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Downloading and Installing Android Studio

The following acronyms will be used:

- API: Application Programming Interface,
- IDE: Integrated Development Environment,
- JDK: Java Development Kit,
- JRE: Java Runtime Environment, and
- SDK: Software Development Kit.

[Android Studio](#) has replaced Eclipse for Android for developers since 2014. Android Studio provides everything you need to start developing apps for Android, including the Android Studio IDE and the Android SDK tools. To download and install Android Studio, take the following steps:

Android is kept added with new features, so it is not stable. Every download or installation has its unique problems. Once you encounter problems, you are most likely on your own to solve the problems. One nice resource for Android debugging is [Stack Overflow](#).

1. [Download Android Studio for Windows.](#)

With a single download, the following software will be included:

- Android Studio IDE,
- Android SDK tools,
- Android 5.0 (Lollipop) Platform,
- Android 5.0 emulator system image with Google APIs,
- Android virtual device, and
- Intel Hardware Accelerated Manager (HAXM).

The one I downloaded was put at

C:\users\wenchen\Downloads\android-studio-bundle-141.2117773.exe

2. [Install the Android Studio.](#)

To set up Android Studio on Windows:

- a. Launch the .exe file you just downloaded.
- b. Follow the setup wizard to install Android Studio and any necessary SDK tools. The installation results for my case include

- Android Studio installation location:

`C:\Program Files\Android\Android Studio\`

- Android SDK installation location (the AppData folder may be hidden):

`C:\Users\wenchen\AppData\Local\Android\sdk\`

- The maximum amount of RAM available for the Intel Hardware Accelerated Manager (HAXM) to use for all x86 emulator instances is 2 GB. In some cases, if the default size of installation is less than 1 GB, which might cause problems, you may set it manually to 1-2 GB via the following path of PC:

- i. Control Panel,
- ii. Programs,
- iii. Programs and Features,
- iv. Intel Hardware Accelerated Execution Manager, and
- v. Change.

- Select the UI Theme of IntelliJ.

The individual tools and other SDK packages are saved outside the Android Studio application directory. If you need to access the tools directly, use a terminal to navigate to the location where they are installed, for example,

`C:\Users\userid\AppData\Local\Android\sdk\`

3. (Optional) Download and install the JDK (Java Development Kit).

Before you set up Android Studio, be sure you have installed JDK 6 or higher (the JRE alone is not sufficient)—JDK 7 is required when developing for Android 5.0 and higher. To check if you have JDK installed (and which version), open a terminal and type “`javac -version`.” If the JDK is not available or the version is lower than 6, go download 64-bit JDK. The one I downloaded is

`C:\Users\wenchen\Downloads\jdk-8u51-windows-x64.exe`

On some Windows systems, the launcher script does not find where Java is installed. If you encounter this problem, you need to set an environment variable indicating the correct location. Select

Start menu ⇒ Control Panel ⇒ System and Security ⇒ System

Then open

Advanced system settings ⇒ Environment Variables

and add a new system variable `JAVA_HOME` that points to your JDK folder, for example,

`C:\Program Files\Java\jdk1.8.0_51\`

Android Studio is now ready and loaded with the Android developer tools, but there are still a couple packages you may add to make your Android SDK complete. Check [Adding SDK Packages](#). To start developing Android apps, read [Android Programming](#).

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