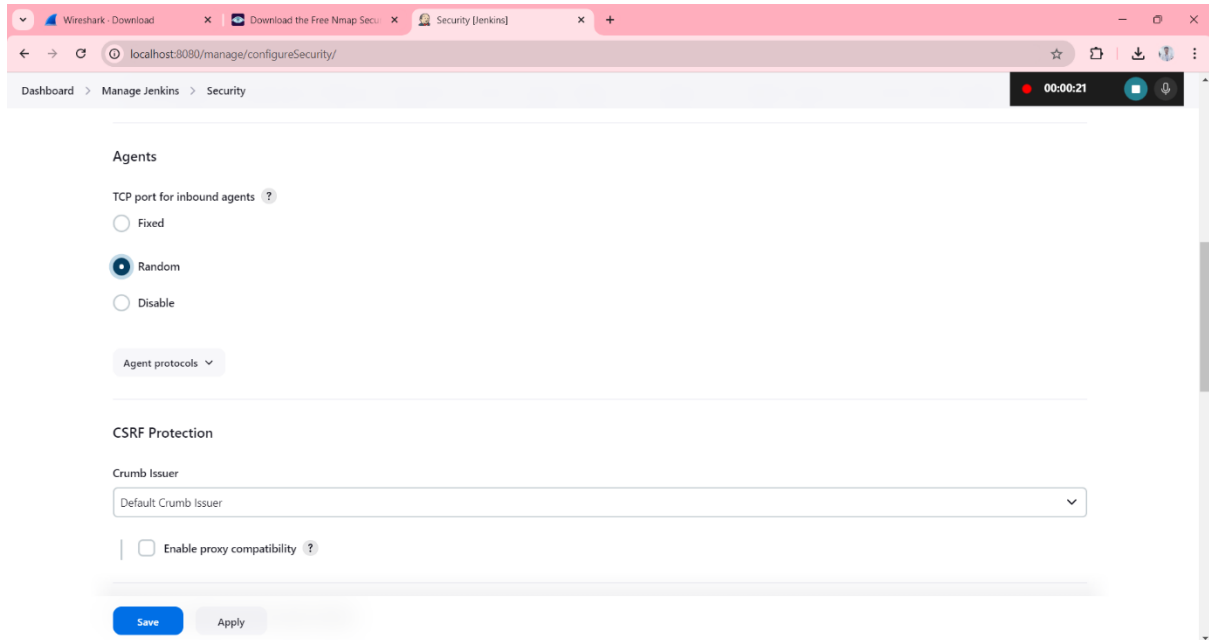
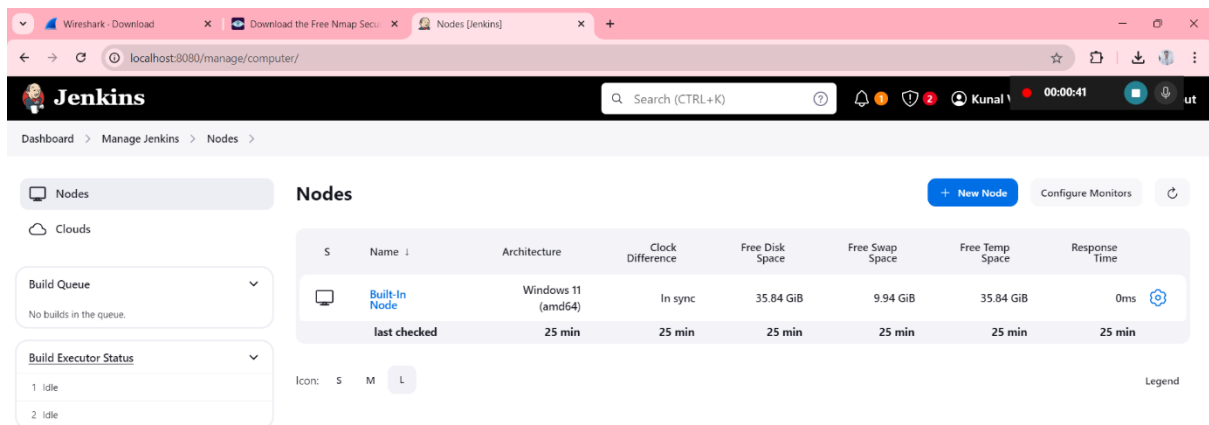


## Experiment No. 6

Step 1 : TCP port for inbound agents is set to random.



Step 2 : Click on new node



### Step 3 : Enter slave node name.

Dashboard > Manage Jenkins > Nodes > New node

## New node

Node name

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 2.452.3

### Step 4 : Create a new folder and set it as directory.

Dashboard > Manage Jenkins > Nodes > createItem

## createItem

Plain text [Preview](#)

Number of executors ?

Remote root directory ?

Labels ?

Usage ?

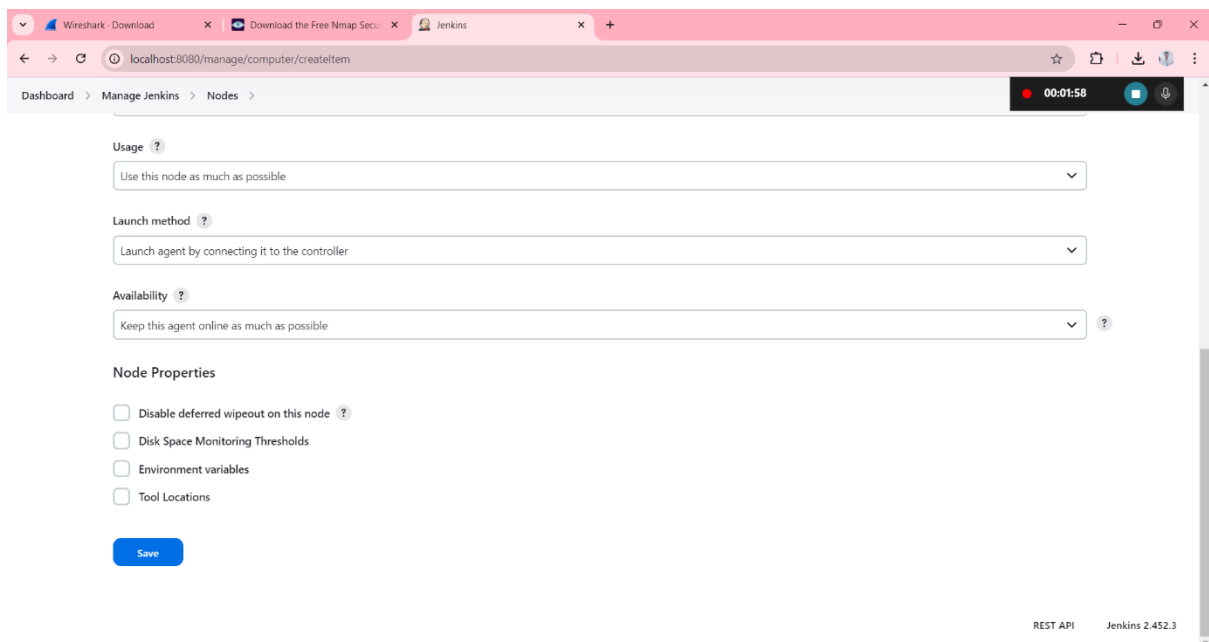
Use this node as much as possible

Launch method ?

Launch agent by connecting it to the controller

Save

## Step 5 : Set the properties and save.



The screenshot shows the Jenkins 'Create Item' page for a new node. The browser tabs include 'Wireshark - Download', 'Download the Free Nmap Secu...', and 'Jenkins'. The address bar shows 'localhost:8080/manage/computer/createItem'. The breadcrumb navigation is 'Dashboard > Manage Jenkins > Nodes >'. The page has a timer '00:01:58' and a 'REST API' link.

**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

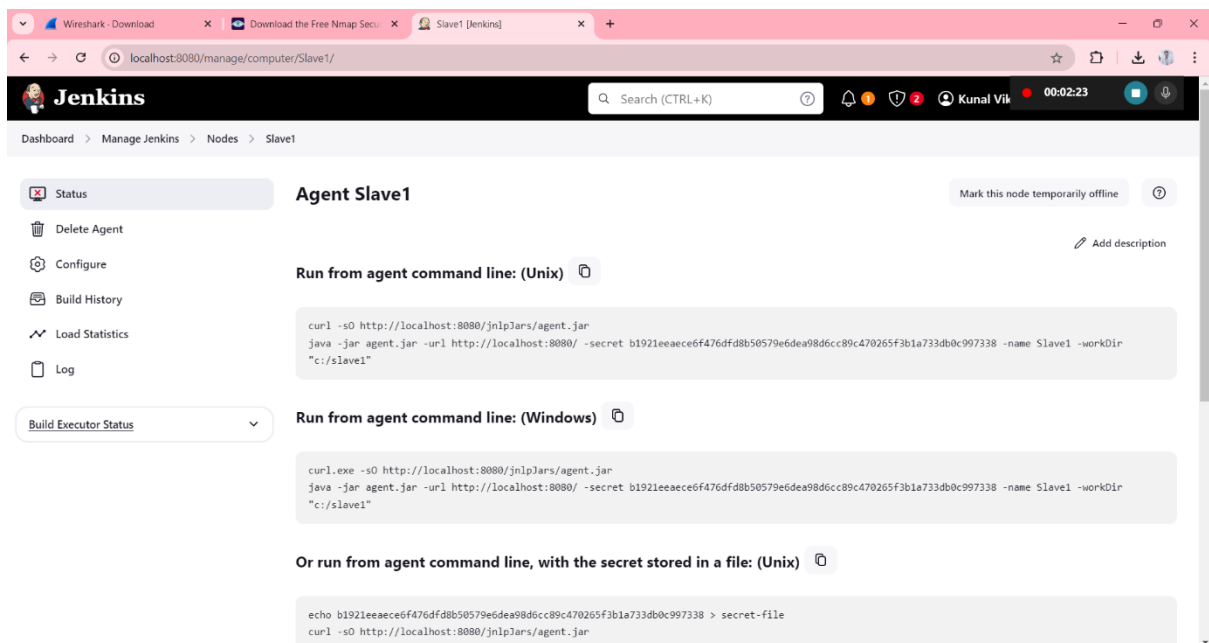
**Node Properties**

- ☐ Disable deferred wipeout on this node ?
- ☐ Disk Space Monitoring Thresholds
- ☐ Environment variables
- ☐ Tool Locations

**Save**

REST API Jenkins 2.452.3

## Step 6 : Copy the command for command line.



The screenshot shows the Jenkins 'Agent Slave1' configuration page. The browser tabs include 'Wireshark - Download', 'Download the Free Nmap Secu...', and 'Slave1 [Jenkins]'. The address bar shows 'localhost:8080/manage/computer/Slave1/'. The breadcrumb navigation is 'Dashboard > Manage Jenkins > Nodes > Slave1'. The page has a search bar 'Search (CTRL+K)', a user profile 'Kunal Vik', and a timer '00:02:23'.

**Agent Slave1** 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 b1921eeaece6f476dfd8b50579e6dea98d6cc89c470265f3b1a733db0c997338 -name Slave1 -workDir "c:/slave1"
```

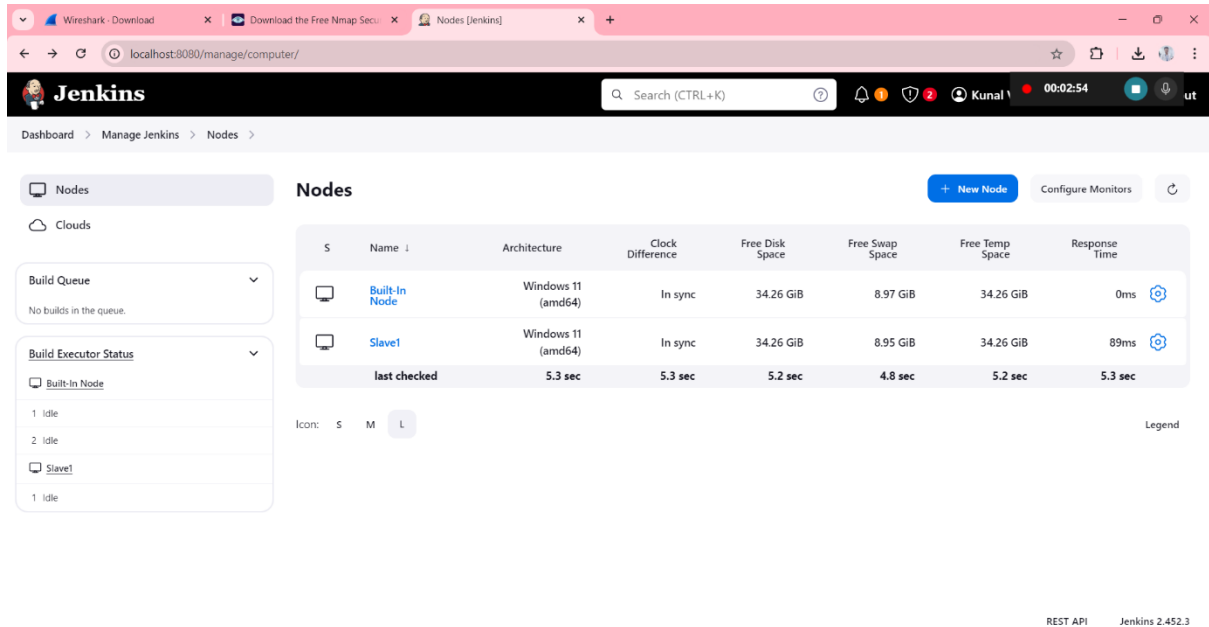
**Run from agent command line: (Windows)** ?

```
curl.exe -sO http://localhost:8080/jnlpJars/agent.jar
java -jar agent.jar -url http://localhost:8080/ -secret b1921eeaece6f476dfd8b50579e6dea98d6cc89c470265f3b1a733db0c997338 -name Slave1 -workDir "c:/slave1"
```

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

```
echo b1921eeaece6f476dfd8b50579e6dea98d6cc89c470265f3b1a733db0c997338 > secret-file
curl -sO http://localhost:8080/jnlpJars/agent.jar
java -jar agent.jar -url http://localhost:8080/ -secret $(cat secret-file) -name Slave1 -workDir "c:/slave1"
```

Step 7 : Run the command in cmd, then slave node should be visible.

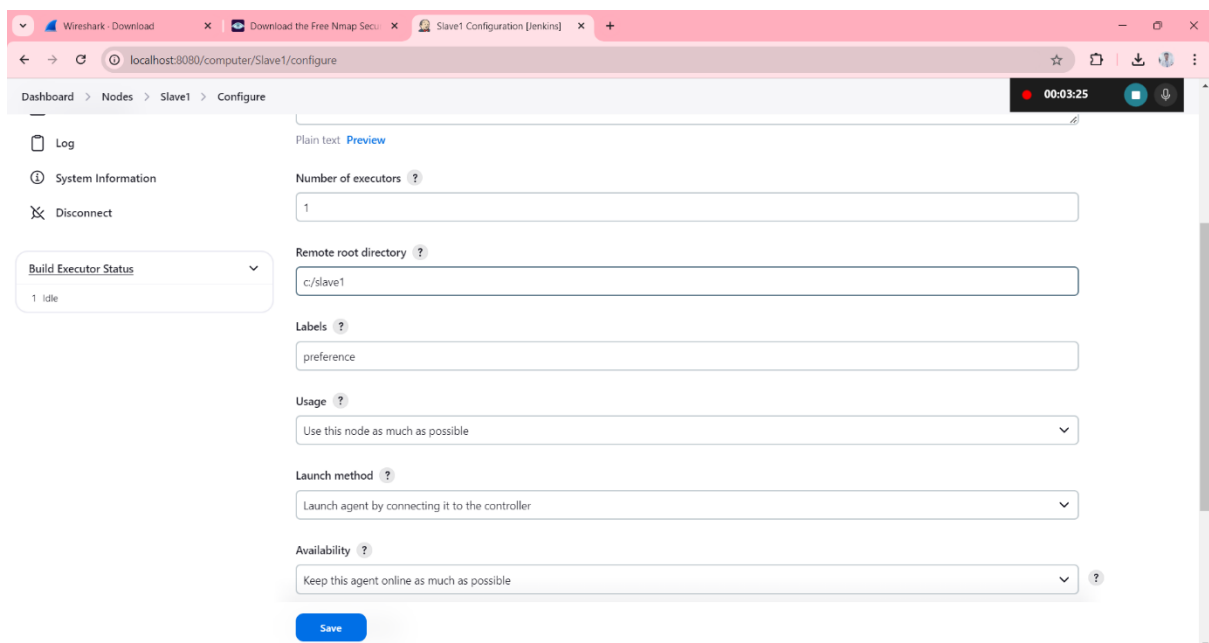


The screenshot shows the Jenkins 'Nodes' page. The left sidebar contains a 'Nodes' section with a 'Build Queue' (empty) and a 'Build Executor Status' section showing 'Built-In Node' (1 idle) and 'Slave1' (1 idle). The main area displays a table of nodes:

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	Built-In Node	Windows 11 (amd64)	In sync	34.26 GiB	8.97 GiB	34.26 GiB	0ms
	Slave1	Windows 11 (amd64)	In sync	34.26 GiB	8.95 GiB	34.26 GiB	89ms
last checked		5.3 sec	5.3 sec	5.2 sec	4.8 sec	5.2 sec	5.3 sec

Below the table is a legend for icons: S (Slave), M (Master), and L (Label). The bottom right corner shows 'REST API' and 'Jenkins 2.452.3'.

Step 8 : In slave node configuration, set labels as preference and save.



The screenshot shows the 'Slave1 Configuration' page in Jenkins. The left sidebar has a 'Log' section and a 'Build Executor Status' section showing '1 idle'. The main area contains the following configuration fields:

- Plain text: [Preview](#)
- Number of executors: 1
- Remote root directory: c:/slave1
- Labels: preference
- 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

A 'Save' button is located at the bottom of the configuration area.

Step 9 : In master node configuration, select the slave node label.

The screenshot shows the Jenkins Configuration page for a job named 'My Maven'. The 'General' tab is selected in the left sidebar. Under the 'Restrict where this project can be run' section, the checkbox is checked, and the 'Label Expression' field contains the text 'preference'. Below this, a message states: 'Label preference matches 1 node. Permissions or other restrictions provided by plugins may further reduce that list.' The 'Source Code Management' section shows 'Git' selected. At the bottom, there are 'Save' and 'Apply' buttons.

Dashboard > My Maven > Configuration

**Configure**

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

☐ Discard old builds ?

☐ GitHub project

☐ This project is parameterised ?

☐ 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 ▾

**Source Code Management**

☐ None

☒ Git ?

Save Apply

Step 10 : Build the master node.

The screenshot shows the Jenkins Dashboard. The 'Build History' section displays a table of recent builds. The 'Build Queue' section shows 'No builds in the queue.' The 'Build Executor Status' section shows the status of the build executors.

Dashboard >

+ New Item

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

Build-in Node

1 Idle

2 Idle

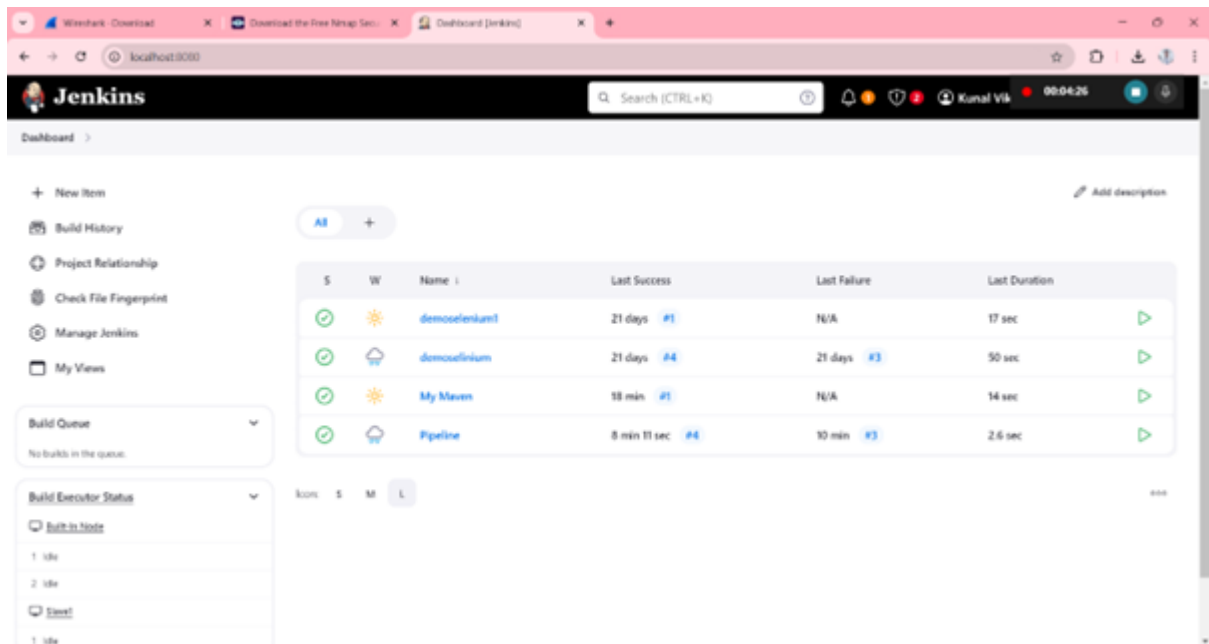
Slave1

1 Idle

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀	demoselenium1	21 days #1	N/A	17 sec
✓	☁	demoselenium	21 days #4	21 days #3	50 sec
✓	☀	My Maven	18 min #1	N/A	14 sec
✓	☁	Pipeline	8 min 11 sec #4	10 min #3	2.6 sec

Icon: S M L

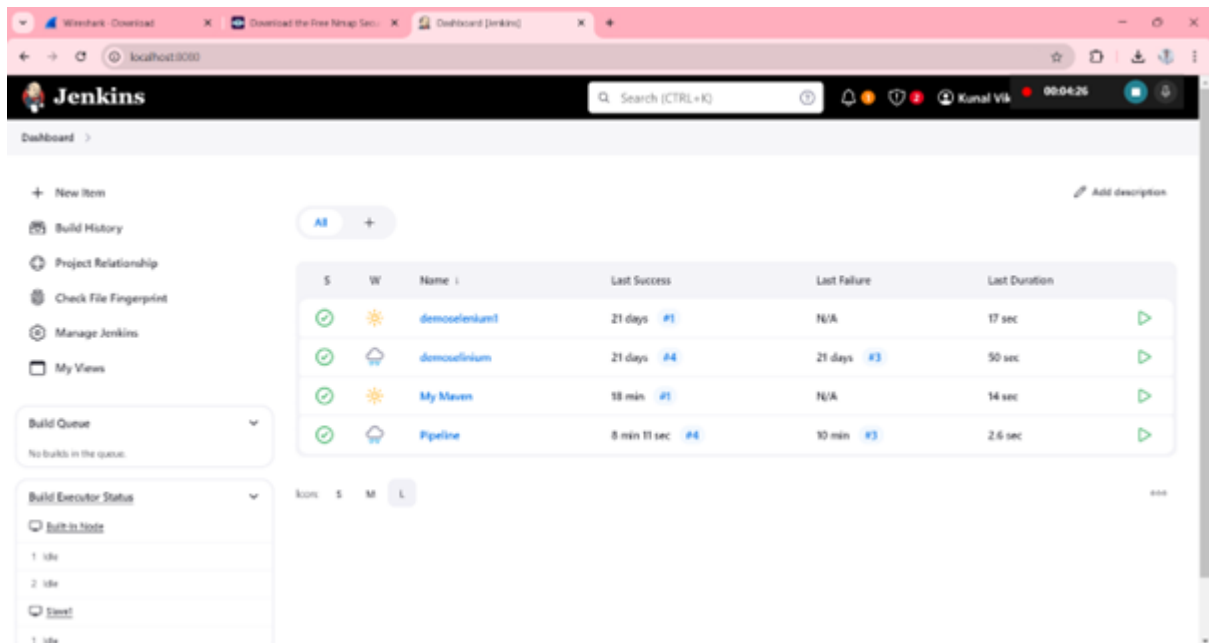
Step 11 : Build in progress.



The screenshot shows the Jenkins Dashboard with a table of build history. The table has columns for Success (S), Failure (W), Name, Last Success, Last Failure, and Last Duration. The builds listed are 'demojenkins1', 'demojenkins2', 'My Maven', and 'Pipeline'. The 'Build Queue' section shows 'No builds in the queue.' and the 'Build Executor Status' section shows '1 idle'.

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀	demojenkins1	21 days #1	N/A	17 sec
✓	☁	demojenkins2	21 days #4	21 days #3	50 sec
✓	☀	My Maven	18 min #1	N/A	14 sec
✓	☁	Pipeline	8 min 11 sec #4	10 min #3	2.6 sec

Step 12 : Build is successful and slave node is visible.



The screenshot shows the Jenkins Dashboard with a table of build history. The table has columns for Success (S), Failure (W), Name, Last Success, Last Failure, and Last Duration. The builds listed are 'demojenkins1', 'demojenkins2', 'My Maven', and 'Pipeline'. The 'Build Queue' section shows 'No builds in the queue.' and the 'Build Executor Status' section shows '1 idle'.

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀	demojenkins1	21 days #1	N/A	17 sec
✓	☁	demojenkins2	21 days #4	21 days #3	50 sec
✓	☀	My Maven	18 min #1	N/A	14 sec
✓	☁	Pipeline	8 min 11 sec #4	10 min #3	2.6 sec