

EXPERIMENT NO – 5

TITLE: Master/Slave concept in Jenkins

Objective: -

Create at least Two slaves in Jenkins and Run two different jobs in two slaves parallel.

- Creating 2 slaves in Jenkins.

Name ?

Slave1

Description ?

This is Slave - 1.

Number of executors ?

1

Remote root directory ?

E:\Slave1

Labels ?

Agent1

Usage ?

Use this node as much as possible

Launch method ?

Launch agent by connecting it to the controller

☐ Disable WorkDir ?


Custom WorkDir path ?

Internal data directory ?

remoting

☐ Fail if workspace is missing ?

☐ Use WebSocket ?

 Either WebSocket mode is selected, or the TCP port for inbound agents must be enabled

Advanced...

Availability ?

Keep this agent online as much as possible

- Connecting the slaves with the machine.

```
PS E:\Slave1> curl http://localhost:8080/jnlpJars/agent.jar

StatusCode      : 200
StatusDescription : OK
Content         : {80, 75, 3, 4...}
RawContent      : HTTP/1.1 200 OK
                  X-Content-Type-Options: nosniff
                  Content-Disposition: attachment; filename=agent.jar
                  Accept-Ranges: bytes
                  Content-Length: 1368830
                  Content-Type: application/java-archive
                  Date: Fri, ...
Headers         : {[X-Content-Type-Options, nosniff], [Content-Disposition, attachment; filename=agent.jar], [Accept-Ranges, bytes], [Content-Length, 1368830]...}
RawContentLength : 1368830

PS E:\Slave1> java -jar agent.jar -jnlpUrl http://localhost:8080/manage/computer/Slave1/jenkins-agent.jnlp -secret d0ee08f14a00374d54ab1ae1f847ac43f7e387f7a
ae76f03c9d5fde74939904a -workDir "E:\Slave1"
Oct 27, 2023 8:06:57 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using E:\Slave1\remoting as a remoting work directory
Oct 27, 2023 8:06:57 PM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to E:\Slave1\remoting
Oct 27, 2023 8:06:57 PM hudson.remoting.jnlp.Main createEngine
INFO: Setting up agent: Slave1
Oct 27, 2023 8:06:57 PM hudson.remoting.Engine startEngine
INFO: Using Remoting version: 3107.v665000b_51092
Oct 27, 2023 8:06:57 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using E:\Slave1\remoting as a remoting work directory
Oct 27, 2023 8:06:57 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Locating server among [http://localhost:8080/]
Oct 27, 2023 8:06:57 PM org.jenkinsci.remoting.engine.JnlpAgentEndpointResolver resolve
INFO: Remoting server accepts the following protocols: [JNLP4-connect, Ping]
Oct 27, 2023 8:06:57 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Agent discovery successful
      Agent address: localhost
      Agent port:    50000
      Identity:      2c:bd:87:cf:88:6b:98:55:1e:c1:bc:e0:38:85:a7:f9
```

```
Identity:      2c:bd:87:cf:88:6b:98:55:1e:c1:bc:e0:38:85:a7:f9
Oct 27, 2023 8:06:57 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Handshaking
Oct 27, 2023 8:06:57 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connecting to localhost:50000
Oct 27, 2023 8:06:57 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Trying protocol: JNLP4-connect
Oct 27, 2023 8:06:57 PM org.jenkinsci.remoting.protocol.impl.BIONetworkLayer$Reader run
INFO: Waiting for ProtocolStack to start.
Oct 27, 2023 8:06:57 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Remote identity confirmed: 2c:bd:87:cf:88:6b:98:55:1e:c1:bc:e0:38:85:a7:f9
Oct 27, 2023 8:06:57 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connected
|
```

- Slave 2

```
PS E:\Slave2> java -jar agent.jar -jnlpUrl http://localhost:8080/manage/computer/Slave2/jenkins-agent.jnlp -secret 3be4db6485fcff013ebc366022580c767b7eaa1ee
b09fe70c9b40edef2803e43 -workDir "E:\Slave2"
Oct 27, 2023 8:11:33 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using E:\Slave2\remoting as a remoting work directory
Oct 27, 2023 8:11:33 PM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to E:\Slave2\remoting
Oct 27, 2023 8:11:33 PM hudson.remoting.jnlp.Main createEngine
INFO: Setting up agent: Slave2
Oct 27, 2023 8:11:33 PM hudson.remoting.Engine startEngine
INFO: Using Remoting version: 3107.v665000b_51092
Oct 27, 2023 8:11:33 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using E:\Slave2\remoting as a remoting work directory
Oct 27, 2023 8:11:33 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Locating server among [http://localhost:8080/]
Oct 27, 2023 8:11:33 PM org.jenkinsci.remoting.engine.JnlpAgentEndpointResolver resolve
INFO: Remoting server accepts the following protocols: [JNLP4-connect, Ping]
Oct 27, 2023 8:11:33 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Agent discovery successful
      Agent address: localhost
      Agent port:    50000
      Identity:      2c:bd:87:cf:88:6b:98:55:1e:c1:bc:e0:38:85:a7:f9
Oct 27, 2023 8:11:33 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Handshaking
Oct 27, 2023 8:11:33 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connecting to localhost:50000
Oct 27, 2023 8:11:33 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Trying protocol: JNLP4-connect
Oct 27, 2023 8:11:33 PM org.jenkinsci.remoting.protocol.impl.BIONetworkLayer$Reader run
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INFO: Connected
```

- Slave-1 & Slave-2 connected to local machine.

Manage nodes and clouds

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	Built-In Node	Windows 11 (amd64)	In sync	24.40 GB	3.52 GB	24.40 GB	0ms
	Slave1	Windows 11 (amd64)	In sync	145.62 GB	3.52 GB	24.40 GB	14ms
	Slave2	Windows 11 (amd64)	In sync	145.62 GB	3.49 GB	24.40 GB	64ms
Data obtained		31 sec	30 sec	30 sec	30 sec	30 sec	30 sec

Build Queue
No builds in the queue.

Build Executor Status
1 idle Built-In Node

- Create a maven build in Jenkins and connect it with slave-1.

☐ Discard old builds ?

☒ GitHub project

Project url ?

☐ This project is parameterized ?

☐ Throttle builds ?

☐ Execute concurrent builds if necessary ?

☒ Restrict where this project can be run ?

Label Expression ?

Label Agent1 matches 1 node. Permissions or other restrictions provided by plugins may further reduce that list.

- Build Generated.

This PC > New Volume (E:) > Slave1 >

Name	Date modified	Type	Size
remoting	10/27/2023 8:06 PM	File folder	
workspace	10/27/2023 8:34 PM	File folder	
agent	10/27/2023 8:06 PM	Executable Jar File	1,339 KB
maven3-interceptor-commons	10/27/2023 8:23 PM	Executable Jar File	8 KB
maven35-agent	10/27/2023 8:23 PM	Executable Jar File	9 KB
maven35-interceptor	10/27/2023 8:23 PM	Executable Jar File	24 KB