Step 1: TCP port for inbound agents in random

Markup Formatter

Markup Formatter **?**

Plain text   ⌄

> Shows descriptions mostly as written. HTML unsafe characters like < and & are escaped to their respective character entities, and line breaks are converted to their HTML equivalent.

Agents

TCP port for inbound agents **?**

◯ Fixed

⦿ Random

◯ Disable

Save   Apply

Step 2: Click on new node.

🖵 Nodes

☁ Clouds

Build Queue   ⌄
No builds in the queue.

Build Executor Status   ⌄
1 Idle
2 Idle

Nodes

+ New Node   Configure Monitors   ↻

S	Name ↓	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time	
🖵	**Built-In Node**	Windows 11 (amd64)	In sync	177.91 GiB	3.91 GiB	177.91 GiB	0ms	⚙
	Data obtained		10 min	10 min	10 min	10 min	10 min	10 min

Icon: S   M   L   Legend

REST API   Jenkins 2.462.2

Step 3: Enter slave node name

Jenkins

Search (CTRL+K)   admin   log out

Dashboard > Manage Jenkins > Nodes > New node

New node

Node name

slave

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

REST API   Jenkins 2.462.2

Jenkins

Search (CTRL+K)   admin   log out

Dashboard > Manage Jenkins > Nodes > New node

New node

Node name

slave

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● Permanent Agent

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Create

REST API   Jenkins 2.462.2

Step 4: Create new folder and set it as directory

Dashboard > Manage Jenkins > Nodes >

Remote root directory ?

```
C:\Users\student\Desktop\shreya\slave
```

Labels ?

Usage ?

Use this node as much as possible

Launch method ?

Launch agent by connecting it to the controller

Availability ?

Keep this agent online as much as possible

Node Properties

Save

Step 5: Copy the command

Agent slave

Add description   Mark this node temporarily offline   ?

Run from agent command line: (Unix)

```
curl -sO http://localhost:8080/jnlpJars/agent.jar
java -jar agent.jar -url http://localhost:8080/ -secret cd09950101415335acde20b1df124c6bfaa3c886a2f9fadd159c35196e07fe52 -
name slave -workDir "C:\Users\student\Desktop\shreya\slave"
```

Run from agent command line: (Windows)

```
curl.exe -sO http://localhost:8080/jnlpJars/agent.jar
java -jar agent.jar -url http://localhost:8080/ -secret cd09950101415335acde20b1df124c6bfaa3c886a2f9fadd159c35196e07fe52 -
name slave -workDir "C:\Users\student\Desktop\shreya\slave"
```

Or run from agent command line, with the secret stored in a file: (Unix)

Step 6: Run the command in terminal

```
Microsoft Windows [Version 10.0.22631.4169]
(c) Microsoft Corporation. All rights reserved.

C:\Users\student>curl.exe -sO http://localhost:8080/jnlpJars/agent.jar & java -jar agent.jar -url http://localhost:8080/ -secret cd09950101415335acd
e20b1df124c6bfaa3c886a2f9fadd159c35196e07fe52 -name slave -workDir "C:\Users\student\Desktop\shreya\slave"
Oct 09, 2024 8:37:15 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using C:\Users\student\Desktop\shreya\slave\remoting as a remoting work directory
Oct 09, 2024 8:37:15 AM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to C:\Users\student\Desktop\shreya\slave\remoting
Oct 09, 2024 8:37:15 AM hudson.remoting.Launcher createEngine
INFO: Setting up agent: slave
Oct 09, 2024 8:37:15 AM hudson.remoting.Engine startEngine
INFO: Using Remoting version: 3248.3250.v3277a_8e88c9b_
Oct 09, 2024 8:37:15 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using C:\Users\student\Desktop\shreya\slave\remoting as a remoting work directory
Oct 09, 2024 8:37:15 AM hudson.remoting.Launcher$CuiListener status
INFO: Locating server among [http://localhost:8080/]
Oct 09, 2024 8:37:15 AM org.jenkinsci.remoting.engine.JnlpAgentEndpointResolver resolve
INFO: Remoting server accepts the following protocols: [JNLP4-connect, Ping]
Oct 09, 2024 8:37:15 AM hudson.remoting.Launcher$CuiListener status
INFO: Agent discovery successful
  Agent address: localhost
  Agent port:    50008
  Identity:      d7:ba:5b:3e:e2:14:4a:2f:fa:56:c5:a8:7c:63:5b:e3
Oct 09, 2024 8:37:15 AM hudson.remoting.Launcher$CuiListener status
INFO: Handshaking
Oct 09, 2024 8:37:15 AM hudson.remoting.Launcher$CuiListener status
INFO: Connecting to localhost:50008
Oct 09, 2024 8:37:15 AM hudson.remoting.Launcher$CuiListener status
INFO: Server reports protocol JNLP4-connect-proxy not supported, skipping
Oct 09, 2024 8:37:15 AM hudson.remoting.Launcher$CuiListener status
INFO: Trying protocol: JNLP4-connect
Oct 09, 2024 8:37:15 AM org.jenkinsci.remoting.protocol.impl.BIONetworkLayer$Reader run
INFO: Waiting for ProtocolStack to start.
Oct 09, 2024 8:37:15 AM hudson.remoting.Launcher$CuiListener status
```

Step 7: Slave node should be visible

Step 8: Set labels a preferences and save

System Information

Disconnect

Build Executor Status

1 Idle

Plain text **Preview**

Number of executors ?

1

Remote root directory ?

C:\Users\student\Desktop\shreya\slave

Labels ?

preference

Usage ?

Use this node as much as possible

Launch method ?

Launch agent by connecting it to the controller

Save

Step 9: New item and select Maven project

New Item

Enter an item name

maven build

Select an item type

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

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.

OK

Step 10: In master node configuration select slave node label

Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Pre Steps
- Build
- Post Steps
- Build Settings
- Post-build Actions

Plain text **Preview**

☐ Discard old builds ?

☐ GitHub project

☐ This project is parameterized ?

☐ Throttle builds ?

☐ Execute concurrent builds if necessary ?

☑ Restrict where this project can be run ?

Label Expression ?

```
preference
```

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

Advanced ⌄

Save   Apply

Step 11: Build the master node

Jenkins

Search (⌘+K)   ⚠ 1   admin ⌄   log out

Dashboard >

- ＋ New Item
- Build History
- Project Relationship
- Check File Fingerprint
- Manage Jenkins
- My Views

✎ Add description

All ＋

S	W	Name ↓	Last Success		Last Failure		Last Duration	
✓	⛅	maven build	11 sec	#5	3 min 31 sec	#4	3 sec	▷
✓	☀	pipeline	1 hr 7 min	#4	N/A		0.8 sec	▷
✓	☀	project	2 days 19 hr	#1	N/A		6.6 sec	▷

Icon: S M L   ○○○

Build Queue ⌄

No builds in the queue.

Build Executor Status ⌄

🖥 **Built-In Node**

1 Idle

2 Idle

🖥 **slave1**

1 Idle