

# Lab Exercise 7

## Integrating Maven with Jenkins

Name: Vishal Pandey

Sap id: 500125280

Enrolment no.: R2142231906

Batch 2 DevOps

**Objective:** To install the Maven plugin in Jenkins for smooth integration and automation of Maven-based build processes within the Jenkins environment

**Tools required:** Git, GitHub, and Jenkins

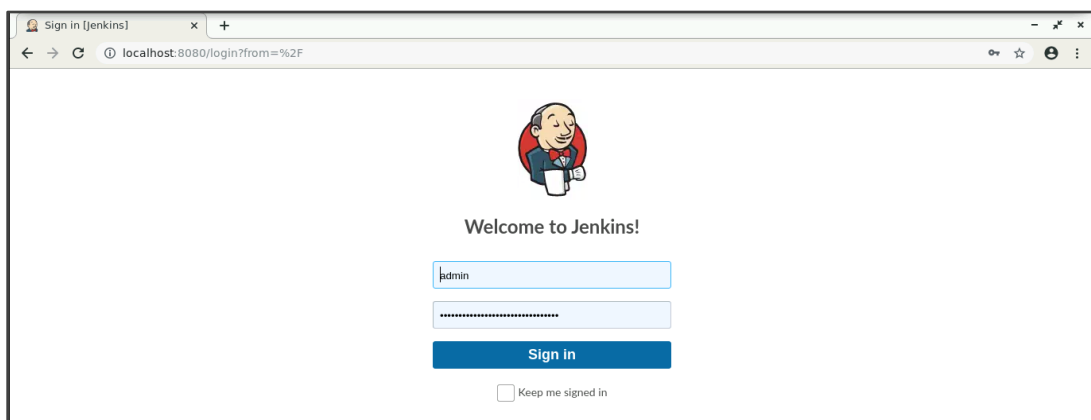
**Prerequisites:** None

Steps to be followed:

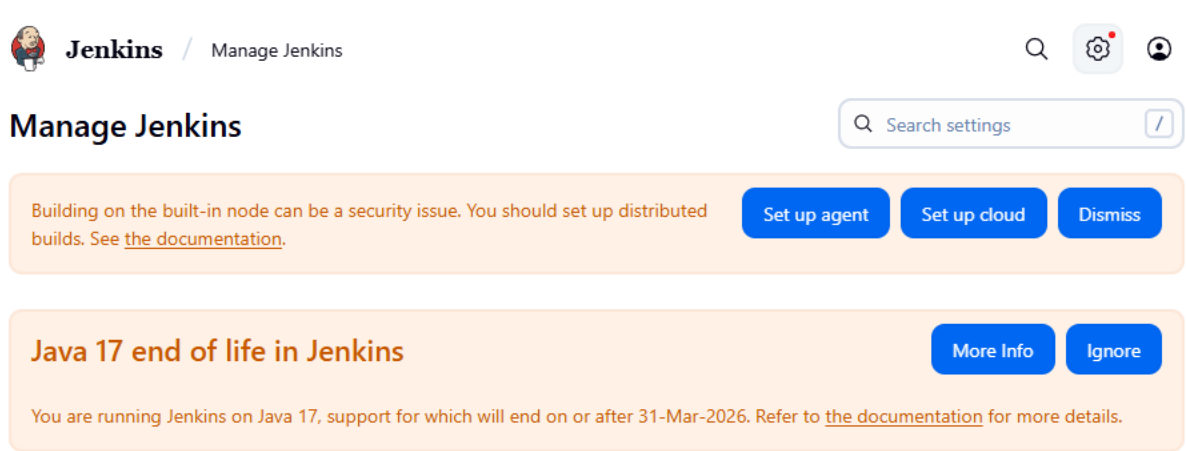
1. Install the Maven plugin
2. Set up Global Tool Configuration
3. Fork a sample repository
4. Integrate Maven with Jenkins

### Step 1: Install the Maven plugin

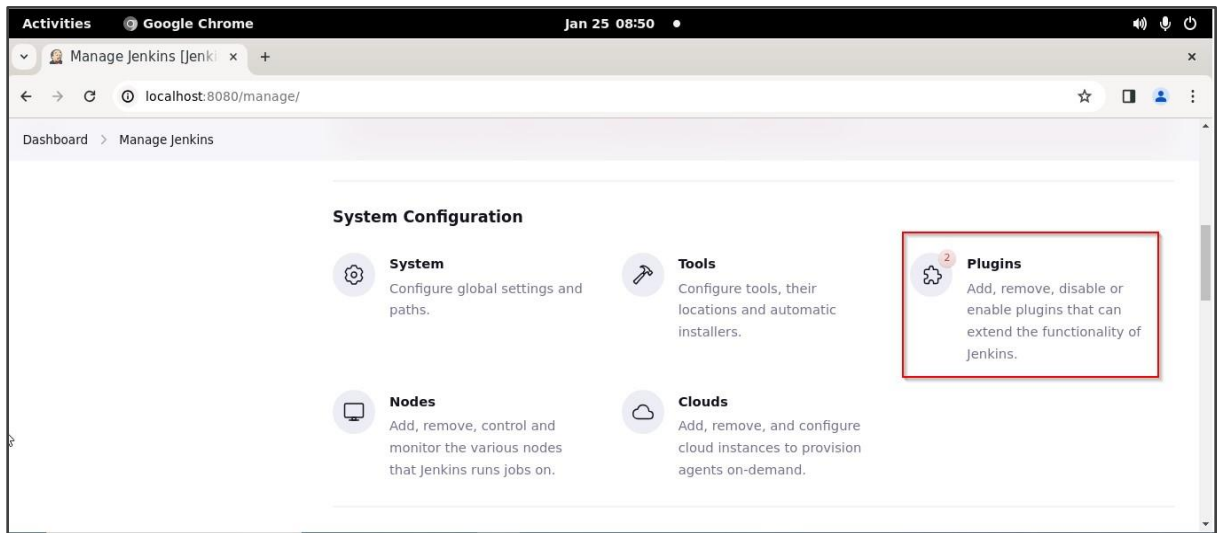
- 1.1 Open the browser, go to the Jenkins Dashboard by typing **localhost:8080** in your browser, provide the credentials, and click the **Sign in** button



1.2 Click on the **Manage Jenkins** option as shown in the screenshot below:



1.3 Click on the **Plugins** option as shown in the screenshot below:



1.4 Click on **Installed plugins** to verify whether the **Maven Integration plugin** has been installed

**Jenkins** / Manage Jenkins / Plugins

Search:

**Plugins**

- Updates
- Available plugins
- Installed plugins
- Advanced settings

| Install                  | Name ↓  | Released    | Health |
|--------------------------|---|-------------|--------|
| <input type="checkbox"/> | <b>Maven Integration 3.27</b><br>Build Tools<br>This plugin provides a deep integration between Jenkins and Maven. It adds support for automatic triggers between projects depending on SNAPSHOTS as well as the automated configuration of various Jenkins publishers such as Junit. | 15 days ago | 100    |
| <input type="checkbox"/> | <b>Config File Provider</b> 994.v3d4a_5fa_f353a_<br>Groovy-related<br>External Site/Tool Integrations Maven<br>Ability to provide configuration files (e.g. settings.xml for maven, XML, groovy, custom files,...) loaded through the UI which will be copied to the job workspace.   | 19 days ago | 100    |

**Note:** Maven is already installed in your practice lab environment. If not, click on **Available plugins**, search for the **Maven Integration** plugin, and install it.

1.5 Use the following command to check the Maven version:

**mvn -version**

```

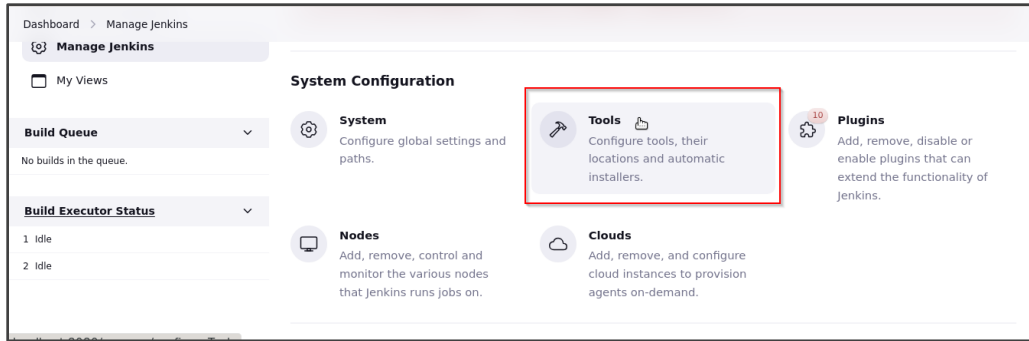
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\ASUS> mvn -version
Apache Maven 3.9.11 (3e54c93a704957b63ee3494413a2b544fd3d825b)
Maven home: C:\Program Files\Apache\apache-maven-3.9.11
Java version: 17.0.16, vendor: Eclipse Adoptium, runtime: C:\Program Files\Eclipse Adoptium\jdk-17.0.16-hotspot
Default locale: en_IN, platform encoding: Cp1252
OS name: "windows 11", version: "10.0", arch: "amd64", family: "windows"
PS C:\Users\ASUS>
  
```

## Step 2: Set up Global Tool Configuration

2.1 Go to the Jenkins Dashboard, click on **Manage Jenkins**, and then select **Tools** from the list of options



2.2 To configure Maven, click on the **Maven installations** button in the Maven section and enter a **Name** and **MAVEN\_HOME** path

