

Experiment 5

Jenkins Master-Slave

Aim

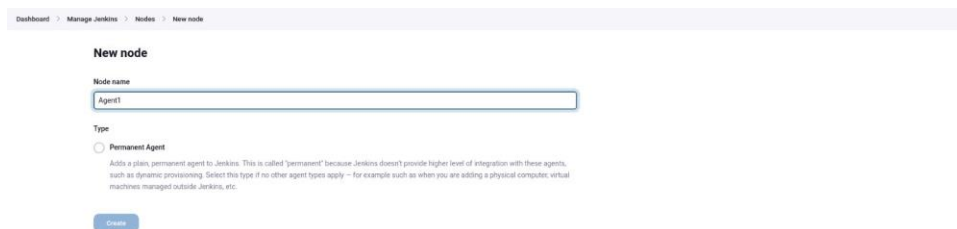
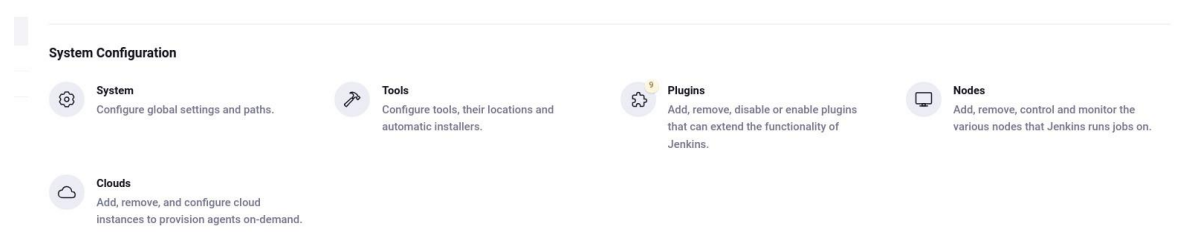
To understand the Master-Slave methodology of Jenkins

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 :

Dashboard > Manage Jenkins > Nodes >

Name ?

Agent1

Description ?

Plain text [Preview](#)

Number of executors ?

1

Remote root directory ?

/home/rohini/UPES/Sem 4/cicd/experiment 5/Agent1

Labels ?

Slave1

Usage ?

Use this node as much as possible

Launch method ?

Launch agent by connecting it to the controller

Save

Dashboard > Manage Jenkins > Nodes > Agent1

Status

Delete Agent

Configure

Build History

Load Statistics

Log

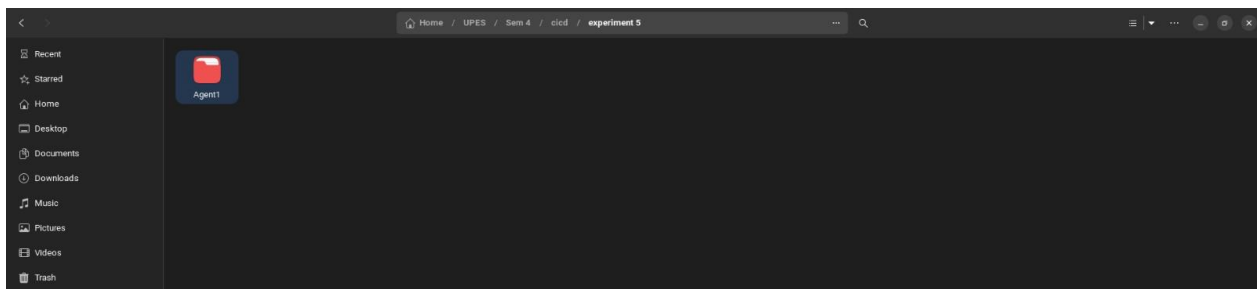
Agent Agent1

Mark this node temporarily offline ⓘ

Add description

Run from agent command line: (Unix) ⓘ

```
curl -sO http://localhost:8080/jnlpJars/agent.jar
java -jar agent.jar -jnlpurl http://localhost:8080/computer/Agent1/jenkins-agent.jnlp -secret a098fb6238a0e9af5ab8bd8c1305ec11c95f1a19143eb105032990df15b632 -workDir "/home/rohini/UPES/Sem 4/cicd/experiment 5/Agent1"
```



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

```
hsl@slave1:~$ java -jar agent.jar -jnlpurl http://localhost:8080/computer/Agent1/jenkins-agent.jnlp --secret a898fbc238a09e9af5ab8bdc1305ec11c95f1a19143e6b105032990df15b632
workDir "/home/hsl/UPE5/Sem 4/cicd/experiment 5/Agent1"
Oct 03, 2023 9:39:40 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /home/hsl/UPE5/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/hsl/UPE5/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_7e715ee3
Oct 03, 2023 9:39:40 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /home/hsl/UPE5/Sem 4/cicd/experiment 5/Agent1/remoting as a remoting work directory
Oct 03, 2023 9:39:40 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Locating server among [https://localhost:8080/]
Oct 03, 2023 9:39:40 AM org.jenkinsci.remoting.engine.JnlpAgentEndpointResolver resolve
INFO: Remoting server accepts the following protocols: [JNLP4-connect, Ping]
Oct 03, 2023 9:39:40 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Agent discovery successful
Agent address: localhost
Agent port: 39985
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:39985
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-


Dashboard >


Enter an item name


Experiment 5 CICD


> Required field

 **Freestyle project**
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

 **Maven project**
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

 **Pipeline**
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

 **Multi-configuration project**
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

 **Folder**
Creates a container that stores nested items in it. Useful for reusing things together. Unlike view which is just a filter, a folder creates a

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

None

General

Source Code Management

Build Triggers

Build Environment

Pre Steps

Build

Post Steps

Build Settings

Post-build Actions

Repositories

Repository URL

https://github.com/rohitd79/CICD-Experiment-4.git

Credentials

none

Add

Advanced

Add Repository

Branches to build

Branch Specifier (blank for 'any')

*main

Add Branch

