

Lab Exercise 6.2

Creating a New Jenkins Job to Checkout Source Code

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

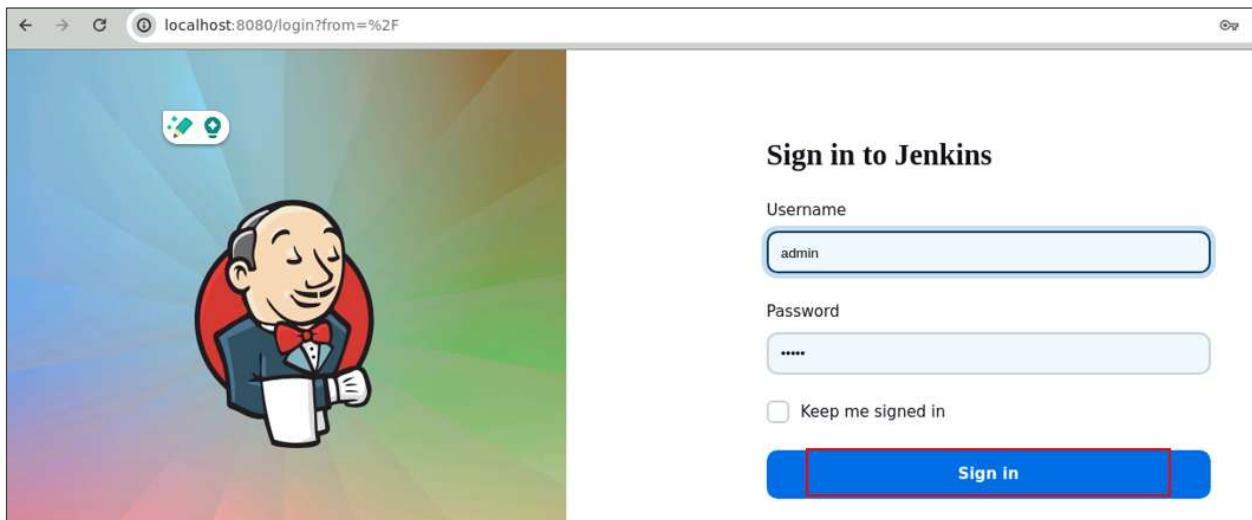
Prerequisites: Jenkins must be operational.

Steps to be followed:

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

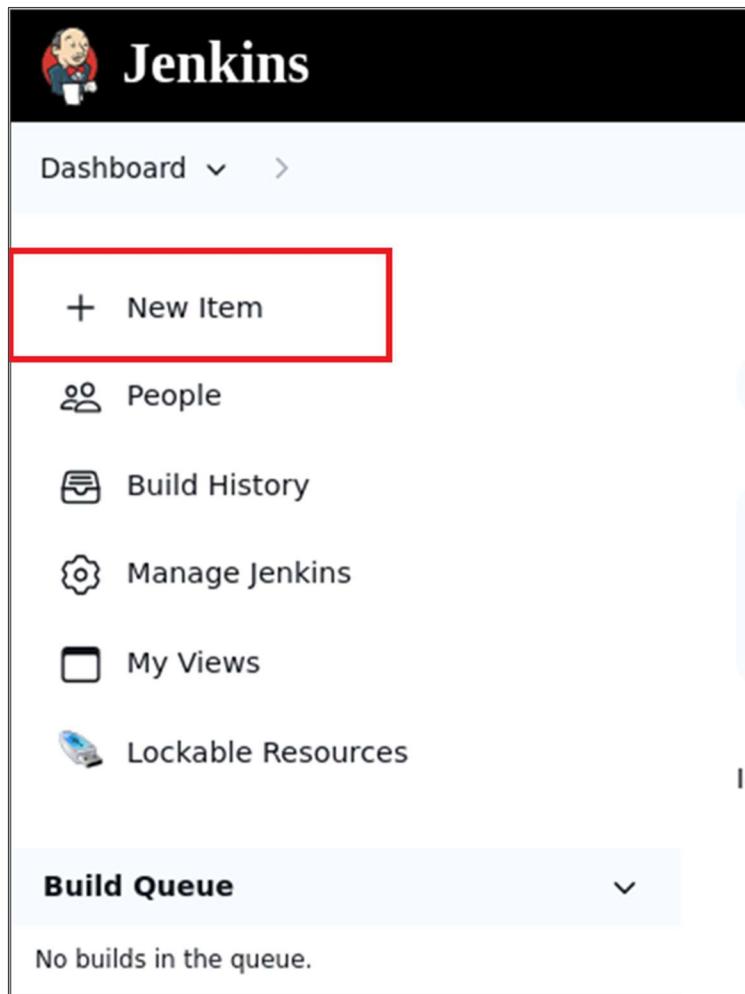
Step 1: Log in and create a Jenkins job

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

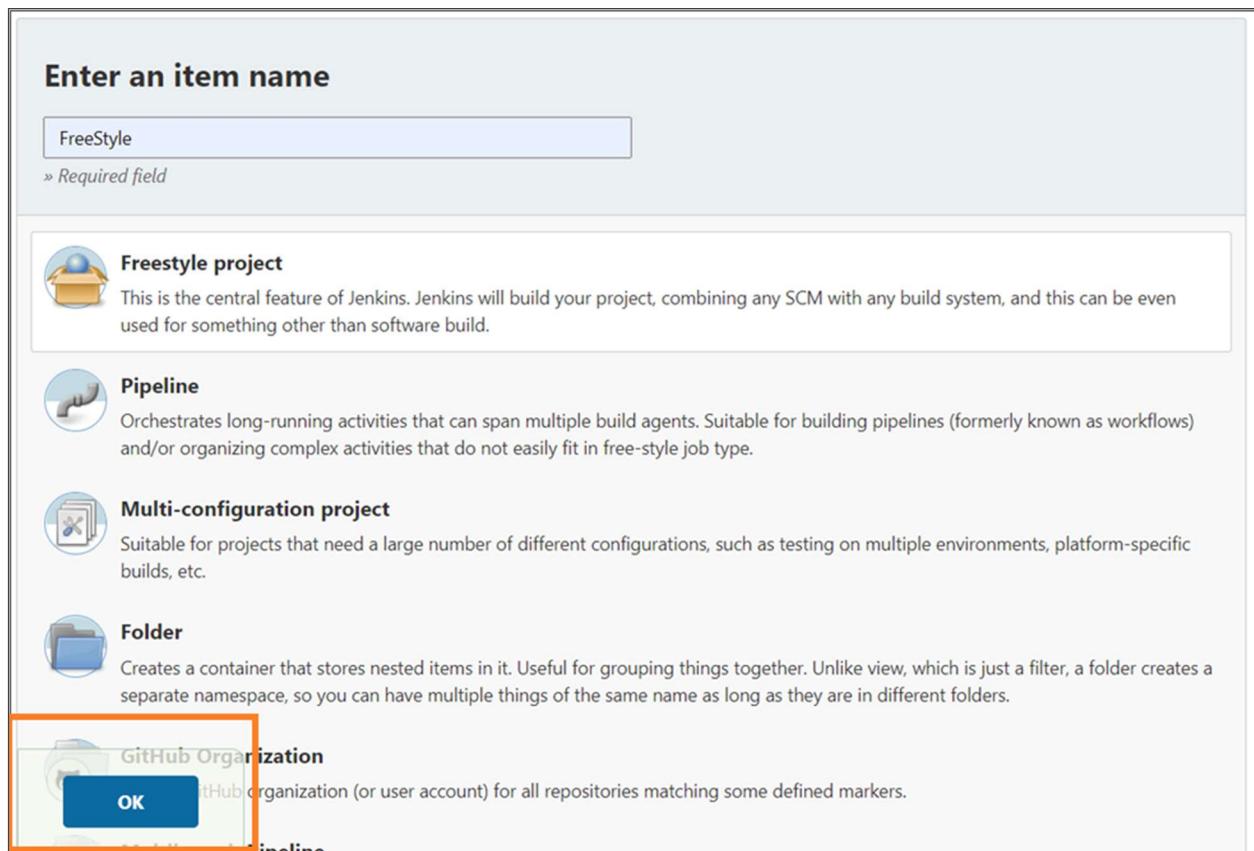


Note: The credentials for accessing Jenkins in the lab are Username: **admin** and Password: **admin**.

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

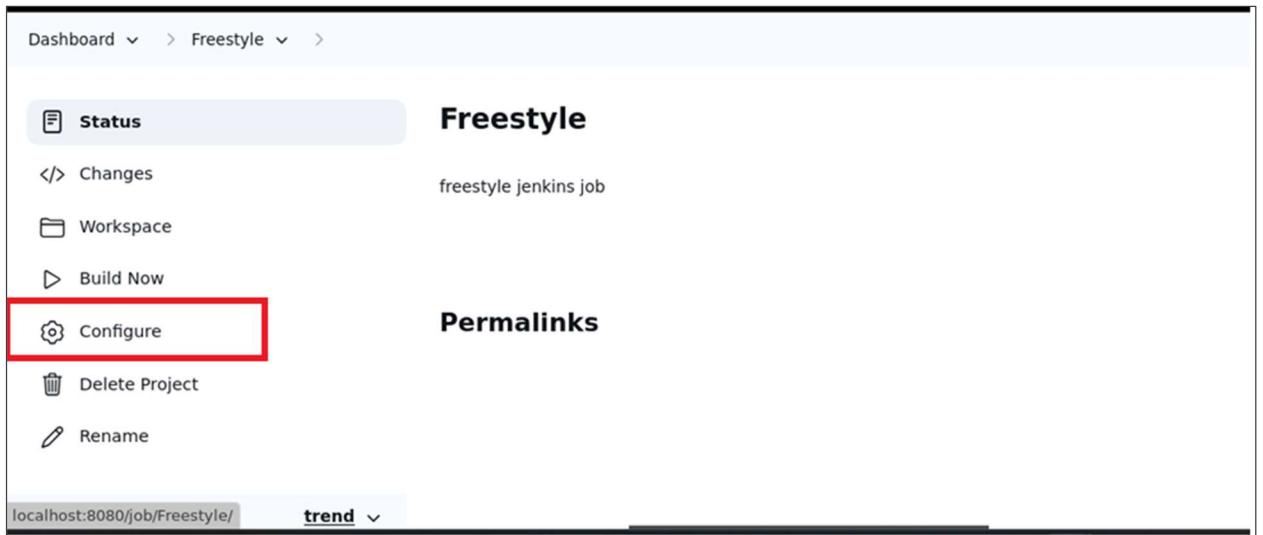


1.3 Provide custom job name inside the field **Enter an item name**, select the **Freestyle project** option, and click on the **OK** button to save the job

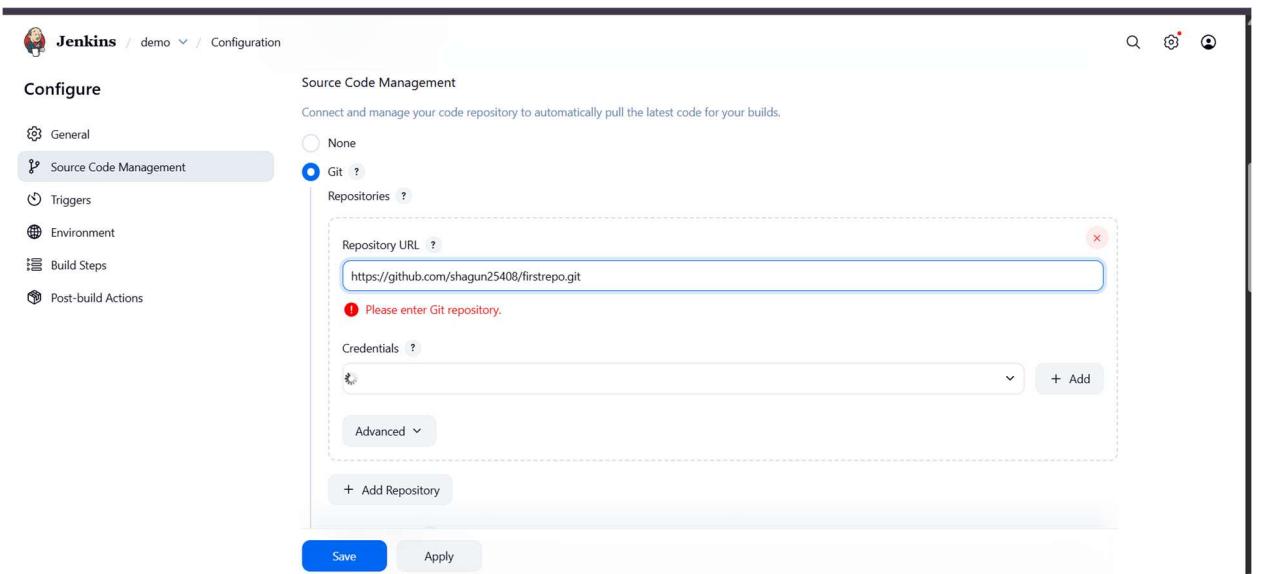


Step 2: Configure source code management

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



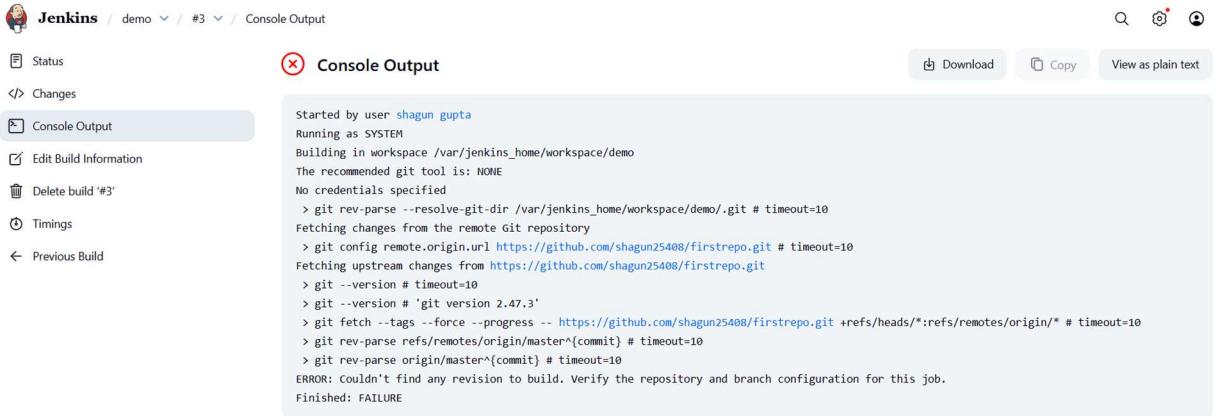
The screenshot shows the Jenkins interface for a project named 'demo'. At the top, there's a navigation bar with links for Status, Changes, Workspace, Build Now, Configure, Delete Project, and Rename. Below this is a 'Permalinks' section with a red circle around the 'Build Now' link. A large button labeled 'Builds' is present, with a message 'No builds' underneath it. In the bottom right corner, there are links for REST API and Jenkins 2.528.2.

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



This screenshot shows the same Jenkins project 'demo' after a build was scheduled. The 'Build Now' link is no longer visible in the 'Permalinks' section. The 'Builds' section now lists three completed builds: #3, #2, and #1, each with a timestamp of 07:26. The Jenkins version at the bottom right is now 2.528.3.

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



The screenshot shows the Jenkins interface for a build named 'demo' (Build #3). The left sidebar contains links for Status, Changes, Console Output (which is selected), Edit Build Information, Delete build '#3', Timings, and Previous Build. The main content area is titled 'Console Output' and displays the following log output:

```
Started by user shagun gupta
Running as SYSTEM
Building in workspace /var/jenkins_home/workspace/demo
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/jenkins_home/workspace/demo/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/shagun25408/firstrepo.git # timeout=10
Fetching upstream changes from https://github.com/shagun25408/firstrepo.git
> git -version # timeout=10
> git -version # 'git version 2.47.3'
> git fetch --tags --force --progress -- https://github.com/shagun25408/firstrepo.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git rev-parse origin/master^{commit} # timeout=10
ERROR: Couldn't find any revision to build. Verify the repository and branch configuration for this job.
Finished: FAILURE
```

[REST API](#) Jenkins 2.528.2

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.