

Set Working environment for Android

To work on android we need to setup working environment. Before setting up android environment we need to fulfill some basics like

1. JDK must be installed (to install <http://www.oracle.com/technetwork/java/javase/downloads/index.html>)
2. Eclipse for java must be installed (<http://www.eclipse.org/downloads/>)

We are expecting that eclipse is working fine.

1. Download Android SDK

It includes only the core Standard development Kit (SDK) Tools, which will help us in developing Android Applications.

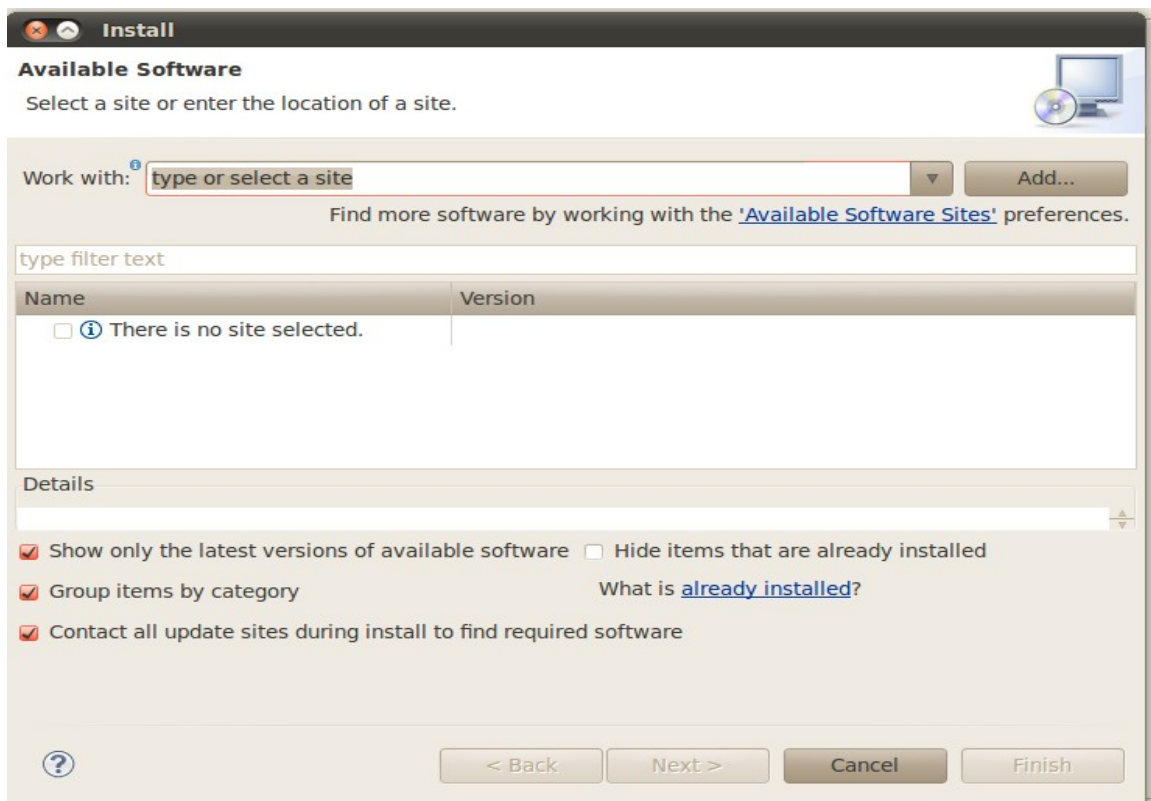
Download Android SDK from <http://developer.android.com/sdk/index.html>

After downloading .zip or .tgz package (instead of the SDK installer), unpack it to a safe location on your machine.

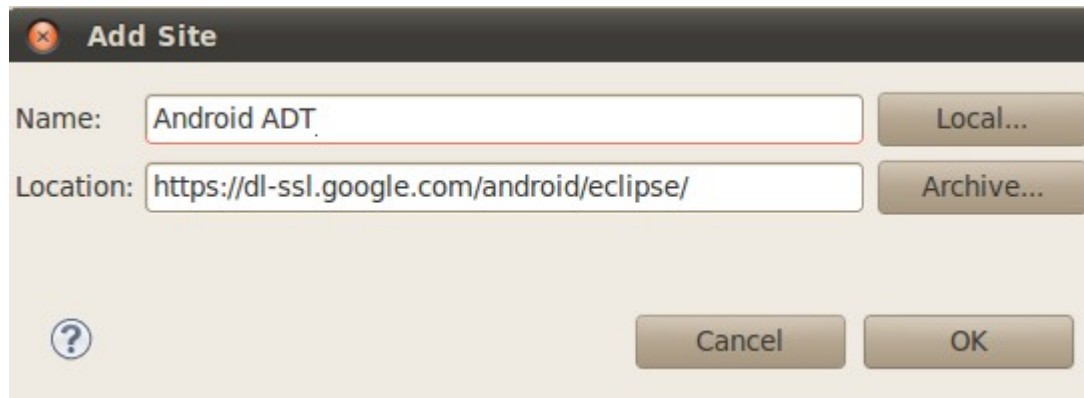
We will be using it later on in coming steps.

2. Install Android development Tools (ADT)

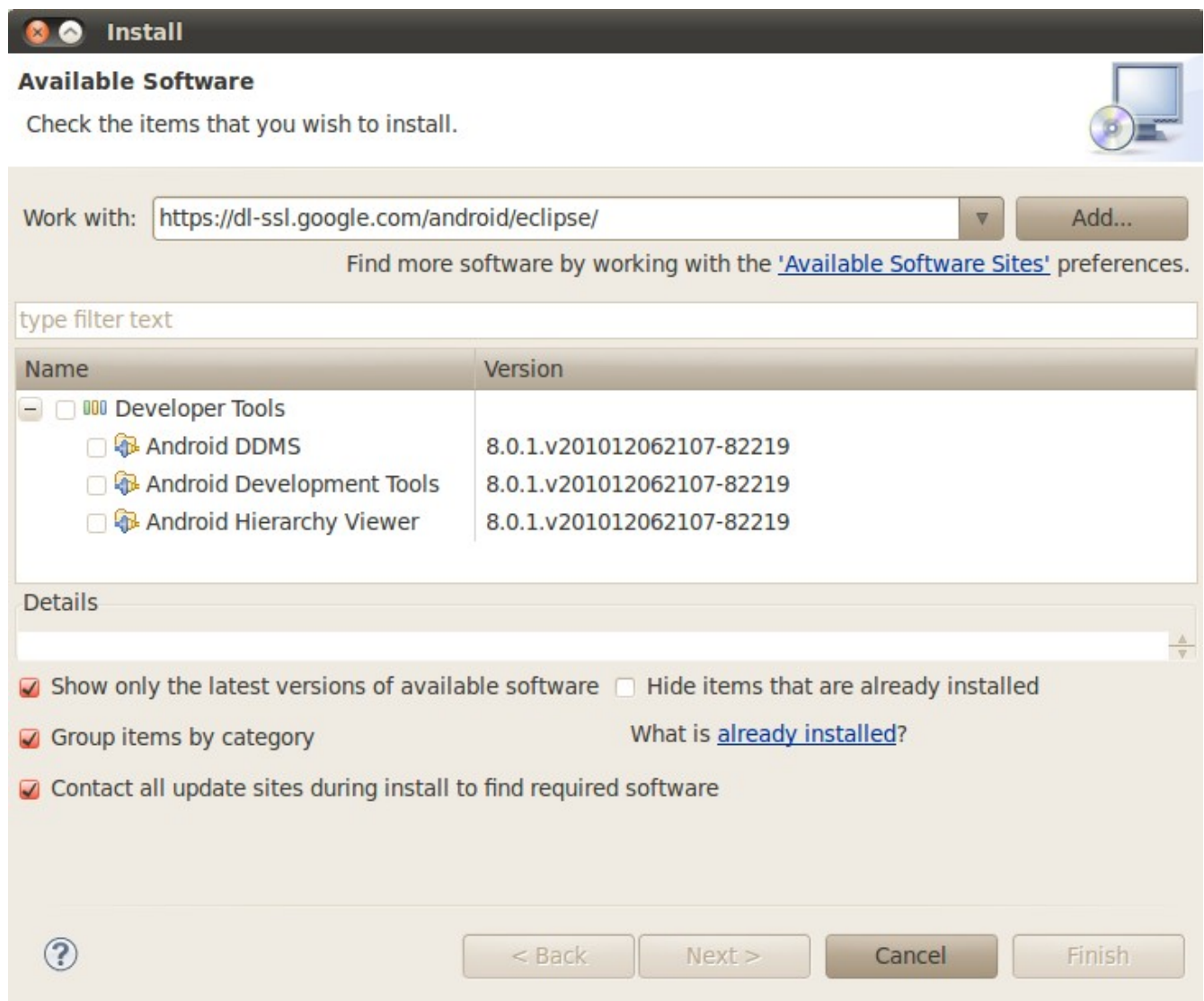
In Eclipse From Help menu click on *Install New Software* option



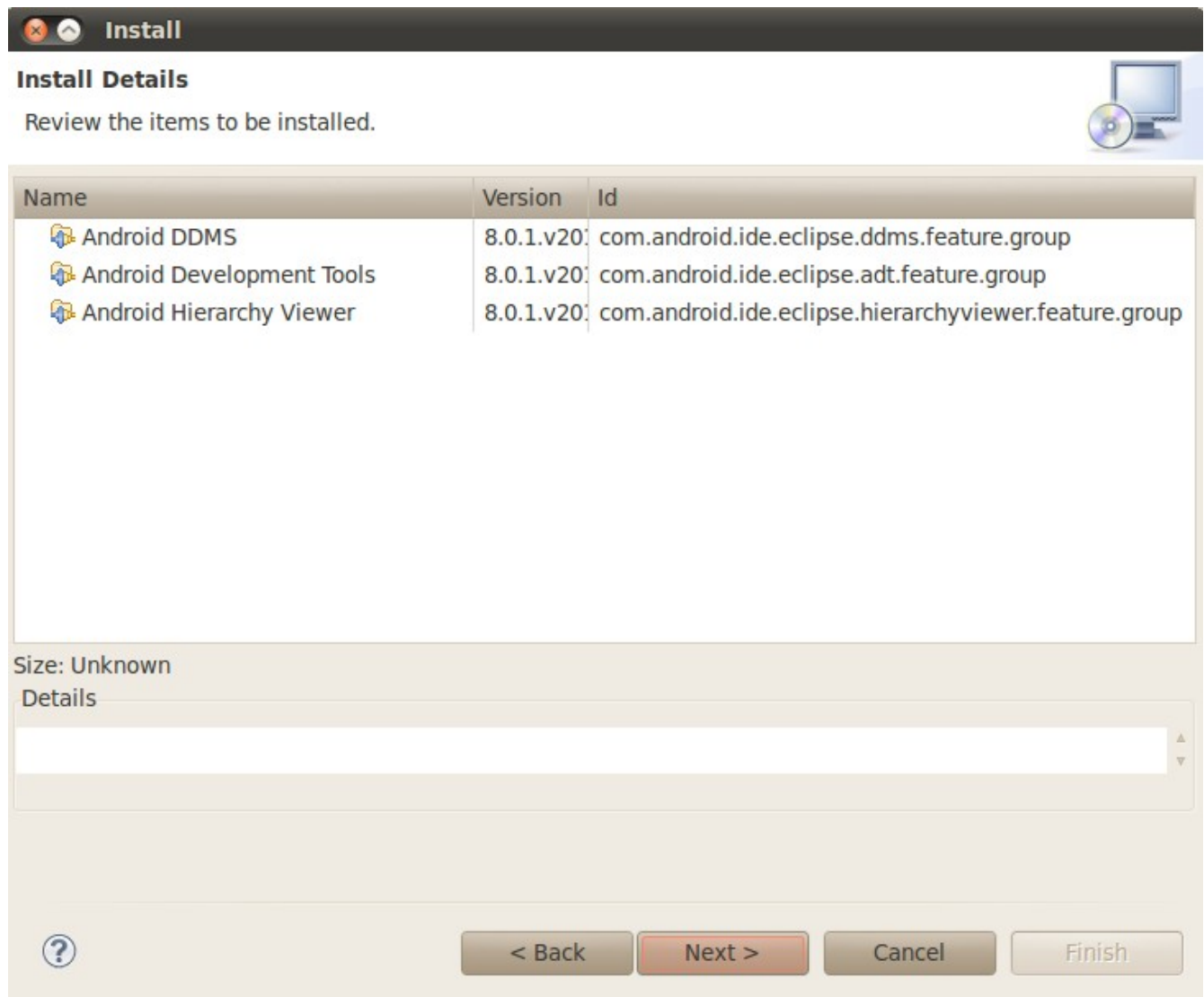
Click on *Add* button and on *Add Site* window fill following url to download Android ADT, you can enter any name in *Name* field, and click on *Ok* button.



Eclipse will search for the available tools and show their list.



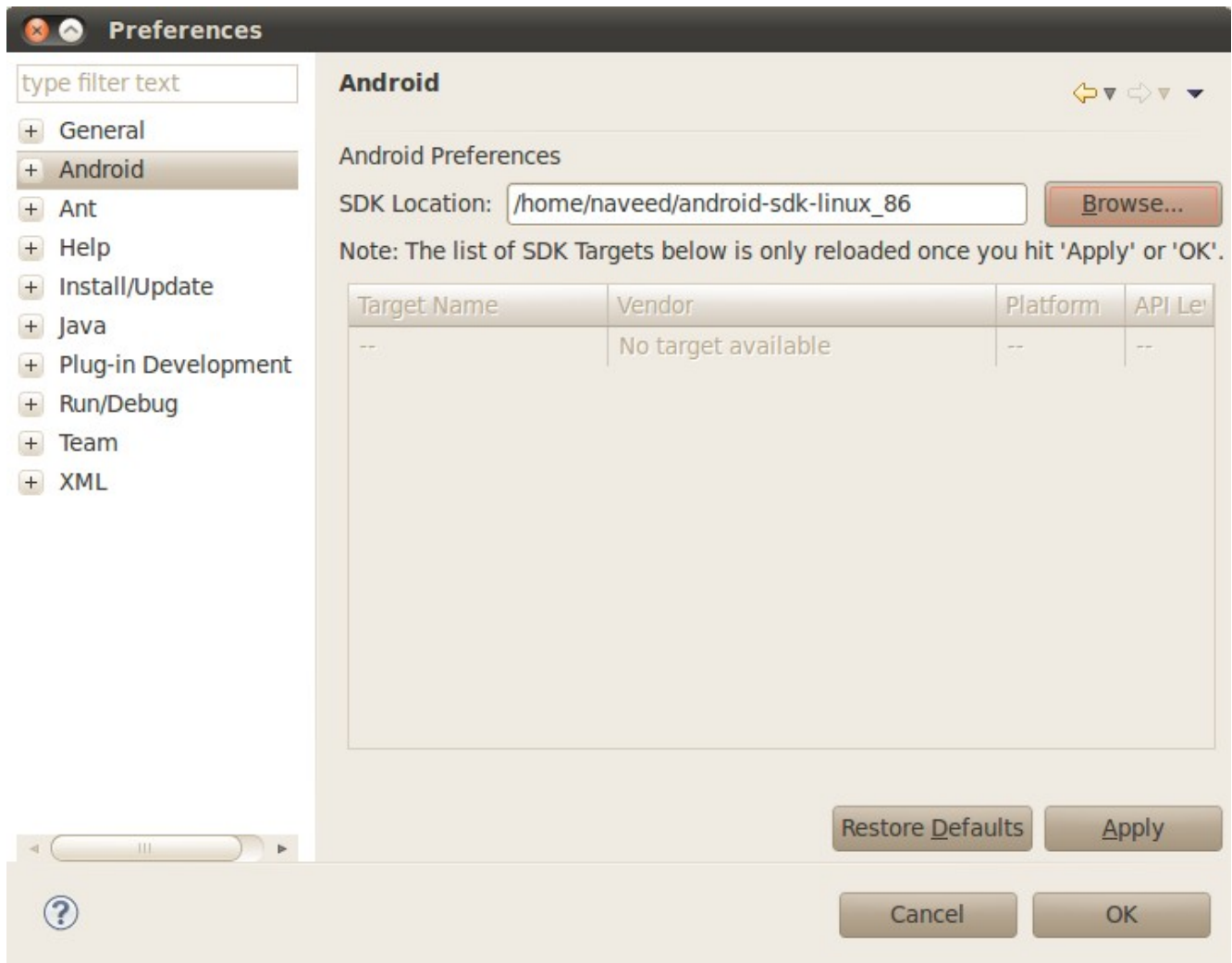
Select all tools and click on *Next*. It will start checking the things and will show list of tools which will be installed.



Click on *Next* button and after a license verification it will start downloading and may take some time depending upon the speed of Internet. After successfully installing it will ask to restart eclipse. Restart it.

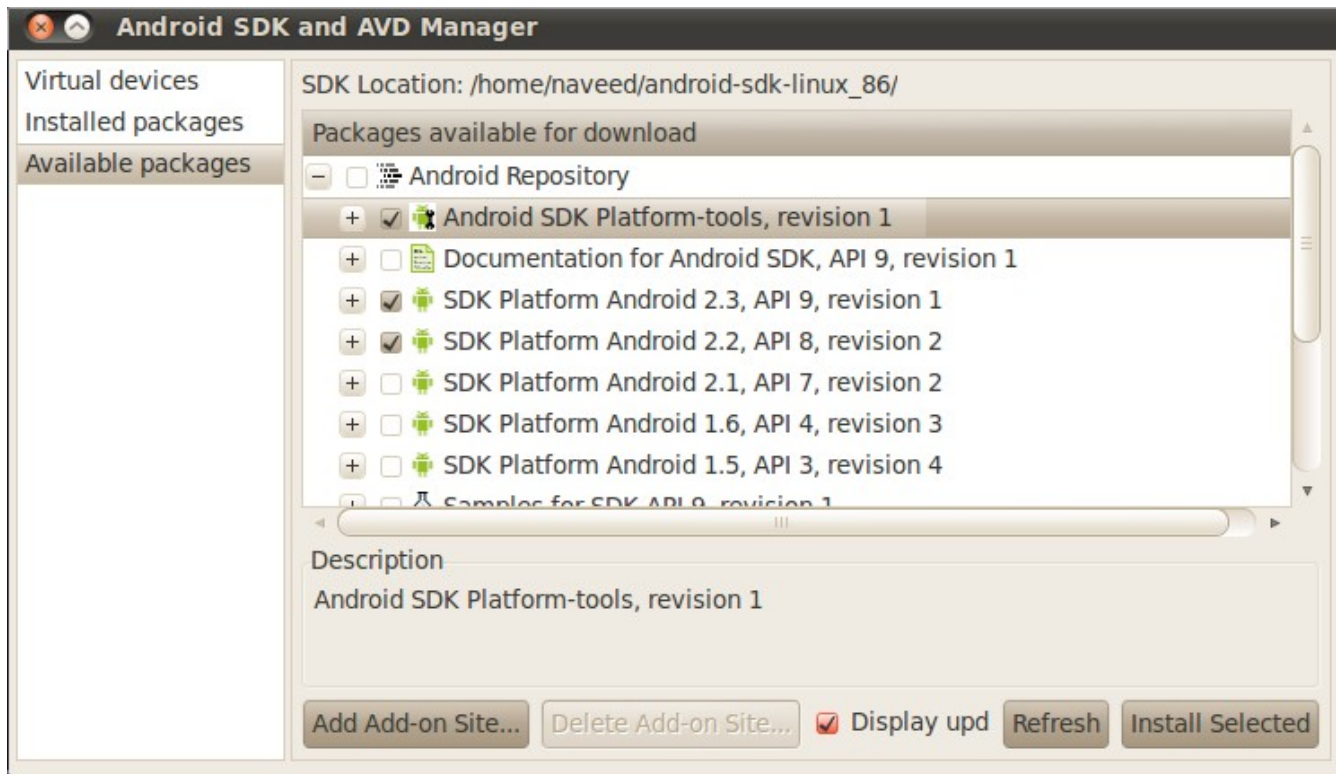
3. Adding SDK Location

From Window menu click on Preferences there would be Android option visible (which is also assurance that android ADT is installed :)). Here we need to tell Eclipse where the Android SDK is located. So click on *Android* from list, and then browse it to the SDK unzipped directory and click on *Ok*.

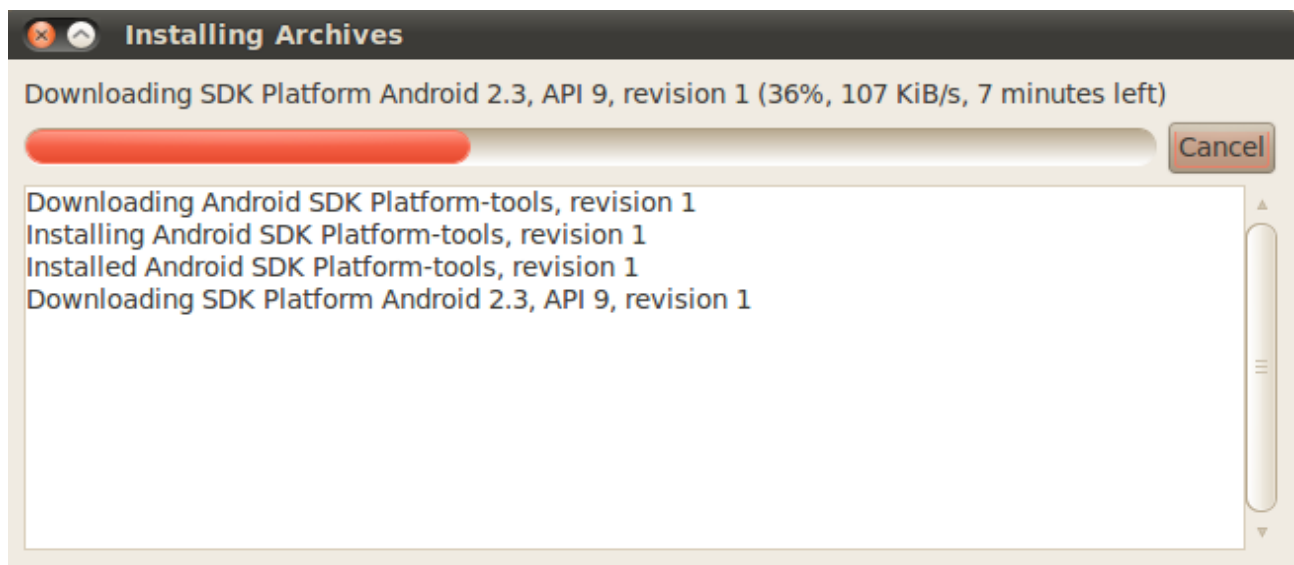


4. Install SDK Latest Version

After that come up on *Android SDK and AVD Manager* from the *Window* menu. Select available packages and select the latest version of the SDK, in my case I will select followings, you can select based on your own choice and click on *Install Selected* to complete the installation, and restart eclipse after it.



During installation It would be looking like this.




5. Set Up Device

As we are almost done, last step is we need to set up device to work, real device can be attached, but we will be using simulator for the scope of our work. From eclipse interface click on this icon from top left side of IDE.



Select the option *Virtual Devices* and click on *New*.

On Android Virtual Device screen fill the followings and click on Create AVD.



The screenshot shows the 'Create new Android Virtual Device (AVD)' dialog box. It contains the following fields and options:

- Name:** A text field containing 'Device'.
- Target:** A dropdown menu showing 'Android 2.3 - API Level 9'.
- SD Card:** A section with two radio buttons: 'Size' (selected) and 'File'. The 'Size' option has a text field with '100' and a unit dropdown set to 'MiB'. The 'File' option has a text field and a 'Browse...' button.
- Skin:** A section with two radio buttons: 'Built-in' (selected) and 'Resolution'. The 'Built-in' option has a dropdown menu set to 'Default (HVGA)'. The 'Resolution' option has two text fields for width and height, separated by an 'x'.
- Hardware:** A table with two columns: 'Property' and 'Value'. It contains one row: 'Abstracted LCD density' with the value '160'. There are 'New...' and 'Delete' buttons to the right of the table.
- Override the existing AVD with the same name:** A checkbox that is currently unchecked.
- Buttons:** 'Cancel' and 'Create AVD' buttons at the bottom.

It will show the device added in Android SDK and AVD manager screen



Now our setup is complete and we are ready to develop android applications.