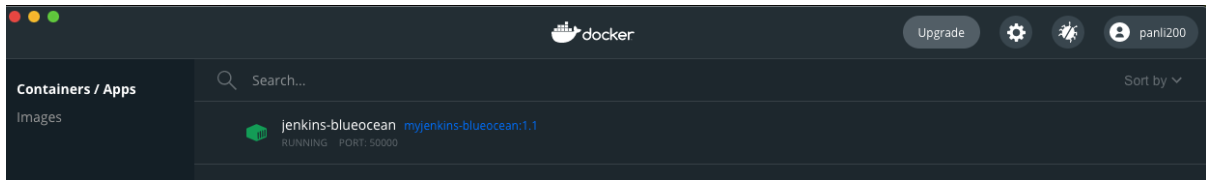


# Jmeter and Selenium Testing

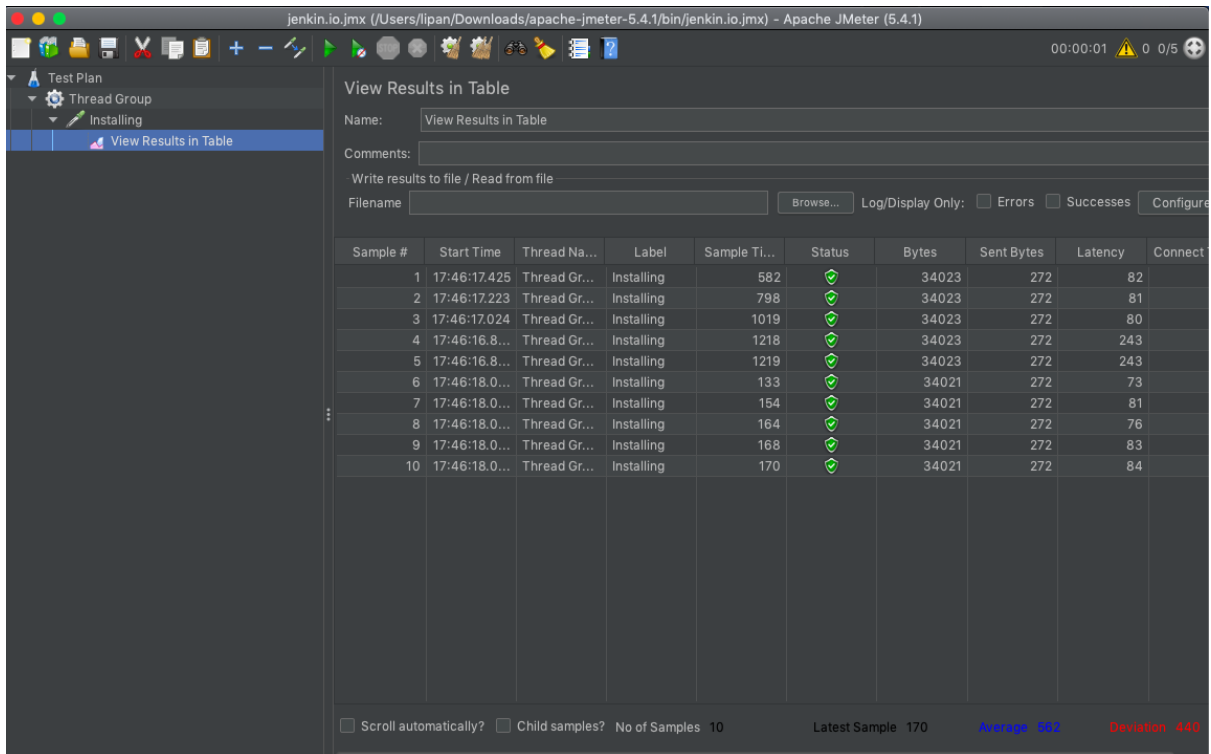
Li Pan  
April 5, 2021

The Jenkins is installed on Docker on my local computer success.

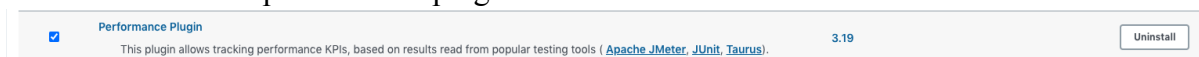


## Jmeter Testing

1. Installing Apache Jmeter on my local Mac computer.
2. Modifying the *user.properties* file under Jmeter folder. Adding the command at the last line of file:  
*jmeter.save.saveservice.output\_format=xml*
3. Adding a new Test plan. Saved the *.jmx* file



4. Installed the performance plugin on Jenkins.



5. Create a new item on Jenkins. I selected a freestyle project.

6. Add the Build with execute shell. The steps vary on different computers. If the user is using Mac this step requires adding an execute shell. If the user is using Windows, it requires adding execute Windows batch command.

The screenshot shows the 'Build' configuration page in Jenkins, specifically the 'Execute shell' step. The 'Command' field contains the following shell script:

```
cd /Users/lipan/Downloads/Jmeter/  
sh jmeter.sh -Jjmeter.save.saveservice.output_format=xml -n -t /Users/lipan/Downloads/Jmeter/jenkins.io.jmx -l /Users/lipan/Downloads/Jmeter/jenki:
```

Below the command field, there is a link that says 'See the list of available environment variables'. At the bottom right, there is an 'Advanced...' button. At the bottom left, there is a dropdown menu labeled 'Add build step'.

7. Adding Post-build Action.

The screenshot shows the 'Publish Performance test result report' configuration page in Jenkins. The 'Source data files (autodetects format):' field contains the path '/Users/lipan/Downloads/jmeter/jenkins.io.report.jtl'. The 'Regex for included samplers' field is empty. The 'Show Trend Graphs' checkbox is checked. The 'Select evaluation mode' section has 'Expert Mode' and 'Standard Mode' radio buttons, with 'Standard Mode' selected. The 'Standard Mode' section is expanded, showing 'Select mode:' with 'Relative Threshold' and 'Error Threshold' radio buttons, and 'Error Threshold' selected. Below this, there are input fields for 'Unstable' and 'Failed' thresholds, both set to '-1'. There is an 'Advanced...' button. Below that, there are input fields for 'Unstable % Range' and 'Failed % Range', both set to '-1.0'. There are also input fields for 'Compare with previous Build' and 'Compare with Build number', with 'Compare with Build number' set to '0'. At the bottom, there is a 'Compare based on' dropdown menu set to 'Average Response Time'. At the bottom left, there are 'Save' and 'Apply' buttons.

8. Run the Project.

The expected output is success. The project should have a performance report created.

However, the console output is:

## Console Output

```
Started by user LiPan  
Running as SYSTEM  
Building in workspace /var/jenkins_home/workspace/JmeterJenkins  
[JmeterJenkins] $ /bin/sh -xe /tmp/jenkins7938845051615247569.sh  
+ cd /Users/lipan/Downloads/Jmeter/bin/  
/tmp/jenkins7938845051615247569.sh: 2: cd: can't cd to /Users/lipan/Downloads/Jmeter/bin/  
Build step 'Execute shell' marked build as failure  
Creating parser with percentiles:'0,50,90,100,' filterRegex:  
Cannot detect file type because of error: Failed to copy /Users/lipan/Downloads/jmeter/jenkins.io.report.jtl to  
/var/jenkins_home/jobs/JmeterJenkins/builds/5/temp/jenkins.io.report.jtl  
Finished: FAILURE
```

Apparently Jenkins cannot change the workspace path following my added command.

My Assumption is my Jenkins is installed on Docker, however, the Jmeter is installed on my computer directly. The testing is failed, I cannot figure out the right path for testing Jmeter.

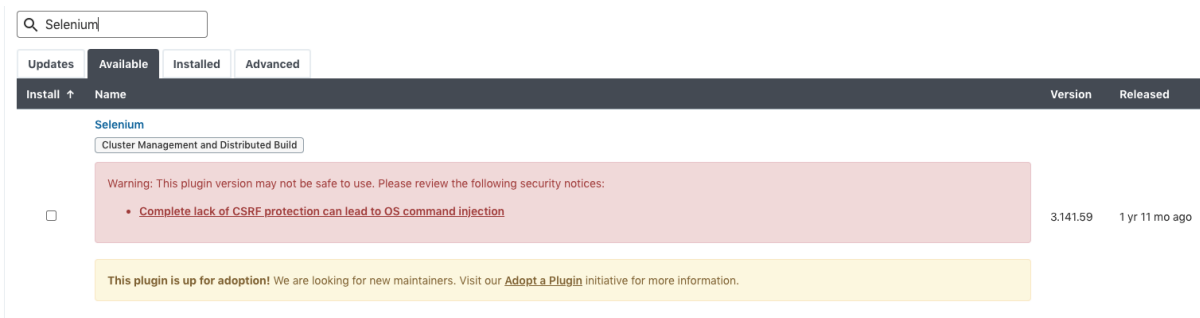
## Selenium Testing

In this test, we are trying to integrate Jenkin with Selenium. Our group is testing Selenium by using the git repository.

Our .pom file added dependency of Selenium:

```
<dependency>
  <groupId>org.seleniumhq.selenium</groupId>
  <artifactId>selenium-java</artifactId>
  <version>3.141.0</version>
</dependency>
```

Find the Selenium plugin on my Jenkins:



However, the plugin install failed.

### Installing Plugins/Upgrades

Preparation

- Checking internet connectivity
- Checking update center connectivity
- Success

Selenium ● Failure - [Details](#)

Loading plugin extensions ● Success

My testing steps cannot continue. Thus, Selenium testing failed on my computer.