

Project Name: Node JS setup in Jenkins

Description: This document demonstrates how to setup node js in Jenkins

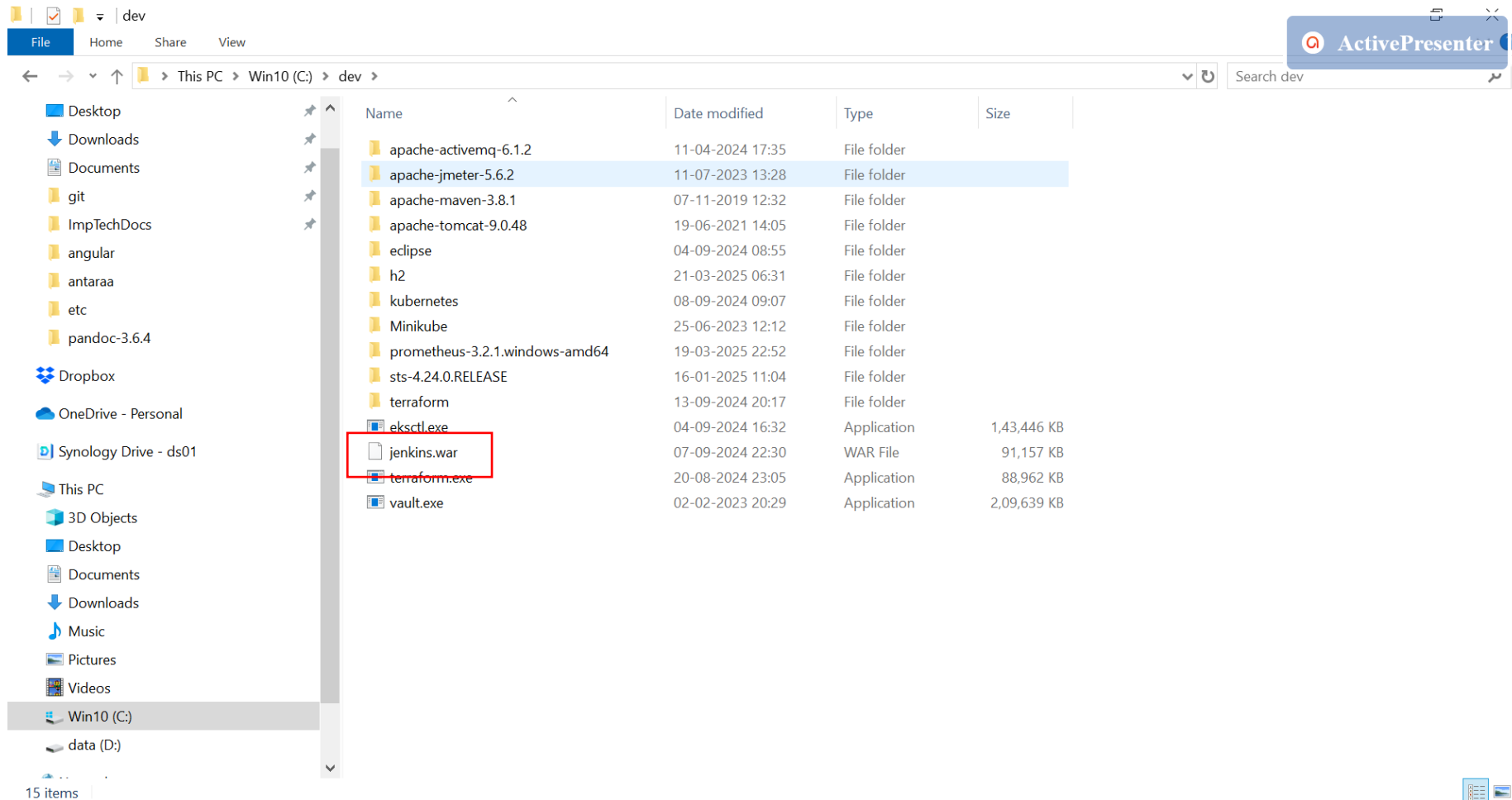
Assumptions:

Node.js installed

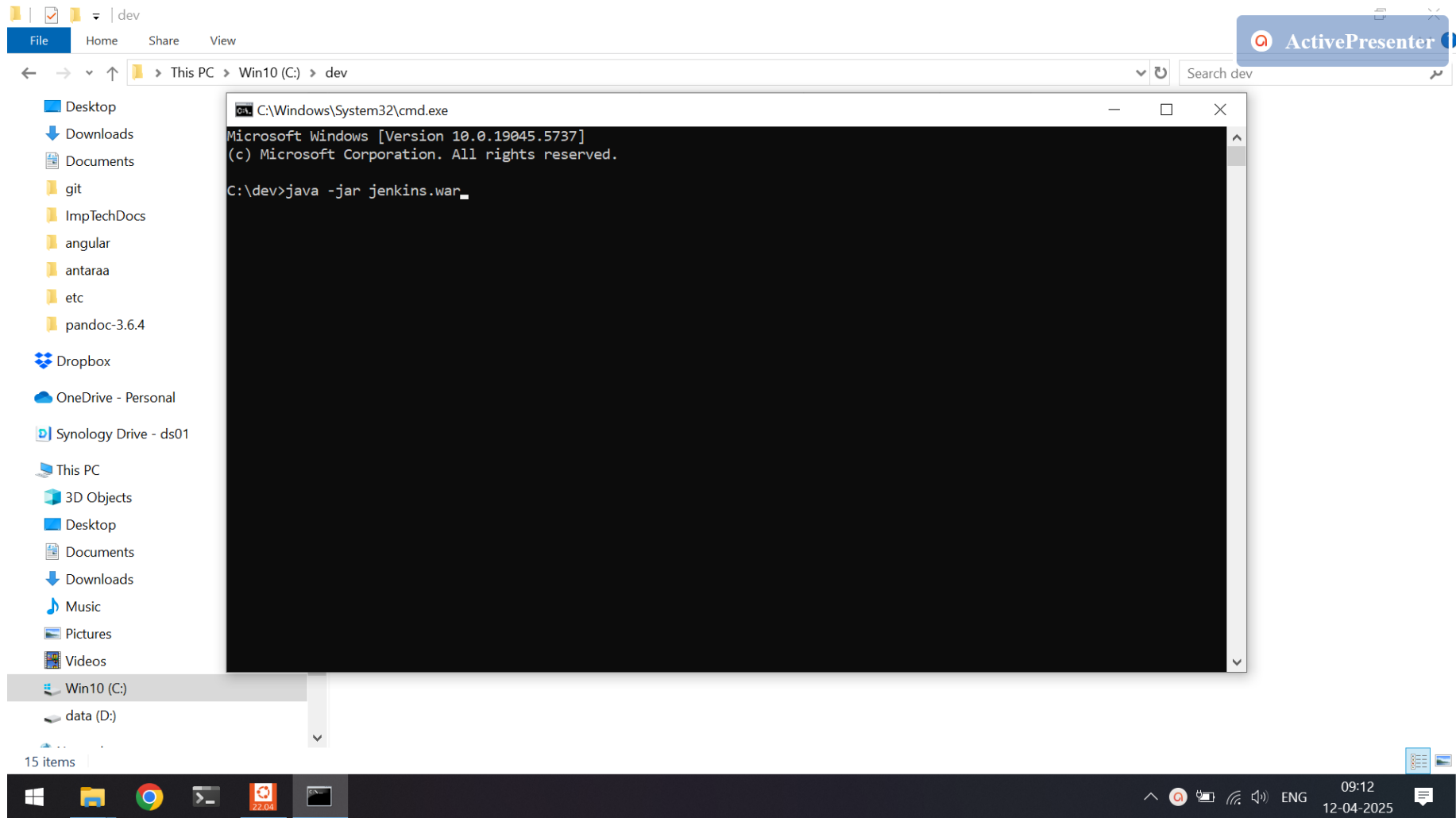
Java Installed and PATH set

Jenkins .war file downloaded from <https://get.jenkins.io/war-stable/2.492.3/jenkins.war>

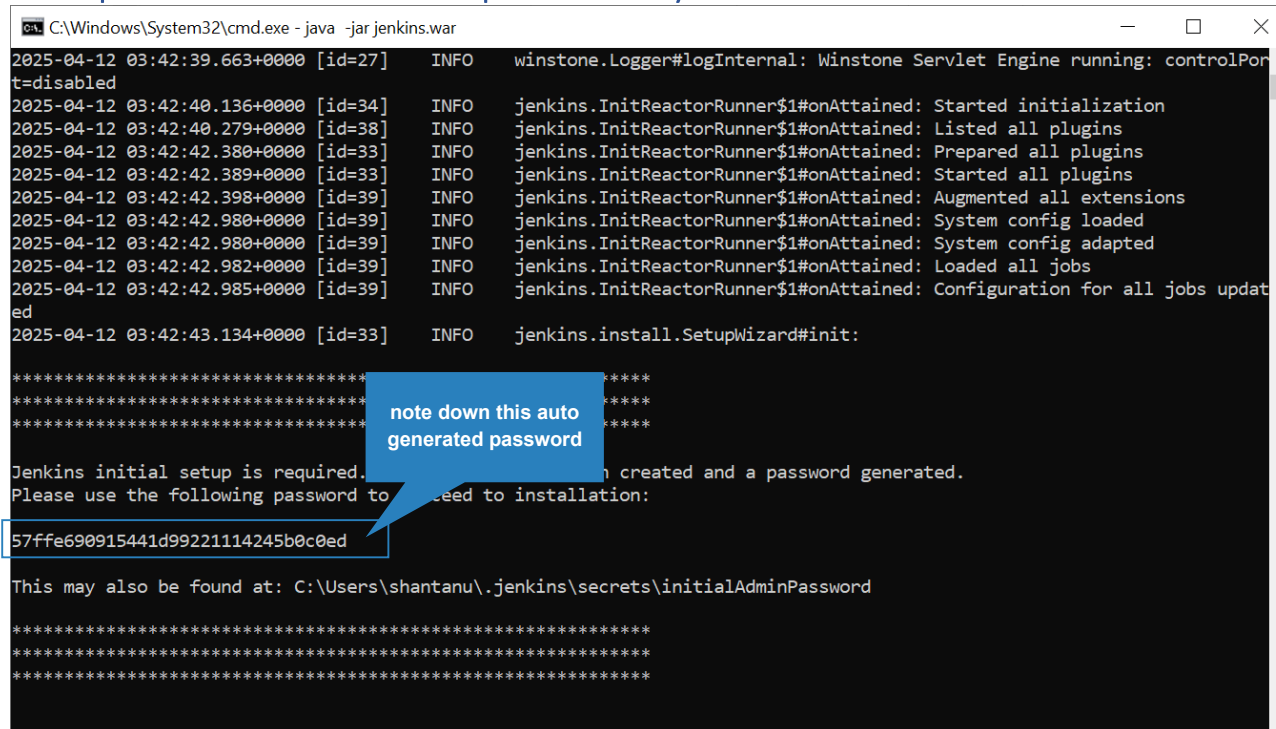
1. Navigate to the location of 'jenkins.war' file you downloaded.



2. Open a command prompt in the location and run the showed command



3. During the startup process Jenkins provides a temporary password. Copy the password and keep it handy:



```
C:\Windows\System32\cmd.exe - java -jar jenkins.war
2025-04-12 03:42:39.663+0000 [id=27] INFO winstone.Logger#logInternal: Winstone Servlet Engine running: controlPort=disabled
2025-04-12 03:42:40.136+0000 [id=34] INFO jenkins.InitReactorRunner$1#onAttained: Started initialization
2025-04-12 03:42:40.279+0000 [id=38] INFO jenkins.InitReactorRunner$1#onAttained: Listed all plugins
2025-04-12 03:42:42.380+0000 [id=33] INFO jenkins.InitReactorRunner$1#onAttained: Prepared all plugins
2025-04-12 03:42:42.389+0000 [id=33] INFO jenkins.InitReactorRunner$1#onAttained: Started all plugins
2025-04-12 03:42:42.398+0000 [id=39] INFO jenkins.InitReactorRunner$1#onAttained: Augmented all extensions
2025-04-12 03:42:42.980+0000 [id=39] INFO jenkins.InitReactorRunner$1#onAttained: System config loaded
2025-04-12 03:42:42.980+0000 [id=39] INFO jenkins.InitReactorRunner$1#onAttained: System config adapted
2025-04-12 03:42:42.982+0000 [id=39] INFO jenkins.InitReactorRunner$1#onAttained: Loaded all jobs
2025-04-12 03:42:42.985+0000 [id=39] INFO jenkins.InitReactorRunner$1#onAttained: Configuration for all jobs updated
2025-04-12 03:42:43.134+0000 [id=33] INFO jenkins.install.SetupWizard#init:

*****
*****
*****
*****

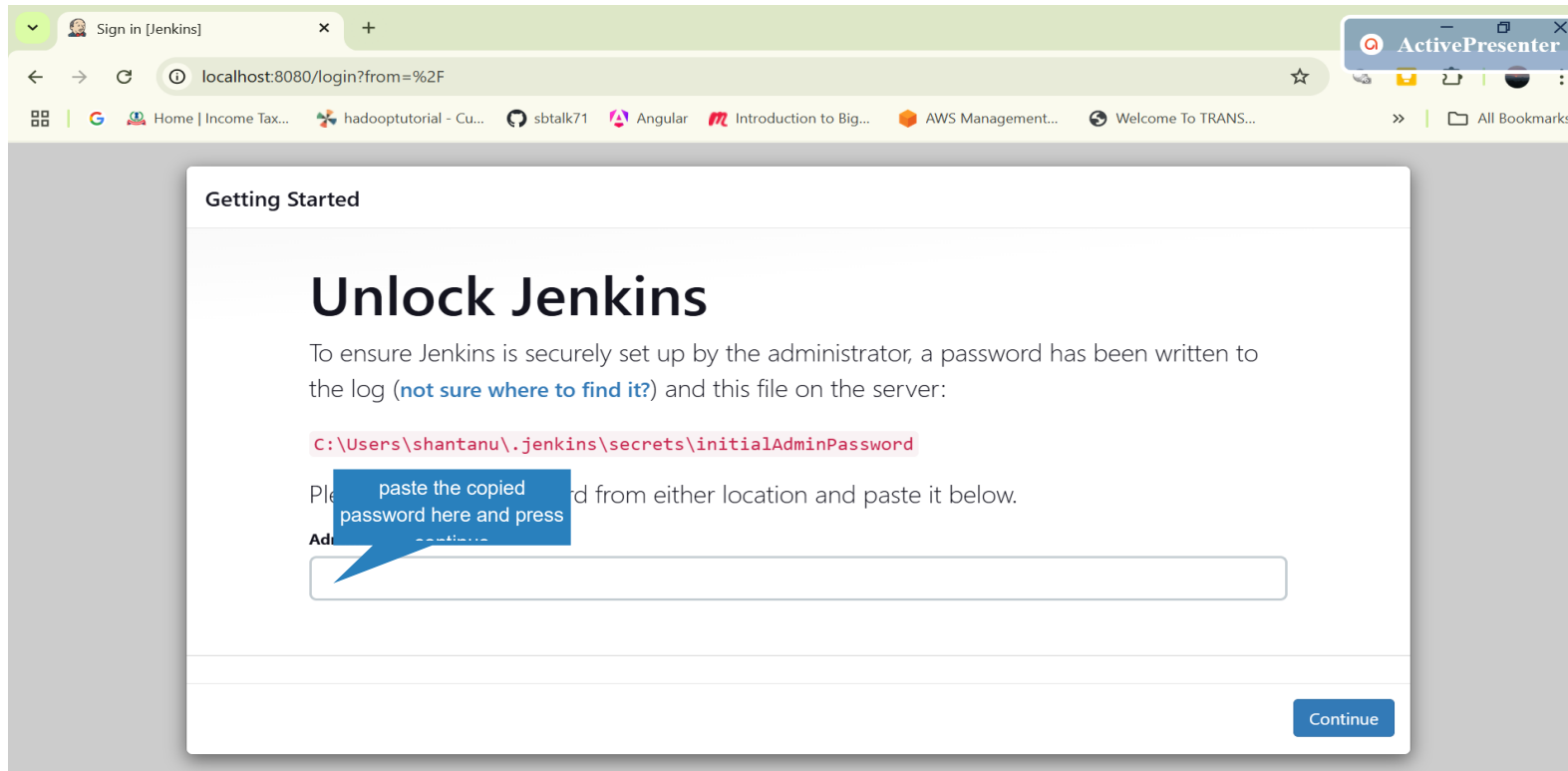
Jenkins initial setup is required. An admin user was created and a password generated.
Please use the following password to proceed to installation:

57ffe690915441d9922114245b0c0ed

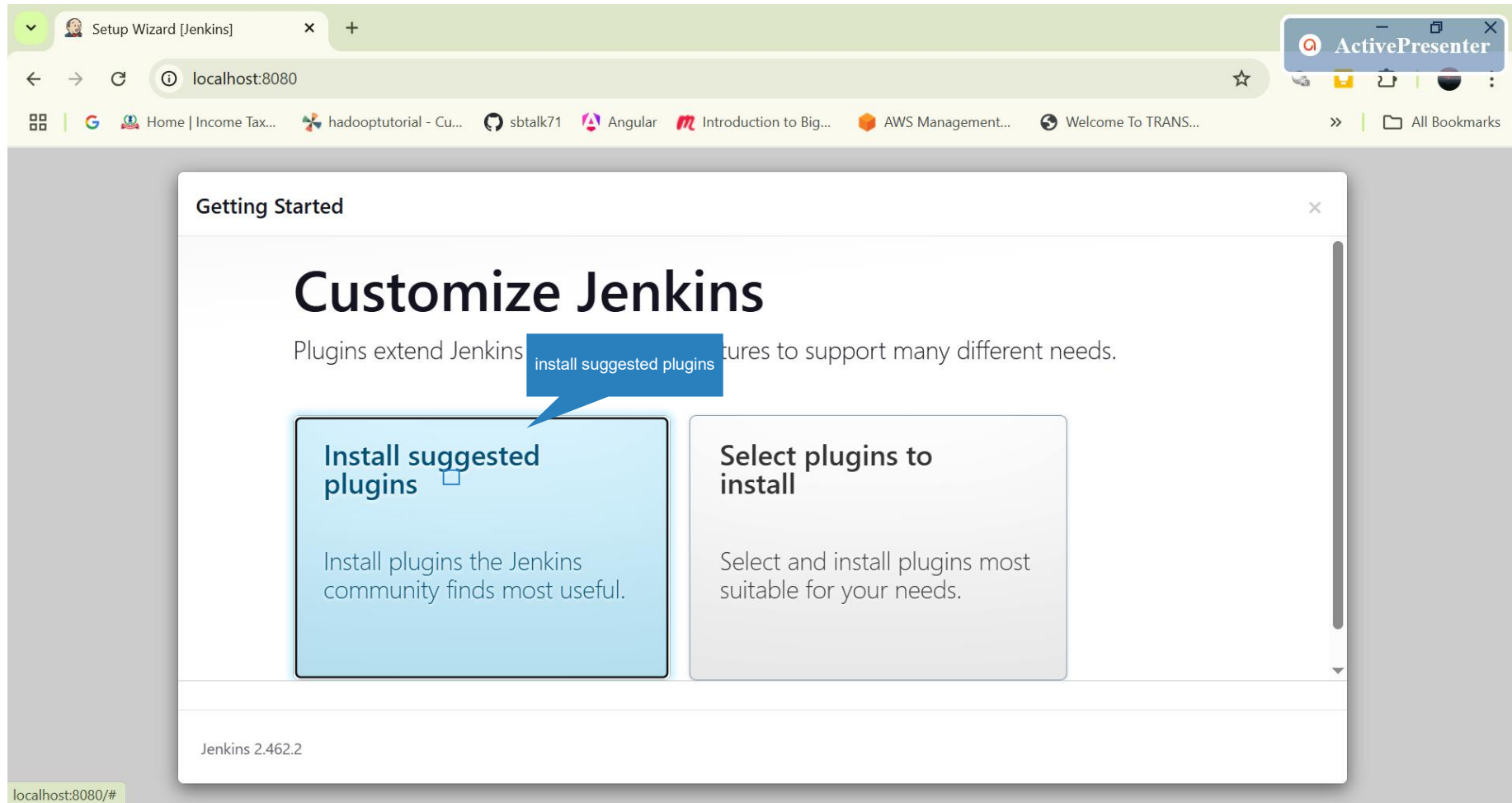
This may also be found at: C:\Users\shantanu\.jenkins\secrets\initialAdminPassword

*****
*****
*****
```

4. After Jenkins starts, open a browser window and type <http://localhost:8080>. It shows the jenkins startup page as given below. Paste the copied password in the in given text box and press continue.



5. When prompted like below, install all the suggested plugins.



6. Create the admin user and provide all the details as asked.

Setup Wizard [Jenkins]

localhost:8080

ActivePresenter

Getting Started

.....

Confirm password

.....

Full name

transparency

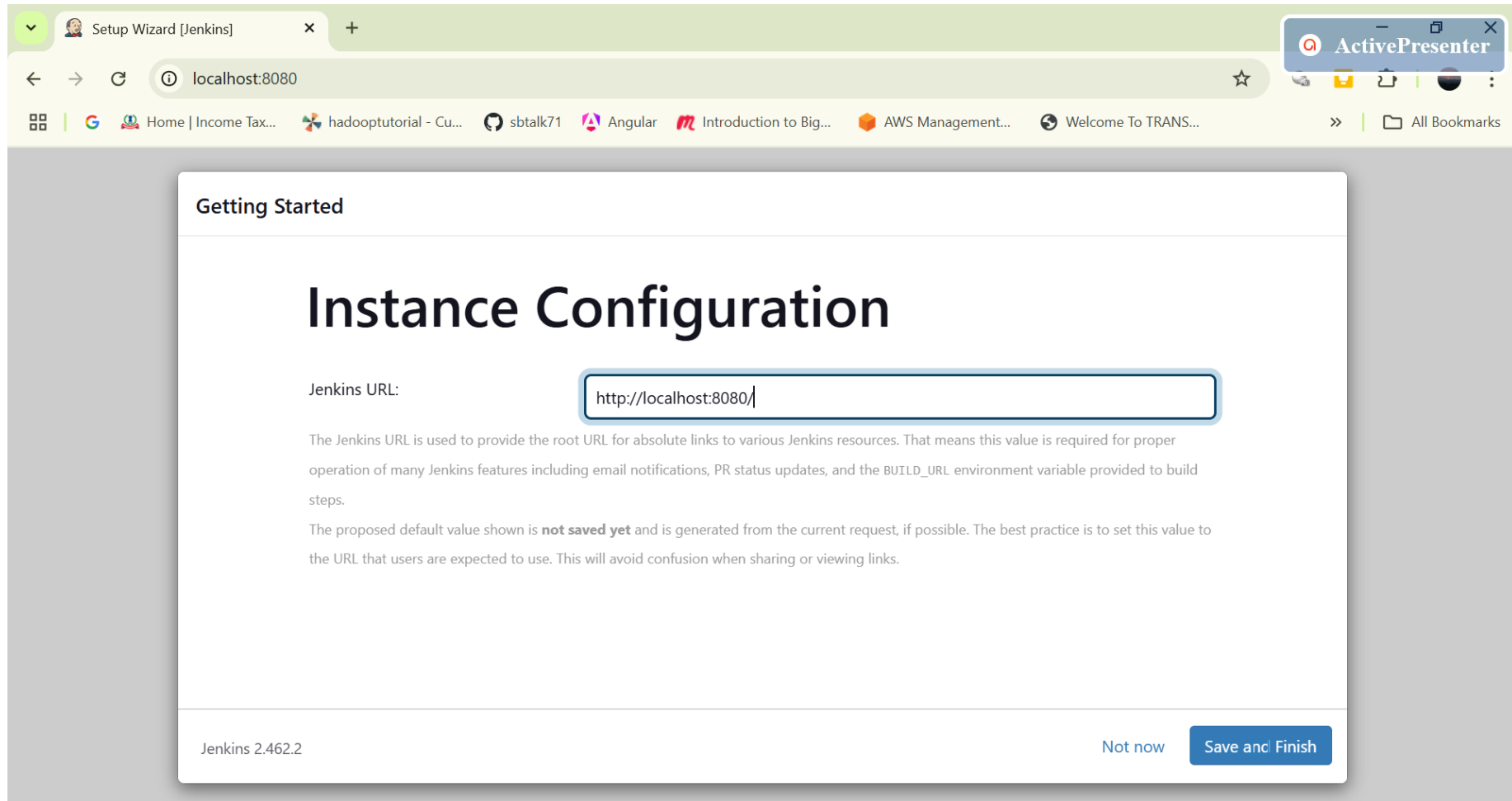
E-mail address

user1@gmail.com

Jenkins 2.462.2

[Skip and continue as admin](#) [Save and Continue](#)

7. You may customize the Jenkins access URL if you need. In our case its not needed.



The screenshot shows a web browser window with the address bar set to `localhost:8080`. The page title is "Setup Wizard [Jenkins]". The main content area is titled "Getting Started" and "Instance Configuration". It features a text input field for the "Jenkins URL:" with the value `http://localhost:8080/`. Below the input field, there is explanatory text about the Jenkins URL and its default value. At the bottom of the configuration panel, there are two buttons: "Not now" and "Save and Finish". The Jenkins version "Jenkins 2.462.2" is displayed in the bottom left corner of the panel.

Getting Started

Instance Configuration

Jenkins URL:

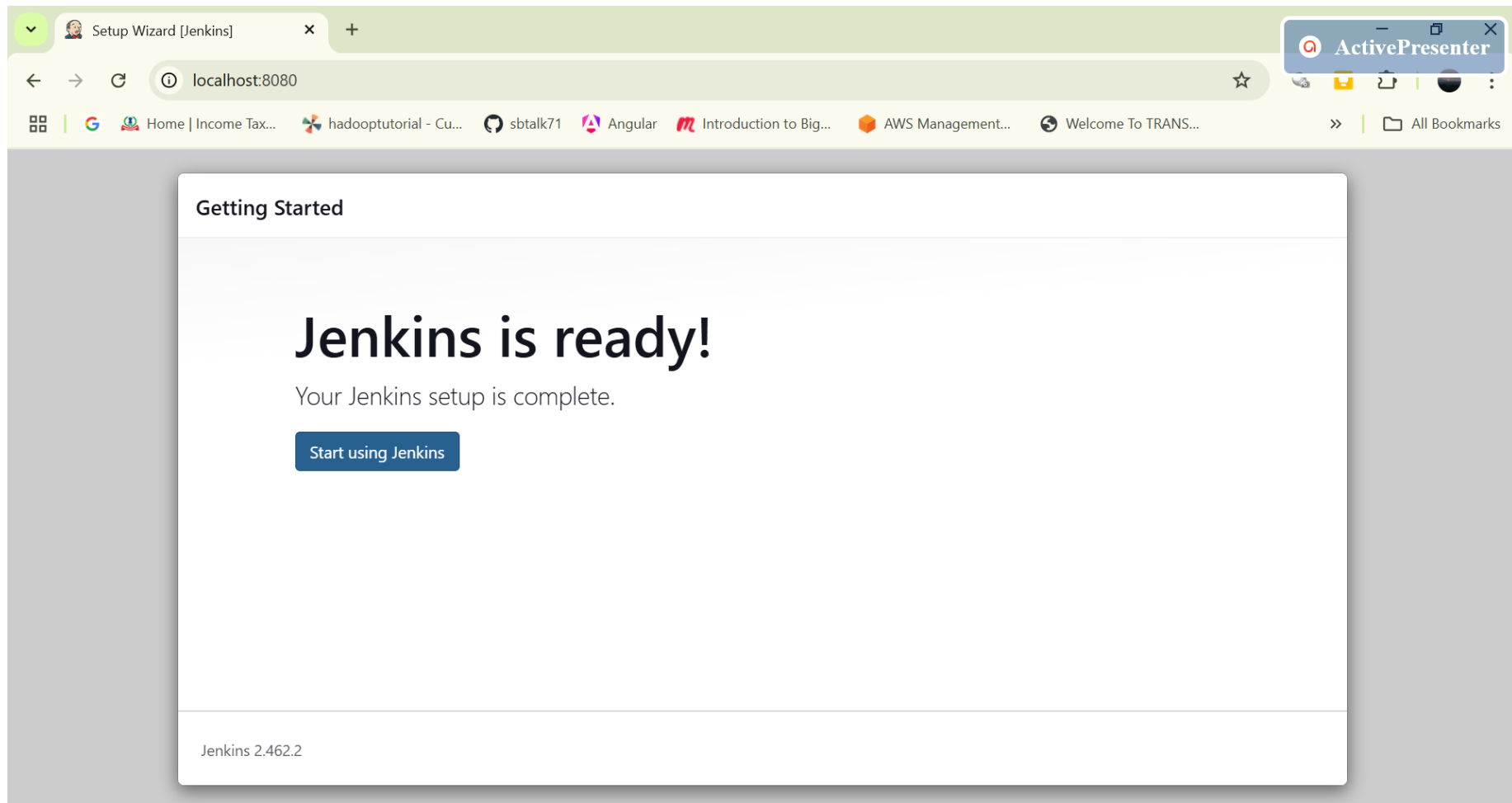
The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the `BUILD_URL` environment variable provided to build steps.

The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

Jenkins 2.462.2

Not now [Save and Finish](#)

8. Click on 'Start Using Jenkins'



9. Click on Manage Jenkins

The screenshot shows the Jenkins web interface in a browser. The browser's address bar displays 'localhost:8080'. The Jenkins header includes the logo, a search bar, and user information 'transparency' with a 'log out' link. The left sidebar contains navigation links: 'New Item', 'Build History', 'Manage Jenkins' (highlighted with a blue callout bubble saying 'Left click here'), and 'My Views'. Below the sidebar, there are two expandable panels: 'Build Queue' (showing 'No builds in the queue.') and 'Build Executor Status' (showing two 'Idle' executors). The main content area displays a 'Welcome to Jenkins!' message, a 'Create a job' button, and a 'Set up a distributed build' section with 'Set up an agent' and 'Configure a cloud' options. An 'ActivePresenter' watermark is visible in the top right corner of the browser window.

Dashboard [Jenkins] x +

localhost:8080

Home | Income Tax... | hadooptutorial - Cu... | sbtalk71 | Angular | Introduction to Big... | AWS Management... | Welcome To TRANS...

All Bookmarks

Jenkins

Search (CTRL+K)

2 2 transparency log out

Dashboard >

+ New Item

Build History

Manage Jenkins

My Views

Left click here

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

localhost:8080/manage

Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

Start building your software project

Create a job

Set up a distributed build

Set up an agent

Configure a cloud

Add description

10. Select Plugins

The screenshot shows the Jenkins web interface in a browser. The address bar shows `localhost:8080/manage/`. The breadcrumb navigation shows `Dashboard > Manage Jenkins`. A red warning banner at the top says "uninstall this plugin." Below this is the "System Configuration" section, which contains several links with icons and descriptions:

- System** (gear icon): Configure system-wide settings and paths.
- Plugins** (puzzle piece icon): Add, remove, disable or enable plugins that can extend the functionality of Jenkins. A blue callout bubble with the text "Left click here" points to this link.
- Install as Windows Service** (Windows logo icon): Installs Jenkins as a Windows service to this system, so that Jenkins starts automatically when the machine boots.
- Appearance** (pencil icon): Configure the look and feel of Jenkins.
- Tools** (wrench icon): Configure tools, their locations and automatic installers.
- Nodes** (monitor icon): Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
- Clouds** (cloud icon): Add, remove, and configure cloud instances to provision agents on-demand.

11. Click on available plugins → search and select the showed plugins and click on install.

The screenshot shows the Jenkins web interface. The browser address bar is `localhost:8080/manage/pluginManager/available`. The Jenkins header includes a search bar with the text "Search (CTRL+K)" and a user profile for "transparency". The breadcrumb navigation is "Dashboard > Manage Jenkins > Plugins".

The "Plugins" section has a search bar containing "stage". Below the search bar is a table of available plugins:

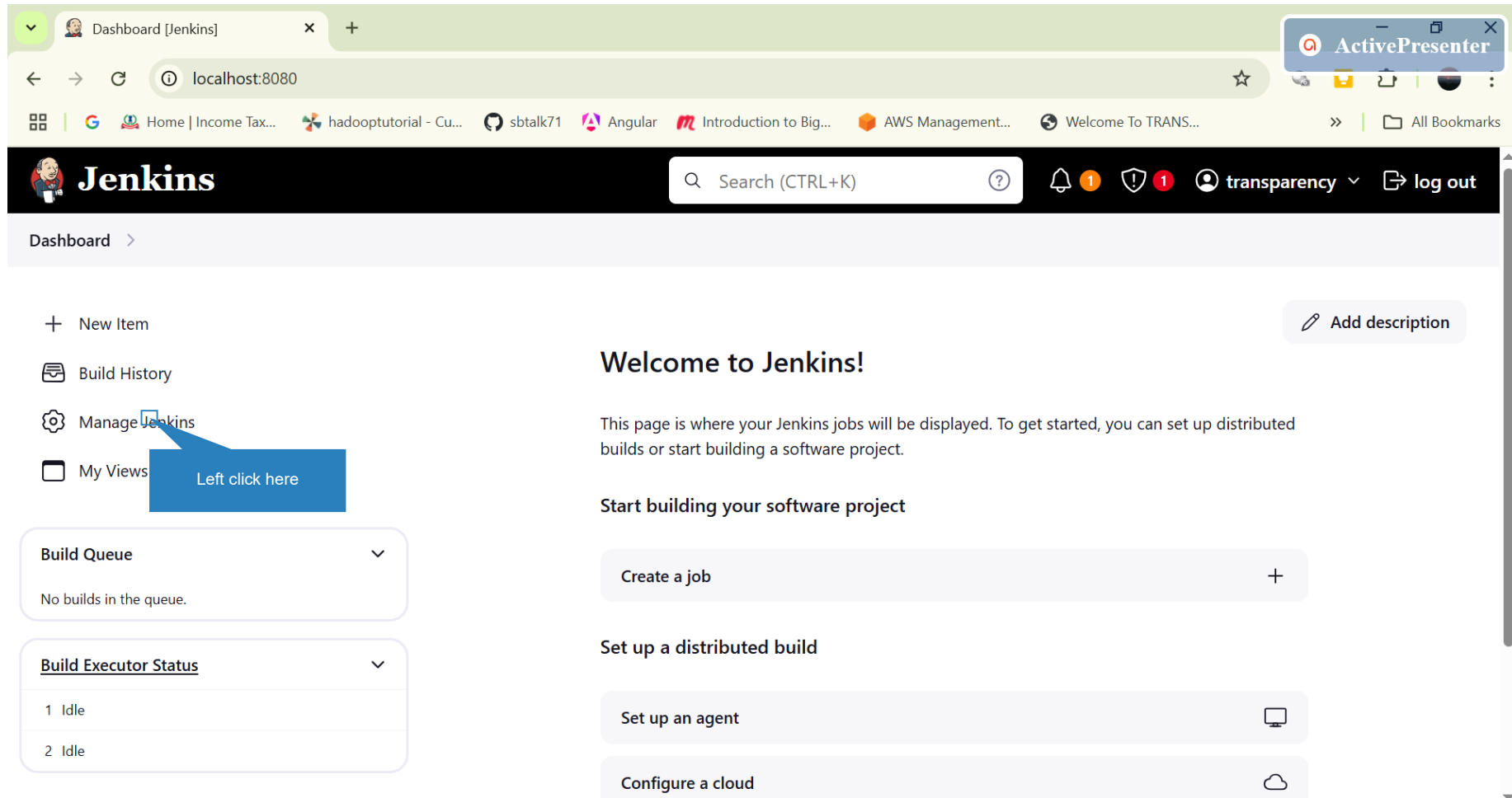
Install	Name ↓	Released
<input checked="" type="checkbox"/>	NodeJS 1.6.2 npm NodeJS Plugin executes NodeJS script as a build step.	8 mo 1 day ago
<input checked="" type="checkbox"/>	Pipeline: Stage View 2.34 User Interface Pipeline Stage View Plugin.	1 yr 5 mo ago
<input type="checkbox"/>	Pipeline Aggregator View 104.v94a_e5f6cdb_c3 User Interface Full screen dashboard to view stages of the pipeline as a build history. <small>This plugin is up for adoption! We are looking for new maintainers. Visit our Adopt</small>	1 yr 0 mo ago

12. The plugins will be installed.

The screenshot shows the Jenkins web interface at `localhost:8080/manage/pluginManager/updates/`. The left sidebar contains a 'Plugins' section with a 'Download progress' link highlighted. The main content area is titled 'Download progress' and shows a list of plugins being installed, all with a 'Success' status indicated by a green checkmark.

Plugin Name	Status
Preparation	• Checking internet connectivity • Checking update center connectivity • Success
Ionicons API	Success
Folders	Success
OWASP Markup Formatter	Success
ASM API	Success
JSON Path API	Success
Structs	Success
Pipeline: Step API	Success
Token Macro	Success
Build Timeout	Success
bouncycastle API	Success

13. After the plugins installed, go to dashboard and click 'manage Jenkins'



Dashboard [Jenkins] x +

localhost:8080

Home | Income Tax... | hadooptutorial - Cu... | sbtalk71 | Angular | Introduction to Big... | AWS Management... | Welcome To TRANS...

All Bookmarks

Jenkins Search (CTRL+K) ? 1 1 transparency log out

Dashboard >

+ New Item

Build History

Manage Jenkins **Left click here**

My Views

Build Queue v

No builds in the queue.

Build Executor Status v

1 Idle

2 Idle

Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

Start building your software project

Create a job +

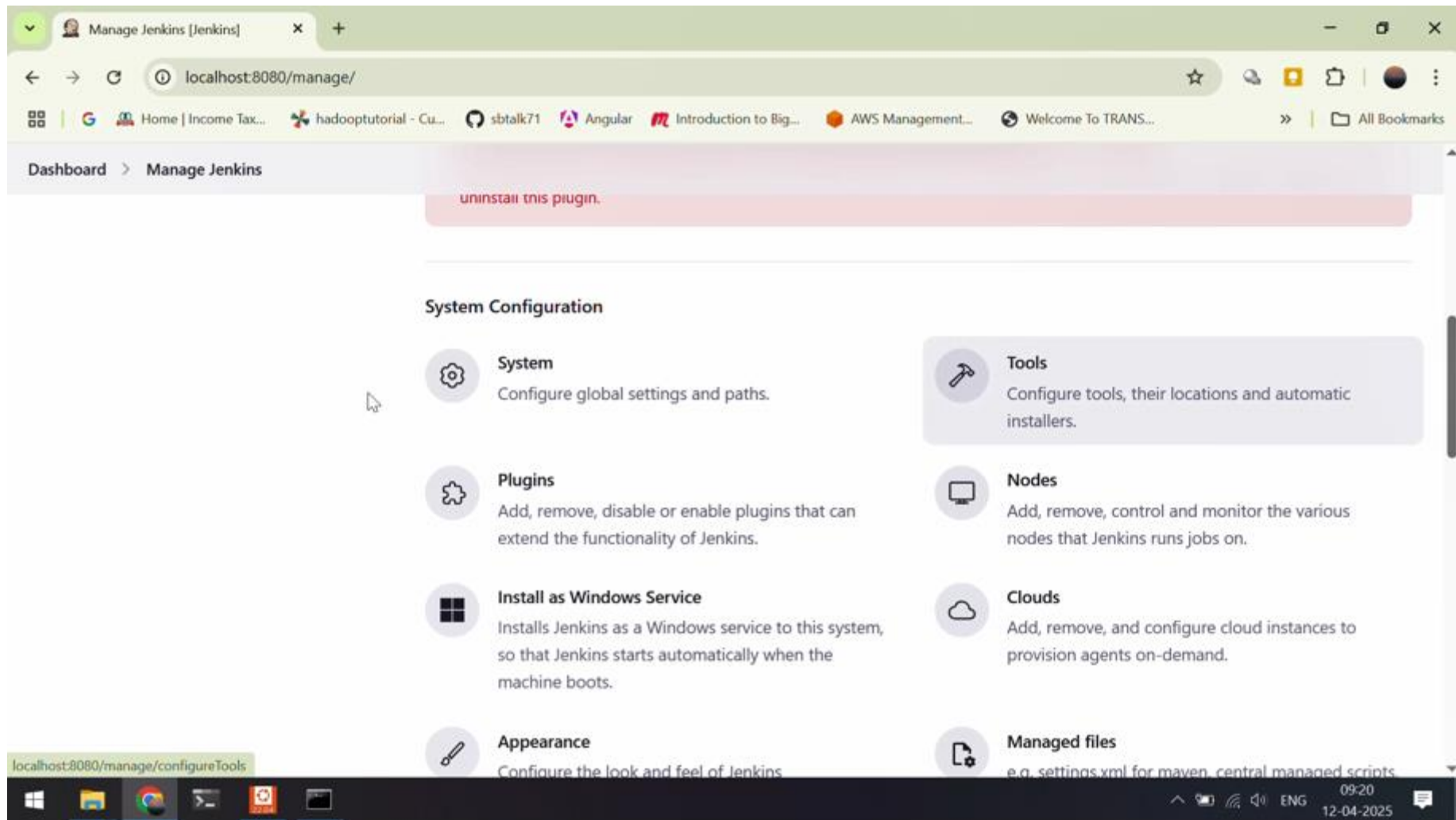
Set up a distributed build

Set up an agent 🖥️

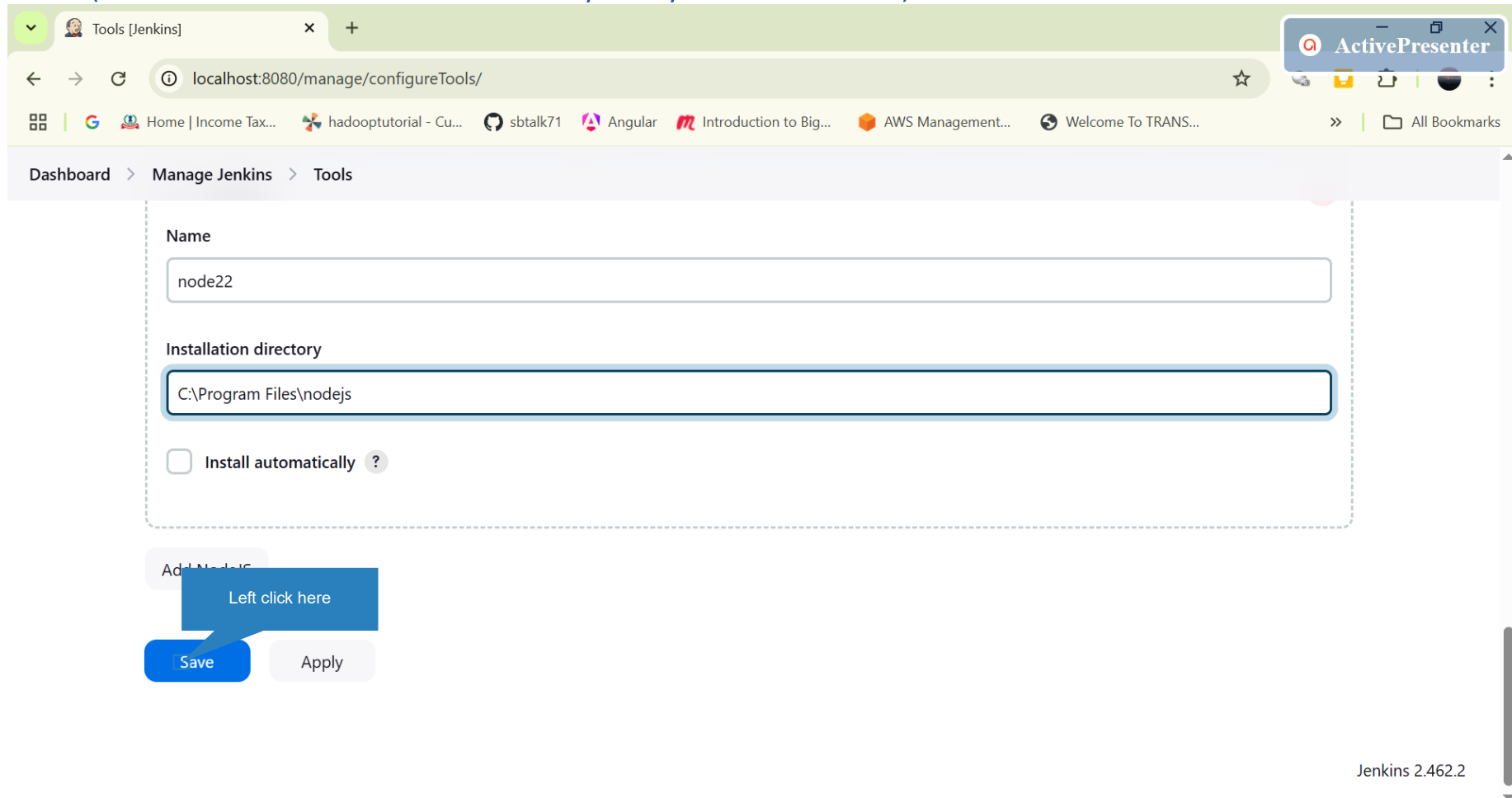
Configure a cloud ☁️

Add description

14. Select 'Tools'



15. Search for NodeJS installation and provide the details of NodeJS as shown
(Your NodeJS install directory may be different)



The screenshot shows the Jenkins web interface at `localhost:8080/manage/configureTools/`. The breadcrumb navigation is `Dashboard > Manage Jenkins > Tools`. The form is for configuring a new tool named `node22`. The `Installation directory` is set to `C:\Program Files\nodejs`. The `Install automatically` checkbox is unchecked. A blue callout box with the text "Left click here" points to the `Save` button. The `Apply` button is also visible. The Jenkins version `2.462.2` is shown in the bottom right corner.

Tools [Jenkins] x +

localhost:8080/manage/configureTools/

Dashboard > Manage Jenkins > Tools

Name

node22

Installation directory

C:\Program Files\nodejs

☐ Install automatically ?

Add NodeJS

Left click here

Save Apply

Jenkins 2.462.2

16. Go to the dashboard and click on New item

The screenshot shows the Jenkins web interface in a browser. The browser's address bar shows 'localhost:8080/manage/'. The Jenkins header includes the logo, a search bar, and a user profile 'transparency' with a 'log out' link. The breadcrumb trail is 'Dashboard > Manage Jenkins'. On the left sidebar, the 'New Item' button is highlighted with a blue callout box that says 'Left click here'. Below this are buttons for 'Build Queue', 'Manage Jenkins', and 'My Views'. The main content area is titled 'Manage Jenkins' and features a notification about a new Jenkins version (2.492.3) available for download or automatic upgrade. Below this, a red warning box lists security vulnerabilities for Jenkins 2.462.2 and earlier, and for the EDDSA API Plugin 0.3.0-4.v84c6f0f4969e. The bottom status bar shows 'localhost:8080/view/all/newJob'.

Manage Jenkins [Jenkins] x +

localhost:8080/manage/

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All Bookmarks

Jenkins

Search (CTRL+K)

transparency log out

Dashboard > Manage Jenkins

+ New Item

Left click here

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

localhost:8080/view/all/newJob

Manage Jenkins

Search settings

New version of Jenkins (2.492.3) is available for [download](#) ([changelog](#)). Or Upgrade Automatically

Warnings have been published for the following currently installed components: [Go to plugin manager](#) [Configure which of these warnings are shown](#)

Jenkins 2.462.2 core and libraries:

- [Multiple security vulnerabilities in Jenkins 2.503 and earlier, LTS 2.492.2 and earlier](#)
- [Denial of service vulnerability in bundled json-lib](#)
- [Multiple security vulnerabilities in Jenkins 2.499 and earlier, LTS 2.492.1 and earlier](#)
- [Multiple security vulnerabilities in Jenkins 2.478 and earlier, LTS 2.462.2 and earlier](#)

Fixes for all of these issues are available. Update Jenkins now.

[EDDSA API Plugin 0.3.0-4.v84c6f0f4969e:](#)

[EDDSA implementation exhibits signature malleability](#) (no fix available)

No fixes for these issues are available. It is recommended that you review the security advisory and apply mitigations if possible, or uninstall this plugin.

17. Type Test Node JS

New Item [Jenkins] x +

localhost:8080/view/all/newJob

Jenkins Search (CTRL+K) ? 1 1 transparency log out



Dashboard > All > New Item

New Item

Enter an item name

Select an item type

Type Test Node JS

-  **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.
-  **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

New Item [Jenkins]


localhost:8080/view/all/newJob


ActivePresenter


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Jenkins

Search (CTRL+K)

1

1

transparency

log out


Dashboard > All > New Item

New Item


Enter an item name

Test Node JS

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.

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

New Item [Jenkins]


localhost:8080/view/all/newJob


ActivePresenter


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Jenkins

Search (CTRL+K)

1

1

transparency

log out


Dashboard > All > New Item

New Item


Enter an item name

Test Node JS

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.

**Pipeline**

Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as ...)

Left click here

OK

Test Node JS Config [Jenkins] x +

localhost:8080/job/Test%20Node%20JS/configure

Home | Income Tax... hadooptutorial - Cu... sbtalk71 Angular Introduction to Big... AWS Management... Welcome To TRANS... All Bookmarks

Jenkins Search (CTRL+K) ? 1 1 transparency log out

Dashboard > Test Node JS > Configuration

Configure

General

- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

General

Enabled

Description

Test the setup and node js

Plain text [Preview](#)

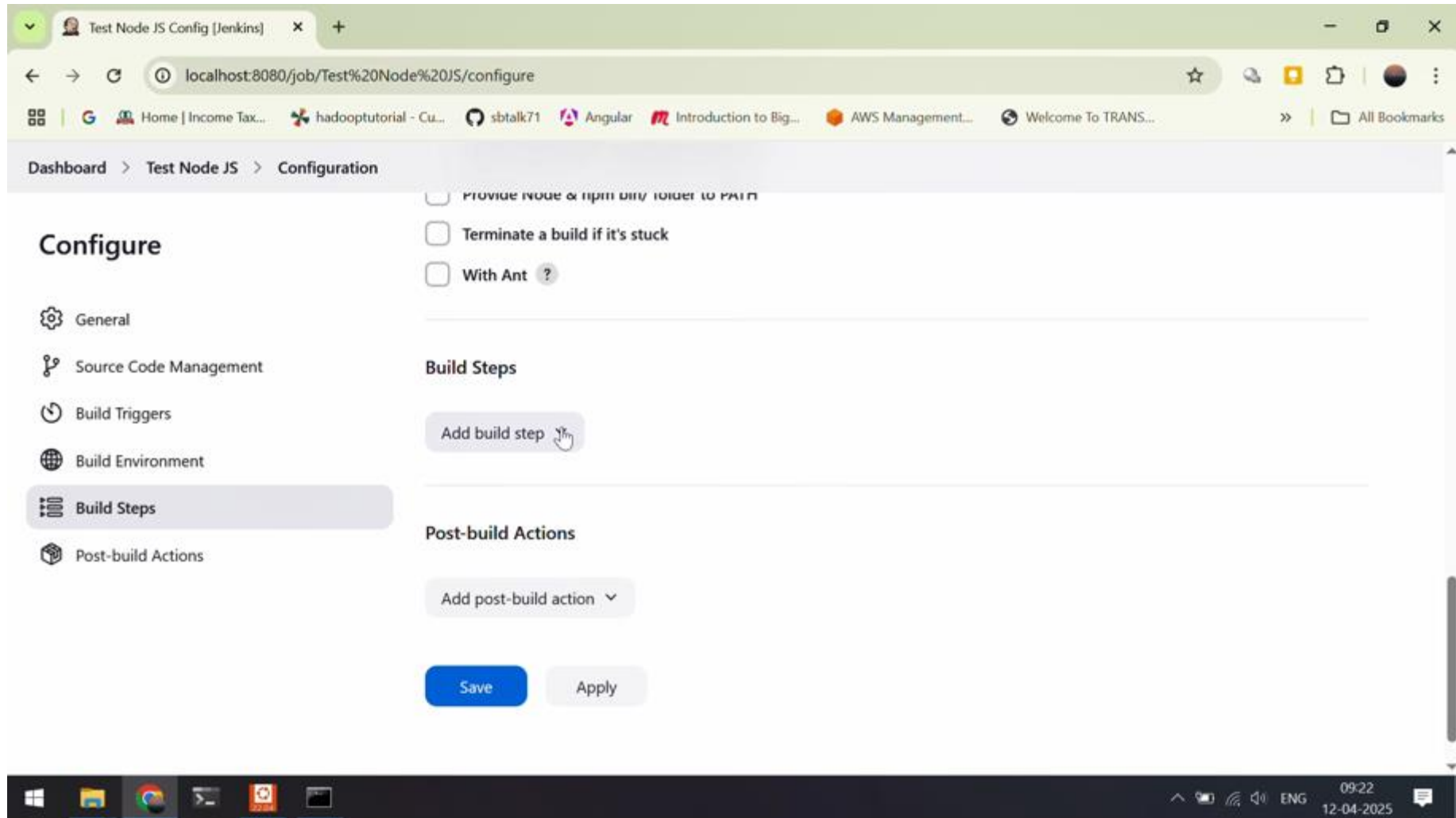
☐ Discard old builds ?

☐ GitHub project

Save Apply

09:21 12-04-2025

18. Go further down and select 'build steps' and add build step as 'execute windows batch command'



19. Type The command 'node -v'

The screenshot shows the Jenkins web interface in a browser. The address bar displays `localhost:8080/job/Test%20Node%20JS/configure`. The page title is 'Test Node JS Config [Jenkins]'. The breadcrumb navigation shows 'Dashboard > Test Node JS > Configuration'. The left sidebar contains the following menu items: 'General', 'Source Code Management', 'Build Triggers', 'Build Environment', 'Build Steps' (which is highlighted), and 'Post-build Actions'. The main content area is titled 'Configure' and includes a checkbox for 'With Ant' which is unchecked. Below this is the 'Build Steps' section, which contains a single step titled 'Execute Windows batch command'. The 'Command' field in this step contains the text `node -v`. A link 'See the list of available environment variables' is visible above the command field. At the bottom of the configuration area are 'Save' and 'Apply' buttons. The Windows taskbar at the bottom shows the time as 09:22 on 12-04-2025.

Test Node JS Config [Jenkins]

localhost:8080/job/Test%20Node%20JS/configure

Dashboard > Test Node JS > Configuration

Configure

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

☐ With Ant ?

Build Steps

Execute Windows batch command ?

Command

See [the list of available environment variables](#)

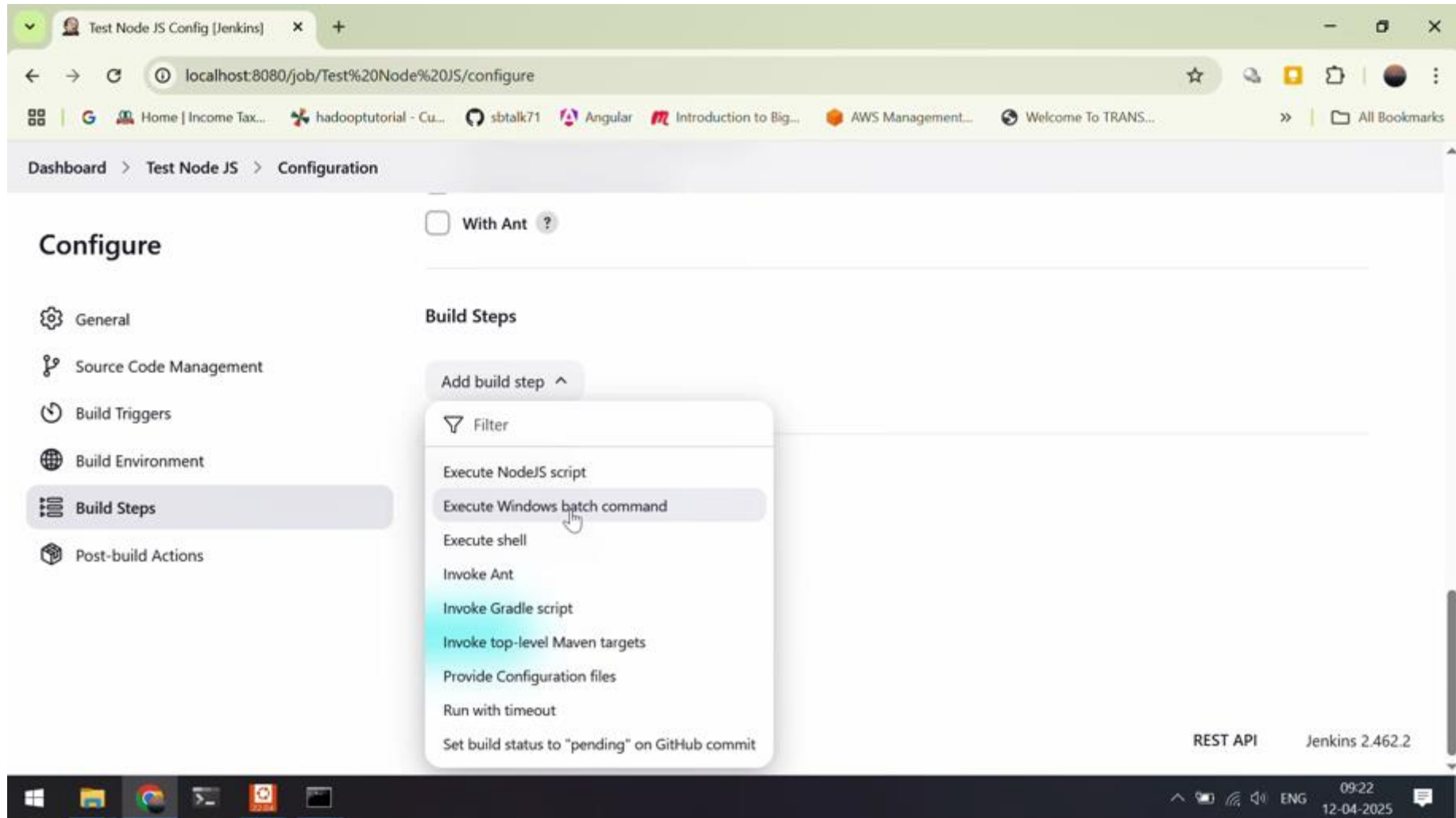
```
node -v
```

Advanced ▾

Save Apply

09:22
12-04-2025

20. Add another build step as shown



21. Type 'npm -v' and save

The screenshot shows the Jenkins web interface for configuring a job named 'Test Node JS Config'. The browser address bar indicates the URL is `localhost:8080/job/Test%20Node%20JS/configure`. The page title is 'Test Node JS Config [Jenkins]'. The breadcrumb navigation shows 'Dashboard > Test Node JS > Configuration'. The left sidebar contains the following menu items: 'General', 'Source Code Management', 'Build Triggers', 'Build Environment', 'Build Steps' (which is highlighted), and 'Post-build Actions'. The main content area is titled 'Configure' and shows the 'Advanced' tab selected. Under the 'Advanced' tab, the 'Execute Windows batch command' step is visible. The 'Command' field contains the text `npm -v`. Below the command field, there is an 'Advanced' dropdown menu and an 'Add build step' button. At the bottom of the configuration area, there are 'Save' and 'Apply' buttons. The Windows taskbar at the bottom shows the system tray with icons for network, volume, and power, along with the date and time: 09:22 on 12-04-2025.

22. Click on Dashboard and select the build button as shown

The screenshot shows the Jenkins Dashboard interface. The top navigation bar includes the Jenkins logo, a search bar, and user information. The left sidebar contains links for 'New Item', 'Build History', 'Manage Jenkins', and 'My Views'. The main content area displays a table of builds. The first build, 'Test Node JS', is highlighted, and a blue callout bubble points to its 'Build' button with the text 'Left click here'. Below the table, there are sections for 'Build Queue' (showing no builds) and 'Build Executor Status' (showing two idle executors). The bottom status bar shows the current URL: 'localhost:8080/job/Test Node JS/build?delay=0sec'.

S	W	Name ↓	Last Success	Last Failure	L
...	☀	Test Node JS	N/A	N/A	N/A

Icon: S M L

23. Click on the build progress #number it will take you to the project build page

The screenshot shows the Jenkins Dashboard in a web browser. The browser's address bar shows 'localhost:8080'. The Jenkins logo and name are at the top left. A search bar and user profile 'transparency' are at the top right. The dashboard has a sidebar with links: 'New Item', 'Build History', 'Manage Jenkins', and 'My Views'. The main area shows a table of builds for 'Test Node JS'. The table has columns: 'S', 'W', 'Name', 'Last Success', 'Last Failure', and 'Last Duration'. The first row shows a build with status 'S' (Success), 'W' (Waiting), and 'Name' 'Test Node JS'. The 'Last Success' and 'Last Failure' columns are 'N/A', and 'Last Duration' is 'N/A'. A 'Build scheduled' button is next to the build. Below the table, there is a section for 'Build Queue' and 'Build Executor Status'. The 'Build Queue' section shows 'No builds in the queue.' The 'Build Executor Status' section shows a list of executors. The first executor is '1 Test Node JS' with a progress bar and a red 'X' icon. The second executor is '2 Idle'. A red box highlights the '#1' in the first executor's name. At the bottom, the Windows taskbar shows the time '09:22' and date '12-04-2025'.

Dashboard [Jenkins] x +

localhost:8080

Jenkins

Search (CTRL+K)

transparency log out

Dashboard >

+ New Item

Build History

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

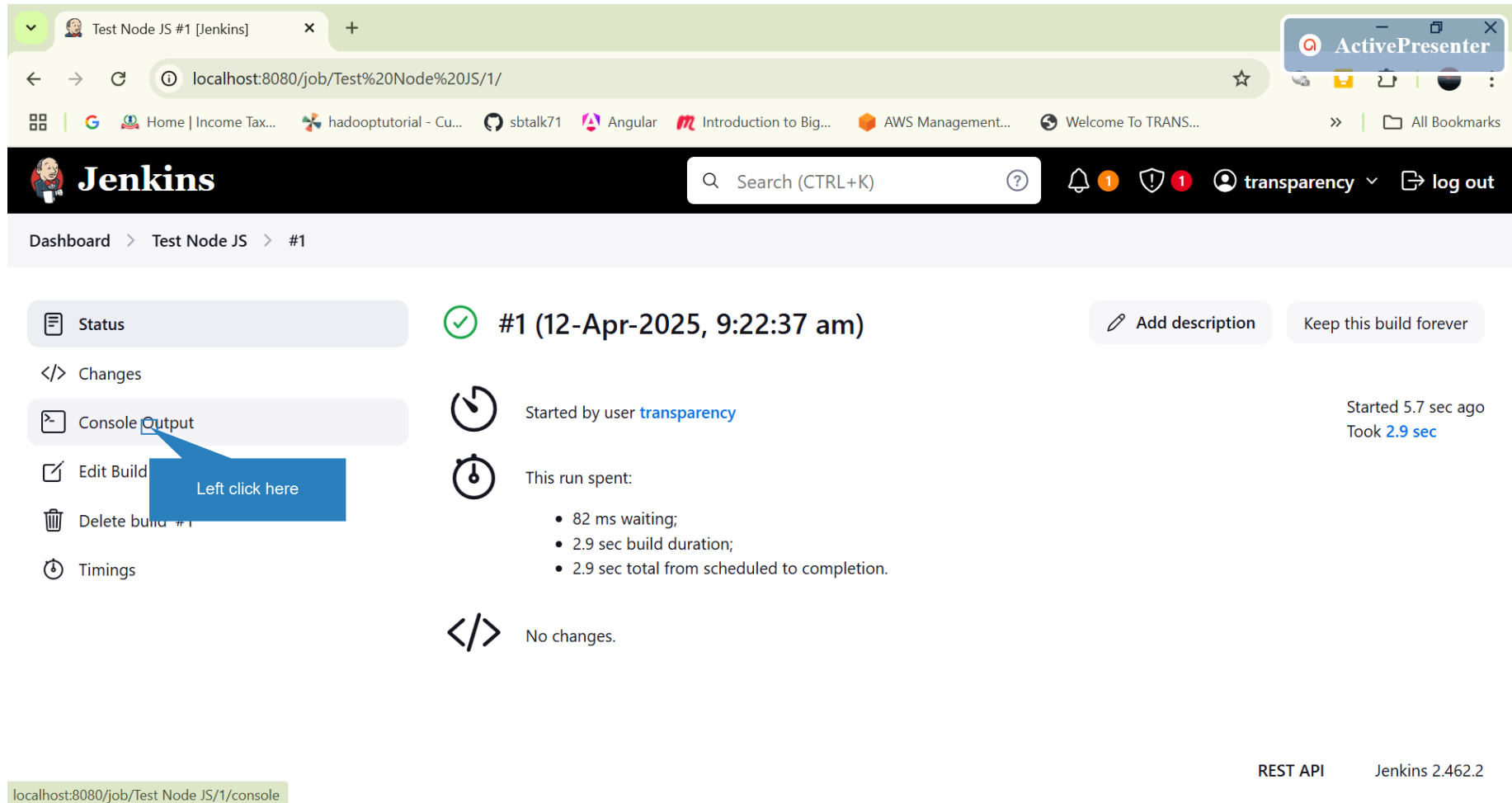
1 Test Node JS

2 Idle

localhost:8080/job/Test Node JS/build?delay=0sec

09:22 12-04-2025

24. Click on the 'Console Output' link



The screenshot shows the Jenkins web interface in a browser. The address bar displays `localhost:8080/job/Test%20Node%20JS/1/`. The Jenkins logo and navigation bar are visible at the top. The breadcrumb trail shows `Dashboard > Test Node JS > #1`. On the left sidebar, the 'Console Output' link is highlighted with a blue callout box containing the text 'Left click here'. The main content area shows the build status as successful (green checkmark) for build #1, dated 12-Apr-2025, 9:22:37 am. It also displays the user 'transparency' who started the build, the build duration of 2.9 seconds, and a list of timing details: 82 ms waiting, 2.9 sec build duration, and 2.9 sec total from scheduled to completion. The 'No changes' section is also visible. At the bottom left, the URL `localhost:8080/job/Test Node JS/1/console` is shown. At the bottom right, the 'REST API' and 'Jenkins 2.462.2' are displayed.

Test Node JS #1 [Jenkins]

localhost:8080/job/Test%20Node%20JS/1/

Jenkins

Search (CTRL+K)

transparency log out

Dashboard > Test Node JS > #1

Status

Changes

Console Output

Edit Build

Delete build #1

Timings

Left click here

✓ #1 (12-Apr-2025, 9:22:37 am)

Add description

Keep this build forever

Started by user transparency

Started 5.7 sec ago
Took 2.9 sec

This run spent:

- 82 ms waiting;
- 2.9 sec build duration;
- 2.9 sec total from scheduled to completion.

</> No changes.

localhost:8080/job/Test Node JS/1/console

REST API Jenkins 2.462.2

25. Now observe the output for command and build success

Test Node JS #1 Console [Jenkir] x +

localhost:8080/job/Test%20Node%20JS/1/console

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Jenkins

Search (CTRL+K)

transparency log out

Dashboard > Test Node JS > #1 > Console Output

Status

Changes

Console Output

Edit Build Information

Delete build '#1'

Timings

Console Output

Download Copy View as plain text

```
Started by user transparency
Running as SYSTEM
Building in workspace C:\Users\shantanu\.jenkins\workspace\Test Node JS
[Test Node JS] $ cmd /c call C:\Users\shantanu\AppData\Local\Temp\jenkins14608559157097289061.bat

C:\Users\shantanu\.jenkins\workspace\Test Node JS>node -v
v18.20.8

C:\Users\shantanu\.jenkins\workspace\Test Node JS>exit 0
[Test Node JS] $ cmd /c call C:\Users\shantanu\AppData\Local\Temp\jenkins15492460405786870850.bat

C:\Users\shantanu\.jenkins\workspace\Test Node JS>npm -v
10.8.2
Finished: SUCCESS
```

localhost:8080/job/Test Node JS/1/console

09:22 12-04-2025

26. Click on the Dashboard and Observe the build success status

The screenshot shows the Jenkins Dashboard in a web browser. The browser's address bar displays 'localhost:8080'. The dashboard includes a sidebar with links to 'New Item', 'Build History', 'Manage Jenkins', and 'My Views'. The main content area features a table of builds. The table has columns for 'S' (Status), 'W' (Webhook), 'Name', 'Last Success', 'Last Failure', and 'Last Duration'. A single build is listed: 'Test Node JS' with a status of 'Success' (represented by a green circle with a checkmark) and 'N/A' for the other columns. Below the table, there are filters for 'Icon', 'S', 'M', and 'L'. On the left, there are two panels: 'Build Queue' (showing 'No builds in the queue') and 'Build Executor Status' (showing '1 Test Node JS' and '2 Idle'). A blue text box is overlaid on the right side of the dashboard, stating: 'Your Jenkins is now setup for executing JavaScript based build'. The bottom of the screen shows the Windows taskbar with the time '09:22' and date '12-04-2025'.

S	W	Name	Last Success	Last Failure	Last Duration
...	☀	Test Node JS	N/A	N/A	N/A

Icon: S M L

Build Queue: No builds in the queue.

Build Executor Status:

- 1 Test Node JS
- 2 Idle

REST API Jenkins 2.462.2

localhost:8080/job/Test Node JS/1/

09:22 12-04-2025