
======5_Appium setup on Windows=======

Softwares:

Appium CLI

- a. Node (**node -v**)
 - https://nodejs.org/en/download/ i.
 - Go with the LTS version (Long Term Support Version Stable) ii.
 - .msi file for WIN OS iii.
 - The path will be automatically set in Environment variables for Windows iv. (confirmed)
- b. Npm (**npm v**)
 - i. This will be installed as part of node is
 - ii. No need to explicitly install this
- c. Appium CLI:
 - i. To install Appium CLI: **npm install -g appium**
 - ii. To know the version: **appium -v**
 - iii. To get the location of Appium installation: where appium
 - To start the Appium server: **appium** iv.



- 3. 4723 Default port for Appium start
- 4. To get help for Appium commands: **appium --help**
- 5. To run Appium server on a different port: appium -p 4725
- To stop the Appium server: **Ctrl+C** V.

------Appium Desktop

a. <u>https://appium.io/downloads.html</u>

1.

- b. https://github.com/appium/appium-desktop/releases/tag/v1.22.0
- c. Appium-Server-GUI-windows-1.22.0.exe
- d. This is the latest version:

i. They are not giving Appium Inspector included in this app

- 1. This inspector helps in identifying the UI elements for Native apps.
- ii. You need to download other applications:
 - 1. https://github.com/appium/appium-inspector/releases
 - 2. Appium-Inspector-windows-2021.9.2.exe

NOTE:

- 1. We have installed Appium CLI and Appium Desktop app
- 2. We can not run both on the same ports
 - *a.* To run Appium server on a different port: **appium p 4725**

Java JDK -1.8

- a. https://www.oracle.com/java/technologies/downloads/#java8-windows
- b. jdk-8u311-windows-x64.exe
- c. To check Java is installed in your machine: **java -version**

Android Studio

- a. https://developer.android.com/studio
- b. Download and Install it with default settings.
- c. Let it download the required files.

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	Android Android	12.0 (5)					
	Andr	oid SDK Platform	31		31	1	Installed
	Sour	ces for Android 31			31	1	Installed
	ARM	64 v8a System Im	age		31	2	Not installed
f.	Intel	x86 Atom_64 Syste	em Image		31	2	Not installed

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Name	Version	Status
Android SDK Build-Tools 31		Installed
NDK (Side by side)		Not Installed
🛛 🗹 Android SDK Command-line Tools (latest)		Not Installed
CMake		Not Installed
Android Auto API Simulators	1	Not installed
Android Auto Desktop Head Unit Emulator	1.1	Not installed
Android Emulator	30.9.5	Installed
Android Emulator Hypervisor Driver for AMD Processors (installer)	1.7.0	Not installed
Android SDK Platform-Tools	31.0.3	Installed
Google Play APK Expansion library	1	Not installed
Google Play Instant Development SDK	1.9.0	Not installed
Google Play Licensing Library	1	Not installed
Google Play services	49	Not installed
Google USB Driver	13	Not installed
Google Web Driver	2	Not installed
Intel x86 Emulator Accelerator (HAXM installer)	7.6.5	Installed
Layout Inspector image server for API 29-30	6	Not installed
Lavout Inspector image server for APLS	3	Not installed

- i. To install Android SDK Command-line tools
 - 1. Click on Apply -> Ok -> Accept -> Next -> Finish
- h. SDK path:

g.

i. C:\Users\rajatverma01\AppData\Local\Android\Sdk

- ii. Make sure that folders are present
 - 1. platform-tools
 - 2. tools
 - a. Bin

i. Path setup:

i. User variables:

- **1.** C:\Users\rajatverma01\AppData\Local\Android\Sdk\
- ii. System variables:

1. ANDROID_HOME -

C:\Users\rajatverma01\AppData\Local\Android\Sdk\

	IOME
able name: ANDROID_F	IONIE
able value: C:\Users\raja	atverma01\AppData\Local\Android\Sdk\
Browse Directory Brow	vse File OK Cancel
System variables	Value
Variable	
	C:\Users\raiatverma01\AppData\Local\Apdroid\Sdk\
Variable ANDROID_HOME ComSpec	C:\Users\rajatverma01\AppData\Local\Android\Sdk\ C:\Windows\system32\cmd.exe
Variable ANDROID_HOME ComSpec DriverData	C:\Users\rajatverma01\AppData\Local\Android\Sdk\ C:\Windows\system32\cmd.exe C:\Windows\System32\Drivers\DriverData
Variable ANDROID_HOME ComSpec DriverData JAVA_HOME	C:\Users\rajatverma01\AppData\Local\Android\Sdk\ C:\Windows\system32\cmd.exe C:\Windows\System32\Drivers\DriverData C:\Program Files\Java\jdk1.8.0_301
Variable ANDROID_HOME ComSpec DriverData JAVA_HOME MAVEN_HOME	C:\Users\rajatverma01\AppData\Local\Android\Sdk\ C:\Windows\system32\cmd.exe C:\Windows\System32\Drivers\DriverData C:\Program Files\Java\jdk1.8.0_301 D:\Softwares\apache-maven-3.8.1-bin\apache-maven-3.8.1
Variable ANDROID_HOME ComSpec DriverData JAVA_HOME MAVEN_HOME NUMBER_OF_PROCESSORS	C:\Users\rajatverma01\AppData\Local\Android\Sdk\ C:\Windows\system32\cmd.exe C:\Windows\System32\Drivers\DriverData C:\Program Files\Java\jdk1.8.0_301 D:\Softwares\apache-maven-3.8.1-bin\apache-maven-3.8.1 8
Variable ANDROID_HOME ComSpec DriverData JAVA_HOME MAVEN_HOME NUMBER_OF_PROCESSORS OS	C:\Users\rajatverma01\AppData\Local\Android\Sdk\ C:\Windows\system32\cmd.exe C:\Windows\System32\Drivers\DriverData C:\Program Files\Java\jdk1.8.0_301 D:\Softwares\apache-maven-3.8.1-bin\apache-maven-3.8.1 8 Windows_NT

- 2. Path
 - a. %ANDROID_HOME%\platform-tools
 - b. %ANDROID_HOME%\tools
 - c. %ANDROID_HOME%\tools\bin

%ANDROID_HOME%\platform-tools %ANDROID_HOME%\tools

- %ANDROID_HOME%\tools\bin
- iii. Commands:
 - To verify that SDKManager path has been set properly: sdkmanager
 -version
 - 2. To get the list of SDKManager command sdkmanager --list
 - **3.** To get the list **adb**

d.

Appium Doctor

- a. To install appium-doctor: npm install -g appium-doctor
- b. To get help: appium-doctor --help
- c. To check Android setup: appium-doctor --android

Emulator setup (Create AVD):

- a. Open Android Studio
 - i. More actions -> AVD Manager
 - 1. Category -> Phone
 - 2. Name -> Pixel 3 -> Next
 - 3. System Image -> Select Latest
- b. AVD name: Pixel 3

Create Driver Session using Appium Desktop:

a. Start Appium Server GUI

i. The server should be running

- b. Start Appium Inspector -> Configurations for Desired Capabilities:
 - i. Remote Path: /wd/hub
 - ii. platformName : Android
 - iii. deviceName: Pixel 3
 - iv. automationName: UiAutomator2
 - v. udid: emulator-5554
 - vi. app: C:\Users\rajatverma01\Downloads\ApiDemos-debug.apk

Appium File <u>V</u> iew Help					-	٥	×
Remote Host 127.0.0.1				Remote Port 4723			
Remote Path /wd/hub				SSL			
> Advanced Settings							
Desired Capabilities Save	d Capability Sets 2 Attach to S	Android	Ð				
appium:deviceName	text \lor	Pixel 3	o	JSON Representation			
appium:automationName	text \lor	UiAutomator2	Û	{ "nlatfonmlismo": "Android"		<u>_</u>	
appium:udid	text \lor	emulator-5554	Û	appium:deviceName": "Pixel 3", "appium:automationName": "Dixel 3",			
appium:app	text \lor	C:\Users\rajatverma01\Down	Û	"appium:udid": "emulator-5554", "appium:app": "C:\\Users\\rajatverma01\\Downloads\\ApiDemos-debug.ap	k"		
Automatically add necessary A	Appium vendor prefixes on start		+	}			
Posired Capabilities Documenta	ation			Save Save As.		Start Sessi	ion

- vii. viii.
- Click on the Start session button and check whether the application is launched on Emulator or not

12:14 🗢 🖸	Source Actions	
API Demos		
Access'ibility	App Source	Selected Element
Accessibility	<android.widget.framelayout></android.widget.framelayout>	Select an element in the source to begin.
Animation	<android.view.viewgroup p="" resource-<=""></android.view.viewgroup>	
Арр	id="android:id/decor_content_parent">	
Content		Ъ
Graphics	API Demos	0
Media	Accessibility	Ф
NFC	Accessibility	
OS	Animation	2
Preference	App	۵
Text	Graphies	
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incirci incirci	NFC	
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- ix. c. NOTE:
 - i. To get UDID of device: adb devices
 - ii. DeviceName need not to be matched
 - iii. If your device is unauthorized:
 - 1. Open Settings in your device
 - 2. Go to About phone
 - 3. Click 7 times on Build number -> You'll become Developer
 - 4. System -> Advanced -> Developer Options
 - 5. Enable USB Debugging



Real Device setup: Enable USB Debugging:

- a. Install the USB drivers
 - i. Google: https://developer.android.com/studio/run/win-usb
 - ii. OEMs: <u>https://developer.android.com/studio/run/oem-usb</u>
- b. Steps can differ based on the phone manufacturer!
 - i. Settings -> System -> About Phone -> Click Build Number 7-8 times
 - ii. Settings -> Developer Options -> Enable USB Debugging
 - iii. Permission pop-up: Check the box and press Allow to recognize the computer
- c. -> run "**adb devices**" in CMD prompt to check if the device is recognized

a. <u>https://www.vysor.io/download/</u>
