

Lab Exercise 7

Integrating Maven with Jenkins

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

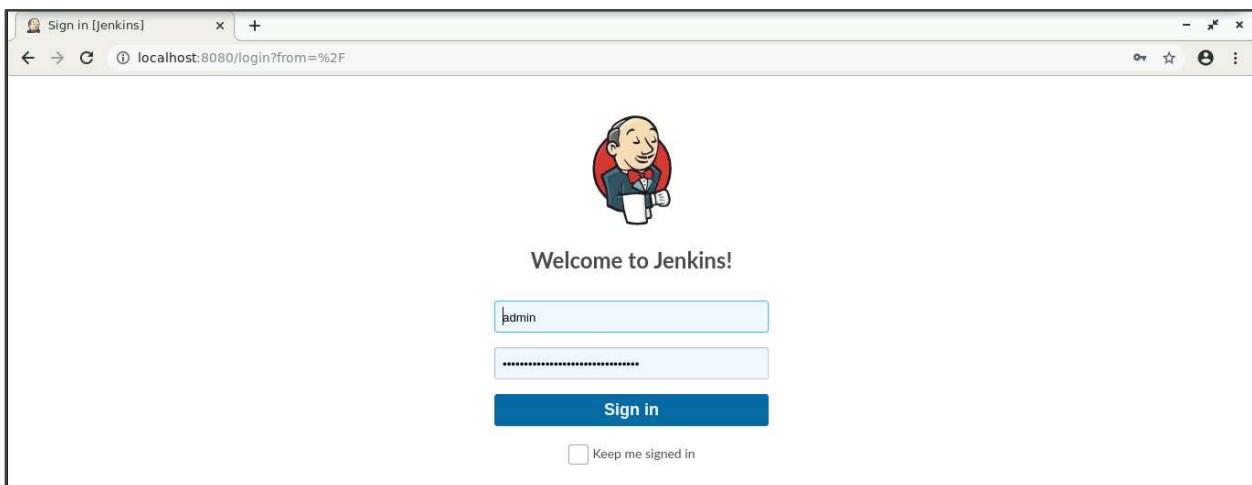
Prerequisites: None

Steps to be followed:

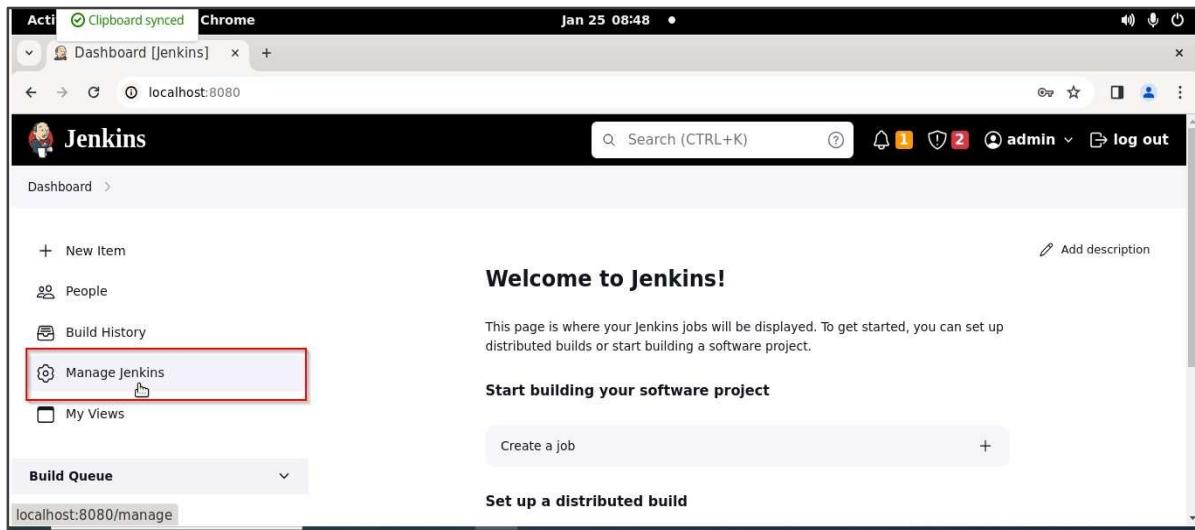
1. Install the Maven plugin
2. Set up Global Tool Configuration
3. Fork a sample repository
4. Integrate Maven with Jenkins

Step 1: Install the Maven plugin

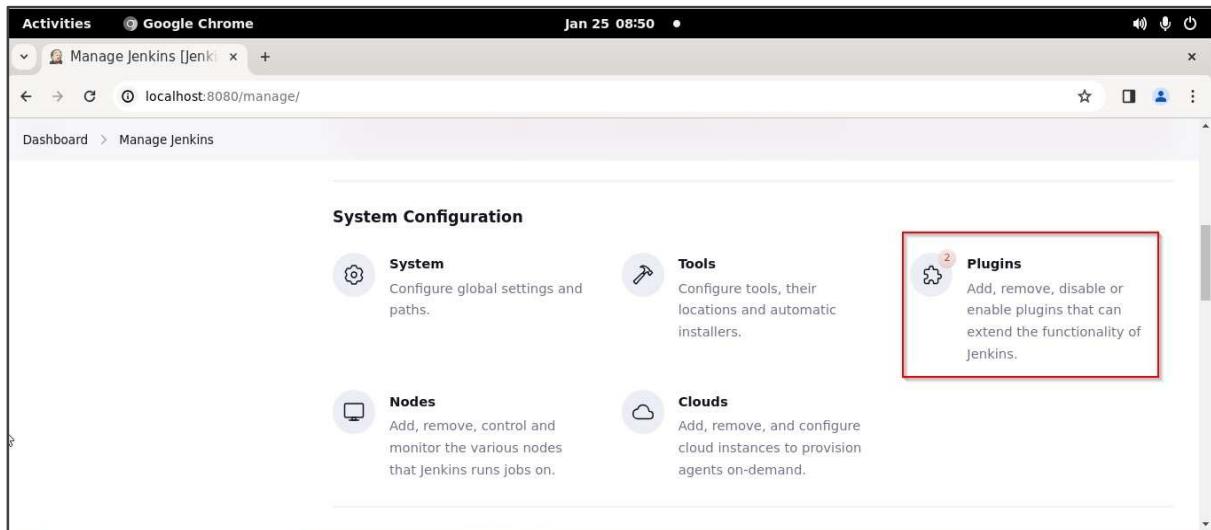
1.1 Open the browser, go to the Jenkins Dashboard by typing **localhost:8080** in your browser, provide the credentials, and click the **Sign in** button



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

The screenshot shows the Jenkins 'Manage Jenkins' interface under the 'Plugins' section. A search bar at the top contains the text 'maver'. Below it, a table lists the 'Maven Integration plugin' version 3.27. The table includes columns for 'Name', 'Health', and 'Enabled'. The 'Enabled' column shows a green circle with '100' and a blue toggle switch with a checkmark. To the right of the table are three icons: a magnifying glass, a gear, and a red X.

REST API Jenkins 2.528.2

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

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

The screenshot shows the Jenkins 'Manage Jenkins' dashboard. On the left, there are sections for 'Build Queue' and 'Build Executor Status'. In the center, there's a 'System Configuration' section with links for 'System', 'Nodes', and 'Clouds'. On the right, there are two main sections: 'Tools' (which is highlighted with a red box) and 'Plugins'. The 'Tools' section has a sub-section for 'Configure tools, their locations and automatic installers.' The 'Plugins' section shows a count of 10 available updates. At the bottom, there are links for 'Dashboard', 'Manage Jenkins', and 'Logout'.

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

