

TASK 5

Setting Up and Executing a Jenkins Pipeline with Git and Maven

Step 1: Cloning the Repository

1. Open the Command Prompt and navigate to the desired directory.
2. Execute the command:

```
git clone https://github.com/ranjanisengottaian/DemoRepos.git
```

3. Move into the cloned repository by running:

Step 2: Accessing Jenkins Inside Docker

1. To enter the Jenkins container, use the following command:

```
docker exec -it jenkins blueocean /bin/bash
```

2. Once inside the container, navigate to the cloned repository:

Step 3: Installing Maven

1. Install Maven within the Jenkins container by running:

```
sudo apt-get install -y maven
```

This command ensures Maven and its dependencies are installed.

2. Confirm the installation by checking the version:

```
mvn -version
```

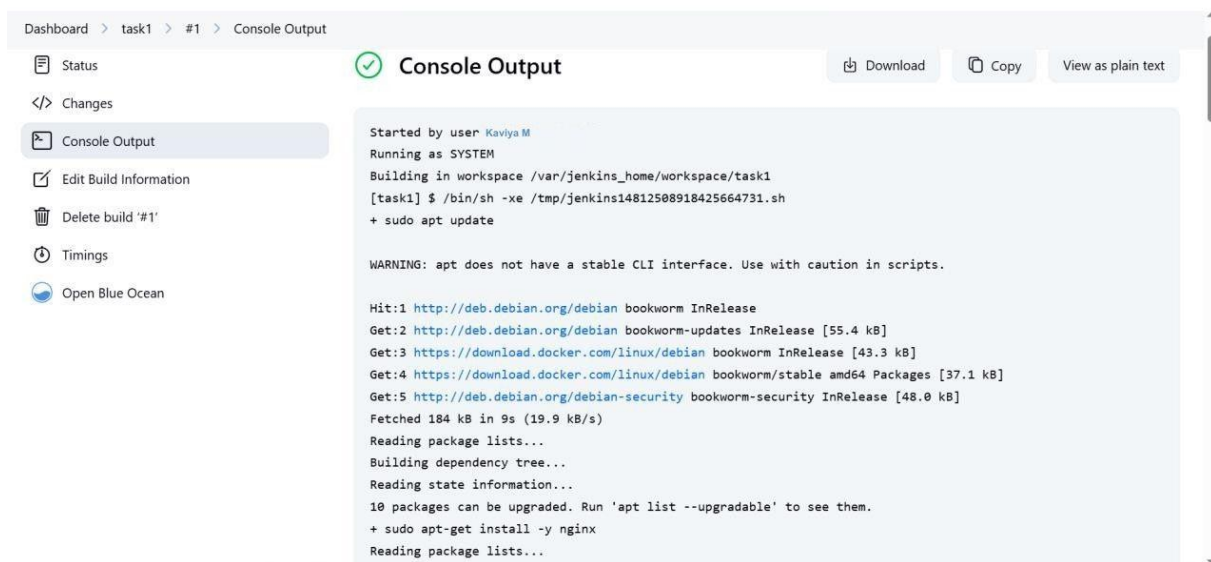
Step 4: Configuring and Running the Jenkins Pipeline

1. Open Jenkins in a web browser.
2. Click on **New Item** to create a new pipeline.
3. Enter a name for the pipeline (e.g., task 5).
4. Choose **Pipeline** and click **OK**.
5. Open the newly created pipeline (task 5).

6. Select **Configure** to modify the settings.
7. In the **Pipeline** section, set **Pipeline script from SCM** as the source.
8. Choose **Git** as the SCM.
9. Enter your Git repository URL:
`https://github.com/ranjanisengottaian/DemoRepos.git`
10. Click **Save** to apply the changes.
11. Start the pipeline execution by selecting **Build Now**.

Step 5: Reviewing the Build Results

1. Track the progress of the build under **Build History** in Jenkins.
2. If the build completes successfully, review the output.
3. In case of errors, analyze the logs in **Console Output** and resolve any issues accordingly.



The screenshot shows the Jenkins 'Console Output' page for a build named 'task1' with ID '#1'. The left sidebar contains navigation links: Status, Changes, Console Output (selected), Edit Build Information, Delete build '#1', Timings, and Open Blue Ocean. The main area displays the console output with a green checkmark icon and the title 'Console Output'. At the top right of the console area are buttons for 'Download', 'Copy', and 'View as plain text'. The output text shows the build was started by user 'Kaviya M', running as 'SYSTEM' in the workspace '/var/jenkins_home/workspace/task1'. The shell command executed was '[task1] \$ /bin/sh -xe /tmp/jenkins14812508918425664731.sh' followed by '+ sudo apt update'. A warning message states: 'WARNING: apt does not have a stable CLI interface. Use with caution in scripts.' The output then shows the process of fetching packages from various sources (deb.debian.org, download.docker.com) and installing them. It lists several packages being upgraded and the installation of 'nginx'.

```
Started by user Kaviya M
Running as SYSTEM
Building in workspace /var/jenkins_home/workspace/task1
[task1] $ /bin/sh -xe /tmp/jenkins14812508918425664731.sh
+ sudo apt update

WARNING: apt does not have a stable CLI interface. Use with caution in scripts.

Hit:1 http://deb.debian.org/debian bookworm InRelease
Get:2 http://deb.debian.org/debian bookworm-updates InRelease [55.4 kB]
Get:3 https://download.docker.com/linux/debian bookworm InRelease [43.3 kB]
Get:4 https://download.docker.com/linux/debian bookworm/stable amd64 Packages [37.1 kB]
Get:5 http://deb.debian.org/debian-security bookworm-security InRelease [48.0 kB]
Fetched 184 kB in 9s (19.9 kB/s)
Reading package lists...
Building dependency tree...
Reading state information...
10 packages can be upgraded. Run 'apt list --upgradable' to see them.
+ sudo apt-get install -y nginx
Reading package lists...
```

 < Build #2

Rebuild

Console

Configure

Pipeline



Details

Manually run by KAVIYA M

Started 11 min ago

Queued 20 ms

Took 10 min

Jenkins 2.498