

Introduction to Android

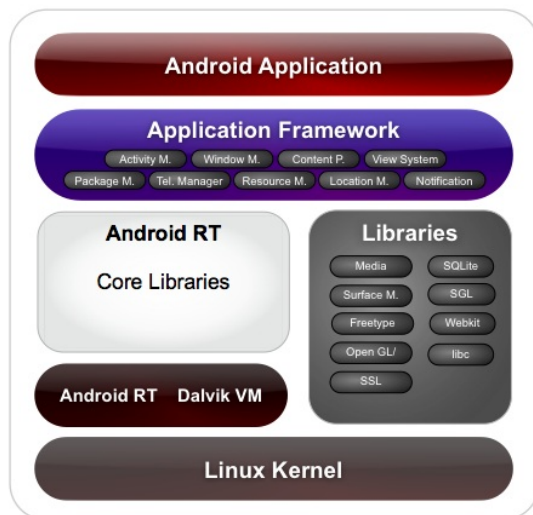
Introduction

Android is a Linux-Based OS which target-platform are mobile devices.
Nowaday, over the 60% of smartphones in the world are running Android.
It is Open Source, it has a good SDK, and it is Linux, this made developers quickly start to love Android.
Android is under ongoing development by Google, which also provides the Android SDK.
Each Android version corresponds to a specific API level, more API levels might be compatible each other.

Life, Death and Miracles

When	What
2003	Android development starts.
2005	Google buys Android Inc..
oct 2008	HTC Dream is the first Android phone to be commerced.
apr 2009	Android 1.5 "Cupcake" released, based on Kernel Linux 2.6.
oct 2011	Android 4.0 "Ice Cream Sandwich" released, based on Kernel Linux 3.0.
q1 2012	More than 800.000 Apps on the Play Store.
q3 2012	1.5 Million new device activation per day.
q1 2013	Over 600 Million total activation.

Internal Structure



Linux Kernel

The Linux Kernel provides basic functions to Android :

- Hardware Abstraction Layer
- C/C++ APIs.
- GCC.
- Memory Manager
- Scheduler

Android Runtime

Android RT consist essentially of core C and Java libraries used by the DVM.

- LibC
- OpenGL ES
- Webkit
- SQLite
- ...

Application Framework

- Development libraries
- Sdk Interface
- Windows Provider
- Package Manager

Dalvik Virtual Machine

See the following charapter for this.