1. **Wallet 3.8.1 WEB Automation Suite Guide**
2. **Version 1.0**

Table of Contents

[1 Document Overview 4](#_Toc454995877)

[1.1 About this Document 4](#_Toc454995878)

[1.2 Intended Audience 4](#_Toc454995879)

[2 Functional Specifications 5](#_Toc454995880)

[2.1 Description 5](#_Toc454995881)

[2.1.1 Modules 17](#_Toc454995889)

[5 Disclaimer 20](#_Toc454995898)

Document Change History

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# Document Overview

## About this Document

The document covers the usage of Wallet and WEB Framework using **Appium,** **Selenium** & **TestNG**.

## Intended Audience

This document is targeted for following audience:

* Test Engineers
* Engineering Teams
* Quality Team

# Functional Specifications

## Description

**Why Selenium?**

* **Selenium** is a set of different software tools each with a different approach to supporting test automation.
* Because of its JavaScript based automation engine and the security limitations browsers apply to JavaScript.
* **Selenium** is a free (**Open source**) automated testing suite for web applications across different browsers and platforms.
* Can run tests across **different browsers.**
* Supports **various operating systems.**
* Can execute tests **while**the **browser is minimized.**

**TestNG**

* **TestNG** is a testing framework inspired from JUnit but introducing some new functionality that make it more powerful and easier to use.
* Run Tests based on **Annotations**.
* Test that your code is multithread safe.
* Flexible test configuration.
* Support for data-driven testing (with @DataProvider).
* Support for parameters.
* Supported by a variety of tools and plug-ins (Eclipse, IDEA, Maven, etc...).
* Default JDK functions for runtime and logging (no dependencies).

**Why Appium?**

Appium is an open-source tool for automating native, mobile web, and hybrid applications on iOS mobile, Android mobile, and Windows desktop platforms. Native apps are those written using the iOS, Android, or Windows SDKs. Mobile web apps are web apps accessed using a mobile browser (Appium supports Safari on iOS and Chrome or the built-in 'Browser' app on Android). Hybrid apps have a wrapper around a "webview" -- a native control that enables interaction with web content.

Importantly, Appium is "cross-platform": it allows you to write tests against multiple platforms (iOS, Android, Windows), using the same API. This enables code reuse between iOS, Android, and Windows testsuites.

**Appium Server :**

Appium is a server written in Node.js. It can be built and installed from source or installed directly from NPM:

**SDK (Software Development Kit) :**

A software development kit (SDK) is a collection of software development tools in one installable package. They ease creation of applications by having compiler, debugger and perhaps a software framework. They are normally specific to a hardware platform and operating system combination.An SDK can take the form of an application programming interfaces (APIs) in the form of on-device libraries of reusable functions used to interface to a particular programming language, or it may be as complex as hardware-specific tools that can communicate with a particular embedded system.

**ADB :**

ADB is included in the Android SDK Platform-Tools package. You can download this package with the SDK Manager, which installs it at android\_sdk/platform-tools/.

When you start an adb client, the client first checks whether there is an adb server process already running. If there isn't, it starts the server process. When the server starts, it binds to local TCP port 5037 and listens for commands sent from adb clients—all adb clients use port 5037 to communicate with the adb server.

**Tesseract:**

1. This package contains an OCR engine - libtesseract and a command line program - tesseract.

2. Tesseract has unicode (UTF-8) support, and can recognize more than 100 languages "out of the box".

3. Tesseract supports various output formats: plain text, hOCR (HTML), PDF, invisible-text-only PDF, TSV. The master branch also has experimental support for ALTO (XML) output.

4. Tesseract can be trained to recognize other languages. See Tesseract Training for more information.



**Combination of these tags are used while creating a Suite.**

### Setup Procedure

**The Procedure to Setup Automation Suite is as follows.**

**Prerequisite:- Install the listed software before the setup.**

* **Install Node JS:**
* **Download the Node Js from given Path :** [**https://nodejs.org/en/download/**](https://nodejs.org/en/download/)
* **Install Appium Through CLI :**
* **For Installing : npm install -g npm**
* **For Installing : npm install -g** [**appium@2.0.0-beta.33**](mailto:appium@2.0.0-beta.33)
* **For UIAutomator2 : appium driver install uiautomator2**
* **For Starting : appium**
* **Note : By Default it will run on : 127.0.0.1:4723**
* **Install Android Studio :**
* **https://developer.android.com/studio?gclid=Cj0KCQjw\_4-SBhCgARIsAAlegrUKHwPaKl0v4Fl6Uz5uGOlX5mnEB5gYWvmN7Q0lCRF2QbbcWHnUeJYaAutdEALw\_wcB&gclsrc=aw.ds**
* **Enable adb debugging on your device :**
* **To use adb with a device connected over USB, you must enable USB debugging in the device system settings, under Developer options.**
* **On Android 4.2 and higher, the Developer options screen is hidden by default. To make it visible, go to Settings > About phone and tap Build number seven times. Return to the previous screen to find Developer options at the bottom.**
* **You can now connect your device with USB. You can verify that your device is connected by executing adb devices from the android\_sdk/platform-tools/ directory. If connected, you'll see the device name listed as a "device."**
* **Install Tesseract:**
* **Download and install the tesseract from given path :** [**https://github.com/tesseract-ocr/tesseract/wiki/Downloads**](https://github.com/tesseract-ocr/tesseract/wiki/Downloads)
* **Install Any IDE like IntelliJ**
* **Install JDK(1.8 minimum)**
* **Set Environment Variables as mentioned in below lines :-**
* **Vaiable Name :- ANDROID\_SDK\_HOME**

**Path :- C:\Users\ <username> \AppData\Local\Android\sdk**

* **Vaiable Name :- ANDROID\_HOME**

**Path :- C:\Users\<username>\AppData\Local\Android\sdk**

* **Vaiable Name :- JAVA\_HOME**

**Path :- C:\Program Files\Java\jdk1.8.0\_171**

* **Pull the project using GIT**
* **URL:** [**http://blrgitlab.comviva.com/PVG/walletproject.git**](http://blrgitlab.comviva.com/PVG/walletproject.git)
* **After successfully importing the project , open the Project in IDE and wait until all the dependencies will not get downloaded.**

### Sequence Flow

#### Before Execution

**Mandatory Changes Required for Release**

Below are some changes which are needed for every release

**In mobile.properties**

*# HANDSET DETAILS*

**device.udid** = **ce11160b81626c3505**

*# Define the Application Package and Activity*

**app.package** = **com.batelco.sub  
app.activity** = **com.batelco.activity.Splashscreen**

*#Name of the Application*

*#No need to change when you are running the suite on e-floos/b-wallet.*

*#Need to change when you are running the suite on Muscat/OAB.***application.name** = **AFS  
project.name** = **Omantel**

*#change according to country* **application.country** = **OM**

*# E X E C U T I O N L A N G U A G E*

**language.code** = **en  
country.code** = **BH**

**Below ones are not mandatory but advised.**

*# Appium Server URL  
# Don't Change the below property unless required. default property is set***appium.server.url** = **http://0.0.0.0:4723/wd/hub**

*# HANDSET DETAILS***device.name** = **One Plus  
device.version** = **8.0.0  
device.platform** = **Android**

**In project.properties**

*#EXCEL\_FILENAME\_AND\_SHEET\_NAME***wallet.excel.filename** = **credentials.xlsx  
wallet.excel.sheetname** = **SHEET1**

#### App Data

**Mandatory Data Need to be Fill According to status and country**

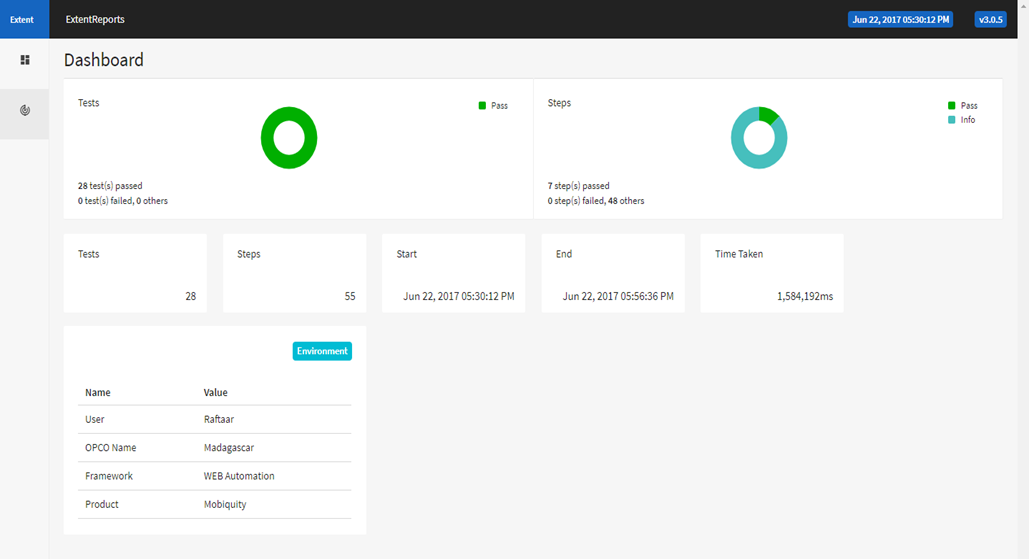
**In credentials.xlsx**

|  |  |  |  |
| --- | --- | --- | --- |
| **MSISDN** | **STATUS** | **COUNTRY** | **PIN** |
| 77565681 | BL | BM | 14709 |
| 77885544 | S | BM | 25809 |
| 77123478 | Y | BM | 14709 |
| 77898944 | B | BM | 25809 |

# Extra Specifications

### Reporting

1. The Reporting feature of the Automation Suite is implemented by using **Extent Report**. The
2. Automation Suite has very good reporting, one can easily understand the Test Results by seeing the report. For each failure case there would be one Screenshot attached and also Error logs would be there.



# Disclaimer

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