59:19 PM hudson.remoting.jnlp.Main$CuiListener status
```

Activities

Google Chrome

Fri 12:59

Upload Assignment: Uploa... Nodes [Jenkins] lab4 [Jenkins]

localhost:8080/computer/

Apps YouTube Flutter - Googl... LinkedIn Contributor acc... flutter/flutter: F... Post New - Write localhost Dashboard SOCS - B.Tech...

Jenkins

search

?

🔔

1

Aman Gupta

log out

Jenkins

Nodes

🏠 Back to Dashboard

⚙️ Manage Jenkins

🖥️ New Node

☁️ Configure Clouds

📊 Node Monitoring

Build Queue

No builds in the queue.

Build Executor Status

🖥️ master

1 Idle

2 Idle

🖥️ Slave1

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
🖥️	master	Linux (amd64)	In sync	43.22 GB	6.69 GB	43.22 GB	0ms
🖥️	Slave1	Linux (amd64)	In sync	816.15 GB	6.69 GB	43.22 GB	1006ms
	last checked	10 sec	10 sec	10 sec	10 sec	10 sec	10 sec

Refresh status