Android 3.0

Portland Java User Group
Sean Sullivan
March 15, 2011

- Introduction
- Android devices
- Android 3.0
- App development

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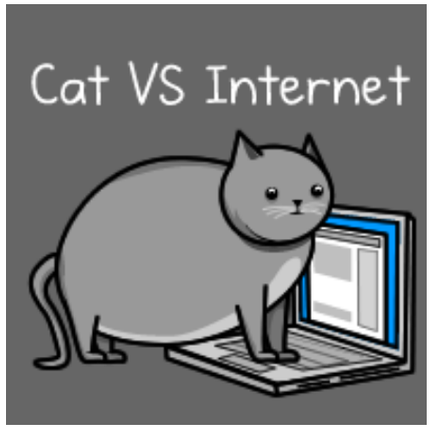
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Mobile World Congress
February 2011

Android leaps beyond RIM to take top spot in U.S. market | Android Atlas - CNET Reviews

http://reviews.cnet.com/8301-19736_7-20040598-251.html?tag=mncol;9r

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Android leaps beyond RIM to take...

Home > Reviews > Android Atlas

GOOGLE | ANDROID

March 8, 2011 9:53 AM PST

Android leaps beyond RIM to take top spot in U.S. market

by Scott Webster

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Android is the now most popular mobile platform for smartphones in the United States, says a **study** released yesterday. According to the ComScore survey, Google's OS

Top Smartphone Platforms 3 Month Avg. Ending Jan. 2011 vs. 3 Month Avg. Ending Oct. 2010 Total U.S. Smartphone Subscribers Ages 13+ Source: comScore MobiLens	
	Share (%) of Smartphone Subscribers

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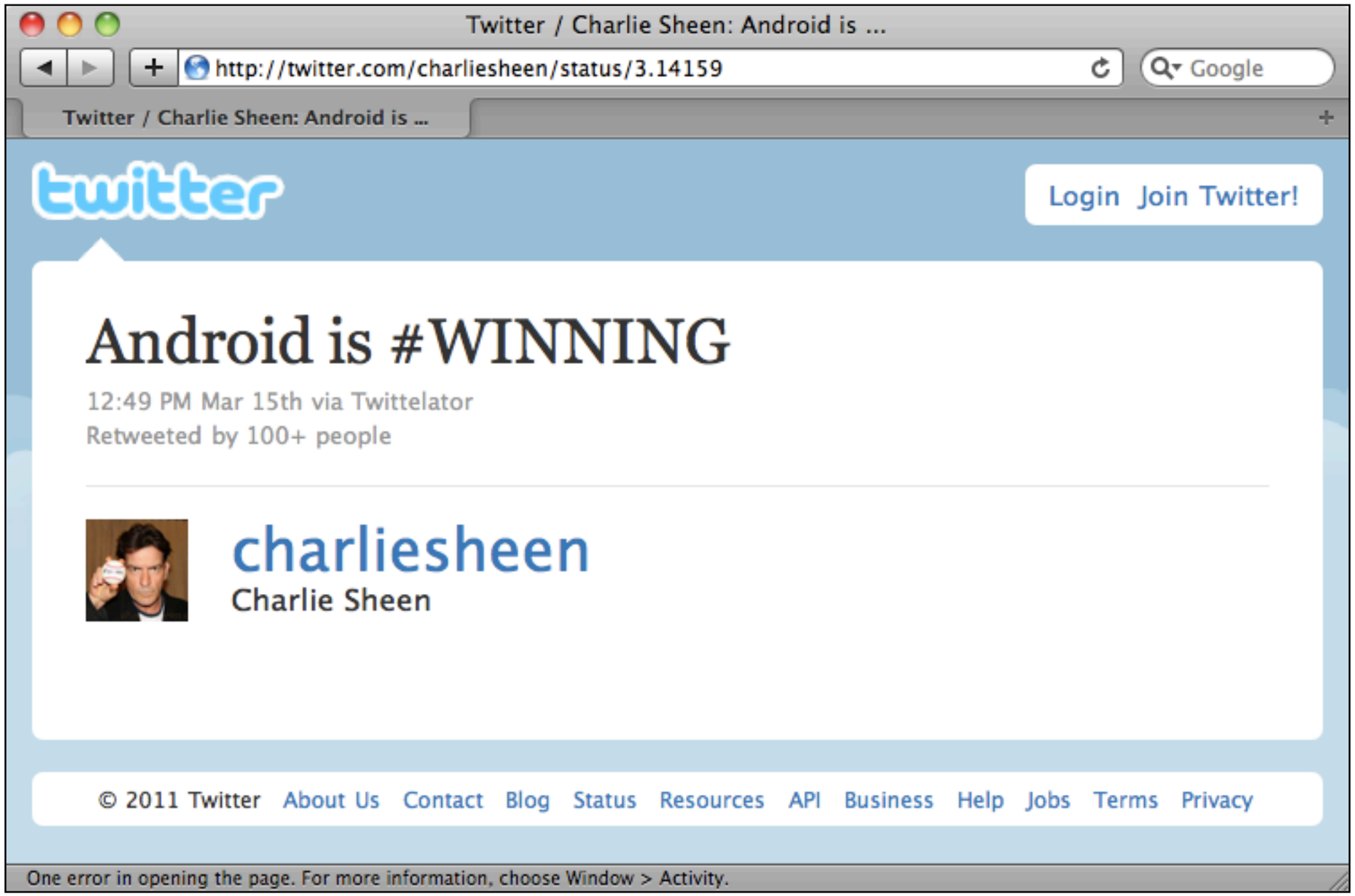
15 errors occurred in opening the page. For more information, choose Window > Activity.

Top Smartphone Platforms
3 Month Avg. Ending Jan. 2011 vs. 3 Month Avg. Ending Oct. 2010
Total U.S. Smartphone Subscribers Ages 13+
Source: comScore MobiLens

	Share (%) of Smartphone Subscribers		
	Oct-10	Jan-11	Point Change
Total Smartphone Subscribers	*100.0%*	*100.0%*	*N/A*
Google	23.5%	31.2%	7.7
RIM	35.8%	30.4%	-5.4
Apple	24.6%	24.7%	0.1
Microsoft	9.7%	8.0%	-1.7
Palm	3.9%	3.2%	-0.7

source: comScore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Android phones

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Samsung latest android
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I just love my new phone!
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Android tablets

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SAMSUNG

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Apps
4GTMobile@gmail.com
Stray1 Jan 27
sup? — Just dipping my foot in the inner workings of google...
Dan Morrill Jan 6
After the demo — Mike, we'll be sending one of the driverless cars to pick you up once
Romain Guy Jan 5
Desserts — Hi Mike, I remembered the name of the dessert place I was telling you
T-Mobile
Google
Picasa
LG Mobile
Gmail
Browser
Talk
Maps
Gallery
YouTube
Books
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LG

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Stream
great place to eat, you should
Wood as a Sweaty, Smoky Sport
wood fire is as much a sport as
more instinctive than cooking
more nuanced than cooking with
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Henry
Last missed call
Today 7:20 AM
Jennifer
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has real Italian pizza?
Yesterday 1:50 PM
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Notes
Skype
Snapbooth

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T-Mobile
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L: 67°
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BrainPOP
Kindle
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Blockbuster
Let's Golf
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HOME
BUMS

MOTOROLA
verizon
Google
Apps
Inbox
davidkelley4763@gmail.com
5
Google Calendar 2:55pm
Reminder: Executive Review Call @ Feb 28
3:00pm - 4:00pm (David's Calendar@moto
Justin Younger 2:52pm
Budget Updates — Hi Everyone, I've updated
all of the budget information for today's call
Me, Paul, Kim 3 2:50pm
content updates for marketing materials —
Sounds like a plan. Let's move forward for now
ANTHONY BOURDAIN
Medium Raw
Motorola
Google
Fandango
Android
Gmail
Browser
Talk
Maps
Gallery
YouTube
Books
Camera
3:00

MOTOROLA XOOM – Android Smart Tablet – Overview – Motorola Mobility, Inc. USA

http://www.motorola.com/Consumers/US-EN/Consumer-Product-and-Services/Tablets/ci.MOTOROLA-XOOM-US-

MOTOROLA XOOM – Android Sma...

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MOTOROLA XOOM™

Experience

MOTOROLA XOOM has a super-powerful dual-core processor and Android™ 3.0 (Honeycomb) -- the Android platform designed specifically for tablets. With its 10.1-inch HD widescreen display, you'll enjoy HD video in a thin, light, and powerful tablet.

→ GET EXCITED

→ USER GUIDE (VERIZON)

KEY FEATURES

- Large 10.1-inch HD widescreen display
- Free 4G LTE Upgrade (Future 4G LTE upgrade applies to the original purchase. Visit VerizonWireless.com/Xoom 4GLTEUpgrade for details.)
- Dual-core 1 GHz processor
- Android 3.0 (Honeycomb) designed specifically for tablets
- 2 MP webcam and 5 MP camera with 720p HD video capture and playback

→ VIEW ALL TECH SPECS

ACCESSORIES

5 errors occurred in opening the page. For more information, choose Window > Activity.

XOOM tech specs

- Android 3.0
- 10.1 inch touchscreen display
- 1280 x 800
- 160 dpi

XOOM tech specs

- NVIDIA Tegra 2 dual-core chipset
- HDMI connector
- two cameras
- no physical keyboard

Google Phone Gallery

http://www.google.com/phone/#manufacturer=all&category=all&carrier=all&countr RSS

Google

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Google phone gallery

All Phones
Phones with Google

All Manufacturers
Dell
HTC
LG
Motorola
Samsung
Sony Ericsson

All Operators
AT&T
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More countries, operators, and phones coming soon!

Sort by: **Newest** | Alphabetical

MOTOROLA XOOM™ with Google

The Next, Next Generation

Experience the future with MOTOROLA XOOM, the world's first tablet powered by Android 3.0 (Honeycomb).

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MOTOROLA ATRIX™ 4G

MOTOROLA ATRIX 4G the world's most powerful smartphone.

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Dell Streak 7

Introducing Dell™ Streak 7. Share photos, videos and movies together. It's small enough to carry around, big enough to gather around.

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Apps
Inbox
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5
Google Calendar
Reminder: Executive Review Call @ Feb 28
3:00pm - 4:00pm (David's Calendar@moto
Justin Younger
Budget Updates — Hi Everyone, I've updated all of the budget information for today's call
Ms. Paul, Kim 3
content updates for marketing materials —
Sounds like a plan. Let's move forward for now
Medium Raw
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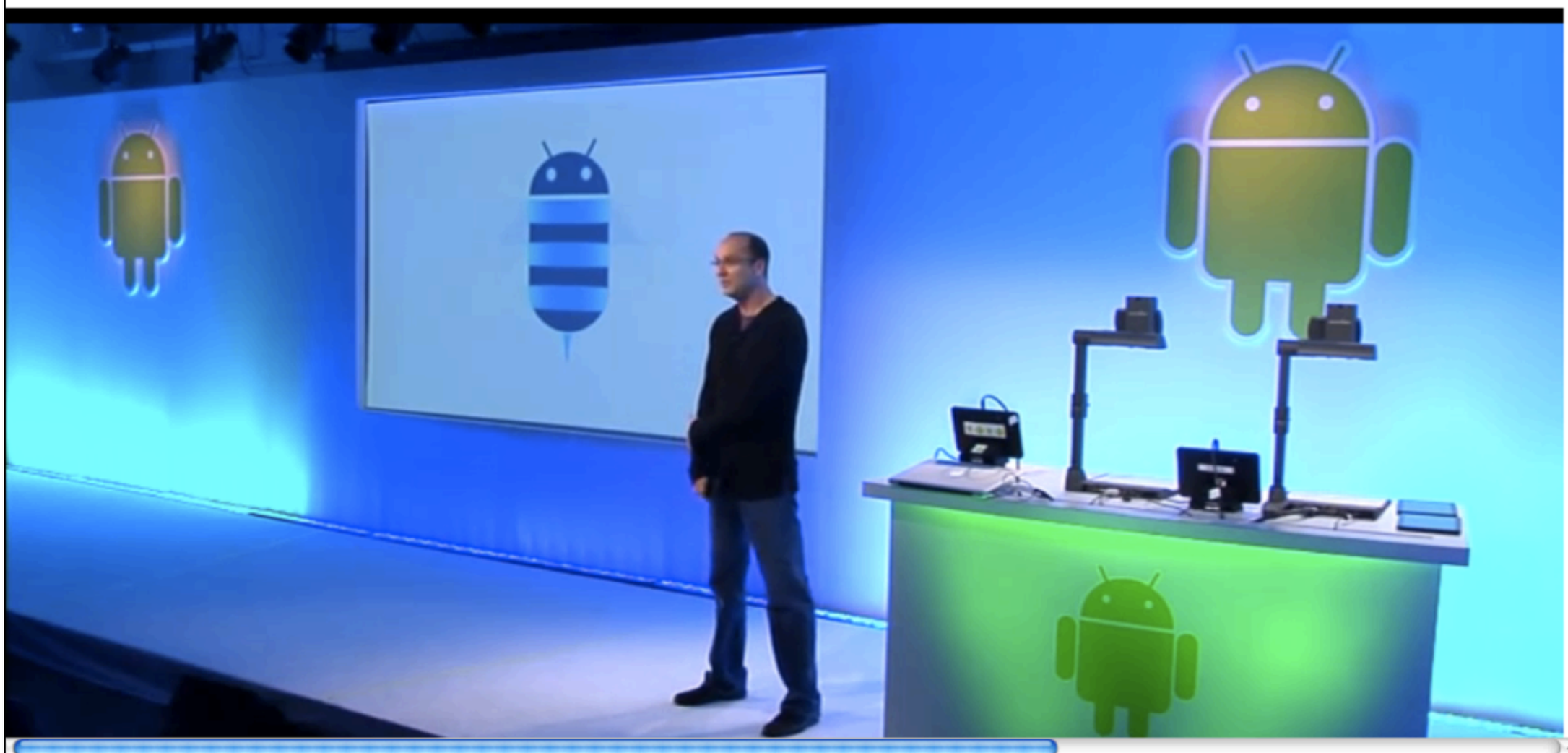

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What's new in Android 3.0?

Android 3.0 Platform Highlights | Android Developers

http://developer.android.com/sdk/android-3.0-highlights.html

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Android SDK Starter Package

- Download
- Installing the SDK

Downloadable SDK Components

- Adding SDK Components
- Android 3.0 Platform new!
  - **Platform Highlights**
  - API Differences Report »
- Android 2.3.3 Platform new!
- Android 2.3 Platform
- Android 2.2 Platform
- Android 2.1 Platform
- Android 1.6 Platform

Android 3.0 Platform Highlights

Welcome to Android 3.0!

The Android 3.0 platform introduces many new and exciting features for users and developers. This document provides a glimpse of some of the new features and technologies, as delivered in Android 3.0. For a more detailed look at new developer APIs, see the Android 3.0 Platform document.

- New User Features
- New Developer Features

Go to "http://developer.android.com/resources/index.html"

- ‘holographic’ UI theme
- Action Bar
- Fragments
- Drag and Drop
- Digital Rights Management
- and more...

‘holographic’ UI

Google
Apps
Google
Picasa
Wikipedia
eBay
CNN
The New York Times
You Tube Volkswagen Commercial: Black...
from Most Popular
D
Tap icon to change
25
D D 9:05pm
Pictures from your visit
東洸 8:54pm
Shasta recommendations ... — Here are some places that I think we should visit when
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Meet tonight? — A few of us are planning to meet tonight at
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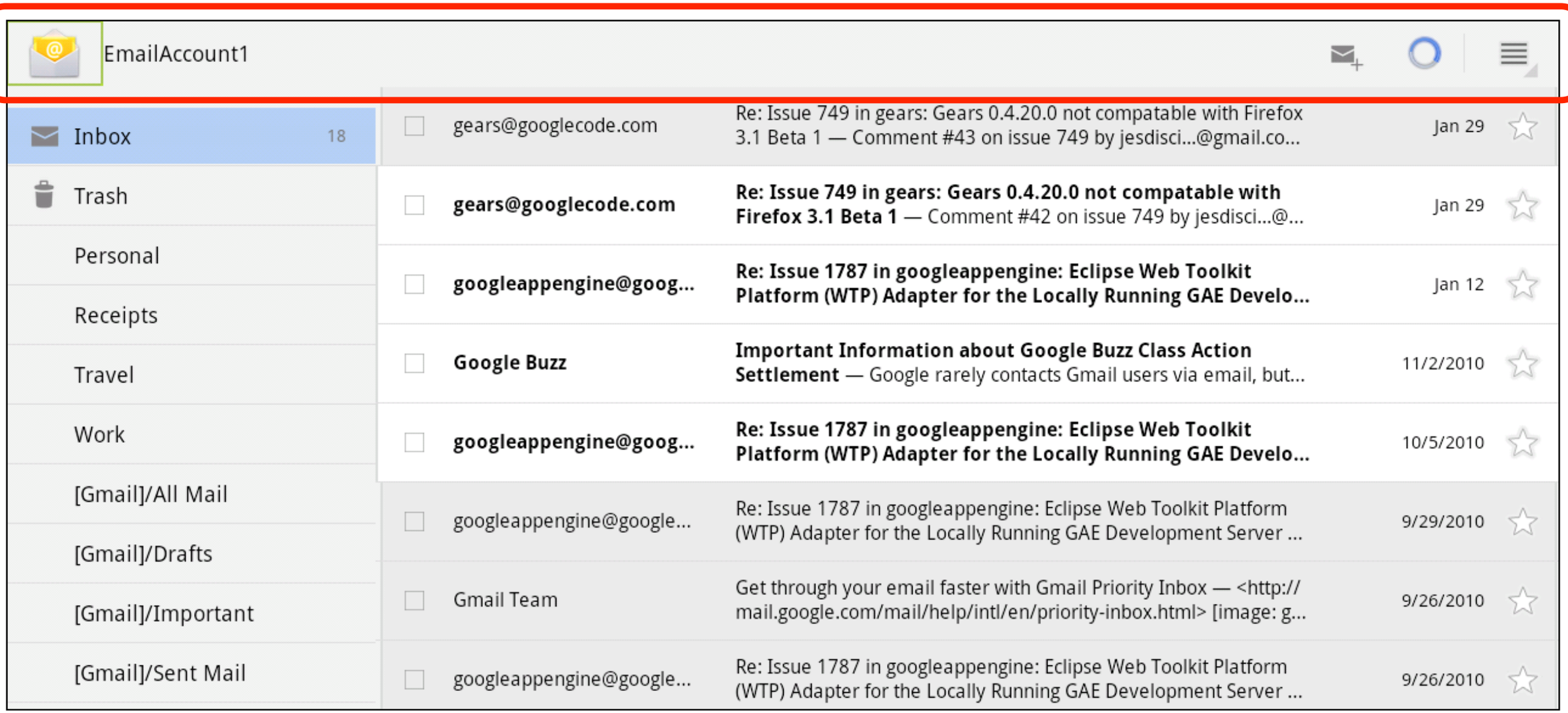
Action Bar

“The Action Bar is a widget for activities that replaces the traditional title bar at the top of the screen.

By default, the Action Bar includes the application logo on the left side, followed by the activity title, and any available items from the Options Menu on the right side.”

Action Bar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[Gmail]/Sent Mail
gears@googlecode.com
Re: Issue 749 in gears: Gears 0.4.20.0 not compatable with Firefox 3.1 Beta 1 — Comment #43 on issue 749 by jesdisci...@gmail.co...
Jan 29
gears@googlecode.com
Re: Issue 749 in gears: Gears 0.4.20.0 not compatable with Firefox 3.1 Beta 1 — Comment #42 on issue 749 by jesdisci...@...
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googleappengine@goog...
Re: Issue 1787 in googleappengine: Eclipse Web Toolkit Platform (WTP) Adapter for the Locally Running GAE Develo...
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Important Information about Google Buzz Class Action Settlement — Google rarely contacts Gmail users via email, but...
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Using the Action Bar | Android Developers

http://developer.android.com/guide/topics/ui/actionbar.html

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Android Basics

What Is Android?
Application Fundamentals

Framework Topics

Activities new!
Services
Content Providers
Intents and Intent Filters
Processes and Threads

User Interface
Declaring Layout
Creating Menus
Using the Action Bar new!
Creating Dialogs
Handling UI Events
Notifying the User
Dragging and Dropping new!
Applying Styles and Themes
Building Custom Components

Using the Action Bar

The Action Bar is a widget for activities that replaces the traditional title bar at the top of the screen. By default, the Action Bar includes the application logo on the left side, followed by the activity title, and any available items from the Options Menu on the right side. The Action Bar offers several useful features, including the ability to:

- Display items from the Options Menu directly in the Action Bar, as "action items"—providing instant access to key user actions.

  Menu items that do not appear as action items are placed in the overflow menu, revealed by a drop-down list in the Action Bar.

Quickview

- A replacement for the title bar that includes the application icon and activity title
- Provides action items from the Options Menu and modes of navigating around the application
- Supports custom views, including an embedded search box
- Requires API Level 11

In this document

Adding the Action Bar
  Removing the Action Bar
Adding Action Items
  Using the app icon as an action item
Adding an Action View
Adding Tabs
Adding Drop-down Navigation
Styling the Action Bar

Display a menu for "http://developer.android.com/guide/topics/ui/actionbar.html"

ActionBar | Android Developers

http://developer.android.com/reference/android/app/ActionBar.html

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- android.bluetooth
- android.content
- android.content.pm
- android.content.res
- android.database
- android.database.sqlite
- android.drm
- ActionBar.Tab
- Activity
- ActivityGroup

Use Tree Navigation

public abstract class

ActionBar

extends Object

Summary: Nested Classes | Constants | Ctors | Methods | Inherited Methods | [Expand All]

Since: API Level 11

java.lang.Object
↳android.app.ActionBar

Class Overview

This is the public interface to the contextual ActionBar. The ActionBar acts as a replacement for the title bar in Activities. It provides facilities for creating toolbar actions as well as methods of navigating around an application.

Summary

One error in opening the page. For more information, choose Window > Activity.

Fragments

"A Fragment represents a behavior or a portion of user interface in an Activity. You can combine multiple fragments in a single activity to build a multi-pane UI and reuse a fragment in multiple activities. You can think of a fragment as a modular section of an activity, which has its own lifecycle, receives its own input events, and which you can add or remove while the activity is running."

http://developer.android.com/guide/topics/fundamentals/fragments.html

- *Fragments decompose application functionality and UI into reusable modules*

- *Add multiple fragments to a screen to avoid switching activities*

- *Fragments have their own lifecycle, state, and back stack*

- *Fragments require API Level "Honeycomb" or greater*

http://developer.android.com/guide/topics/fundamentals/fragments.html

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:orientation="horizontal"
        android:layout_width="match_parent"
        android:layout_height="match_parent">

    <fragment class="com.example.android.apis.app.TitlesFragment"
            android:id="@+id/titles" android:layout_weight="1"
            android:layout_width="0px"
            android:layout_height="match_parent" />

    <FrameLayout android:id="@+id/details" android:layout_weight="1"
            android:layout_width="0px"
            android:layout_height="match_parent" />

</LinearLayout>
```

```
public static class TitlesFragment extends ListFragment {
    private boolean mDualPane;
    private int mCurCheckPosition = 0;

    @Override
    public void onActivityCreated(Bundle savedState) {
        super.onActivityCreated(savedState);
        // do something here
    }

    @Override
    public void onSaveInstanceState(Bundle outState) {
        super.onSaveInstanceState(outState);
        outState.putInt("curChoice", mCurCheckPosition);
    }

    @Override
    public void onListItemClick(ListView l, View v,
                                int pos, long id)    {
        // do something here
    }

}
```

Fragment | Android Developers

http://developer.android.com/reference/android/app/Fragment.html

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- android.appwidget
- android.bluetooth
- android.content
- android.content.pm
- android.content.res
- android.database
- android.database.sqlite
- android.drm
- FragmentManager
- FragmentTransaction
- Instrumentation

Use Tree Navigation

public class

Fragment

Summary: Nested Classes | Ctors | Methods | Inherited Methods | [Expand All]

Since: API Level 11

extends Object
implements ComponentCallbacks View.OnCreateContextMenuListener

java.lang.Object
↳android.app.Fragment

▶Known Direct Subclasses
DialogFragment, ListFragment, PreferenceFragment, WebViewFragment

Class Overview

A Fragment is a piece of an application's user interface or behavior that can be placed in an `Activity`. Interaction with fragments is done through `FragmentManager`, which can be obtained via `Activity.getFragmentManager()` and `Fragment.getFragmentManager()`.

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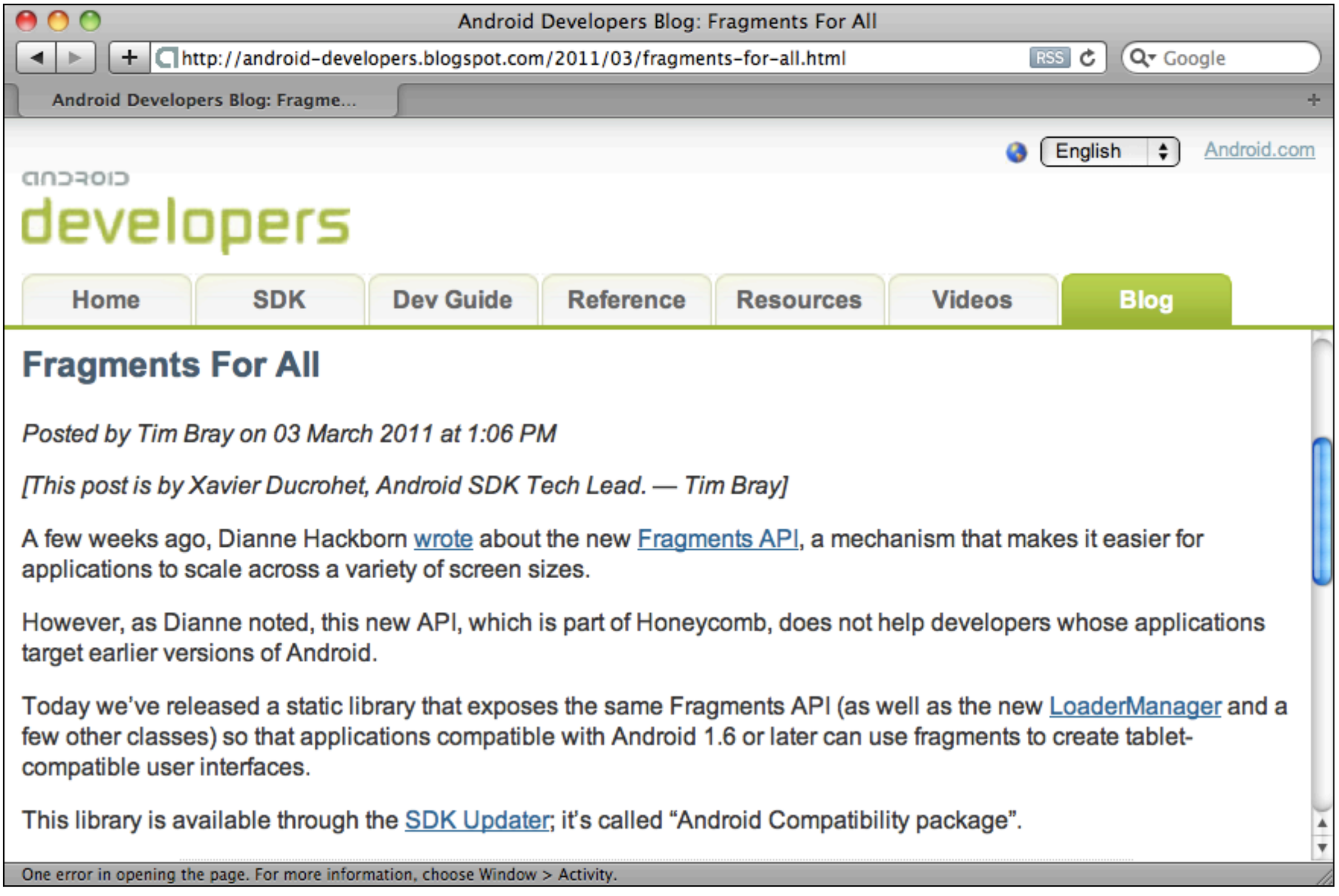
Android Developers Blog: Fragments For All
http://android-developers.blogspot.com/2011/03/fragments-for-all.html
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Fragments For All
Posted by Tim Bray on 03 March 2011 at 1:06 PM
[This post is by Xavier Ducrohet, Android SDK Tech Lead. — Tim Bray]
A few weeks ago, Dianne Hackborn wrote about the new Fragments API, a mechanism that makes it easier for applications to scale across a variety of screen sizes.
However, as Dianne noted, this new API, which is part of Honeycomb, does not help developers whose applications target earlier versions of Android.
Today we've released a static library that exposes the same Fragments API (as well as the new LoaderManager and a few other classes) so that applications compatible with Android 1.6 or later can use fragments to create tablet-compatible user interfaces.
This library is available through the SDK Updater; it's called "Android Compatibility package".
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Drag and drop

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http://developer.android.com/reference/android/view/DragEvent.html

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android.text
android.text.format
android.text.method
android.text.style
android.text.util
android.util
android.view
android.view.accessibility
android.view.animation

Use Tree Navigation

public class

Summary: Constants | Inherited Constants | Fields | Methods | Inherited Methods | [Expand All]

Since: API Level 11

DragEvent

extends Object
implements Parcelable

java.lang.Object
↳android.view.DragEvent

Go to #constants on this page

View.OnDragListener | Android Developers

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android.text.method
android.text.style
android.text.util
android.util
android.view
android.view.accessibility

public static interface **Since: API Level 11**

View.OnDragListener

android.view.View.OnDragListener

Class Overview

Interface definition for a callback to be invoked when a drag is

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Renderscript

"The Renderscript rendering and computational APIs offer a low-level, high performance means of carrying out mathematical calculations and 3D graphics rendering."

android.renderscript | Android Developers

http://developer.android.com/reference/android/renderscript/package-summary.html

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- android.nfc.tech
- android.opengl
- android.os
- android.os.storage
- android.preference
- android.provider
- **android.renderscript**
- android.sax
- android.service.wallpaper
- android.speech
- android.speech.tts

Classes

Allocation

Use Tree Navigation

package

android.renderscript

Since: API Level 11

The Renderscript rendering and computational APIs offer a low-level, high performance means of carrying out mathematical calculations and 3D graphics rendering. An example of Renderscript in applications include the 3D carousel view that is present in Android 3.0 applications such as the Books and YouTube applications. This API is intended for developers who are comfortable working with native code and want to maximize their performance critical applications.

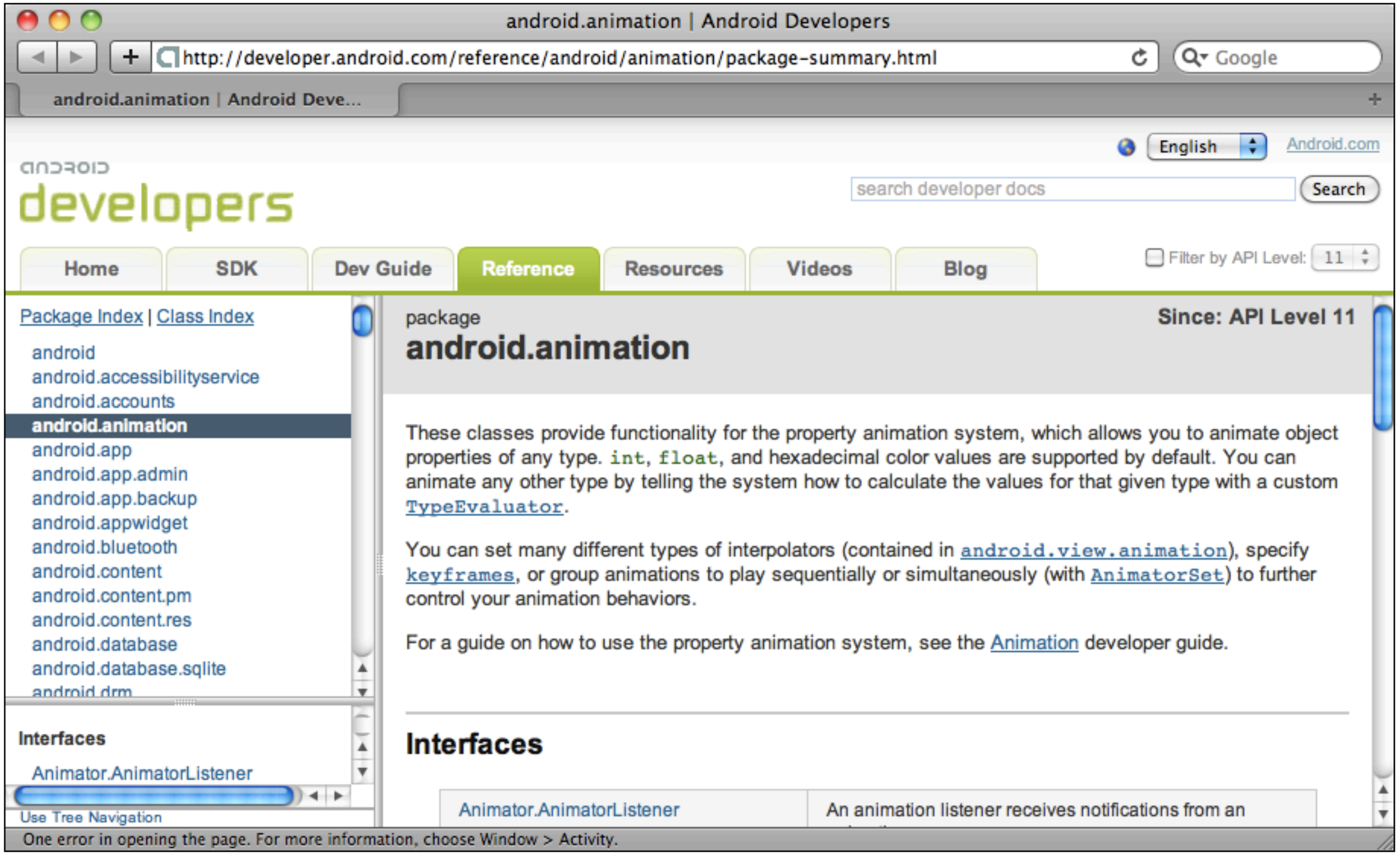
Renderscript adopts a control and slave architecture where the low-level native code is controlled by the higher level Android system that runs in the virtual machine (VM). The VM code handles resource allocation and lifecycle management of the Renderscript enabled application and calls the Renderscript code through high level entry points. The Android build tools generate these entry points through reflection on the native Renderscript code, which you write in C (C99 standard). The Renderscript code does the intensive computation and returns the result back to the Android VM.

You can find the Renderscript native APIs in the `<sdk_root>/platforms/android-3.0/renderscript` directory. The Android system APIs are broken into a few main groups:

Core

One error in opening the page. For more information, choose Window > Activity.

New animation API


android.animation | Android Developers
http://developer.android.com/reference/android/animation/package-summary.html
Google
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Android.com
android
developers
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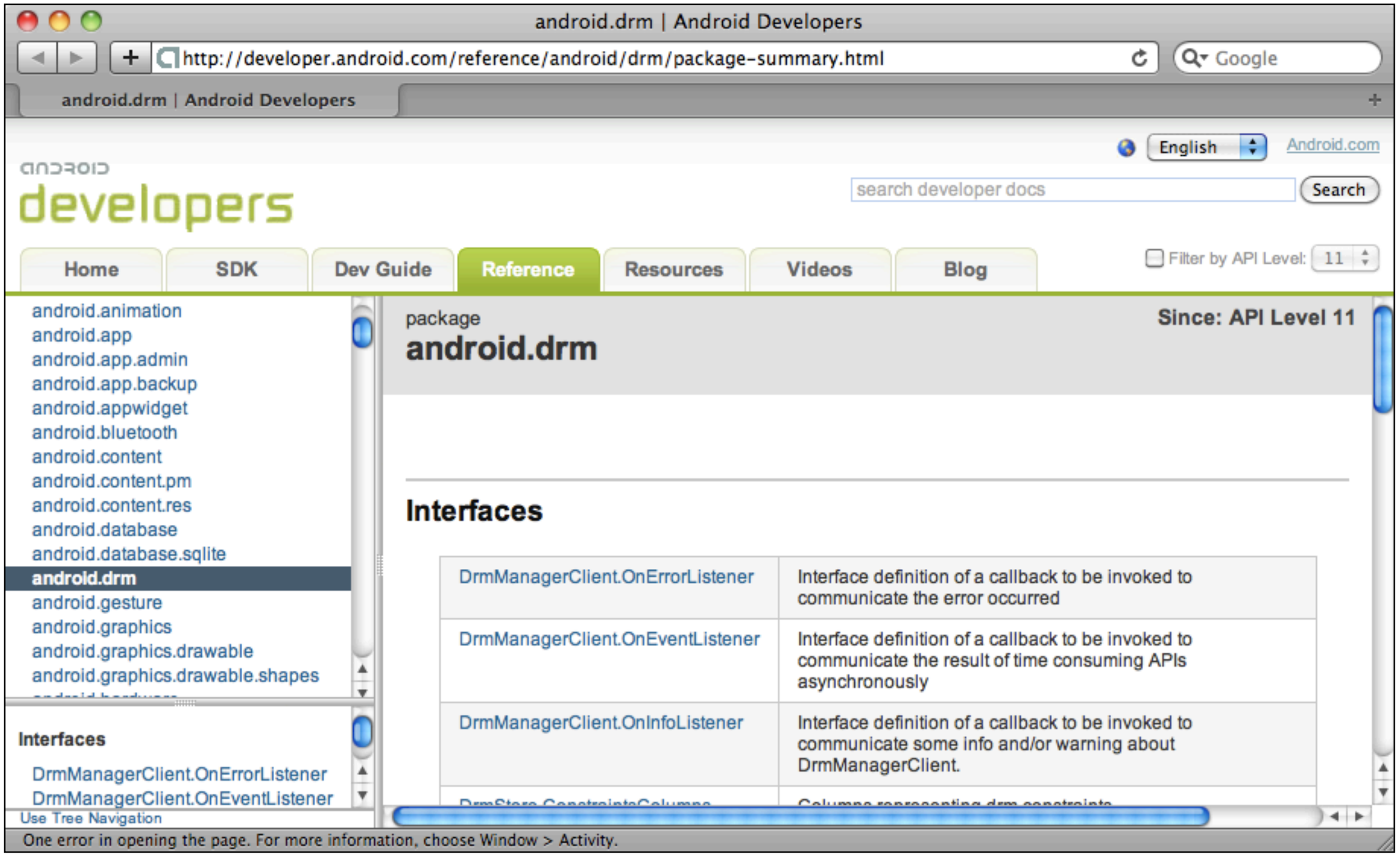
Reference
Resources
Videos
Blog
Filter by API Level:
11
Package Index | Class Index
android
android.accessibilityservice
android.accounts
android.animation
android.app
android.app.admin
android.app.backup
android.appwidget
android.bluetooth
android.content
android.content.pm
android.content.res
android.database
android.database.sqlite
android.drm
Interfaces
Animator.AnimatorListener
Use Tree Navigation
package
android.animation
Since: API Level 11
These classes provide functionality for the property animation system, which allows you to animate object properties of any type. int, float, and hexadecimal color values are supported by default. You can animate any other type by telling the system how to calculate the values for that given type with a custom TypeEvaluator.
You can set many different types of interpolators (contained in android.view.animation), specify keyframes, or group animations to play sequentially or simultaneously (with AnimatorSet) to further control your animation behaviors.
For a guide on how to use the property animation system, see the Animation developer guide.
Interfaces
Animator.AnimatorListener
An animation listener receives notifications from an
One error in opening the page. For more information, choose Window > Activity.

Digital Rights Management API


android.drm | Android Developers
http://developer.android.com/reference/android/drm/package-summary.html
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android.app
android.app.admin
android.app.backup
android.appwidget
android.bluetooth
android.content
android.content.pm
android.content.res
android.database
android.database.sqlite
android.drm
android.gesture
android.graphics
android.graphics.drawable
android.graphics.drawable.shapes
Interfaces
DrmManagerClient.OnErrorListener
DrmManagerClient.OnEventListener
Use Tree Navigation
package
android.drm
Since: API Level 11
Interfaces
DrmManagerClient.OnErrorListener
Interface definition of a callback to be invoked to communicate the error occurred
DrmManagerClient.OnEventListener
Interface definition of a callback to be invoked to communicate the result of time consuming APIs asynchronously
DrmManagerClient.OnInfoListener
Interface definition of a callback to be invoked to communicate some info and/or warning about DrmManagerClient.
One error in opening the page. For more information, choose Window > Activity.

DrmManagerClient | Android Developers

http://developer.android.com/reference/android/drm/DrmManagerClient.html

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Filter by API Level: 11

android.animation
android.app
android.app.admin
android.app.backup
android.appwidget
android.bluetooth
android.content
android.content.pm
android.content.res
android.database
android.database.sqlite
android.drm
android.gesture
android.graphics
android.graphics.drawable
android.graphics.drawable.shapes
DrmStore
DrmStore.Action
DrmStore.DrmObjectType
DrmStore.Playback

Use Tree Navigation

public class

Summary: Nested Classes | Constants | Ctors | Methods | Protected Methods | Inherited Methods | [Expand All]

Since: API Level 11

DrmManagerClient

extends Object

java.lang.Object
↳android.drm.DrmManagerClient

Class Overview

Interface of DRM Framework. Java application will instantiate this class to access DRM agent through DRM Framework.

Summary

One error in opening the page. For more information, choose Window > Activity.

The same security issues that have led to piracy concerns on the Android platform have made it difficult for us to secure a common Digital Rights Management (DRM) system on these devices. […] Although we don't have a common platform security mechanism and DRM, we are able to work with individual handset manufacturers to add content protection to their devices.

November 2010
http://blog.netflix.com/2010/11/netflix-on-android.html

Unfortunately, this is a much slower approach and leads to a fragmented experience on Android, in which some handsets will have access to Netflix and others won't.

We will also continue to work with the Android community, handset manufacturers, carriers, and other service providers to develop a standard, platform-wide solution that allows content providers to deliver their services to all Android-based devices

November 2010
http://blog.netflix.com/2010/11/netflix-on-android.html

Application development

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http://developer.android.com/index.html

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Android 3.0 is here!

Android 3.0 is now available for the Android SDK. It offers a redesigned UI and all new developer APIs for an optimized experience on tablets and similar devices. For more information about what's in Android 3.0, read the version notes.

If you have an existing SDK, add Android 3.0 as an SDK component. If you're new to Android, install the SDK starter package.

service that lets you distribute your apps to handsets.

Learn more »

Contribute

Android Open Source Project gives you access to the entire platform source.

Learn more »

Target Devices

The Device Dashboard provides information about deployed Android devices to help you target suitable device configurations as you build and update your apps.

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Android SDK | Android Developers

http://developer.android.com/sdk/index.html

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Android SDK Starter Package

- **Download**
- Installing the SDK

Downloadable SDK Components

- Adding SDK Components
- Android 3.0 Platform new!
- Android 2.3.3 Platform new!
- Android 2.3 Platform
- Android 2.2 Platform
- Android 2.1 Platform
- Android 1.6 Platform
- Android 1.5 Platform
- Older Platforms
- SDK Tools, r10 new!
- Google USB Driver, r4

Download the Android SDK

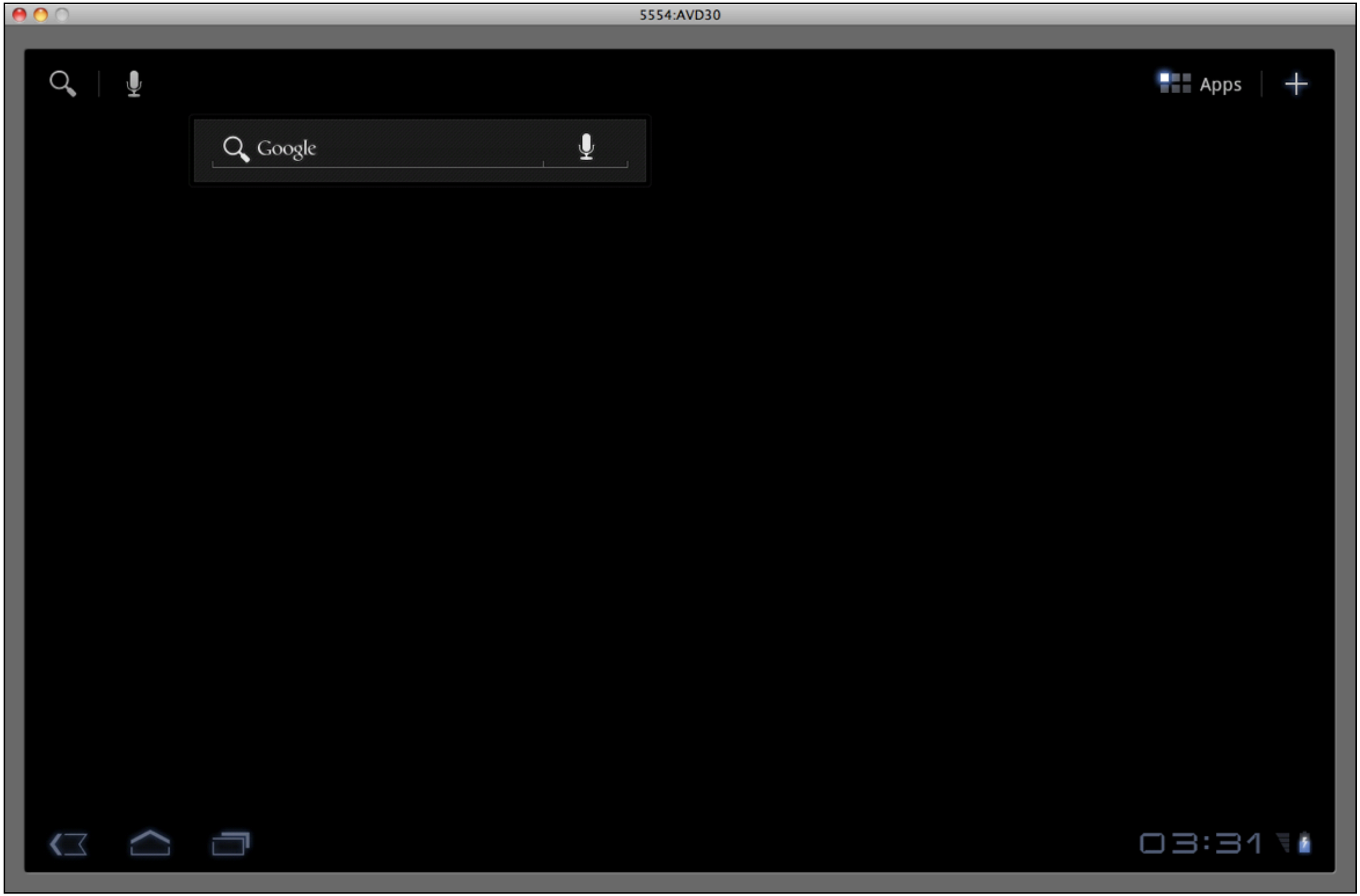
Welcome Developers! If you are new to the Android SDK, please read the steps below, for an overview of how to set up the SDK.

If you're already using the Android SDK, you should update to the latest tools or platform using the *Android SDK and AVD Manager*, rather than downloading a new SDK starter package. See Adding SDK Components.

Platform	Package	Size	MD5 Checksum
Windows	android-sdk_r10-windows.zip	32832260 bytes	1e42b8f528d9ca6d9b887c58c6f1b9a2

One error in opening the page. For more information, choose Window > Activity.

Android emulator


5554:AVD30
Apps
Google
03:31

Emulator performance

About emulator performance

Because the Android emulator must simulate the ARM instruction set on your computer and the WXGA screen is significantly larger than a typical virtual device, emulator performance is much slower than a real device.

source: developer.android.com

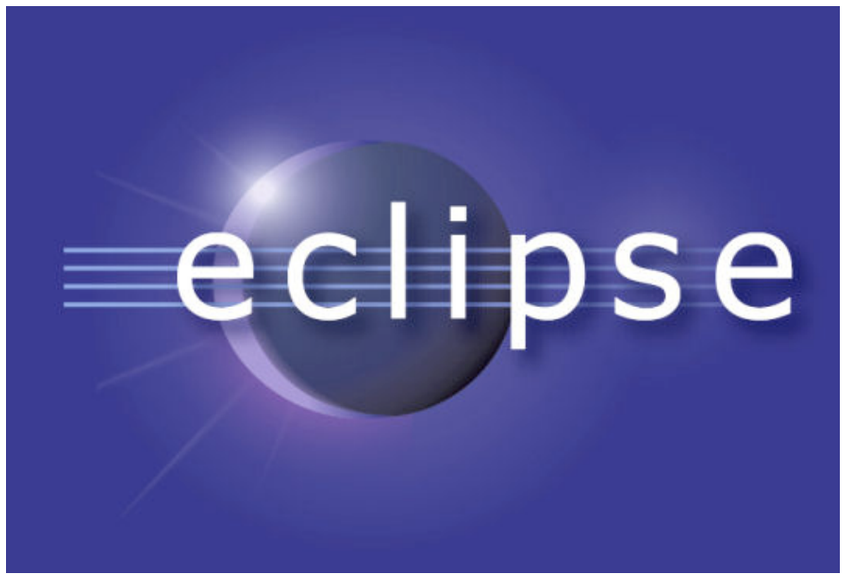
*In particular, initializing the emulator can be slow and **can take several minutes**, depending on your hardware. When the emulator is booting, there is limited user feedback, so please be patient and wait until you see the home screen (or lock screen) appear.*

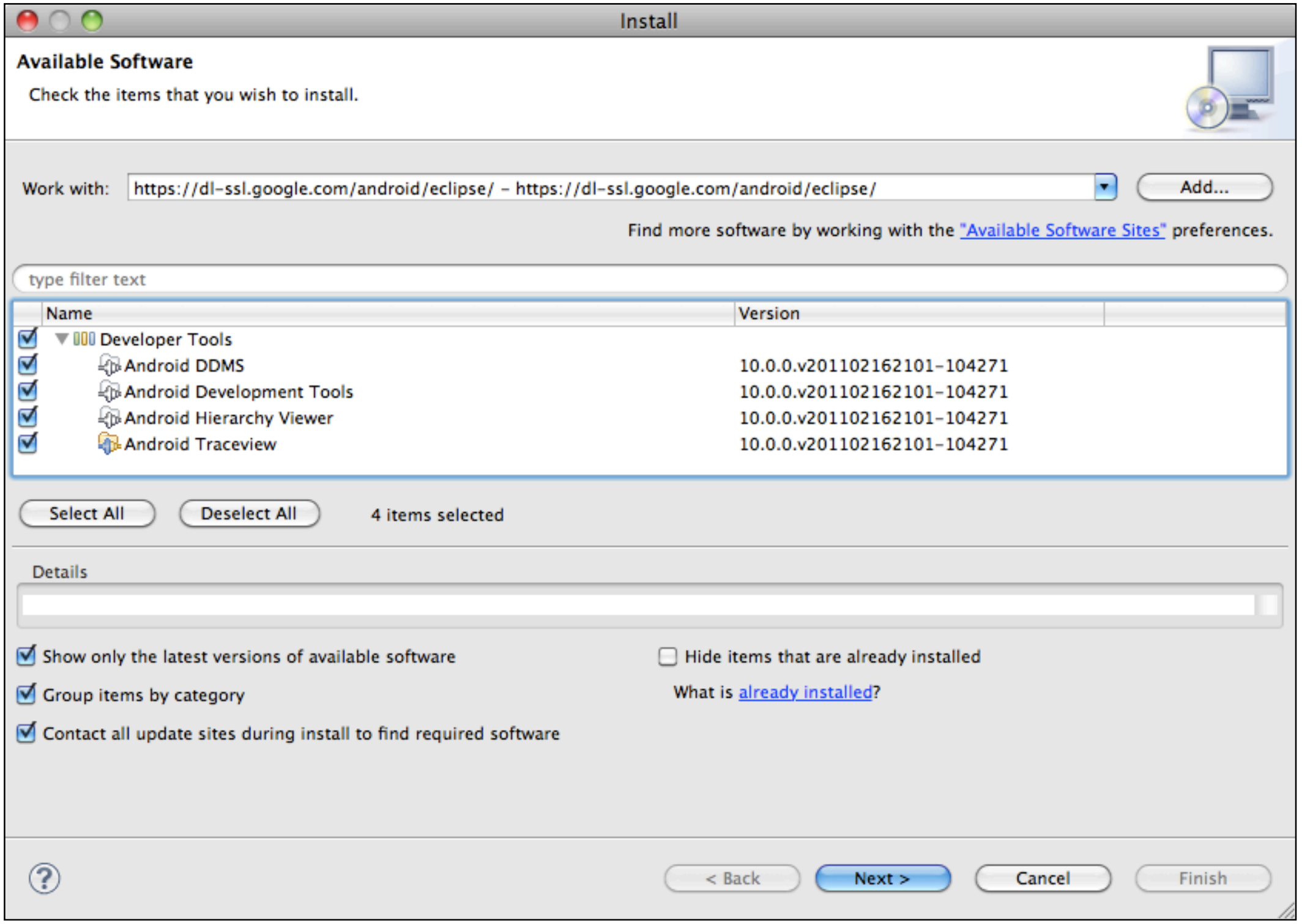
source: developer.android.com

However, you don't need to boot the emulator each time you rebuild your application—typically you only need to boot at the start of a session and keep it running. Also see the tip below for information about using a snapshot to drastically reduce startup time after the first initialization.

We're working hard to resolve the performance issues and it will improve in future tools releases.

source: developer.android.com


eclipse


Install
Available Software
Check the items that you wish to install.
Work with:
https://dl-ssl.google.com/android/eclipse/ - https://dl-ssl.google.com/android/eclipse/
Add...
Find more software by working with the "Available Software Sites" preferences.
type filter text
Name
Version
Developer Tools
Android DDMS
10.0.0.v201102162101-104271
Android Development Tools
10.0.0.v201102162101-104271
Android Hierarchy Viewer
10.0.0.v201102162101-104271
Android Traceview
10.0.0.v201102162101-104271
Select All
Deselect All
4 items selected
Details
Show only the latest versions of available software
Group items by category
Contact all update sites during install to find required software
Hide items that are already installed
What is already installed?
< Back
Next >
Cancel
Finish

Preferences

type filter text

- General
- Android
- Ant
- Data Management
- Google
- Help
- Install/Update
- Java
- Java EE
- Java Persistence
- JavaScript
- Maven
- Plug-in Development
- Remote Systems
- Run/Debug
- Server
- Tasks
- Team
- Terminal
- Usage Data Collector
- Validation
- Web
- Web Services
- WindowBuilder
- XML

Android

Android Preferences

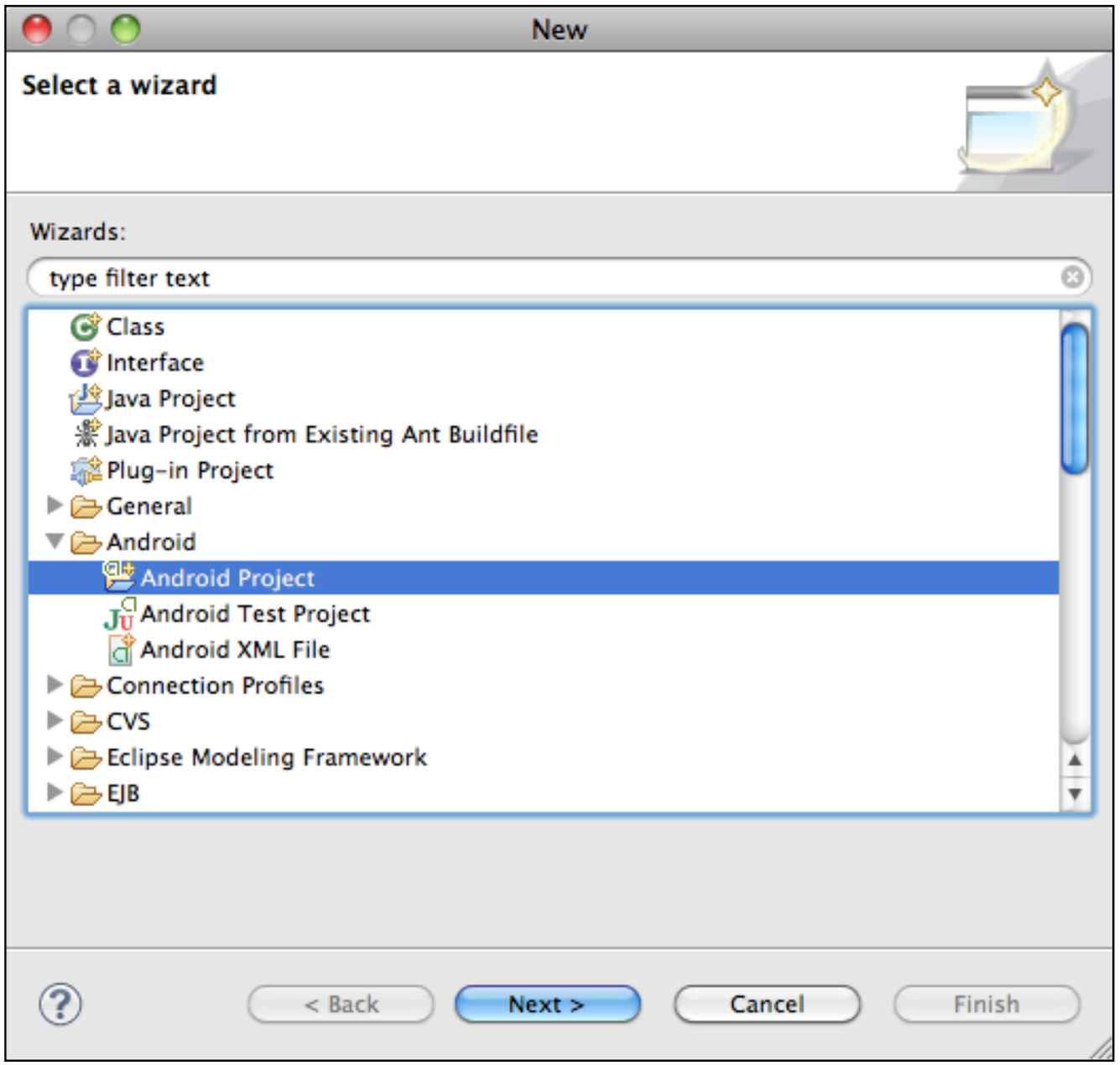
SDK Location: /usr/local/android-sdk-mac_x86 Browse...

Note: The list of SDK Targets below is only reloaded once you hit 'Apply' or 'OK'.

Target Name	Vendor	Platform	API Lev
Android 1.5	Android Open Source Project	1.5	3
Google APIs	Google Inc.	1.5	3
Android 1.6	Android Open Source Project	1.6	4
Google APIs	Google Inc.	1.6	4
Android 2.1-update1	Android Open Source Project	2.1-update	7
Google APIs	Google Inc.	2.1-update	7
Android 2.2	Android Open Source Project	2.2	8
Google APIs	Google Inc.	2.2	8
GALAXY Tab Addon	Samsung Electronics Co., Ltd.	2.2	8
GALAXY Tab Addon	Samsung Electronics Co., Ltd.	2.2	8
GALAXY Tab Addon	Samsung Electronics Co., Ltd.	2.2	8
Android 2.3.1	Android Open Source Project	2.3.1	9
Google APIs	Google Inc.	2.3.1	9
Android 2.3.3	Android Open Source Project	2.3.3	10
Google APIs	Google Inc.	2.3.3	10
Android 3.0	Android Open Source Project	3.0	11
Google APIs	Google Inc.	3.0	11

Restore Defaults Apply

Cancel OK


New
Select a wizard
Wizards:
type filter text
Class
Interface
Java Project
Java Project from Existing Ant Buildfile
Plug-in Project
General
Android
Android Project
Android Test Project
Android XML File
Connection Profiles
CVS
Eclipse Modeling Framework
EJB
< Back
Next >
Cancel
Finish

New Android Project

New Android Project

Creates a new Android Project resource.

Use default location

Location: /Users/sean/Documents/workspace-android30/myap Browse...

Create project from existing sample

Samples: AccelerometerPlay

Build Target

	Target Name	Vendor	Platform	API L
☐	Android 1.5	Android Open Source Project	1.5	3
☐	Google APIs	Google Inc.	1.5	3
☐	Android 1.6	Android Open Source Project	1.6	4
☐	Google APIs	Google Inc.	1.6	4
☐	Android 2.1-update1	Android Open Source Project	2.1-update1	7
☐	Google APIs	Google Inc.	2.1-update1	7
☐	Android 2.2	Android Open Source Project	2.2	8
☐	Google APIs	Google Inc.	2.2	8
☐	GALAXY Tab Addon	Samsung Electronics Co., Ltd.	2.2	8
☐	GALAXY Tab Addon	Samsung Electronics Co., Ltd.	2.2	8
☐	GALAXY Tab Addon	Samsung Electronics Co., Ltd.	2.2	8
☐	Android 2.3.1	Android Open Source Project	2.3.1	9
☐	Google APIs	Google Inc.	2.3.1	9
☐	Android 2.3.3	Android Open Source Project	2.3.3	10
☐	Google APIs	Google Inc.	2.3.3	10
☑	Android 3.0	Android Open Source Project	3.0	11
☐	Google APIs	Google Inc.	3.0	11

Standard Android platform 3.0

Properties

Application name: myapp

Package name: my.app

Create Activity: MyAppActivity

Min SDK Version: 11

< Back Next > Cancel Finish

Debug Configurations

Create, manage, and run configurations

Android Application

type filter text

- Android Application
  - myapp
- Android JUnit Test
- Apache Tomcat
- Compile GWT Applicati
- Eclipse Application
- Eclipse Data Tools
- Generic Server
- Generic Server(Externa
- GWT Application
- GWT JUnit Test
- GWT JUnit Test
- HTTP Preview
- J2EE Preview
- Java Applet
- Java Application
- JavaScript
- JUnit
- JUnit Plug-in Test
- Maven Build
- OSGi Framework
- Remote Java Applicatio
- Task Context Test

Filter matched 25 of 25 items

Name: myapp

Android | Target | Common

Project:

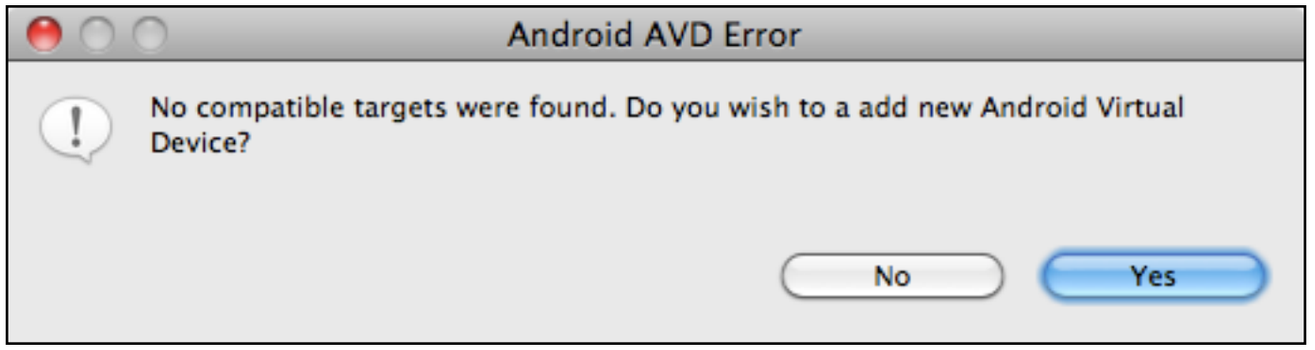
myapp — Browse...

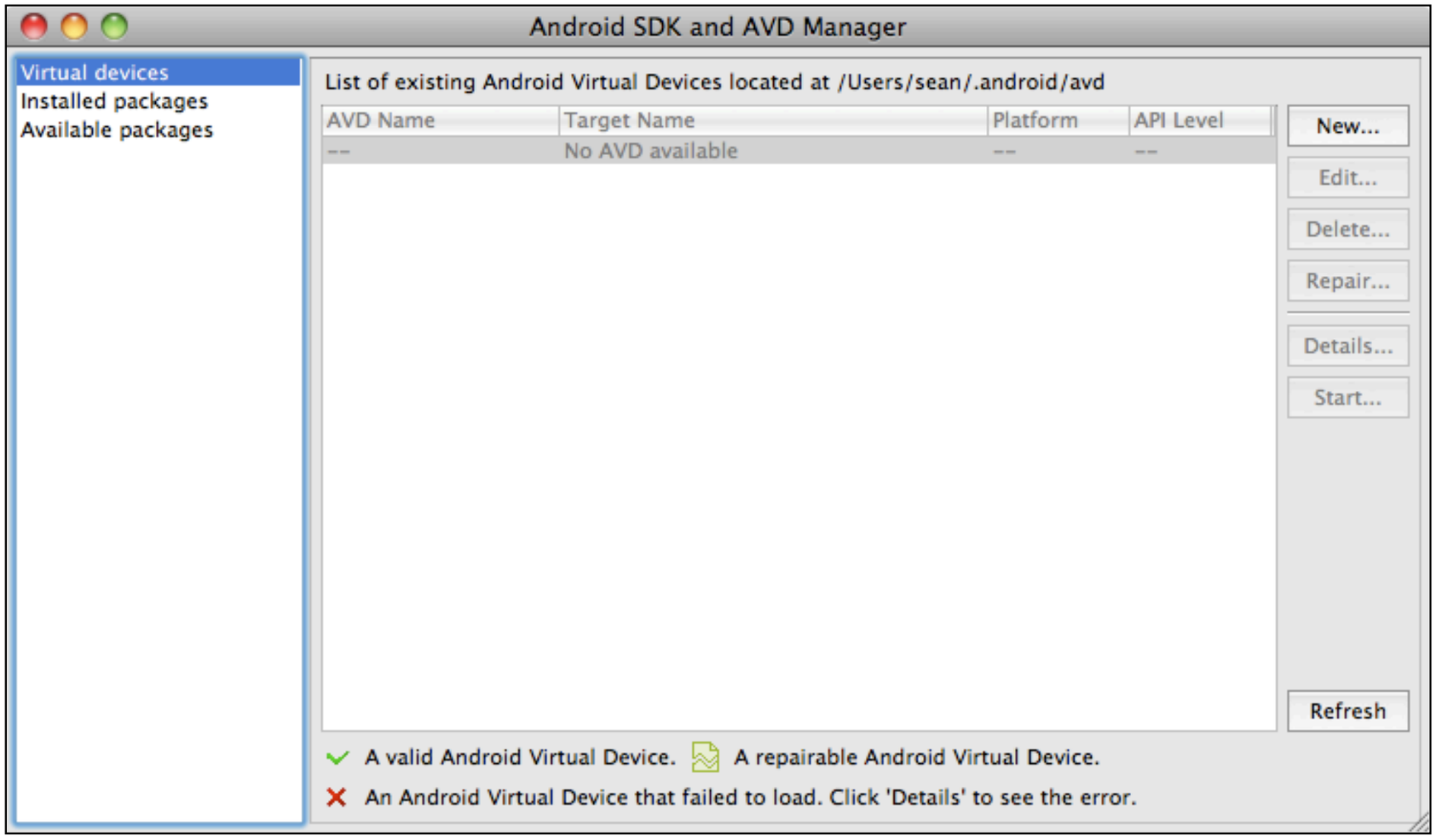
Launch Action:

- (•) Launch Default Activity
- ( ) Launch:
- ( ) Do Nothing

Apply | Revert

Close | Debug


Android AVD Error
No compatible targets were found. Do you wish to a add new Android Virtual Device?
No
Yes


Android SDK and AVD Manager
Virtual devices
Installed packages
Available packages
List of existing Android Virtual Devices located at /Users/sean/.android/avd
AVD Name
Target Name
Platform
API Level
--
No AVD available
--
--
New...
Edit...
Delete...
Repair...
Details...
Start...
Refresh
A valid Android Virtual Device.
A repairable Android Virtual Device.
An Android Virtual Device that failed to load. Click 'Details' to see the error.

Create new Android Virtual Device (AVD)

Name: AVD30

Target: Android 3.0 - API Level 11

SD Card:
- Size: 50 MiB
- File: Browse...

Snapshot:
- Enabled

Skin:
- Built-in: Default (WXGA)
- Resolution: x

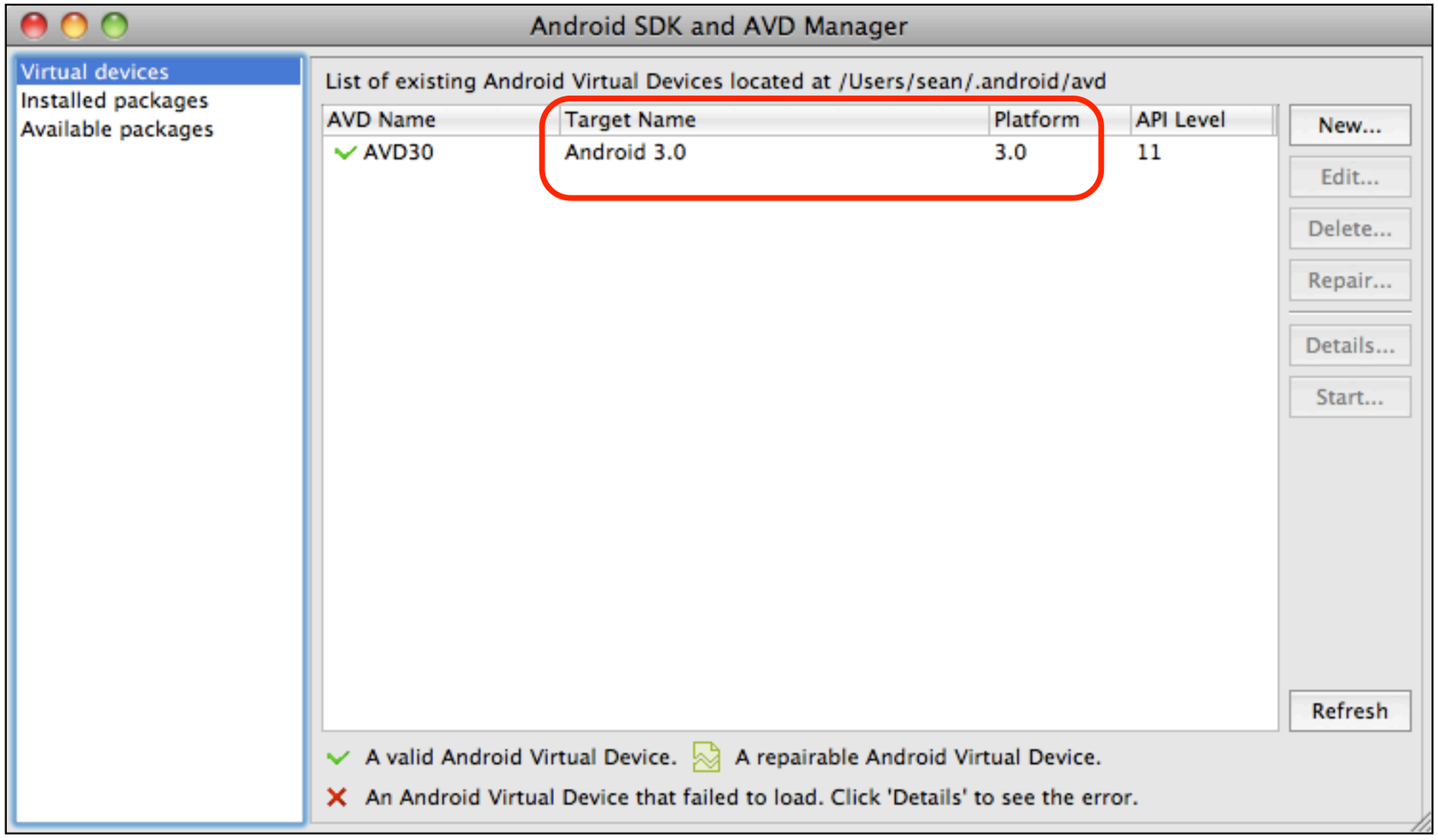
Hardware:

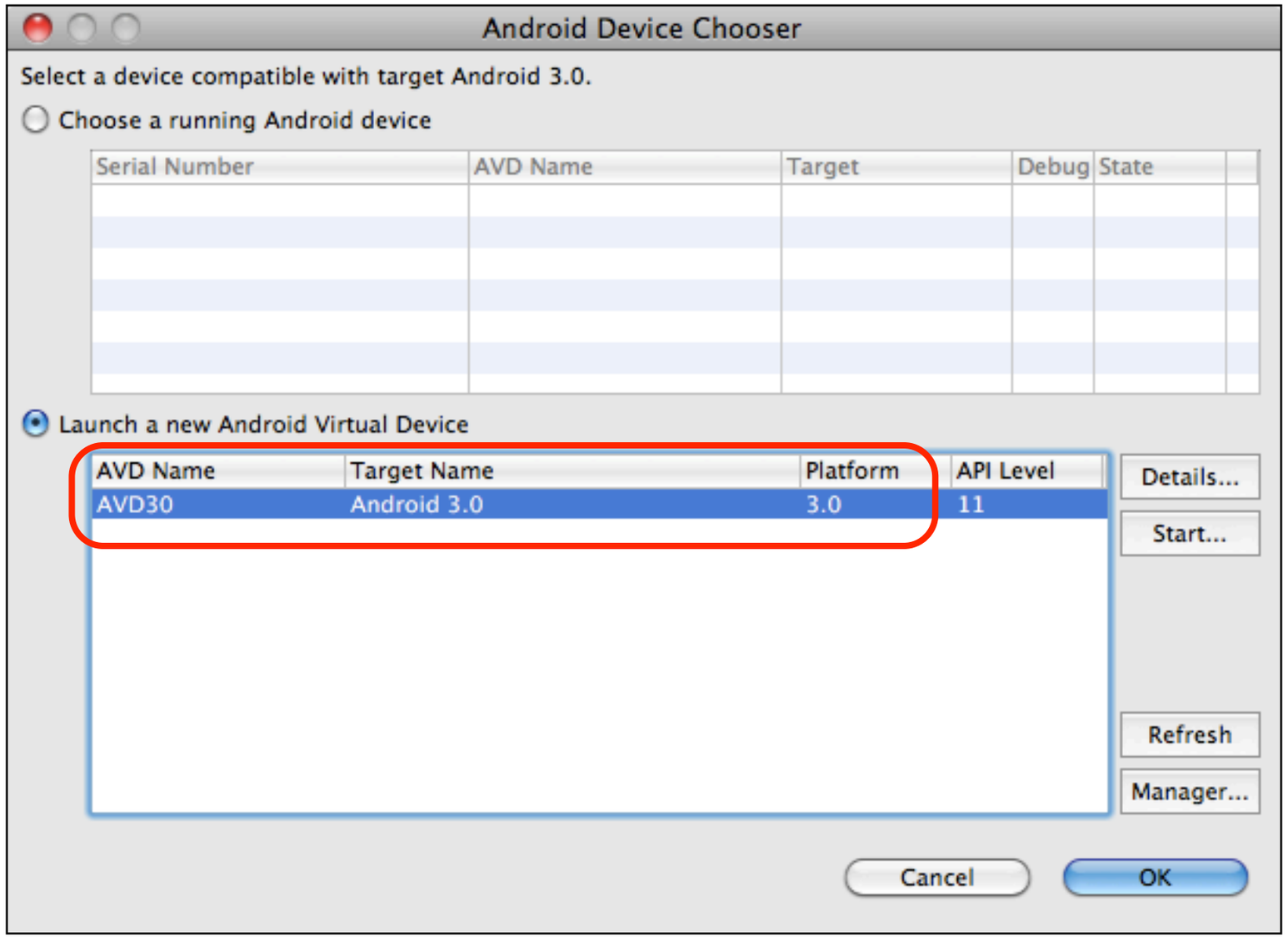
Property	Value
Abstracted LCD density	160
Keyboard lid support	no
Max VM application heap si	48
Device ram size	256

New... Delete

Override the existing AVD with the same name

Cancel Create AVD


Android SDK and AVD Manager
Virtual devices
Installed packages
Available packages
List of existing Android Virtual Devices located at /Users/sean/.android/avd
AVD Name
Target Name
Platform
API Level
AVD30
Android 3.0
3.0
11
New...
Edit...
Delete...
Repair...
Details...
Start...
Refresh
A valid Android Virtual Device.
A repairable Android Virtual Device.
An Android Virtual Device that failed to load. Click 'Details' to see the error.


Android Device Chooser
Select a device compatible with target Android 3.0.
Choose a running Android device
Serial Number
AVD Name
Target
Debug
State
Launch a new Android Virtual Device
AVD Name
Target Name
Platform
API Level
AVD30
Android 3.0
3.0
11
Details...
Start...
Refresh
Manager...
Cancel
OK

Sample code

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http://developer.android.com/resources/browser.html?tag=sample

Google

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  - Accelerometer Play new!
  - Accessibility Service new!
  - API Demos
  - Backup and Restore
  - Bluetooth Chat
  - BusinessCard
  - Contact Manager
  - Cube Live Wallpaper
  - Home
  - Honeycomb Gallery new!
  - JetBoy
  - Lunar Lander
  - Multiple Resolutions
  - NFC Demo
  - Note Pad
  - Renderscript new!
  - SampleSyncAdapter
  - Searchable Dictionary v2

Home

Sample

A home screen replacement application.

Honeycomb Gallery new!

Sample for **New Features** and **User Interface**

An image gallery application using APIs that are new in Android 3.0 (a.k.a. Honeycomb).

JetBoy

Sample for **Game Development** and **Multimedia**

A game that demonstrates the SONiVOX JET interactive music technology, with `JetPlayer`.

Lunar Lander

Sample for **Game Development** and **Multimedia**

A classic Lunar Lander game.

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HoneycombGallery – Honeycomb Gallery | Android Developers

http://developer.android.com/resources/samples/HoneycombGallery/index.html

HoneycombGallery – Honeycomb ...

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  - API Demos
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  - Bluetooth Chat
  - BusinessCard
  - Contact Manager
  - Cube Live Wallpaper
  - Home
  - **Honeycomb Gallery new!**
  - JetBoy
  - Lunar Lander
  - Multiple Resolutions
  - NFC Demo
  - Note Pad
  - Renderscript new!

Sample Code >

HoneycombGallery - Honeycomb Gallery

← Back

This is a demo application highlighting how to use some of the new APIs in Honeycomb, including:

- Fragments
- The action bar and contextual action bar
- Drag and drop
- The new `android.animation` framework
- Custom notifications

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API differences

@AndroidDev
AndroidDev

The Honeycomb diffs:
http://developer.android.com/sdk/api_diff/11/changes.html

22 Feb via web ☆ Favorite ↻ Retweet ↩ Reply

Retweeted by sarveshgupta89 and 68 others

http://developer.android.com/sdk/api_diff/11/changes.html

Best practices

Android Developers Blog: Best Practices for Honeycomb and Tablets

http://android-developers.blogspot.com/2011/02/best-practices-for-honeycomb-and.html

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Best Practices for Honeycomb and Tablets

Posted by Tim Bray on 23 February 2011 at 10:00 AM

The first tablets running Android 3.0 ("Honeycomb") will be hitting the streets on Thursday Feb. 24th, and we've just posted the full SDK release. We encourage you to test your applications on the new platform, using a tablet-size AVD.

Developers who've followed the Android Framework's guidelines and best practices will find their apps work well on Android 3.0. This purpose of this post is to provide reminders of and links to those best practices.

Moving Toward Honeycomb

There's a comprehensive discussion of how to work with the new release in Optimizing Apps for Android 3.0. The discussion includes the use of the emulator; most developers, who don't have an Android tablet yet, should use it to test and update their apps for Honeycomb.

While your existing apps should work well, developers also have the option to improve their apps' look and feel on Android 3.0 by using Honeycomb features; for example, see The Android 3.0 Fragments API. We'll have more on that in this space, but in the meantime we recommend reading Strategies for Honeycomb and Backwards Compatibility for advice on adding Honeycomb polish to existing apps.

Specifying Features

Go to "http://developer.android.com/videos/index.html"

http://android-developers.blogspot.com/2011/02/best-practices-for-honeycomb-and.html

Optimizing Apps for Android 3.0 | Android Developers

http://developer.android.com/guide/practices/optimizing-for-3.0.html

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Application Licensing
In-app Billing new!
Market Filters

Developing

Introduction
Managing Virtual Devices
Using Hardware Devices
Managing Projects
Building and Running
Debugging
Testing
Tools

Publishing

Signing Your Applications
Versioning Your Applications
Preparing to Publish
Publishing Your Applications

Best Practices

Compatibility
Supporting Multiple Screens

Optimizing Apps for Android 3.0

In this document

Set Up Your SDK with Android 3.0
Optimize Your App for Tablets and Similar Devices
Upgrade or Develop a New App for Tablets and Similar Devices

If you're developing an Android application, Android 3.0 introduces several features that allow you to enhance your user's experience on tablets and similar devices. Any application you've already published is compatible with devices running Android 3.0, by default, because Android applications are forward-compatible. However, there are some simple changes you should make to optimize your application for tablet-type devices.

This document shows how you can optimize your existing application for Android 3.0 and maintain compatibility with older versions or upgrade your application completely with new APIs.

To get started:

1. Set up your SDK with Android 3.0.
2. Then choose to either optimize or upgrade:
   a. Optimize Your App for Tablets and Similar Devices.

One error in opening the page. For more information, choose Window > Activity.

Motorola XOOM™ Tablet Programming Tips

ECCN 5D992.a

Print Document

Welcome to the next evolution in tablets. Motorola XOOM™ is a touch tablet that provides the most enjoyable and immersive mobile video experience today. With a large, 10.1-inch, full touchscreen display, watch videos and movies in brilliant high def 1080p resolution. Its screen size and shape are optimized for 16:9 widescreen format, so movies fill the screen. An HDMI connector allows content to be played back on any HDTV. Users can rotate seamlessly between front and rear cameras. The built in gyroscope and barometer extend the offering of available sensors. At the center of the tablet sits an NVIDIA Tegra 2 dual-core chipset, which sets the stage for a better performing, media-rich device.

In preparation for the tablet, some general programming guidelines are provided here.

Share This Page

Bookmark and Share

Table of Contents

- Screen
- Touch tablet
- Resolution and resources
- Text and screen size
- Expanded camera class
- Dual-core processor
- What's next?

Screen

The first obvious feature of Motorola XOOM is the screen size. It measures 10.1 inches diagonally and displays 1280 x 800 physical pixels. This could impact your application in various ways as described throughout this article.

What's next?

Eric Schmidt: Next Version of Android will ...rbread - Droid Life: A Droid Community Blog

http://www.droid-life.com/2011/02/15/eric-schmidt-next-versio RSS

Google

Eric Schmidt: Next Version of And...

Eric Schmidt: Next Version Of Android Will "Combine" Honeycomb And Gingerbread

On 02.15.11, In News, by Kellex

21 retweet Share 6

During his keynote speech today at MWC, Eric Schmidt helped clarify what the future version of Android will end up being. There has been a lot of talk on whether or not Honeycomb would be available to phones or if the version to follow Gingerbread would simply pull certain parts out of its tablet brother. According to Schmidt, they will essentially be "combined"…

> *"We have OS called Gingerbread for phones, we have an OS being previewed now for tablets called Honeycomb. You can imagine the follow up will start with an I, be named after dessert, and will combine these two."*

Loading "http://www.droid-life.com/2011/02/15/eric-schmidt...omb-and-gingerbread/", completed 146 of 157 items (10 errors)

DROIDLIFE

The Future Version Of Android Isn't Called Ice Cream. It's Ice Cream SANDWICH.

http://techcrunch.com/2011/01/11/android-ice-cream-sandwic

Reader

ice cream

The Future Version Of Android Is...

TechCrunch

What's Hot: SXSW | Android | Apple | Facebook | Google | Groupon | Microsoft | Twitter | Zynga

Round-The-Clock SXSW Coverage »

The Future Version Of Android Isn't Called Ice Cream. It's Ice Cream SANDWICH.

Jason Kincaid

Jan 11, 2011

Like 402 Buzz 175 Tweet 593 5 Digg

133 Comments

Loading "http://techcrunch.com/2011/01/11/android-ice-cream-sandwich/", completed 139 of 151 items (11 errors)

Final thoughts

- Android 3.0 is for tablets, not phones
- XOOM is available now
- Additional Honeycomb tablets coming soon
- Learn the Fragments API

Thank you

sean@seansullivan.com