# To create an AVD:

This section describes how to create and setup an Android emulator.

**Steps:**

1. In Eclipse: select **Window > AVD Manager**

In Windows: **%install directory%\Android\android-sdk\** and open **AVD Manager.exe**

1. Select **Virtual Devices** in the left panel.
2. Click **New....** and the **The Create New AVD** dialog appears.
3. Type the name of the AVD, such as "my\_avd".
4. Choose a target. The target is the platform (that is, the version of the Android SDK, such as 2.3.3) you want to run on the emulator. Click here to see a description of the different SDKs.
5. Click Create AVD.

# Setting up your Android device for debugging in Eclipse

The Eclipse ADT plugin for Android provides a nice and easy way to run your code directly on it. There is an article about how to set it up on the Android developer’s website:

<http://developer.android.com/guide/developing/device.html>

**Basically here are the steps:**

1. Declare your application as "debuggable" in the Android Manifest. By Default this is enabled when you use Eclipse to run the project.
2. Enable USB debugging on your device. You can find that here:

**Settings > Development** and enable **USB debugging**.

1. Make sure your system recognizes your device. Normally you will not have to do anything here, but occasionally you will have to find the OEM USB drivers for your particular device. There is more information about that [here](http://developer.android.com/sdk/oem-usb.html).
2. Additionally, in Eclipse you can open the Devices view to see all Android devices by going to **Window > Show View > Other** and selecting **Android > Devices**.
3. When the device is turned on and Eclipse is running, when you go to run the application, the Android Device Chooser window should come up and your device should be listed in that window.
4. Select your device as the target, make sure that the phone is unlocked, and the application should load. Note: All the debugging statements will be displayed in Eclipse.

If you still can't see the device in the chooser window, open up a command prompt and type **adb devices** from your SDK platform-tools/ directory. I have added that directory to my system path variable to make life more simple:

C:\Program Files (x86)\Android\android-sdk\platform-tools\;

If your device is still not displayed it means that it is an issue with the device and you might need new drivers.

Also, note that a lot of people have had issues with the device not registering because of the USB cable. It cannot be connected through a USB hub, and generally using a USB port on the back of the computer is better if you have a desktop computer.