RapidValue™
Driving Digital Excellence

AutoBots Selenium Java

User Manual

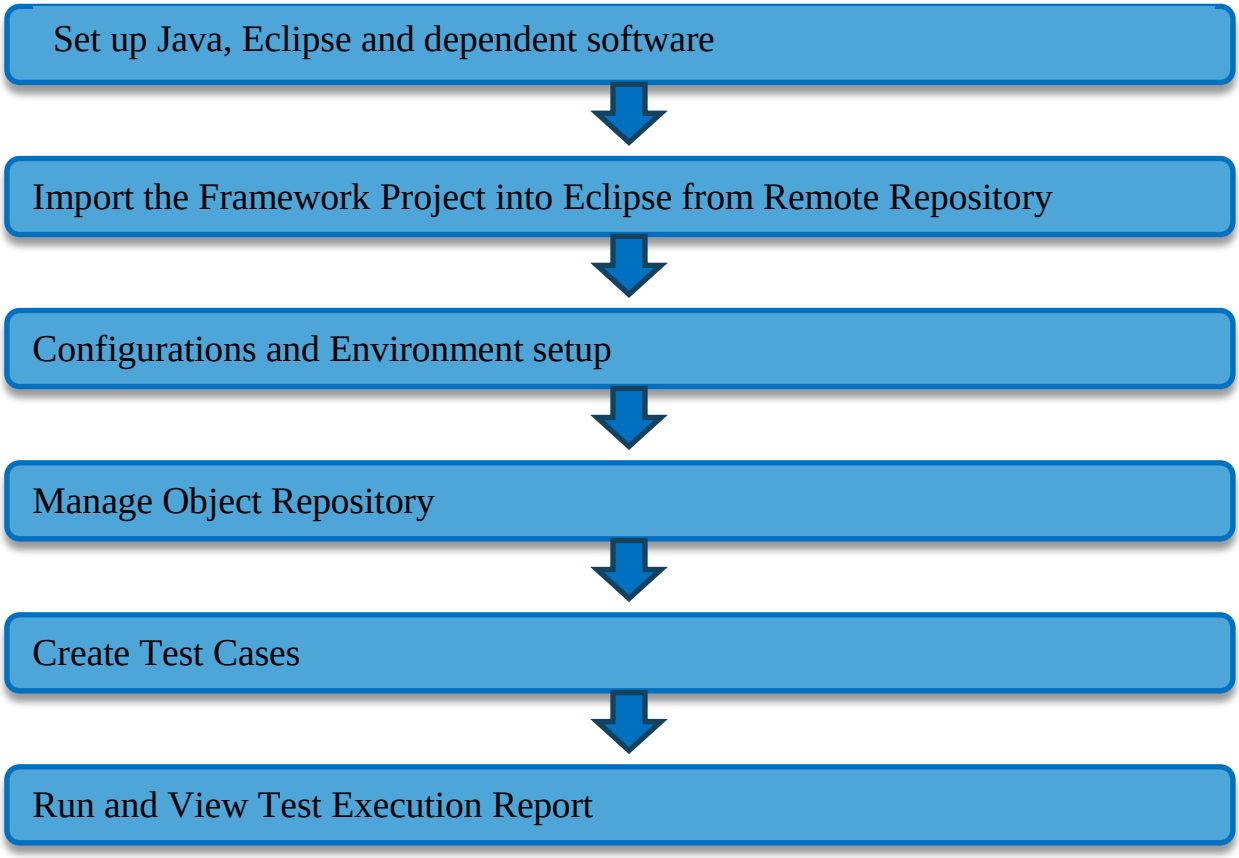
Contents

Overview

Autobots_Selenium-Java is an automation framework for the test automation of web applications on different browsers like Google chrome and Mozilla Firefox in real time. It provides rich features like Test Execution, Test Reporting, and Test details sharing via mail.

Autobots_Selenium-Java includes 100+ pre-built functions using which an Automation Engineer can easily perform the web automation. This manual provides the instruction to use Autobots_Selenium-Java.

The below mentioned steps to be followed to develop automation script using Autobots_Selenium-Java.



Getting Started with AutoBots Selenium-Java

The following sections describe hardware and software requirements as pre-requisite on Windows and Mac system. The below mentioned setups should be available in the user machine to start the test execution.

Hardware Configurations

Mac System

- OS Version: OS X EI Capitan (10.11.6) and above
- RAM: 16GB and above
- Stable Network connection (LAN preferred)

Windows Systems

- OS Version: 7 and above
- RAM: 16GB and above
- Stable Network connection (LAN preferred)

Software Configurations

- Eclipse Version: Mars and above (preferred Java Developer Eclipse)
- Java: JDK 8 (http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads2133151.html)
- TestNG plugin should be added into your eclipse (https://dl.bintray.com/testng-team/testngeclipse-release/6.14.3/)

Eclipse Software for Windows and MAC

Windows

- Eclipse Oxygen: http://www.eclipse.org/downloads/download.php?file=/technology/epp/downloads/release/oxyg en/1a/eclipse-java-oxygen-1a-win32-x86_64.zip&mirror_id=1093
- Eclipse Photon: https://www.eclipse.org/downloads/download.php?file=/technol

ogy/epp/downloads/release/pho ton/R/eclipse-java-photon-R-win32-x86_64.zip&mirror_id=1248

- Eclipse 2019-09: https://www.eclipse.org/downloads/download.php?file=/technology/epp/downloads/release/201 9-09/M1/eclipse-java-2019-09-M1-win32-x86_64.zip&mirror_id=1142
- Eclipse 2020-03: https://www.eclipse.org/downloads/download.php?file=/oomph/epp/2020-03/R/eclipse-inst-mac64.dmg&mirror_id=518

MAC

- Eclipse Oxygen: http://www.eclipse.org/downloads/download.php?file=/technology/epp/downloads/release/oxyg en/1a/eclipse-java-oxygen-1a-macosx-cocoa-x86_64.dmg&mirror_id=1093
- Eclipse Photon: https://www.eclipse.org/downloads/download.php?file=/technology/epp/downloads/release/pho ton/R/eclipse-java-photon-R-macosx-cocoa-x86_64.dmg&mirror_id=1142
- Eclipse 2019-09: https://www.eclipse.org/downloads/download.php?file=/technology/epp/downloads/release/201 9-09/M1/eclipse-java-2019-09-M1-macosx-cocoa-x86_64.dmg&mirror_id=1142
- Eclipse 2020-03: https://www.eclipse.org/downloads/download.php?file=/oomph/epp/2020-03/R/eclipse-inst-mac64.dmg&mirror_id=518

JDK Software for Windows and MAC

- Go to http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html.
  From this site you can download and install JDK. Once you done the installation set JAVA_HOME in system environment variable.)

TestNG plugin Installation to eclipse

1. Open eclipse
2. Go to Help -> Eclipse Marketplace...
3. Do search for TestNG (Type the text TestNG in Find text box > Click Go button)
4. After searching: Click Install button at TestNG for Eclipse area

After successful installation: Go to Window -> Preferences. TestNG is enlisted at the left panel in pop-up.

NOTE: If you failed to find the TestNG in marketplace, then you can install the TestNG via Install New Software option with this link https://dl.bintray.com/testng-team/testng-eclipse-release/6.14.3/

How to use AutoBots_Selenium-Java Framework

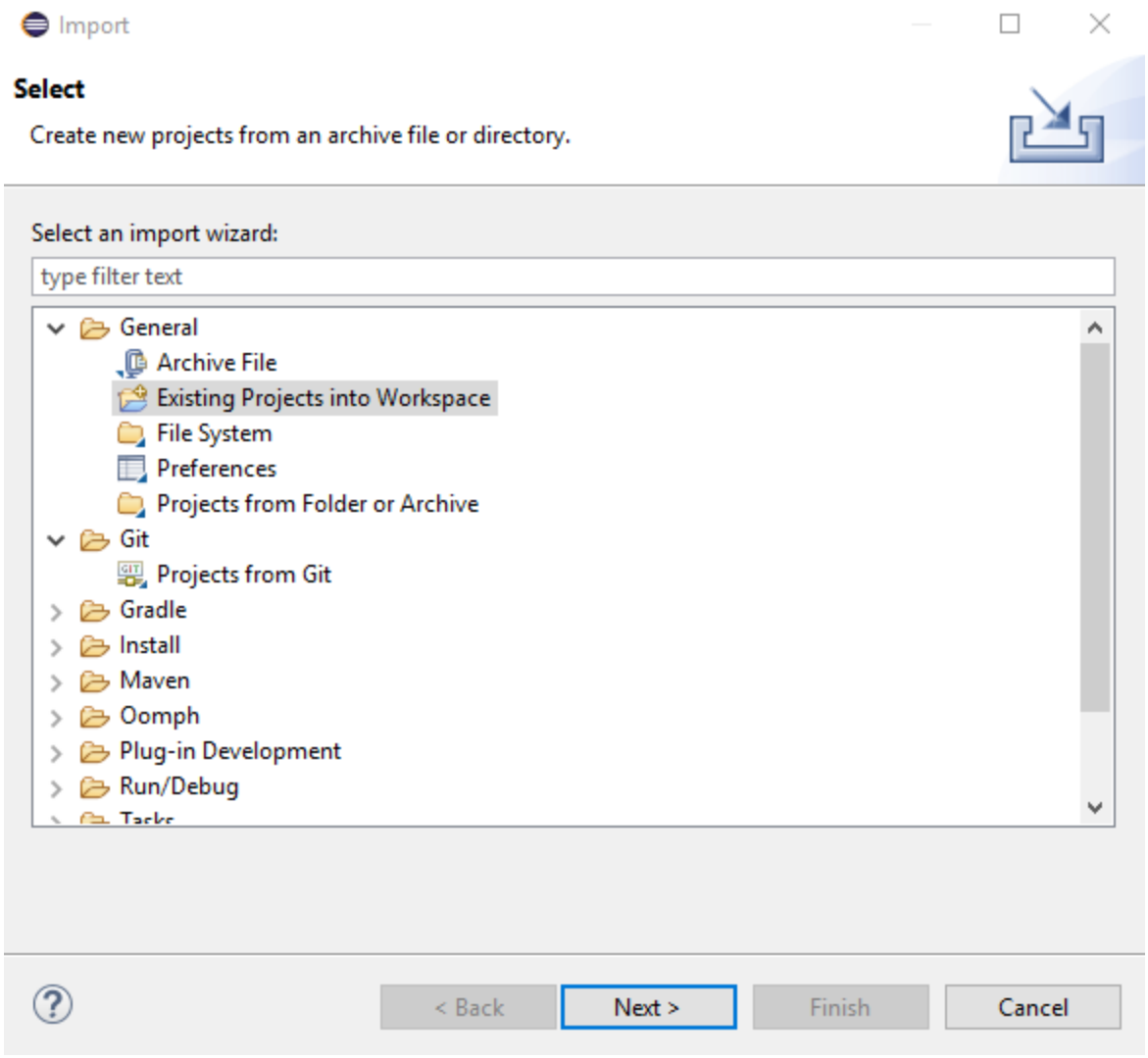
Import Project in Eclipse

The Autobots_Selenium-Java Framework is keeping in a remote repository and download the framework project into the system. Later you can import the downloaded project into Eclipse IDE.

To get the Framework in Eclipse

Open Eclipse and do the below steps to get the downloaded project into the eclipse.

1. Open File->Import.
2. Select "Existing Projects into Workspace" from the Selection Wizard.

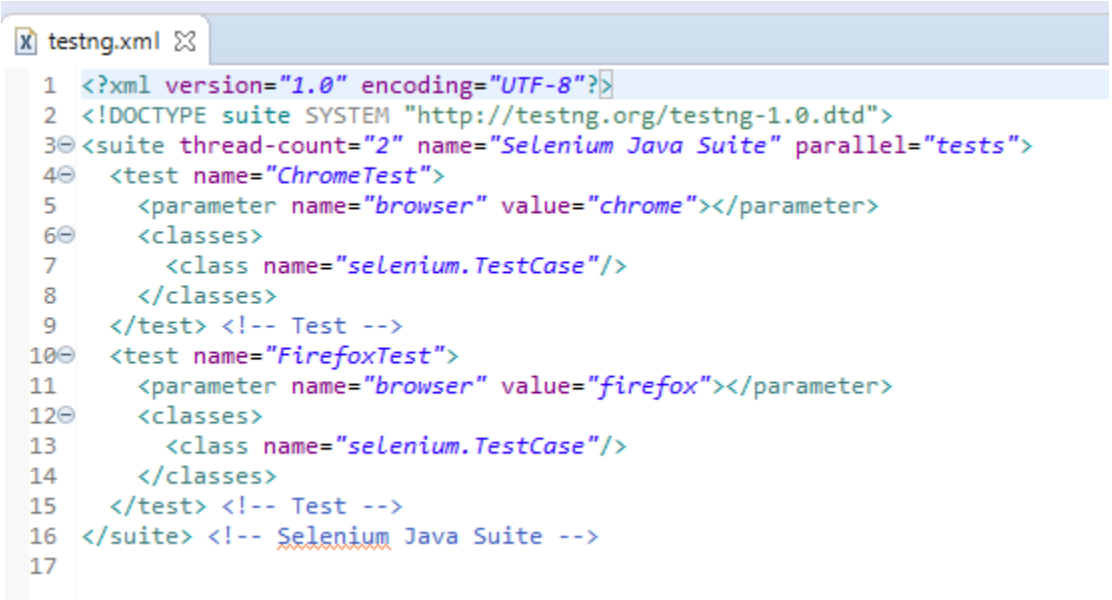


3. Select Next to get the Import Wizard. Browse to find the location of the Project.
4. Make sure the Project you want is checked, then hit Finish

Then you will see the Selenium-Java framework is listed in your Eclipse project list. Now you can start to explore the framework.

Configuration setup

This automation framework supports parallel execution, and using which a user can perform cross-browser testing. As mentioned earlier, this framework supports test execution in Google Chrome and Mozilla Firefox, and the configuration is made in the testng.xml file. (Screenshot below)



If the user needs to execute only in Chrome, then he/she can remove the test named "FirefoxTest", and if the user wants to execute only in Firefox, then the test named "ChromeTest" should be removed.

The timeouts are mentioned in the frameworkConfig.properties file. Hence if the user need to edit the timeouts mentioned in the file, he /she can edit the same. As of now, there are 2 types of timeouts available here:

1. Short Loading : 30 seconds
2. Long Loading : 60 seconds

Manage Object Repository

The repository allow the user to store all the **objects** that will be used in the scripts in centralized locations rather than letting them be scattered all over the **test** scripts. You can create a package in src/test/java say **com.projectname.testobjects.** Create simple Java class with proper name of your application pages for example, you have **LoginTest** suite with helper class **LoginHelper,** then you can create an object class say **LoginObects** and keep login

related objects in the same class with proper naming convention for objects (Camel case, already mentioned in the coding standard)

To Create Test Cases

Select the ***src/test/java*** directory for the application test case creation. Try to create the packages as the mentioned below. It will help you to arrange the test scripts in a structured manner.

- **com.projectname.testcases:** In this package, the user can create classes based on pages available in the web application and track the test cases in respective classes.
- **com.projectname.testhelpers:** User can create classes based on test cases which are written corresponding to each page This functions can be called from the test case class functions and this will improve the overall look of your script.
- **com.projectname.testrunner:** This package contains the most important test runner class **'TestRunner'**.

```
@Listeners(AutomationReport.class)
public class TestRunner extends AutomationBase {
    @BeforeClass
    @Parameters("browserName")
    public void setup(String browserName) throws Exception {
           launchBrowser(browserName);
    }

    @AfterSuite
    public void tearDownMethod() throws AutomationException, InterruptedException
{
           WebActionHelpers webObj = new WebActionHelpers();
           webObj.closeBrowser(driver);
    }
}
```

This **TestRunner** class will execute along with the test case classes and this will run the framework functionalities like launch app, execution report generation, and send mail with execution report.

To Check Execution Output details

Execution Report

To view the execution report, go to the **'Reports'** folder. Take the latest execution report which is on top with the execution time. User can open the html report in the web browser.

From this report user will get the entire test cases execution status.
In case of failed test cases the respective screenshot is attached with this report.

It's easy to track the developer scripting quality based on the test case created user details. The user section on html report is filter the test case executed based on the created user.

If you are not interested with the light theme, you can change it to dark using the bottom left theme button.

To View failed cases Screenshots

The user can view the failed cases screenshots in the screenshot folder which are automatically created when a test case got failed, the user need to open the same from project structure in order to view the failed case screenshot. Using the screenshots you can easily trouble shoot the failed cases.

Automated Mail Setup

The framework is capable to share the execution reports to the stakeholders with the attachments of current execution report and device log.

In order to change the mail content or recipients details, you need to update the same in **'emailConfig.properties'**

```
subject= Automation Test Report
message= Please find the attached report to get the details

# Enter the mail recipient list in the below field (to which the report to be
send after the execution)
maillist =

#Enter the sender email ID and password in the username and password field
username =
password =
```

In Subject session, the user can update the required text that he/she needs to show in the report mail. The maillist session is handling the recipient's details, who all need to get the execution details. It is possible to add multiple recipients in case if needed.

User should add the username (mail-id) and password of the sender email, from which the mail will be send to the recipients.

About RapidValue

RapidValue is a leading provider of end-to-end mobility, omni-channel, IoT and cloud solutions to enterprises worldwide. Armed with a large team of experts in consulting, UX design, application engineering and testing, along with experience delivering global projects, we offer a range of services across various industry verticals. RapidValue delivers its services to the world's top brands and Fortune 1000 companies, and has offices in the United States and India.

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