# Jenkins

Automating Testing using Jenkins

# Lesson Objectives

In this lesson, you will learn about:

- Automating Unit Tests
- Configuring Test reports in Jenkins
- Displaying Test Results

# Automating Unit Tests

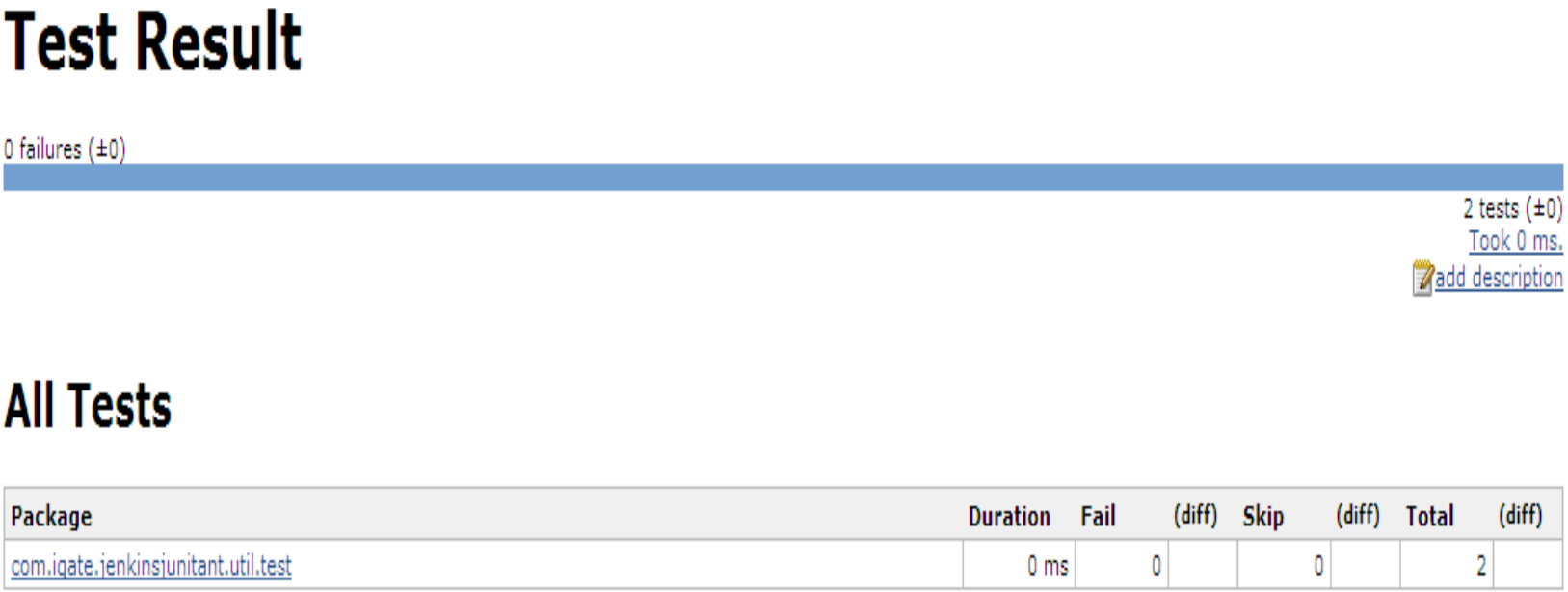
- To verify a build in Continuous Integration, automated testing is more suitable.
- For performing Unit testing of Java code, JUnit testing tool is the de facto standard .
- JUnit testing tool need to be installed in Jenkins as a plugin.
- Jenkins does an excellent job of reporting on your test results.
- Jenkins supports with all types of testing like unit testing, integration testing, web testing, functional testing, performance testing, load testing and so on.

# Configuring Test reports in Jenkins

- Once build generates test results, Jenkins build job need to be configured to display results.
- Display result should be configured in “Post-build Actions” by following the below steps:
  - In build job configuration, select “Post-build Actions”.
  - In “Publish Junit test result report” section, specify the path where the generated test report XML files should be placed.
    - For an Example, “test/data/*.xml” can be mentioned in the “Test Report XMLs” field.

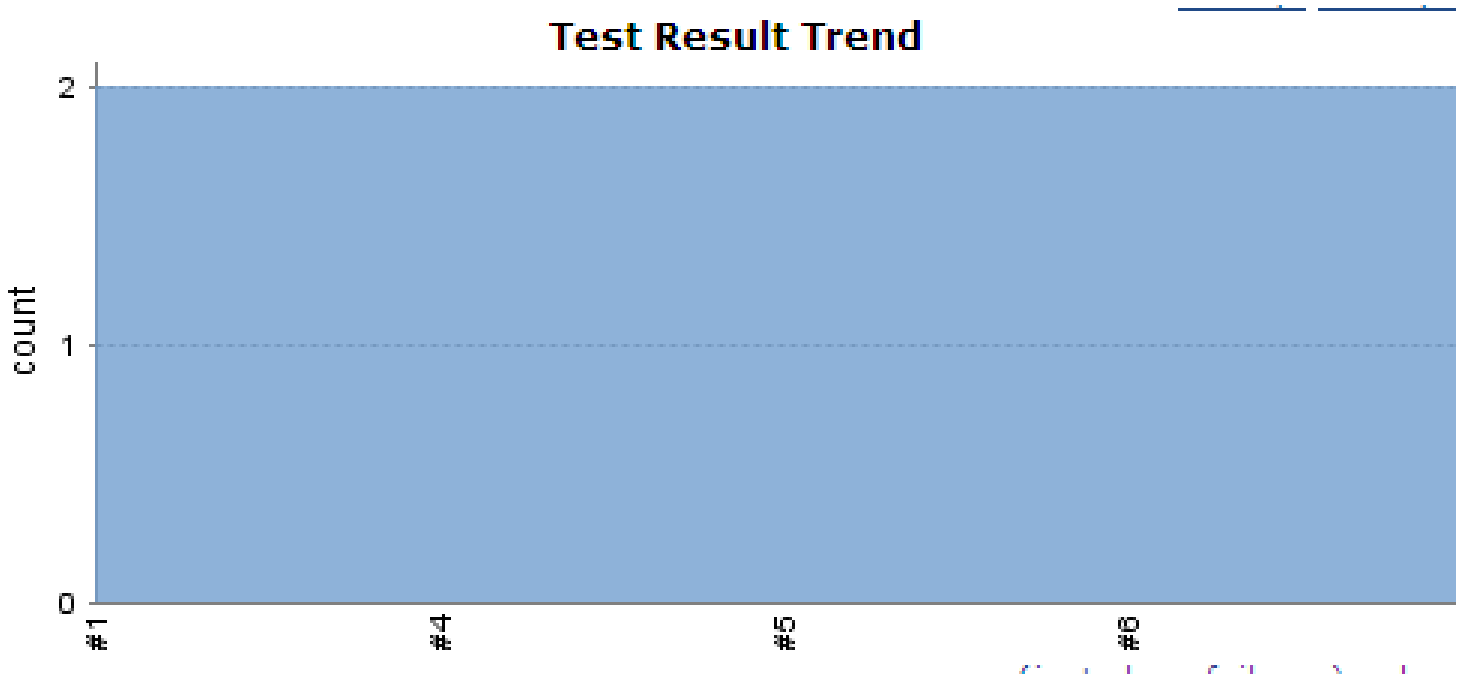
# Displaying Test Results

- Jenkins will find the test reports and generate a trend report on that.
- In build job home page, “Latest Test Result “ Link shows number of test failures and passed as shown below:



# Displaying Test Results

- "Test Result Trend Graph" will be shown in the project home page as default for "freestyle build jobs".



# Summary

In this lesson,  you have learnt about:

- Automating Unit Tests
- Configuring Test reports in Jenkins
- Displaying Test Results