

Mobile app testing with Appium

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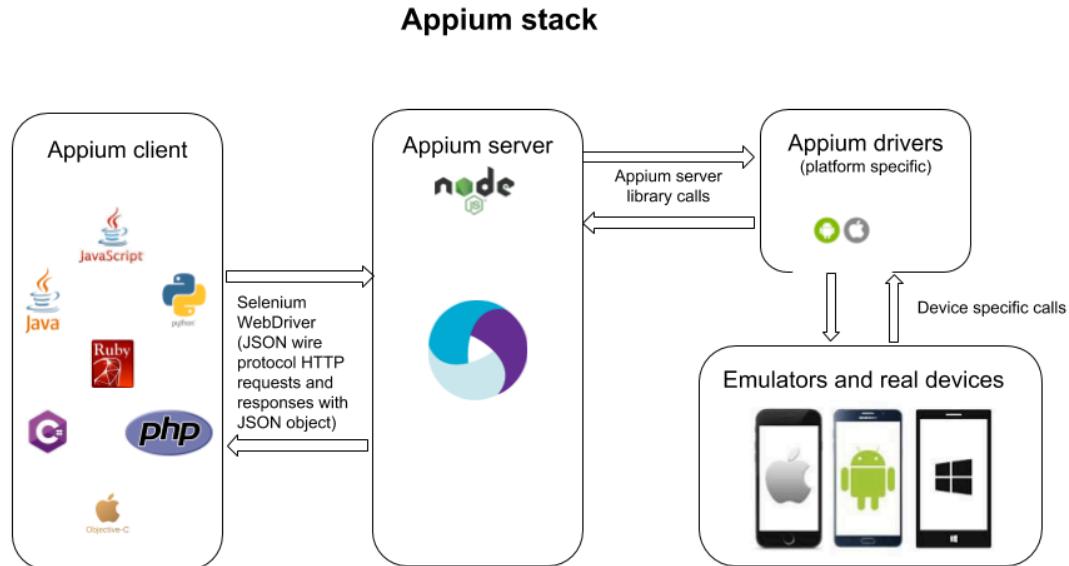


Agenda

1. What is Appium?
2. Environment Setup for Appium
3. How to add environment variables?
4. Install Appium
5. Add Appium Dependencies
6. Appium UIAutomator

What is Appium?

Appium is an open-source project for automating native, mobile web, and hybrid applications on iOS mobile, Android mobile, and Windows desktop platforms.



Environment Setup for Appium

1. Download Android SDK & Tools: [Link](#)
2. Set ANDROID_HOME environment variable. Example: `C:\Users\{username}\AppData\Local\Android\Sdk` for Windows and
`/Users/{username}/Library/Android/sdk` for macOS
3. Add `platform-tools` to the PATH environment variable. Example: `C:\Users\{username}\AppData\Local\Android\Sdk\platform-tools` for Windows and
`/Users/{username}/Library/Android/sdk/platform-tools` for macOS
4. Add `tools` to the PATH environment variable. Example: `C:\Users\{username}\AppData\Local\Android\Sdk\tools` for Windows and
`/Users/{username}/Library/Android/sdk/tools` for macOS
5. Add emulator device using AVD Manager from Android Studio or use a real device

How to add environment variables?

1. Windows: Control Panel > System and Security > System > Advanced system settings > Environment Variables
2. macOS: `~/.bash_profile` or `~/.zshrc` file. Example: `export ANDROID_HOME=/Users/{username}/Library/Android/sdk` and `export PATH=$PATH:$ANDROID_HOME/tools:$ANDROID_HOME/platform-tools`
 - Run `source ~/.bash_profile` or `source ~/.zshrc` to apply changes
 - Run command `echo $ANDROID_HOME` to verify the environment variable
1. Run command `adb devices` to verify the Android setup Note: To show hidden files in macOS, press `Cmd + Shift + .`

Install Appium

1. Install Node.js from nodejs.org
2. Install Appium using npm `npm install -g appium`
3. Install Appium Doctor `npm install -g appium-doctor`
4. Verify Appium installation `appium --version`
5. Install Appium Inspector: [Link](#)

Install Appium Driver

- `appium driver list` to see available drivers
- `appium driver install <driver-name>` to install a driver
- Android: `appium driver install uiautomator2`
- iOS: `appium driver install xcuittest`
- `appium-doctor --android` to verify Android setup
- `appium-doctor --ios` to verify iOS setup

Add Appium Dependencies

1. Add Appium Java Client dependency in `pom.xml` file.

Link: [Maven Repository](#)

```
1  <dependency>
2      <groupId>io.appium</groupId>
3      <artifactId>java-client</artifactId>
4      <version>9.3.0</version>
5  </dependency>
```

Appium UIAutomator

Documentation: [Link](#)

UiAutomator2 options for installed app:

```
1  UiAutomator2Options options = new UiAutomator2Options()
2      .setDeviceName("emulator-5554")
3      .setAppPackage("com.android.settings")
4      .setAppActivity("com.android.settings.Settings");
5
6  AndroidDriver androidDriver = new AndroidDriver(new URL("http://127.0.0.1:4723/"), options);
```


Thank you ❤

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