

# Task 3 - Jenkins Task

## Prerequisites:

### Setup Jenkins:

- Chrome browser (version 86) should be installed
- [Maven Integration plugin](#) should be installed
- [Allure Jenkins Plugin](#) should be installed
- Configure global environment variable **CI = true**. As, automation code from task-1 checks for CI environment var and adds headless options.

To configure, go to: Manage Jenkins > Configure System > Global properties

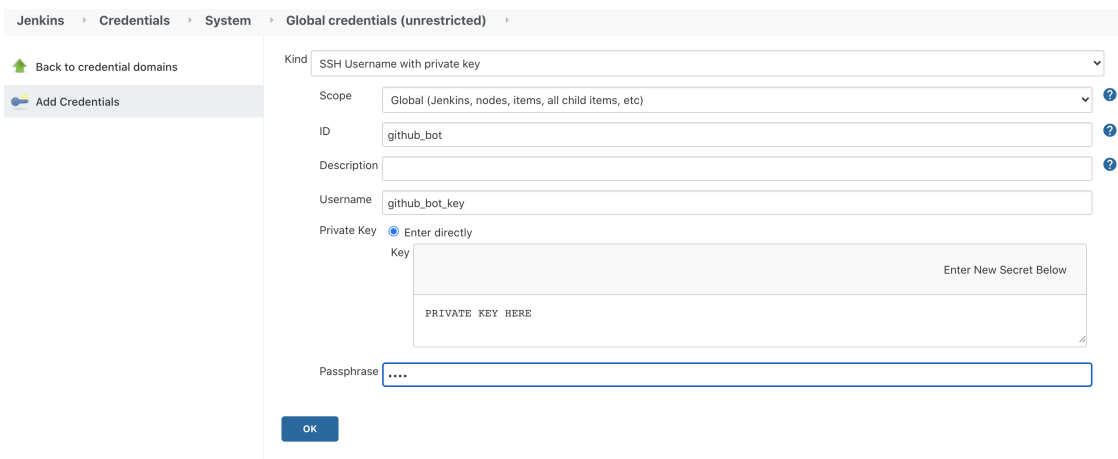


The screenshot shows the 'Global properties' configuration page in Jenkins. It has a section for 'Environment variables' which is checked. Below it, there is a table with one row showing a variable named 'CI' with a value of 'true'. There are 'Add' and 'Delete' buttons at the bottom of the table.

Name	Value
CI	true

- Configure SSH credentials for access to the git repository.

To add credentials go to: Jenkins > Credentials > System > Global credentials



The screenshot shows the 'SSH Username with private key' configuration page in Jenkins. The 'Kind' is set to 'SSH Username with private key'. The 'Scope' is 'Global (Jenkins, nodes, items, all child items, etc)'. The 'ID' is 'github\_bot'. The 'Description' is empty. The 'Username' is 'github\_bot\_key'. The 'Private Key' is set to 'Enter directly'. The 'Key' field is empty, with a placeholder 'PRIVATE KEY HERE'. The 'Passphrase' field is empty. There is an 'OK' button at the bottom.

Kind: SSH Username with private key

Scope: Global (Jenkins, nodes, items, all child items, etc)

ID: github\_bot

Description:

Username: github\_bot\_key

Private Key: Enter directly

Key: PRIVATE KEY HERE

Passphrase: ....

## Pipeline Configuration

1. Add **New Item** in jenkins dashboard.
2. Enter item name and select Maven Project then click OK

**Enter an item name**

Seven Senders Task  
» Required field

**Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Maven project**  
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

**Pipeline**  
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

**Multi-configuration project**  
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

**Folder**  
Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

**OK** **Cancel**

3. Then under the **Source Code Management** tab, select git and enter the repository details and choose the added credentials (follow the prerequisite process) with access to the repository. Also, change the branch specifier to **\*/main**.

General **Source Code Management** Build Triggers Build Environment Pre Steps Build Post Steps

Build Settings Post-build Actions

☐ None  
☒ Git

Repositories

Repository URL: git@github.com:sagarika-sahoo/sevensenders-task.git

Credentials: github\_bot\_key Add

Advanced...  
Add Repository

Branches to build

Branch Specifier (blank for 'any'): \*/main

Add Branch

Repository browser: (Auto)

Additional Behaviours: Add

4. To run the pipeline automatically at night choose **Build periodically** under **Build Triggers** tab and enter schedule time as **@midnight**

**Build Triggers**

- ☐ Build whenever a SNAPSHOT dependency is built
- ☐ Trigger builds remotely (e.g., from scripts)
- ☐ Build after other projects are built
- ☒ Build periodically

Schedule:

Would last have run at Saturday, October 24, 2020 1:03:23 AM UTC; would next run at Sunday, October 25, 2020 1:03:23 AM UTC.

- ☐ GitHub hook trigger for GITScm polling
- ☐ Poll SCM

5. Configure **Build** step to correct path for **pom.xml** and set goal to **“test”**

**Build**

Root POM:

Goals and options:

Advanced...

6. To publish the test report using Allure plugin. Add **Allure report** in post build actions then set the results path to generated reports path, in case of task-1 it is **task-1/target/surefire-reports**

**Post-build Actions**

Allure Report

Disabled ☐

Results:

Path:

Add

Paths to Allure results directories relative from workspace.  
E.g. **target/allure-results**.

Properties: Add

Advanced...

Add post-build action

7. After the build ran at the scheduled time. We can see the details of the build along with access to allure reports. Below is the screenshot from running task-1 in jenkins.

The screenshot shows the Jenkins interface for Build #1. The left sidebar contains navigation links: Back to Project, Status, Changes, Console Output, Edit Build Information, Delete build '#1', Git Build Data, No Tags, Test Result, Redeploy Artifacts, Allure Report, and See Fingerprints. The main content area displays the build title 'Build #1 (25-Oct-2020 12:03:34)' with a 'Keep this build forever' button. Below the title, there are sections for 'Build Artifacts' (allure-report.zip, 954.28 KB), 'No changes', 'Started by user admin', 'Revision: a4c3d0092ba27ced360a0f2a575b3bab8b21f2c9' (refs/remotes/origin/main), 'Test Result (no failures)', and 'Allure Report'. At the bottom, the 'Module Builds' section shows 'sevensenders-task' with a duration of 1 min 6 sec.

8. Allure reports results of task-1.

The screenshot shows the Allure Suites page. The left sidebar contains navigation links: Overview, Categories, Suites, Graphs, Timeline, Behaviors, and Packages. The main content area displays the 'Suites' section with a search bar and a status bar showing 0 failures, 0 warnings, 5 passes, 0 skipped, and 0 pending. Below the status bar, there is a table of test results for the 'TestSuite'.

order	name	duration	status
#3	invalidEmailIdTest	6s 137ms	Pass
#5	invalidLoginTest[qasaga1991@gmail.com](1)	8s 715ms	Pass
#1	logoutTest	12s 006ms	Pass
#2	searchOnHomePage	19s 668ms	Pass
#4	validLoginTest	10s 318ms	Pass