# Protractor Setup, Configuration and Test Script execution

**Prerequisites:-**

1. jdk 1.8

2. NodeJS 8.9.0 and above

3. Visual Studio Code (Latest version)

**Configuration:-**

1. Java installation and configuration

Download and Install JDK 1.8 (Windows 32 or 64 bit).

2. Set up PATH and JAVA\_HOME system variables.

3. Verify Java Installation using the below command

java -version

**Protractor Framework Setup and test script execution:-**

1. Clone the project code from DEV branch to local workspace and open it in Visual Studio Code.

2. Run below command from the terminal of visual studio code. It will install the dependencies in the local node\_modules folder.

**npm install**

3. Use npm to install Protractor globally with below command. This will install two command line tools, protractor and webdriver-manager.

**npm install -g protractor**

4. Run below command to check whether the installation is successful.

**protractor --version**

5. The webdriver-manager is a helper tool to easily get an instance of a Selenium Server running. To download the necessary binaries run below command

**webdriver-manager update**

6. Start the webdriver server with below command

**webdriver-manager start**

7. Now run the test scripts using below command

**protractor protractor.conf.js**

**Test Suite Execution:-**

All the spec files are listed in the specs section in the protractor.conf.js file. If you want to execute a particular spec file, then comment out the other spec files as below.

A screenshot of a cell phone

Description automatically generated

After that, run below command. The particular spec file will be executed.

**protractor protractor.conf.js**

There is one more approach using which this can be achieved.

List down all your spec files in key-value format in the section **“suites”** as below.

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Suppose, we want to run only smoketest suite, then we will run below command

**protractor protractor.conf.js --suite smoketest**

**Selecting a browser at runtime for test execution.**

Specify all the browsers you want to use for test execution in capabilities section in protractor.conf.js file as below.

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The user can comment out the parameter browserName for the browser which he does not want to use. However, it can be achieved without commenting out the parameter browserName as below

Below command can be used to select “Firefox” browser for test execution.

**protractor protractor.conf.js --browser=firefox**

Below command can be used to select “Chrome” browser for test execution.

**protractor protractor.conf.js --browser=chrome**