

Full Stack Development

Lab Jenkins 3

Running a Simple Pipeline

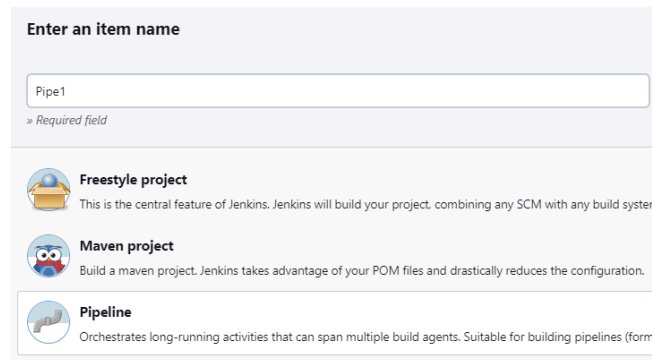
1. Lab objectives

In this lab you will be using a Jenkinsfile to run the Hello World application

2. Create the project and the Jenkinsfile

Start Jenkins and log in as before.

Create a new **Pipeline** project. Called **Pipe1**.



Enter an item name

Pipe1

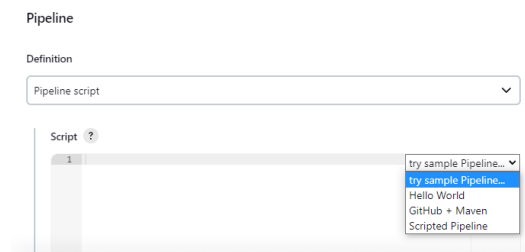
» Required field

Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system.

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 (form

In the **Pipeline** section, choose the “Hello World” option from the dropdown list.



Pipeline

Definition

Pipeline script

Script ?

try sample Pipeline...
try sample Pipeline...
Hello World
GitHub + Maven
Scripted Pipeline

The result should look like this.



Save the project and run it. Notice that the output looks different than the projects you were running before.

2. The Pipeline repository

Create a new git repository called pipeline. Specifically, create an empty git repository in a directory of your choosing. For this lab, I am using D:/pipeline.

Cope the pipeline script from the previous section and save it into a file name **Jenkinsfile** in the repository you just created.

```

D:\pipeline>dir
Volume in drive D is Working
Volume Serial Number is 021F-6867

Directory of D:\pipeline

2022-11-20  05:55 PM    <DIR>          .
2022-11-20  05:55 PM    <DIR>          ..
2022-11-20  05:55 PM                162 Jenkinsfile
                1 File(s)                162 bytes
                2 Dir(s)  3,786,219,278,336 bytes free

D:\pipeline>git init
Initialized empty Git repository in D:/pipeline/.git/

D:\pipeline>git add .

D:\pipeline>git commit -m "Initial commit"
[master (root-commit) e305b45] Initial commit
1 file changed, 11 insertions(+)
create mode 100644 Jenkinsfile

```

Change the **Pipeline** section of your project to use the Jenkinsfile in the repository.

Pipeline

Definition

Pipeline script from SCM

SCM ?

Git

Repositories ?

Repository URL ?

D:\pipeline

Credentials ?

- none -

Make sure that the correct branch is chosen (if you are unsure, do “git branch –list”) in your repository. Also make sure that you have the name of the Jenkinsfile spelled correctly and with the correct case.

Branches to build ?

Branch Specifier (blank for 'any') ?

*/master

Add Branch

Repository browser ?

(Auto)

Additional Behaviours

Add

Script Path ?

Jenkinsfile

Run the project to confirm it works.

3. Versioning the pipeline

Edit the Jenkinsfile in your repository to print out a different message. Commit your changes to the repository. You have just created a new version of your pipeline.

There is no need to update anything in Jenkins, just rerun your project and check the console output to show that it actually has been updated.