

Lab Exercise 6.2- Creating a New Jenkins Job to Checkout Source Code

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Objective: To set up a Jenkins job to manage source code, specifically by configuring the Source Code Management section to check out code from a Git repository

Tools required: Jenkins

Prerequisites: Jenkins must be operational.

Steps to be followed:

1. Log in and create a Jenkins job
2. Configure source code management

Step 1: Log in and create a Jenkins job

- 1.1 Navigate to **localhost:8080** in your web browser, enter your credentials, and click on **Sign In**

localhost:8080/login?from=%2F

Sign in to Jenkins

Username
admin

Password

☐ Keep me signed in

Sign in

Note: The credentials for accessing Jenkins in the lab are Username: **admin** and Password: **admin**.

1.2 Create a new Jenkins job by clicking on **New Item**

localhost:8090

Jenkins

+ New Item

Build History

Build Queue

Build Executor Status
(0 of 2 executors busy)

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

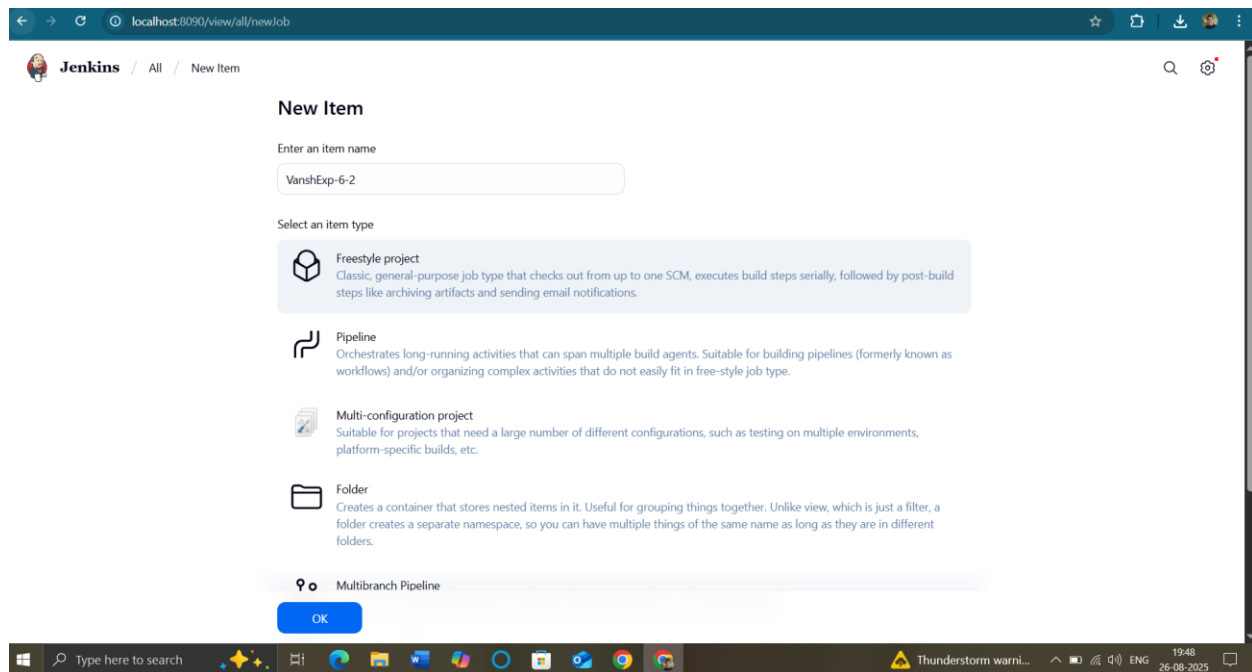
Set up an agent

Configure a cloud

Learn more about distributed builds

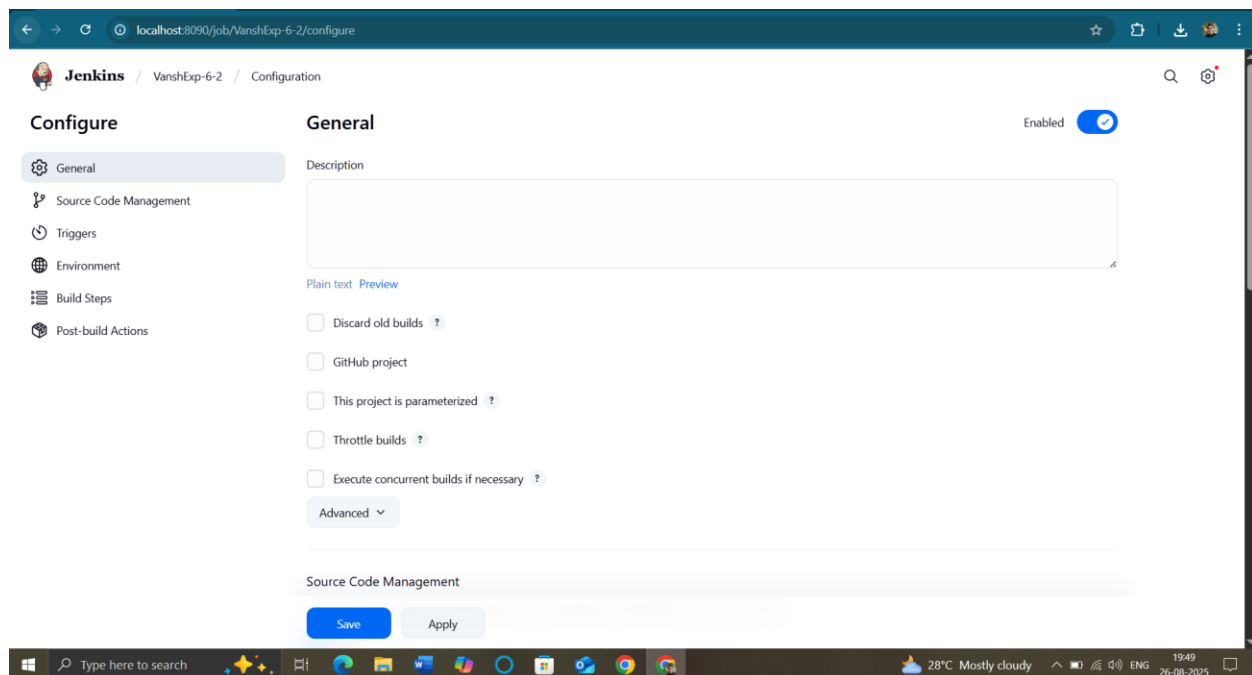
REST API Jenkins 2.516.2

1.3 Provide custom job name inside the field **Enter an item name**, select the **Freestyle project** option, and click on the **OK** button to save the job

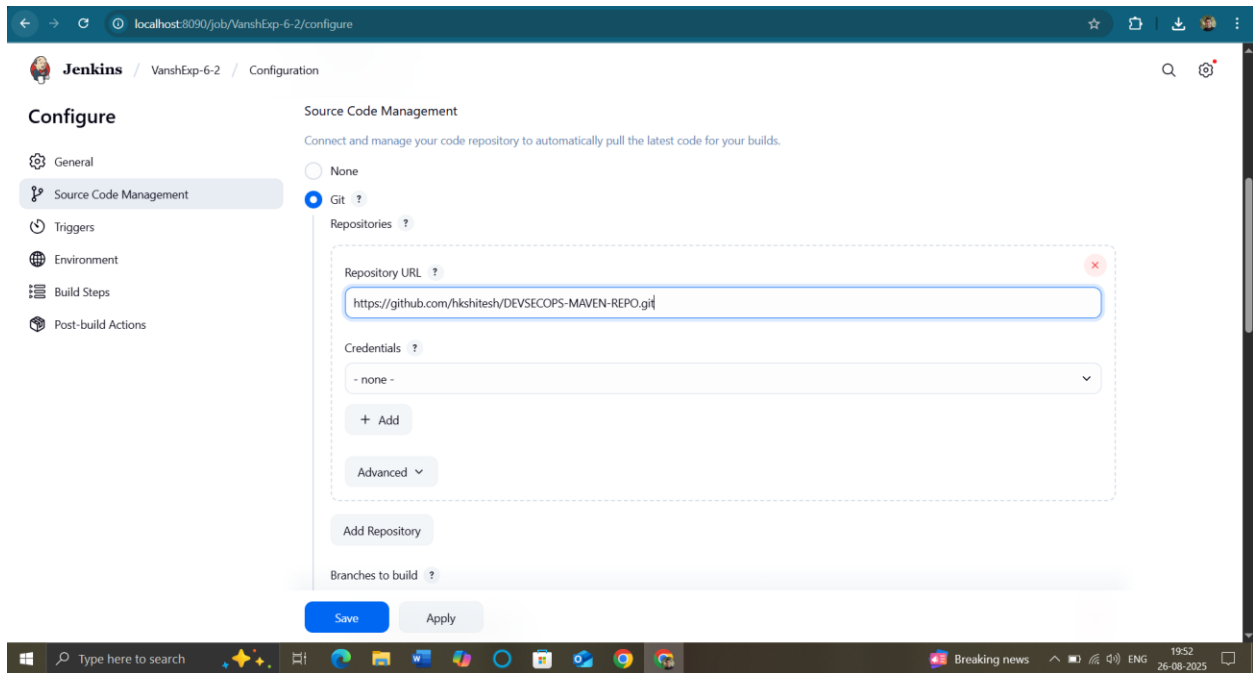


Step 2: Configure source code management

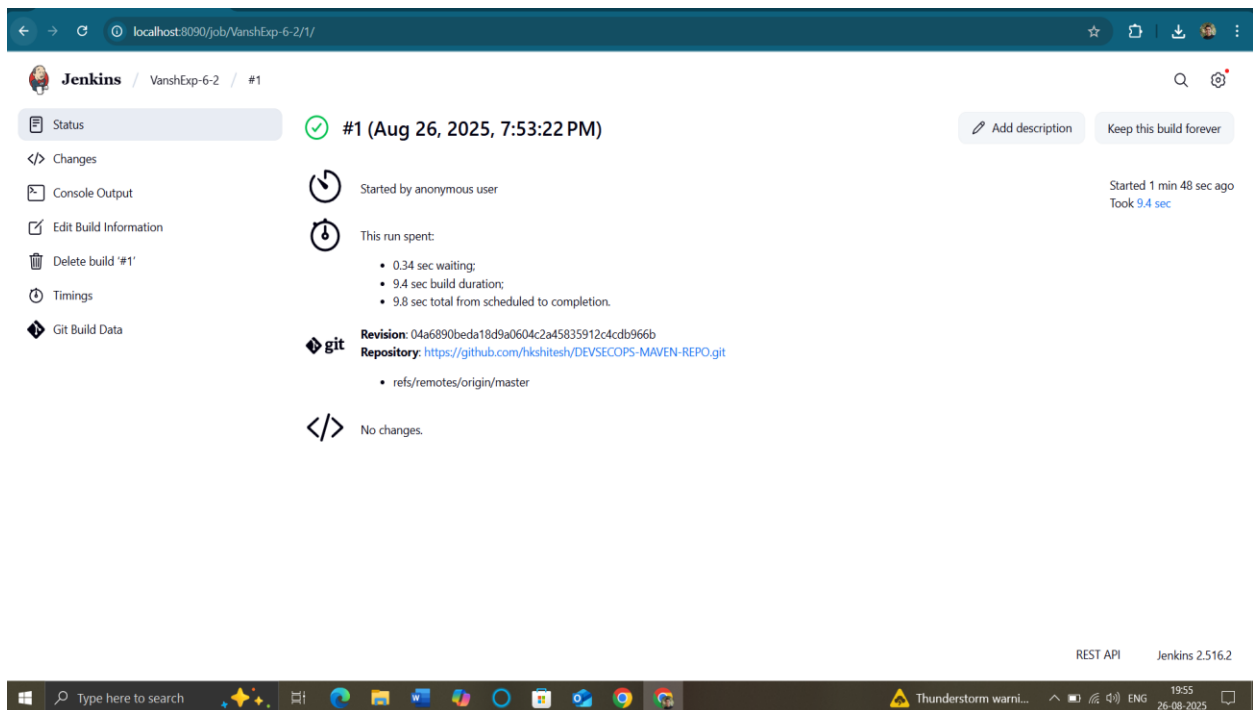
2.1 Access the newly created job's configuration screen by clicking on **Configure**



2.2 Navigate to the **Source Code Management** tab, provide Git repository configuration inside the **Repository URL** field, and click on the **Save** button



2.3 Then, click on the **Build Now** option to schedule a build



2.4 To schedule the build, click the required link under **Permalinks**

The screenshot shows the Jenkins web interface for a job named 'VanshExp-6-2'. The build #1 is shown as successful with a green checkmark. The build started on August 26, 2025, at 7:53:22 PM. The console output shows the build process, including cloning the repository and checking out the code. The build took 9.4 seconds. The interface includes a sidebar with links to Status, Changes, Console Output, Edit Build Information, Delete build '#1', Timings, and Git Build Data. The top right corner shows the REST API and Jenkins version 2.516.2. The bottom of the screen shows a Windows taskbar with various application icons and a system clock showing 19:55 on 26-08-2025.

2.5 Click on **Console Output** to check out the process during the build process

The screenshot shows the Jenkins web interface for the same job 'VanshExp-6-2', but now the 'Console Output' tab is selected. The console output displays the following text:

```
Started by user unknown or anonymous
Running as SYSTEM
Building in workspace C:\ProgramData\jenkins\workspace\VanshExp-6-2
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/hkshitesh/DEVSECOPS-MAVEN-REPO.git
> git.exe init C:\ProgramData\jenkins\workspace\VanshExp-6-2 # timeout=10
Fetching upstream changes from https://github.com/hkshitesh/DEVSECOPS-MAVEN-REPO.git
> git.exe --version # timeout=10
> git.exe --version # 'git version 2.47.1.windows.2'
> git.exe fetch --tags --force --progress -- https://github.com/hkshitesh/DEVSECOPS-MAVEN-REPO.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git.exe config remote.origin.url https://github.com/hkshitesh/DEVSECOPS-MAVEN-REPO.git # timeout=10
> git.exe config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git.exe rev-parse 'refs/remotes/origin/master^{commit}' # timeout=10
Checking out Revision 04a6890beda18d9a0604c2a45835912c4cdb966b (refs/remotes/origin/master)
> git.exe config core.sparsecheckout # timeout=10
> git.exe checkout -f 04a6890beda18d9a0604c2a45835912c4cdb966b # timeout=10
Commit message: "div() added"
First time build. Skipping changelog.
Finished: SUCCESS
```

By following these steps, you have successfully set up a Jenkins job to automatically check out source code from a Git repository, enabling seamless integration and automation in your CI/CD pipeline.