

Experiment 5 Working with Jenkins Agents

Objective: Running a Maven Project on a Jenkins Slave Agent.

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

Agent1

Type

☒ 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.

Create

(c) Provide the root directory path and label.

Remote root directory ?

/home/psyche/jenkins/agent1

Labels ?

Agent1

(d) Select Launch Method and custom Work Dir Path

Launch method ?

Launch agent by connecting it to the controller

☐ Disable WorkDir ?

Custom WorkDir path ?

/home/psyche/jenkins/agent1

(e) Run the provided command to the location of the root directory.

```
psyche@pop-os:~/jenkins/agent1$ curl -sO http://localhost:8080/jnlpJars/agent.jar;java -jar agent.jar -jnlpUrl http://localhost:8080/computer/Agent1/jenkins-agent.jnlp -secret 6c20fbe393e8e84dbe5b26b0388a4254a3d28eef6921564c5d16b9d4c4aa6620 -workDir "/home/psyche/jenkins/agent1"
Oct 17, 2023 9:25:20 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /home/psyche/jenkins/agent1/remoting as a remoting work directory
Oct 17, 2023 9:25:21 PM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
```

(f) Agent should be up and running now.

Nodes + New Node ↻						
S	Name ↓	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space
	Agent1		N/A	N/A	N/A	N/A
	Built-In Node	Linux (amd64)	In sync	50.36 GB	11.58 GB	50.36 GB
Data obtained		19 min	19 min	19 min	19 min	19 min

2. Create a Maven Project and Restrict it to running on the Agents created.

☒ Restrict where this project can be run ?

Label Expression ?

slave1

Label slave1 matches 1 node. Permissions or other restrictions provided by plugins further reduce that list.

Advanced ▼

3. Run the build to verify pipeline is running on Agent1:

Console Output

```
Running as SYSTEM
Building remotely on Agent1 (slave1) in workspace /home/psyche/jenkins/agent1/workspace/CICDLab5-Slave1
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
```