

Full Stack Development

Lab Jenkins 4

Multistage Pipelines

1. Lab objectives

In this lab you will be using a Jenkinsfile to run a multistage pipeline.

2. Create and run the project

Start Jenkins and log in as before.

Create a new **Pipeline** project called **Pipe2**.

For this project, you will be using a remote repository. For the SCM options enter

<https://github.com/ExgnosisClasses/MultiStagePipeline>

Make sure you use the main branch and use the file Jenkinsfile1.

The screenshot shows the Jenkins Pipeline configuration interface. On the left, under the 'Pipeline' section, the 'Definition' is set to 'Pipeline script from SCM'. Below this, the 'SCM' is set to 'Git'. Under the 'Repositories' section, a 'Repository URL' is entered as 'https://github.com/ExgnosisClasses/MultiStagePipeline'. On the right, under 'Branches to build', the 'Branch Specifier (blank for \'any\')' is set to '*/main'. Below this, the 'Repository browser' is set to '(Auto)'. Under 'Additional Behaviours', there is an 'Add' button. At the bottom, the 'Script Path' is set to 'Jenkinsfile1'.

Pipeline

Definition

Pipeline script from SCM

SCM

Git

Repositories

Repository URL

https://github.com/ExgnosisClasses/MultiStagePipeline

Branches to build

Branch Specifier (blank for 'any')

*/main

Add Branch

Repository browser

(Auto)

Additional Behaviours

Add

Script Path

Jenkinsfile1

The Jenkinsfile1 is:

```
pipeline {
  agent any

  stages {
    stage('Build') {
      steps {
        echo 'Build'
      }
    }
    stage('Test') {
      steps {
        echo 'Test'
      }
    }
    stage('Package') {
      steps {
        echo 'Package'
      }
    }
    stage('Deploy') {
      steps {
        echo 'Deploy'
      }
    }
    stage('Report') {
      steps {
        echo 'Report'
      }
    }
  }
}
```

Run the project and notice the stages. Look in the console output to see how the different stages executed.

3. Introduce a failure

Now run a different version of the pipeline – Jenkinsfile2 – that has the following error.

```
stage('Test') {  
    steps {  
        exho 'Test'  
    }  
}
```

Run the build and notice how it displays the results. Switch back to Jenkinsfile1 and see the project build successfully.

End Lab