

# Experiment 5

## Jenkins Master-Slave

### Aim

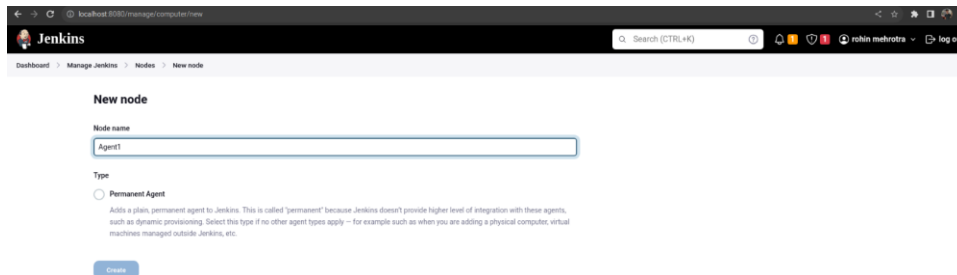
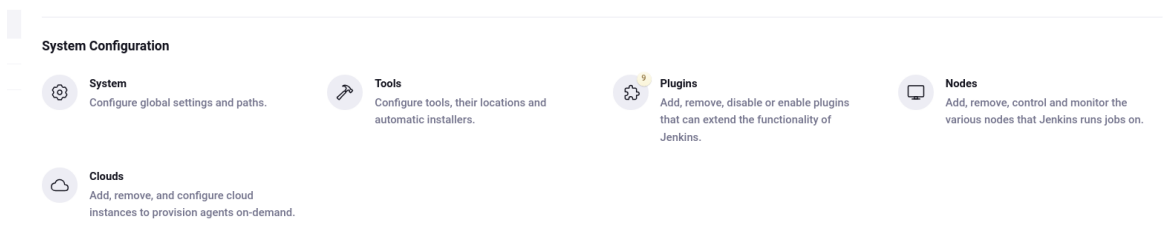
To understand the Master-Slave methodology of Jenkins

### Steps

1. Create a Slave Node on Jenkins

1.a. Go to Dashboard > Manage Jenkins > Nodes > New Node

1.b. Give a name to the node, select Permanent Agent & click Create

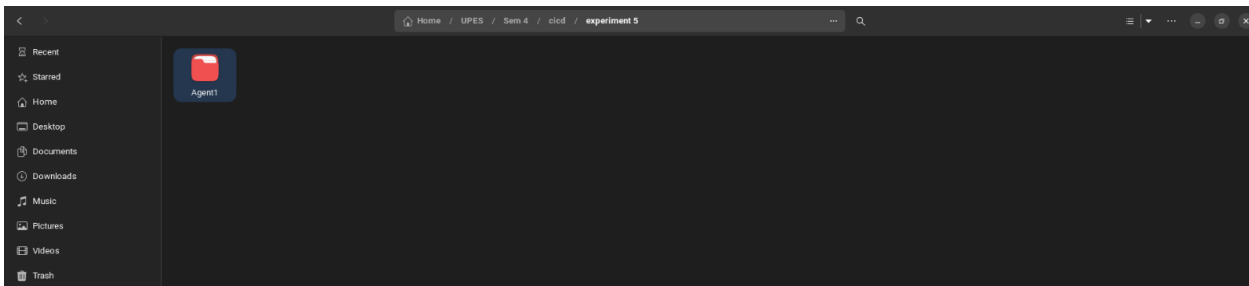


- Set as permanent agent
- Label it as Agent1
- Set remote root repo path of your local system :

The screenshot shows the Jenkins 'Create New Computer' form. The browser address bar indicates the URL is localhost:8080/manage/computer/createNew. The Jenkins logo and a search bar are at the top. The breadcrumb trail is Dashboard > Manage Jenkins > Nodes >. The form fields are: Name (Agent1), Description (empty), Plain text (Preview), Number of executors (1), Remote root directory (/home/rohin/UPES/Sem 4/cicd/experiment 5/Agent1), Labels (Slave1), Usage (Use this node as much as possible), and Launch method (Launch agent by connecting it to the controller). A blue 'Save' button is at the bottom.

The screenshot shows the Jenkins 'Agent Agent1' configuration page. The browser address bar indicates the URL is localhost:8080/manage/computer/Agent1. The Jenkins logo and a search bar are at the top. The breadcrumb trail is Dashboard > Manage Jenkins > Nodes > Agent1. On the left is a sidebar with links: Status, Delete Agent, Configure, Build History, Load Statistics, and Log. The main content area has the title 'Agent Agent1' and a status 'Mark this node temporarily offline'. Below the title is a section 'Run from agent command line: (Unix)' with a code block containing the following commands:

```
curl -s0 http://localhost:8080/jnlpJars/agent.jar
java -jar agent.jar -jnlpUrl http://localhost:8080/computer/Agent1/jenkins-agent.jnlp -secret a098fb6238a09e9af5ab8bd8c1305ec11c05f1a19143e0b105832990df15b632 -workDir "/home/rohin/UPES/Sem 4/cicd/experiment 5/Agent1"
```



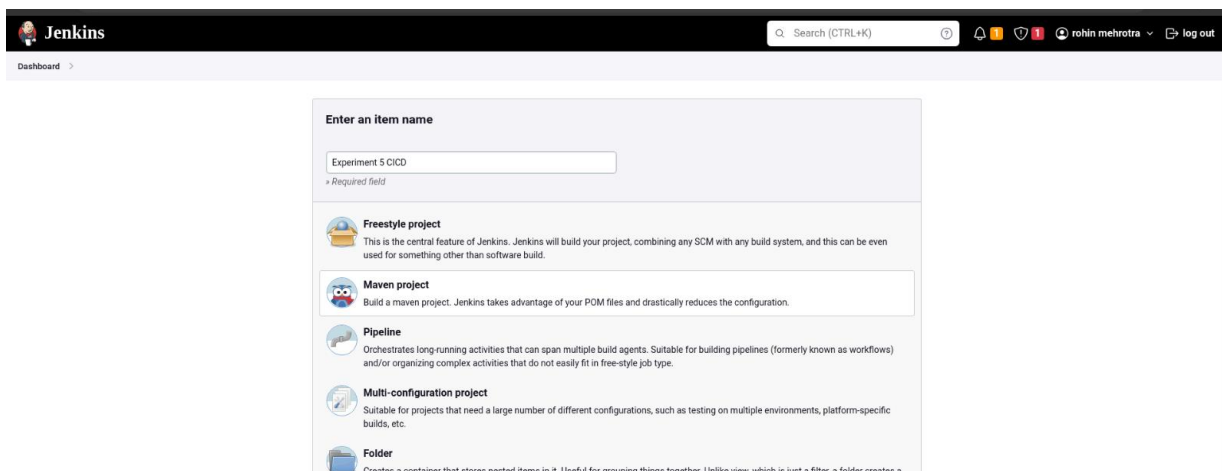
- Then save it
- 1. Go to your cmd of slave1 and run these commands

```

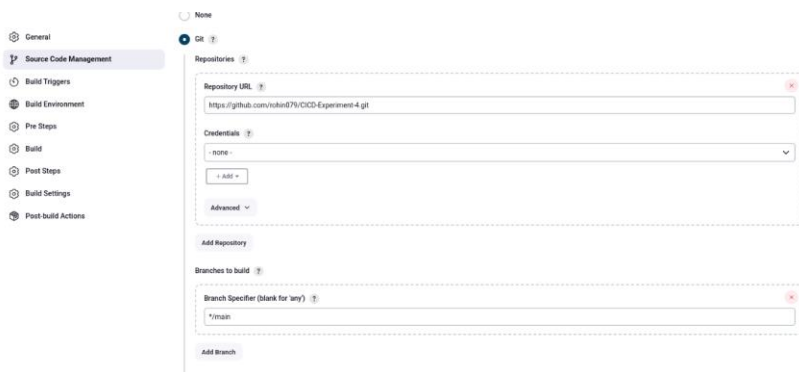
rohin@victus:~/UPES/Sem 4/cicd/experiment 5/Agent1$ java -jar agent.jar -jnlpurl http://localhost:8080/computer/Agent1/jenkins-agent.jnlp -secret a098fb0238a09e9af5ab8d8c1305ec1c95f1a19143e0b105032990df15b632 -
workDir "/home/rohin/UPES/Sem 4/cicd/experiment 5/Agent1"
Oct 03, 2023 9:39:40 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /home/rohin/UPES/Sem 4/cicd/experiment 5/Agent1/remoting as a remoting work directory
Oct 03, 2023 9:39:40 AM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to /home/rohin/UPES/Sem 4/cicd/experiment 5/Agent1/remoting
Oct 03, 2023 9:39:40 AM hudson.remoting.jnlp.Main createEngine
INFO: Setting up agent: Agent1
Oct 03, 2023 9:39:40 AM hudson.remoting.Engine startEngine
INFO: Using Remoting version: 3148.v532a_7e715ee5
Oct 03, 2023 9:39:40 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /home/rohin/UPES/Sem 4/cicd/experiment 5/Agent1/remoting as a remoting work directory
Oct 03, 2023 9:39:40 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Locating server among [http://localhost:8080/]
Oct 03, 2023 9:39:40 AM org.jenkinsci.remoting.engine.JnlpAgentEndpointResolver resolve
INFO: Remoting server accepts the following protocols: [JNLP4-connect, Ping]
Oct 03, 2023 9:39:40 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Agent discovery successful
      Agent address: localhost
      Agent port: 39905
      Identity: 2f:16:b7:ee:74:20:2d:53:8e:83:d9:b2:83:fb:92:99
Oct 03, 2023 9:39:40 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Handshaking
Oct 03, 2023 9:39:40 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connecting to localhost:39905
Oct 03, 2023 9:39:40 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Trying protocol: JNLP4-connect
Oct 03, 2023 9:39:41 AM org.jenkinsci.remoting.protocol.impl.BIONetworkLayer$Reader run
INFO: Waiting for ProtocolStack to start.
Oct 03, 2023 9:39:41 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Remote identity confirmed: 2f:16:b7:ee:74:20:2d:53:8e:83:d9:b2:83:fb:92:99
Oct 03, 2023 9:39:41 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connected

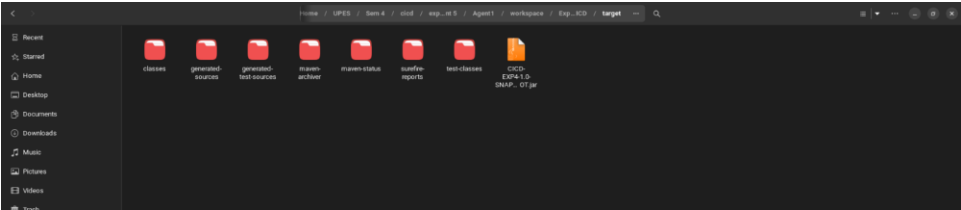
```

This slave is connected and now using this slave we'll make a build-



Make a new maven project and connect it to github project for making automatic build(cicd-lab-5)





Dashboard > cicd-lab5.1 >

Status

Changes

Workspace

Build Now

Configure

Delete Maven project

Modules

Rename

Build History

Filter builds...

#1

Oct 6, 2023, 10:31 AM

Atom feed for all

Atom feed for failures

Maven project cicd-lab5.1

Permalinks

- Last build (#1), 3 min 50 sec ago
- Last stable build (#1), 3 min 50 sec ago
- Last successful build (#1), 3 min 50 sec ago
- Last completed build (#1), 3 min 50 sec ago