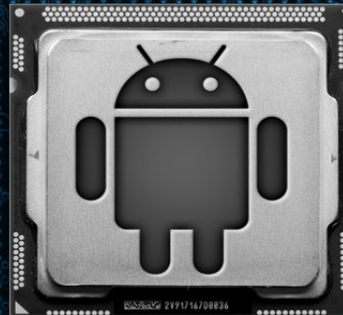


Android fundamentals



BUS_RATIO	JP1	JP2	JP3
X1.5/3.5	OFF	OFF	OFF
X2.0	ON	OFF	OFF
X2.5	ON	ON	OFF
X3.0	OFF	OFF	ON
X4.0	ON	ON	OFF
X4.5	ON	ON	ON
X5.0	OFF	ON	ON
X5.5	OFF	ON	OFF

JP4 1-2 = DISABLE INT VGA
JP4 2-3 = ENABLE INT VGA

Segesvári
Dávid



@segi67

Android 1.0

- 23 September 2008.
- Notification bar
- Gmail integration
- Android market



Android 1.1

- February 9, 2009
- it patched a ton of bugs
- The ability to roll out updates over the air





Android 1.5 *Cupcake*

- April, 30 2009
- An on-screen keyboard.
- Extensible widgets
- Clipboard
- Video capture and playback

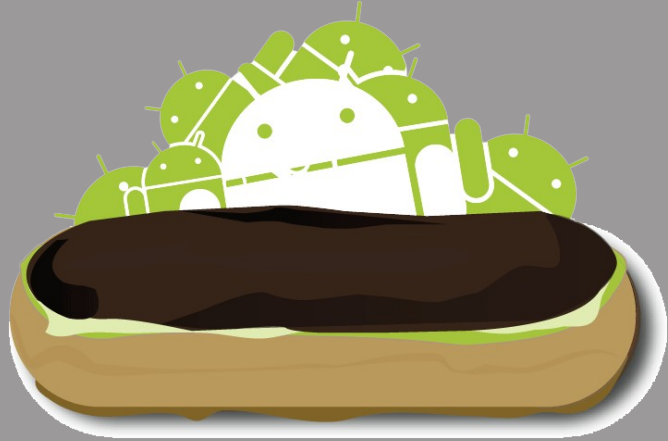




Android 1.6 *Donut*

- September, 15, 2009
- CDMA support
- Support for WVGA resolutions
 - 800 x 480
 - 848 x 480
 - 852 x 480
- Quick search box
- New Market
 - It started using green-white color scheme
- New tabs:
 - Top free apps
 - Top paid apps





2.0/2.1 Android *Eclair*

- October 26, 2009
- Multiple account support.
- Google Maps Navigation.
- Quick Contact.
- Revamped browser.
- Live wallpapers.
- Speech-to-text.





2.2 Android *Froyo*

- May, 20, 2010
- Just-In-Time (JIT) optimization
- Wi-Fi hotspot functionality
- Flash support
- V8 Javascript integration in browser app
- Install application to sd card

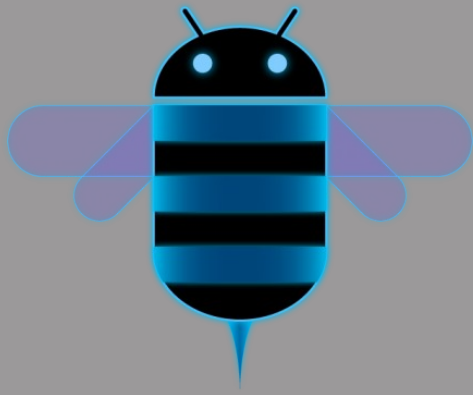




2.3 Android *Gingerbread*

- December 6, 2010
- Improved copy and paste function
- Better battery and app management tools
- Support for front-facing cameras.
- NFC support





3.x Android *Honeycomb*

New direction
on
new foundations



Motorola XOOM





4.x Android

Ice cream sandwich

- Continuation of Honeycomb
- November 14 2011
- Android Beam
- Face unlock
- Data usage analysis
- New calendar and mail apps



Install a new android
development environment



First step, Install Java JDK

Ubuntu: `sudo apt-get install sun-java6-jdk`

Windows: Download JDK from [here](#), and run .exe

Both: Setup the **PATH** and **JAVA_HOME** environment variables



Second step, Install IDE

Which IDE:

- NetBeans
- Eclipse ← *Now I use this*
- IntelliJ



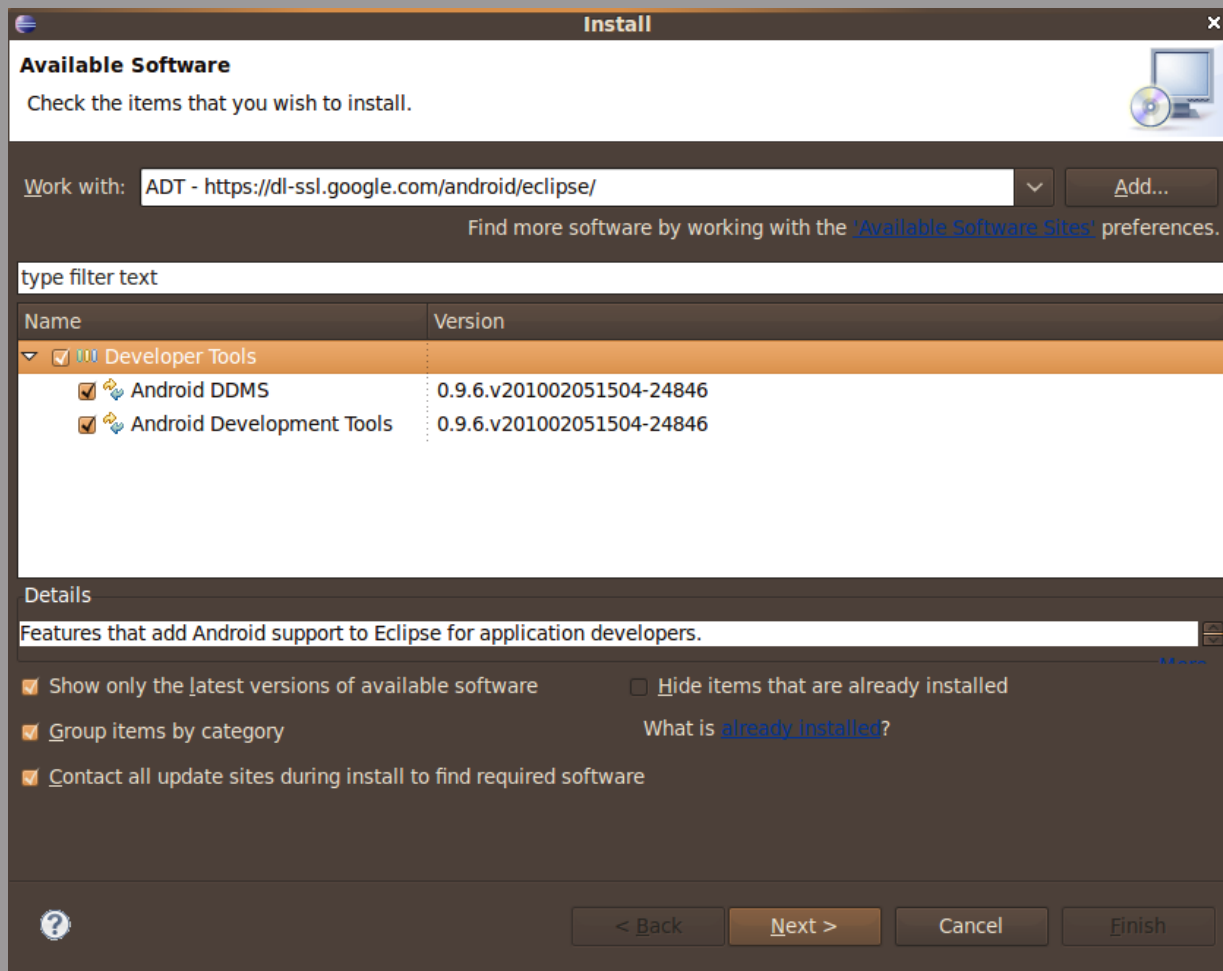
Third step, Install ADT

(Android Development Tools)

- Launch eclipse
- Select: Help->Install new software
- Click „Add” button
- Add new source:
 - Name: ADT (optional)
 - Location: <https://dl-ssl.google.com/android/eclipse/>



Install ADT 2.



- Restart Eclipse

Fourth step, Install Android SDK

(Android Software Development Kit)

- Download from here
- Extract .zip or .tar file to
 - In Ubuntu for example: /usr/local/
 - `sudo nano ~/.bashrc`
 - `export PATH=${PATH}:<path to your $SDK_ROOT/tools>`
 - In Windows for example: c:\program files
 - Go to the Control Panel, and select the System (Windows Vista/7)
 - Select the Advanced settings
 - Click on Advanced system settings on the left.



Install Android SDK 2.

Ubuntu:

- Open terminal and type: *android*

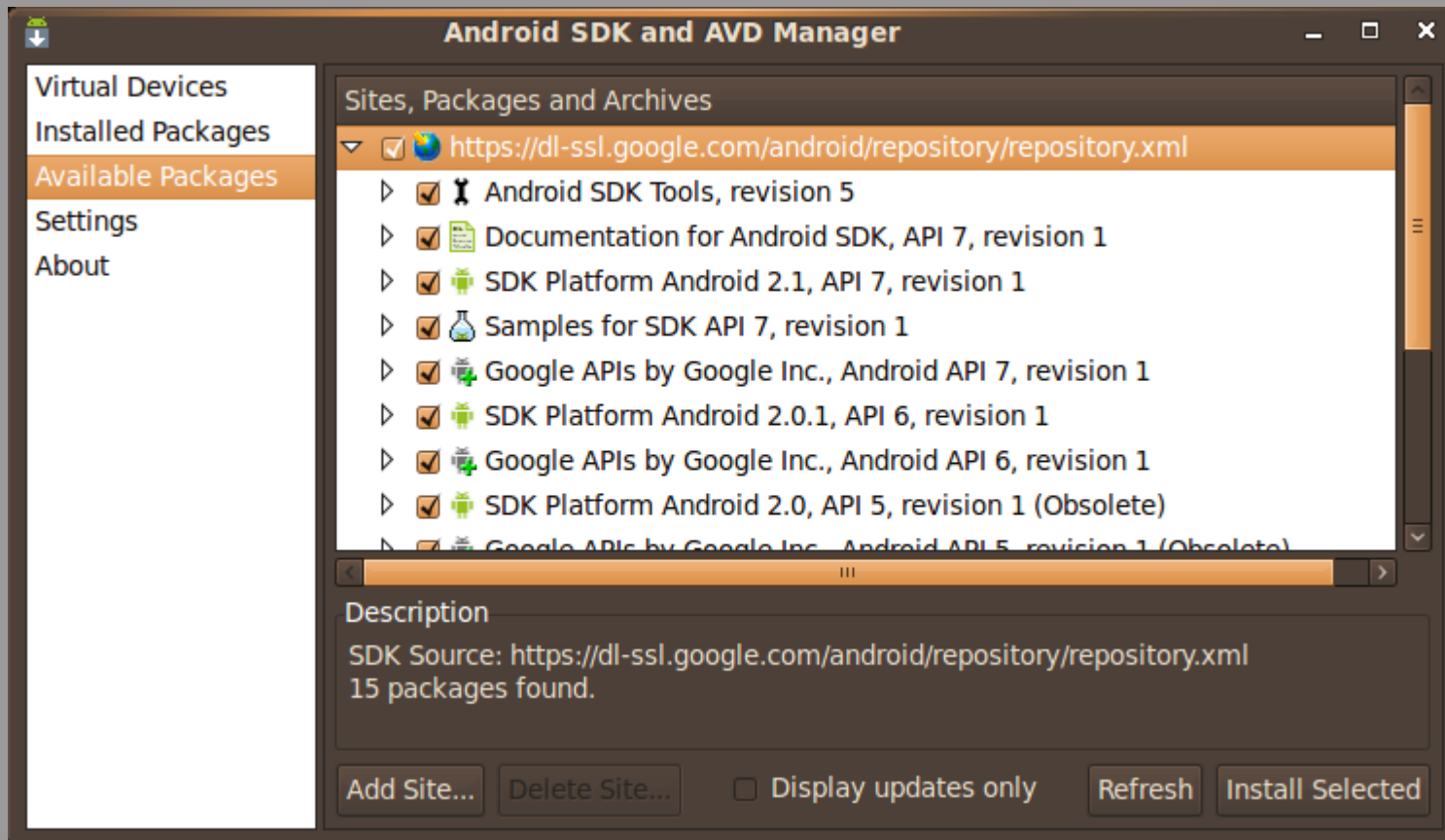
Windows:

- Launch SDK Manager.exe in SDK's folder



Install Android SDK 3.

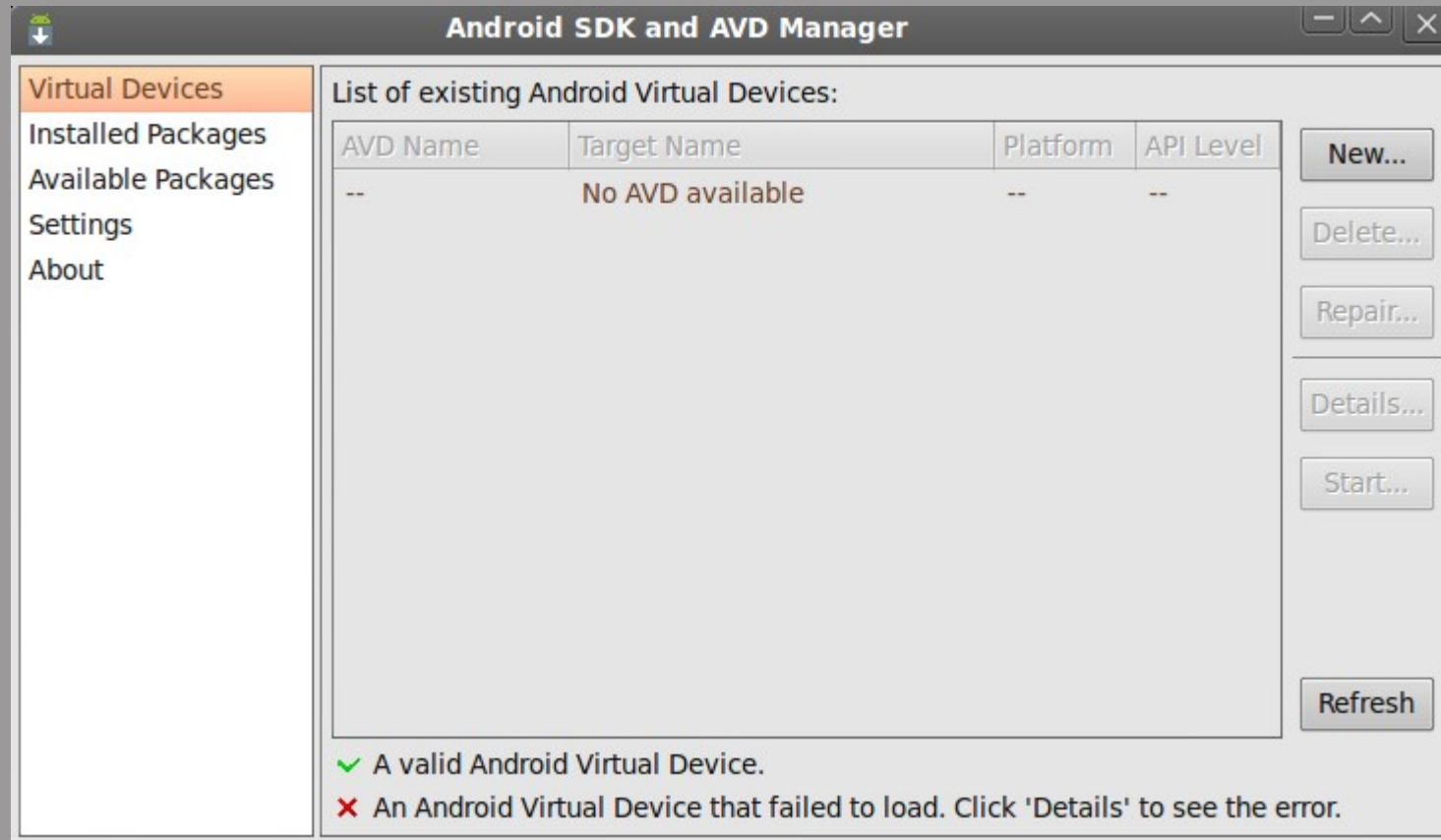
- Select „Settings” menu on the left side and check the first checkbox „Force https://... sources to be fetched using http://...”
- Then select „Available Packages” in the left menu
- Check package which you want to install



Install Android SDK 4.

How to create an Android Virtual Device in Eclipse?

- Firstly, setup SDK location in *Preferences->Android*
- Launch AVD Manager: *Window->AVD Manager*



Install Android SDK 5.

Create new AVD

Name:

Target:

SD Card:

☒ Size: MiB

☐ File:

Skin:

☒ Built-in:

☐ Resolution: x

Hardware:

Property	Value
Abstracted LCD density	160

☐ Force create

Android SDK and AVD Manager

Virtual Devices

Installed Packages

Available Packages

Settings

About

List of existing Android Virtual Devices:

AVD Name	Target Name	Platform	API Level
✓ my_device	Android 2.1	2.1	7

✓ A valid Android Virtual Device.
✗ An Android Virtual Device that failed to load. Click 'Details' to see the error.



Use your device for
develop



Windows:

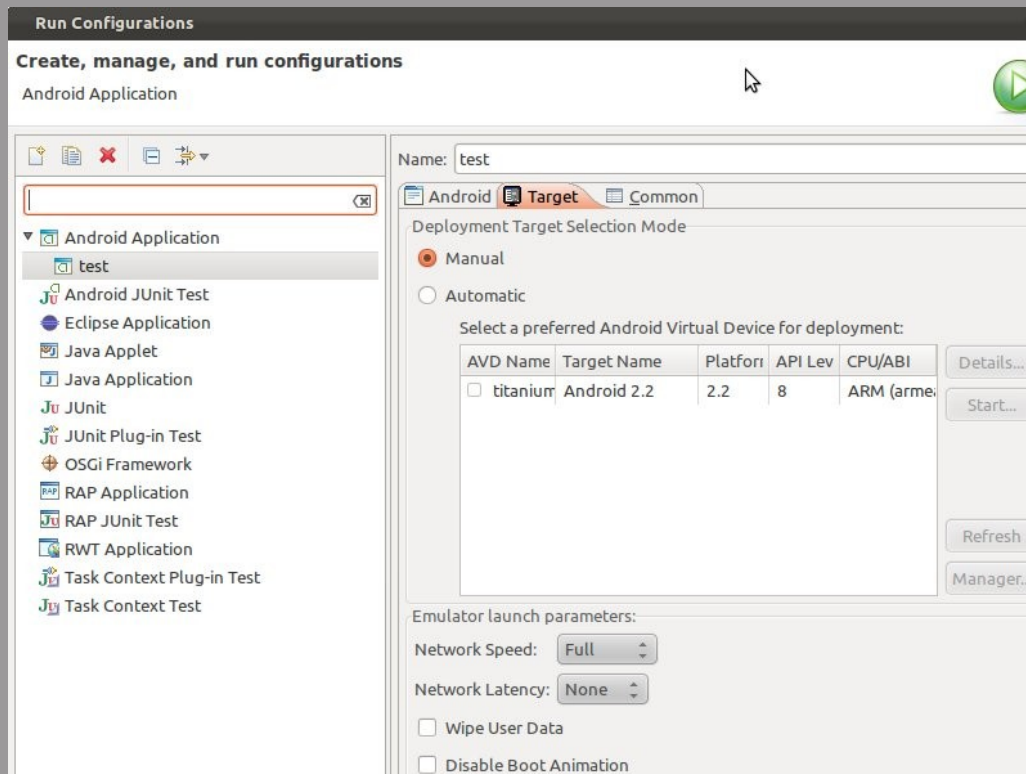
- Just install the usb driver in ADV

Linux:

- `sudo nano /etc/udev/rules.d/51-android.rules`
- Search producer code [here](#)
- `service udev restart`

Eclipse:

- Run → Run Configuration



Android Device Chooser

Select a device compatible with target Android 2.1.

☒ Choose a running Android device

Serial Number	AVD Name	Target	Debug	State
80A352166041298327	N/A	✓ 2.1-update1		Online

☐ Launch a new Android Virtual Device

AVD Name	Target Name	Platform	API Level	CPU/ABI
titanium_7_HVGA	Android 2.2	2.2	8	ARM (armeabi)

Details...
Start...
Refresh
Manager...

Cancel OK

My phone is in the top section





Merry
Christmas