

# Lab 3- Storing artefacts

We'll have a look at creating some builds here, focusing on build step configuration, statuses and storing artifacts.

## 1. Create a Job

First, we will need a new Jenkins job to work on: create one called "Lab-3".

## 2. Add a Build Step

Let's add a build step that we know will succeed. Select the **Add build step** button and add an **Execute shell** build step.

Add the following script into the **Command** field:

```
#!/usr/bin/env bash
echo "Hello from the Jenkins job named: ${JOB_NAME}"
```

## 3. Run the Job

Save the job and then build it; you should then have one successful build in your history for that job.

Once you navigate to the console output, you should see an output like this:

### Console Output

```
Started by user admin
Running as SYSTEM
Building in workspace /var/jenkins_home/workspace/My Project
[WS-CLEANUP] Deleting project workspace...
[WS-CLEANUP] Deferred wipeout is used...
[WS-CLEANUP] Done
[My Project] $ /bin/sh -xe /tmp/jenkins2828915287112120083.sh
+ echo 'Hello from the Jenkins job named: My Project'
Hello from the Jenkins job named: My Project
Finished: SUCCESS
```

## 4. Make the Build Fail

Now that the last build succeeded, let's see what a failed build looks like!

All we have to do is make it so that the script we added to the command box "fails".

Jenkins will treat any script or application exiting with a non-zero status as a failure.

So to create a failed build, let's add `exit 1` to the script box, which will make the script exit with a code of 1:

```
#!/usr/bin/env bash
echo "Hello from the Jenkins job named: ${JOB_NAME}"
exit 1
```

### Console Output

```
Started by user admin
Running as SYSTEM
Building in workspace /var/jenkins_home/workspace/My Project
[WS-CLEANUP] Deleting project workspace...
[WS-CLEANUP] Deferred wipeout is used...
[WS-CLEANUP] Done
[My Project] $ /bin/sh -xe /tmp/jenkins8077683492031581351.sh
+ echo 'Hello from the Jenkins job named: My Project'
Hello from the Jenkins job named: My Project
+ exit 1
Build step 'Execute shell' marked build as failure
Finished: FAILURE
```

## 5. Fix the Build and Create Artefacts

We can, of course, remove the `exit 1` from the build step to fix it.

After that, let's change the script to create several files, and then put them in a zip archive called `archive.zip`:

```
#!/usr/bin/env bash
echo "Hello from the Jenkins job named: ${JOB_NAME}"
touch 1.txt 2.txt 3.txt 4.txt 5.txt
zip archive.zip *.txt
```

Next, a `Post-build Action` must be configured to archive the zip files, using the "archive the artefacts" step type.

## 6. Finish Up

Now try to run the job. You should see artifacts on the project dashboard. If they don't show up, try refreshing the page.