

APPIUM MAC INSTALLATION STEP BY STEP PROCEDURE

Requirements

- MAC-14.X.Y and above (or latest Version)
- Xcode-15.X (or latest Version)
- Appium 2.x cmd line version (latest version)
- Android SDK
- Any IDE
- Java (JDK) greater than 11
- Other MAC internal software to execute Appium scripts (External dependencies)

IDE Installation

Install Eclipse or IntelliJ or any IDE of your choice

Java Installation

1. To install java latest version, navigate to the below link [Java Downloads | Oracle India](#)

Java 21 and Java 17 available now

JDK 21 is the latest long-term support release of Java SE Platform.

[Learn about Java SE Subscription](#)

[JDK 21](#) [JDK 17](#) [GraalVM for JDK 21](#) [GraalVM for JDK 17](#)

JDK Development Kit 21 downloads

JDK 21 binaries are free to use in production and free to redistribute, at no cost, under the [Oracle No-Fee Terms and Conditions](#) (NFTC).

JDK 21 will receive updates under the NFTC, until September 2026, a year after the release of the next LTS. Subsequent JDK 21 updates will be licensed under the Java SE OTN License (OTN) and production use beyond the [limited free grants](#) of the OTN license will [require a fee](#).

[Linux](#) [macOS](#) [Windows](#)

Product/file description	File size	Download
ARM64 Compressed Archive	181.88 MB	https://download.oracle.com/java/21/latest/jdk-21_macos-aarch64_bin.tar.gz (sha256)
ARM64 DMG Installer	181.24 MB	https://download.oracle.com/java/21/latest/jdk-21_macos-aarch64_bin.dmg (sha256)
x64 Compressed Archive	184.14 MB	https://download.oracle.com/java/21/latest/jdk-21_macos-x64_bin.tar.gz (sha256)
x64 DMG Installer	183.46 MB	https://download.oracle.com/java/21/latest/jdk-21_macos-x64_bin.dmg (sha256)

2. Click on the latest version of JAVA and download.
3. After download completed, double click on dmg file.
4. Drag the JAVA dmg file to the application folder.
5. Once installation is completed, open the terminal, and enter the below command
java -version
6. Should display the version of java installed.
7. If shown JAVA installation is completed.

NOTE: You can install any version of JDK which is greater than version 11.

To set JAVA Path (Environment variables)

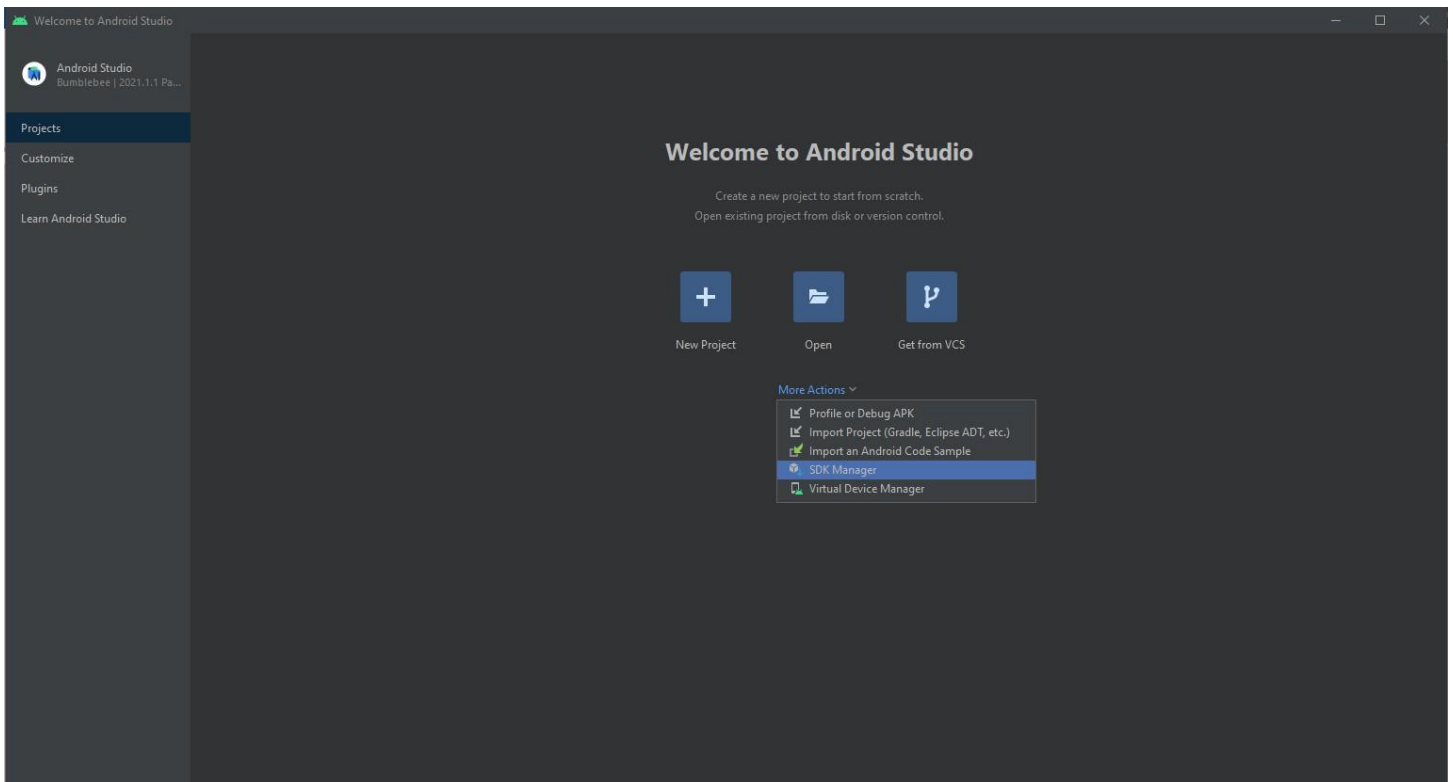
1. Open the terminal and enter the below command and press Enter
vim ~/.bash_profile (or) vim ~/.zprofile (Depending upon the default profile set in your MAC)

Appium Mac Installation

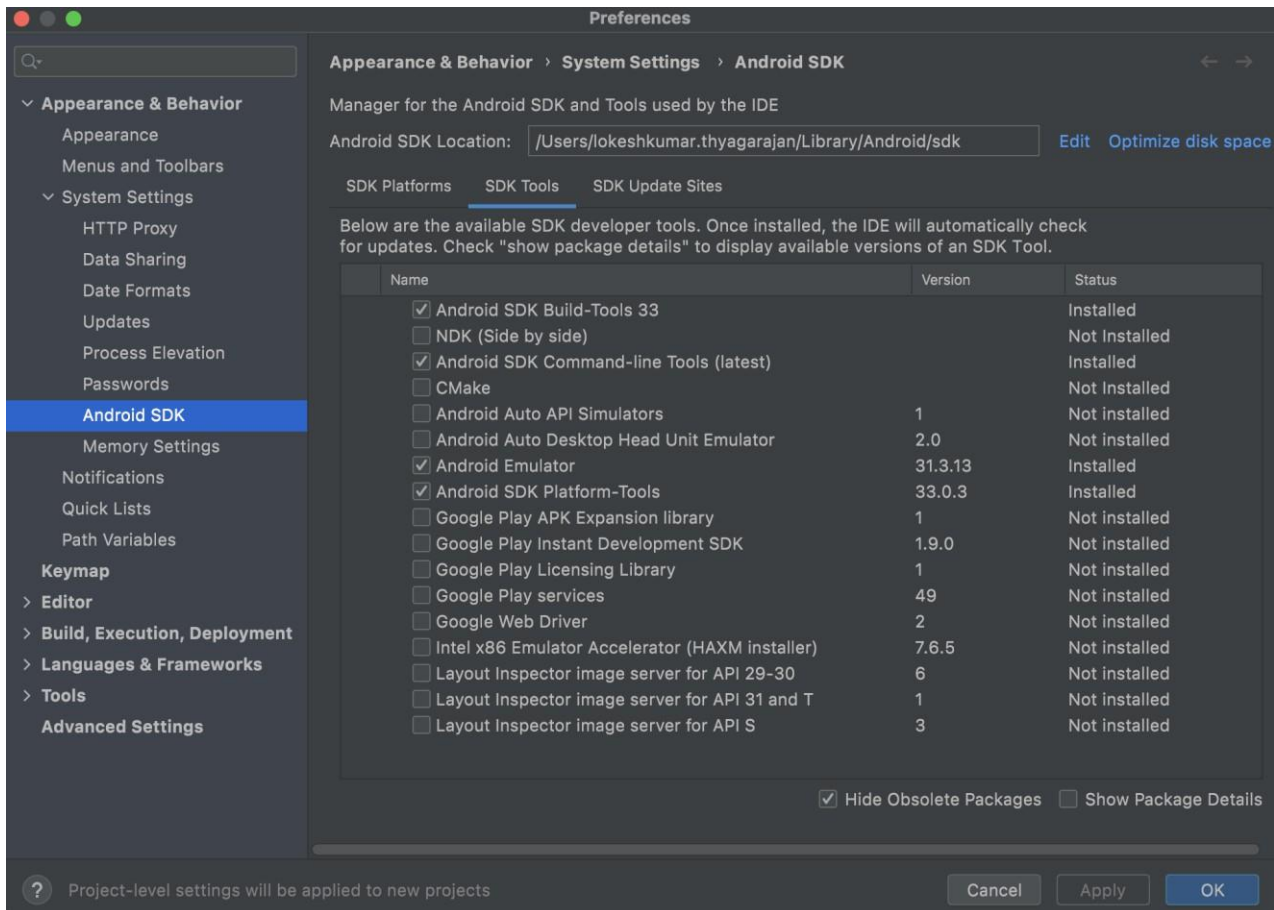
2. Press **I** button to make the editor in Edit/Insert mode
3. Now to enter the following command in editor
export JAVA_HOME=/Library/Java//Contents/Home (Note: Provide correct path of folder)
export PATH=\$JAVA_HOME/bin:\$PATH
4. After entering above command click on esc key on keyboard
5. Enter the following command in terminal
:wq
6. Command will save the profile and you navigate to the terminal window.
7. Type **echo \$JAVA_HOME** in new terminal window and verify the path is displayed in terminal.
8. If shown JAVA environment variable is set.

Android Studio installation for Android SDK and Emulator

1. To download the latest version of Android SDK files navigate to below link
<https://developer.android.com/studio/#downloads>
2. Click on the android SDK bundle for MAC and download it.
3. Once download is completed open the dmg file.
4. Drag the Android Studio dmg file to applications so it will be installed.
5. Open the Android studio and navigate to SDK Manager from the **More Actions** drop down



6. Click the SDK Tools tab and install the latest one for the ones checked in image (Note: If your processor is Intel then install Intel x86 Emulator Accelerator)



To set ANDROID_HOME Path (Environment variables)

1. Open the terminal and enter the below command and press Enter
vim ~/.bash_profile (or) vim ~/.zprofile (Depending upon the default profile set in your MAC)
2. Press **I** button to make the editor in Edit/Insert mode
3. Now to enter the following command in editor
export ANDROID_HOME=/users/<username>/Library/android/sdk (Note: Provide correct path of folder)
export PATH=\$ANDROID_HOME/platform-tools:\$PATH
4. After entering above command click on esc key on keyboard
5. Enter the following command in terminal
:wq
6. Command will save the profile and you navigate to the terminal window.
7. Type **echo \$ANDROID_HOME** in new terminal window and verify the path is displayed in terminal.

XCode installation

Method 1

1. Login with the Developer Account in apple website.
2. Go to downloads page (<https://developer.apple.com/download/>) and download the latest version of Xcode

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3. After download completed, double click on dmg file of Xcode.
4. Drag the Xcode dmg file to application folder.

Method 2

1. Open App Store in Mac
2. Search for XCode
3. Click Get option
4. Enter valid developer account and install the XCode

Method 3

1. Navigate to <https://xcodereleases.com/>
2. Download the **RELEASE** version of the latest Xcode.
3. After download completed, double click on dmg file of Xcode.
4. Drag the Xcode dmg file to application folder.

NOTE: It is always recommended to use the latest version of XCode by either Method 1 or 2

To install XCode command line tools

1. Once Xcode is installed then go to the terminal and type the below command
xcode-select --install
2. Open the terminal and enter the below command and press Enter
xcode-select --version
If the version is displayed, then xcode-select is installed properly.

Note: If command line tools are already installed the try to update the same to latest version by using the system software update option

To set XCode - Environment variables

1. Open the terminal and enter the below command and press Enter
sudo xcode-select -s /Applications/Xcode.app/Contents/Developer

External Dependencies

Note: If the below dependencies are already installed in your machine then ensure the latest version is installed.

Run the below command in terminal one by one to install the external dependencies required for Appium

1. **Homebrew:** Homebrew installs the stuff you need that Apple didn't. (Note below command needs to be entered in a single line). **(MANDATORY once)** Note: Should be entered in a single line in terminal.
`/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"`
2. **Homebrew update:** To update brew to the latest version . **(MANDATORY)**
`brew update`
3. To upgrade all the brew dependencies to the latest version . **(MANDATORY)**
`brew upgrade`

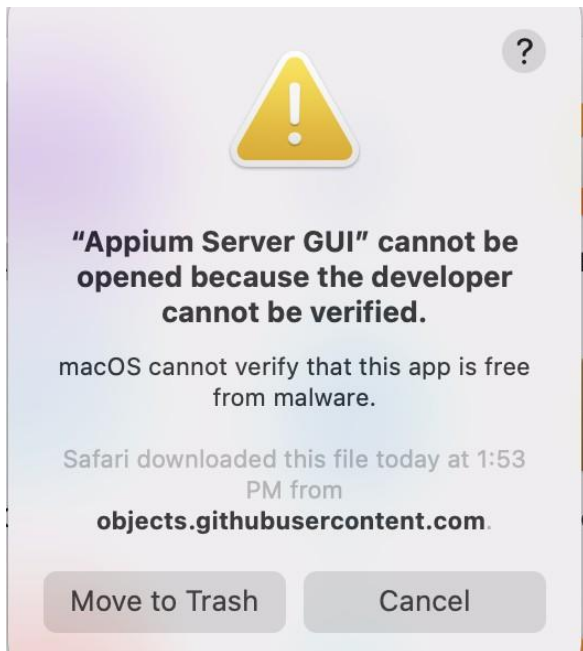
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4. **Node**: npm makes it easy for JavaScript developers to share and reuse code, and it makes it easy to update the code that you're sharing.
brew install node
5. Confirm the node and npm installation with below commands
node -v
npm -v
6. **Appium** : Install Appium cmd line version (**MANDATORY**)
npm install -g appium
7. **Appium Doctor**: Install Appium doctor cmd line
npm install -g appium-doctor
8. **UiAutomator2 driver** for Appium command line (**MANDATORY for Android**)
appium driver install uiautomator2
9. **XCUITest driver** for Appium command line (**MANDATORY for iOS**)
appium driver install xcuitest
10. **ideviceinstaller**: Cross-platform library and tools for communicating with iOS devices. Supports upto iOS 9. (included as part of libimobiledevice)
brew install ideviceinstaller
11. **Carthage**: It is a dependency management tool and intended to be the simplest way to add frameworks to your Cocoa application. (**MANDATORY**)
brew install carthage
12. **iOS-deploy**: To prepare for your Appium tests to run on a real device, It can deploy the iOS apps in real devices.
brew install ios-deploy
13. **xcPretty**: It is a fast and flexible formatter for xcodebuild
gem install xcpretty
14. **libimobiledevice**: A library to communicate with services of Apple iOS devices using native protocols. (**MANDATORY**)
brew install libimobiledevice --HEAD

Appium installation (Optional)

1. Navigate to <https://github.com/appium/appium-desktop/releases/latest> page for the GUI version of Appium Server GUI installation executable file..
2. Download the MAC executable file. i.e., **Appium-Server-GUI-mac-X.Y.Z.dmg** (**X.Y.Z should be the latest version displayed in page**)
3. Open the downloaded file.
4. Drag the Appium dmg file to Application folder
5. Once setup is completed Appium will be launched.
6. Proceed with below steps only if you face error in launching Appium as below

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7. Open terminal and run the below two commands separately i.e., one by one.
xattr -cr /Applications/Appium\ Server\ GUI.app

codesign --deep --sign - /Applications/Appium\ Server\ GUI.app

Appium Inspector installation

1. Navigate to <https://github.com/appium/appium-inspector/releases/latest> for the latest Appium inspector installation executable file.
2. Download the MAC executable file. i.e., **Appium-Inspector-mac-X.Y.Z.dmg** (X.Y.Z should be the latest version displayed in page)
3. Open the downloaded file and wait till installation is completed.
4. Once setup is completed Appium Inspector will be launched.
5. Proceed with below steps only if you face error in launching Appium Inspector
6. Open terminal and run the below command
xattr -cr /Applications/Appium\ Inspector.app

Update WebDriverAgent for Appium Server GUI (Optional)

For Appium Server GUI

1. Download the source code of the latest version of WebDriverAgent from the below link
<https://github.com/appium/WebDriverAgent/releases/latest>
2. Extract the source code zip file
3. Copy all the contents in the downloaded source code. **Note copy only the contents inside WebDriverAgent-X.Y.Z folder and not the complete folder**
4. In finder, navigate to Applications section
5. Right click Appium Server GUI and click Show package contents
6. Search for Appium-webdriveragent inside the Appium Server GUI
7. Once the folder is displayed, right click and click "Show in enclosing folder"
8. Ensure it is present inside node-modules

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9. Double click on the Appium-webdriveragent folder
10. Paste all the copied contents in step 3
11. Click replace all in the pop-up during file replace

Note: These changes needs to be done to test in latest iOS Versions. Since the Appium Server GUI is released long back, we need to update WebDriverAgent manually

Update WebDriverAgent for Appium 2.x i.e. cmd line (Mandatory)

Open terminal and run the below command

```
npm i -g appium-webdriveragent
```

WebDriverAgent Configuration for real iOS devices:

More details are available in [ios xcuitest real devices - appium](#)