

Mobile APPS: *Distribution/Installation/Logs*

What is ADB LOCATS?

Logcat is a command-line tool that dumps a log of system messages, including stack traces when the device throws an error and messages that you have written from your app with the Log class

ANDROID MONITOR includes a logcat Monitor that displays debug messages.

The logcat Monitor displays system messages, such as when a garbage collection occurs, as well as messages that you can add to your app using the LOG class.

It displays messages in real time and also keeps a history so you can view older messages.

Mobile APPS: *Distribution/Installation/Logs*

What is ADB LOCATS?

Verbose - Show all log messages (the default).

Debug - Show debug log messages that are useful during development only, as well as the message levels lower in this list.

Info - Show expected log messages for regular usage, as well as the message levels lower in this list.

Warn - Show possible issues that are not yet errors, as well as the message levels lower in this list.

Error - Show issues that have caused errors, as well as the message level lower in this list.

Assert - Show issues that the developer expects should never happen.

**To set a LOG LEVEL : in the log level MENU
Select the Following Options**

Mobile APPS: *Distribution/Installation/Logs*

What is ADB LOGCATS?

HOMEWORK : <http://adbshell.com/commands/adb-logcat>

Some most useful commands

adb logcat *:V *lowest priority, filter to only show Verbose level*

adb logcat *:D *filter to only show Debug level*

adb logcat *:I *filter to only show Info level*

adb logcat *:W *filter to only show Warning level*

adb logcat *:E *filter to only show Error level*

adb logcat *:F *filter to only show Fatal level*

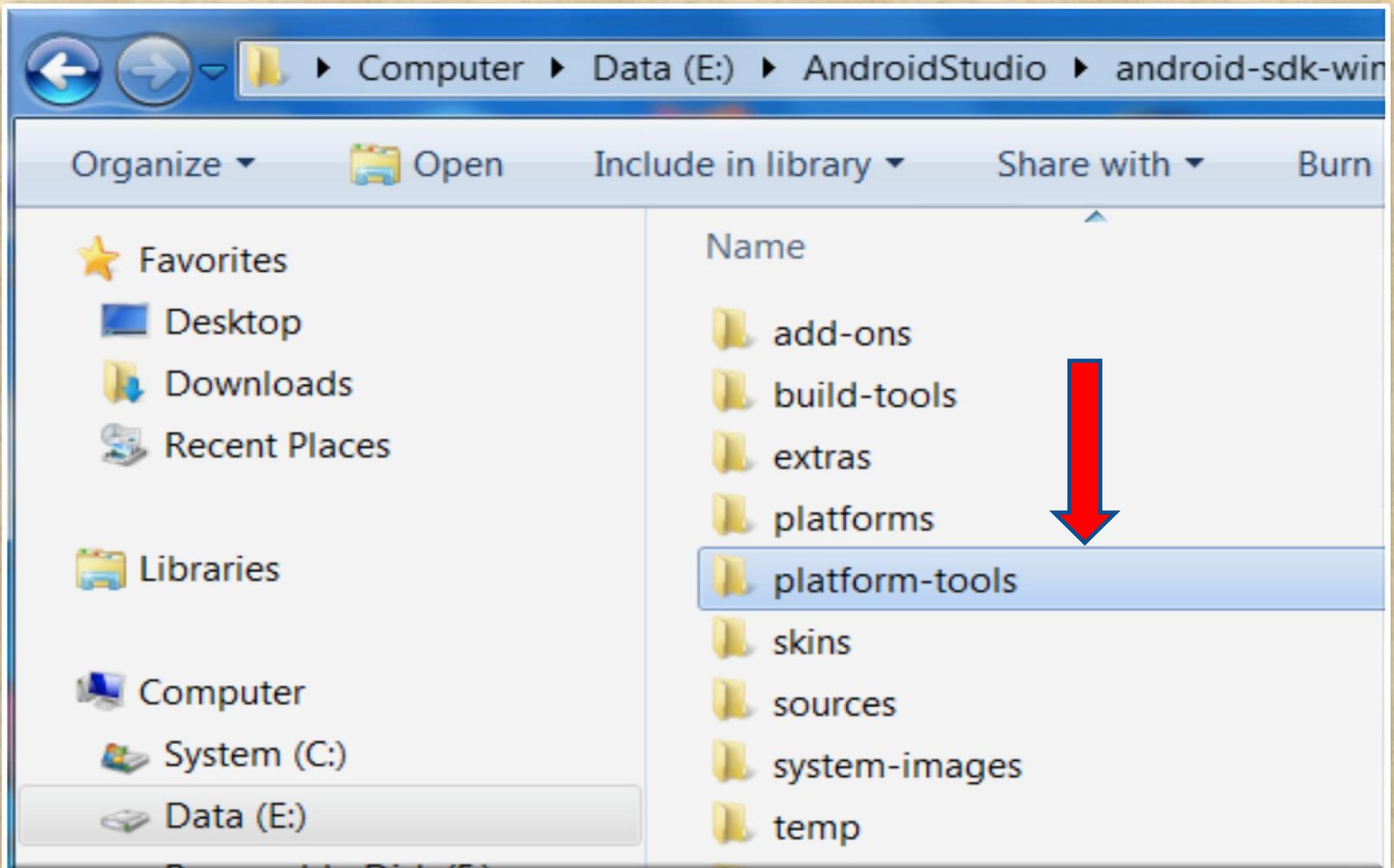
adb logcat *:T *filter to show steps leading up to errors and warnings*

Mobile APPS: **Distribution/Installation/Logs**

Organize ▾ Open Include in library ▾ Share with ▾ Burn New folder

Name	Date modified	Type
android-sdk-windows	11/17/2016 1:58 PM	File folder
android-studio	6/17/2015 5:47 PM	File folder
Projects	6/18/2015 10:16 A...	File folder

Mobile APPS: *Distribution/Installation/Logs*



Mobile APPS: **Distribution/Installation/Logs**

Computer > Data (E:) > AndroidStudio > android-sdk-windows > platform-tools

Organize ▾ Include in library ▾ Share with ▾ Burn New folder

	Name	Date modified
★ Favorites		
Desktop		
Downloads		
Recent Places		
	api	6/22/2016 11:56 A...
	lib64	6/22/2016 11:56 A...
	systrace	6/22/2016 11:56 A...
	adb.exe	6/22/2016 11:56 A...

Mobile APPS: *Distribution/Installation/Logs*

The screenshot displays the Android Studio environment. At the top, a file explorer window is open, showing the path: Computer > Data (E:) > AndroidStudio > android-sdk-windows > platform-tools. Below this, the main Android Studio window is visible, showing the 'MyApplication' project. The interface includes a menu bar (File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, Help) and a toolbar. The left sidebar shows the 'Project' and 'Structure' views. The bottom panel contains a 'Terminal' window with the following text:

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

E:\AndroidStudio\Projects\MyApplication>
```

A large red arrow points from the 'platform-tools' directory in the file explorer to the terminal window, indicating the path to the system image files.

Mobile APPS: *Distribution/Installation/Logs*

The screenshot shows the Android Studio 2.2 interface. The title bar reads "MyApplication - [E:\AndroidStudio\Projects\MyApplication] - Android Studio 2.2". The menu bar includes File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, and Help. The toolbar contains various icons for file operations, navigation, and development. The main workspace is divided into several panes:

- Project:** Shows "Captures" and "System Information".
- Build Variants:** A table with columns "Module" and "Build Variant".
- Terminal:** Displays the following text:

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

E:\AndroidStudio\Projects\MyApplication>cd E:\AndroidStudio\android-sdk-windows\platform-tools

E:\AndroidStudio\android-sdk-windows\platform-tools>
```

A red arrow points to the terminal prompt "E:\AndroidStudio\android-sdk-windows\platform-tools>".

Platform and Plugin Updates
The following components are ready to [update](#): A Repository, Android SDK Platform-Tools 25.0.2, A v7a System Image, Android SDK Tools 25.2.4

Mobile APPS: *Distribution/Installation/Logs*

The screenshot shows the Android Studio interface for a project named 'MyApplication'. The top menu bar includes File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, and Help. The toolbar contains various icons for file operations and development actions. The left sidebar shows the Project, Structure, and Captures views. The main workspace is divided into several panels: Captures, System Information, Build Variants, and Terminal. A notification for 'Platform and Plugin Updates' is visible on the right side of the workspace. The Terminal window shows the following text:

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

E:\AndroidStudio\Projects\MyApplication>cd E:\AndroidStudio\android-sdk-windows\platform-tools

E:\AndroidStudio\android-sdk-windows\platform-tools>adb devices
```

A red arrow points to the 'adb devices' command in the terminal.

Mobile APPS: *Distribution/Installation/Logs*

MyApplication - [E:\AndroidStudio\Projects\MyApplication] - Android Studio 2.2

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

MyApplication

Captures

System Information

Build Variants

Module	Build Variant
--------	---------------

Terminal

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

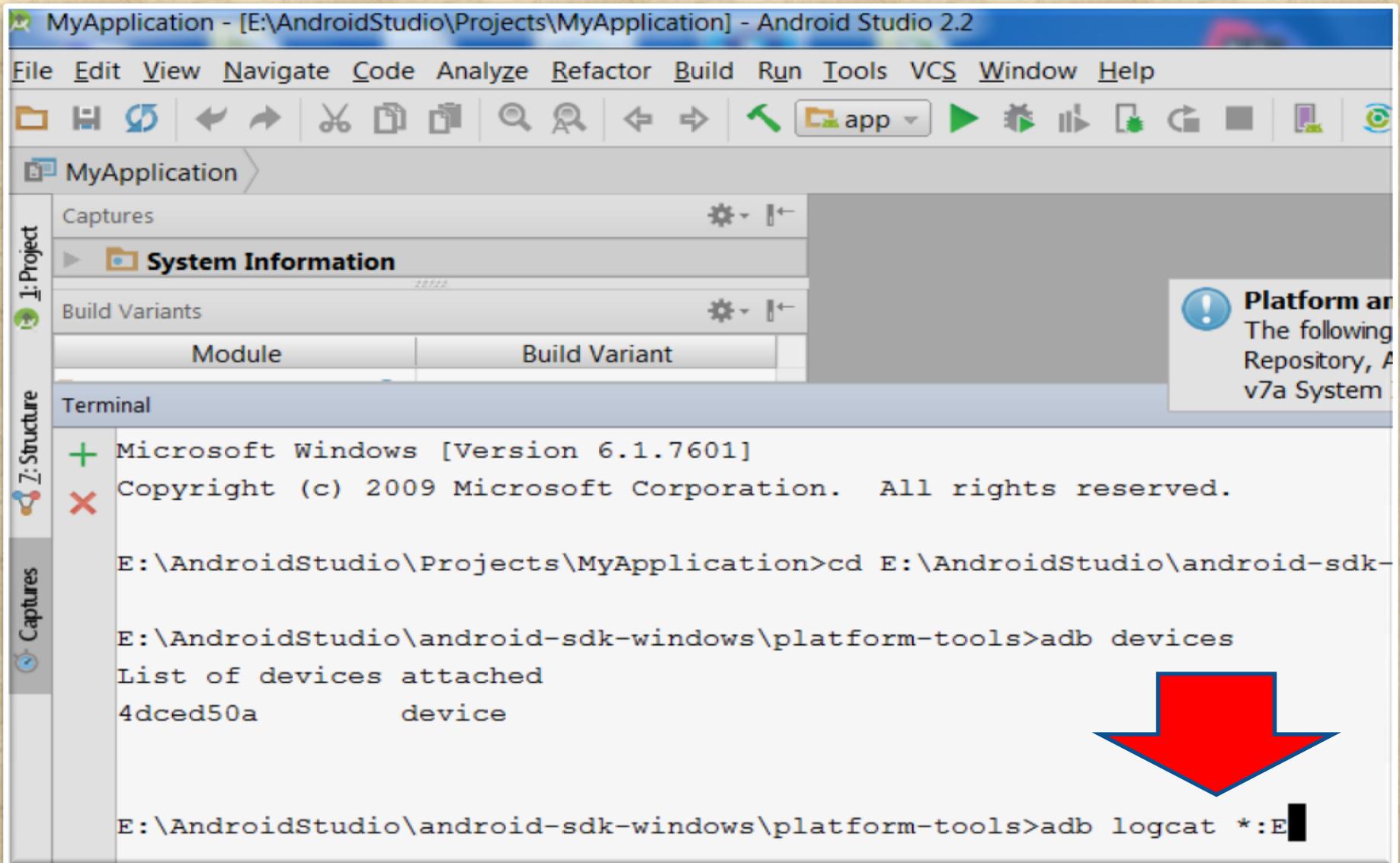
```
E:\AndroidStudio\Projects\MyApplication>cd E:\AndroidStudio\android-sdk-windows\platform-tools  
E:\AndroidStudio\android-sdk-windows\platform-tools>adb devices  
List of devices attached  
4dced50a      device
```

E:\AndroidStudio\android-sdk-windows\platform-tools>

Platform and Plugin Updates
The following components are ready to [update](#): Android Repository, Android SDK Platform-Tools 25.0.2, Android v7a System Image, Android SDK Tools 25.2.4



Mobile APPS: *Distribution/Installation/Logs*



The screenshot shows the Android Studio 2.2 interface. The title bar reads "MyApplication - [E:\AndroidStudio\Projects\MyApplication] - Android Studio 2.2". The menu bar includes File, Edit, View, Navigate, Code, Analyze, Refactor, Build, Run, Tools, VCS, Window, and Help. The toolbar contains various icons for file operations and development actions. The main workspace is divided into several panes: "Captures", "System Information", "Build Variants", and "Terminal". The "Terminal" pane is active, showing the following commands and output:

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

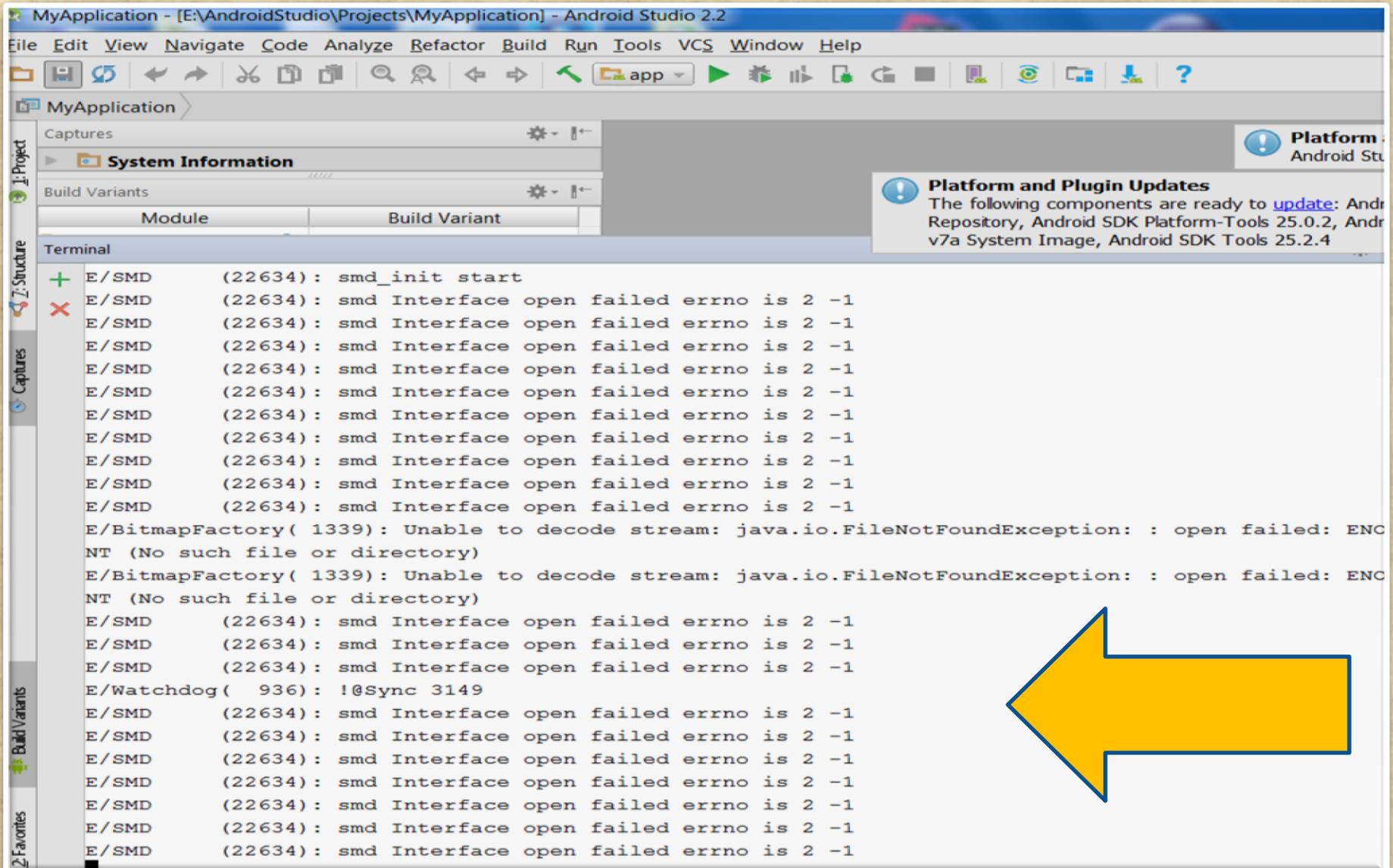
E:\AndroidStudio\Projects\MyApplication>cd E:\AndroidStudio\android-sdk-

E:\AndroidStudio\android-sdk-windows\platform-tools>adb devices
List of devices attached
4dced50a      device

E:\AndroidStudio\android-sdk-windows\platform-tools>adb logcat *:E
```

A red arrow points to the terminal output, specifically to the "device" entry in the list of attached devices.

Mobile APPS: Distribution/Installation/Logs



MyApplication - [E:\AndroidStudio\Projects\MyApplication] - Android Studio 2.2

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

MyApplication

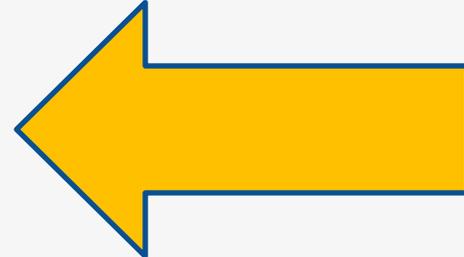
System Information

Build Variants

Terminal

```
+ E/SMD (22634): smd_init start
X E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/BitmapFactory( 1339): Unable to decode stream: java.io.FileNotFoundException: : open failed: ENO
NT (No such file or directory)
E/BitmapFactory( 1339): Unable to decode stream: java.io.FileNotFoundException: : open failed: ENO
NT (No such file or directory)
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/Watchdog( 936): !@Sync 3149
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
E/SMD (22634): smd Interface open failed errno is 2 -1
```

Platform and Plugin Updates
The following components are ready to [update](#): Android Repository, Android SDK Platform-Tools 25.0.2, Android v7a System Image, Android SDK Tools 25.2.4



Mobile APPS: *Distribution/Installation/Logs*

The screenshot displays the Android Studio 2.2 interface. The top window title is "MyApplication - [E:\AndroidStudio\Projects\MyApplication] - Android Studio 2.2". The menu bar includes "File", "Edit", "View", "Navigate", "Code", "Analyze", "Refactor", "Build", "Run", "Tools", "VCS", "Window", and "Help". The toolbar contains various icons, including a red arrow pointing to the "AVD" icon. Below the toolbar, the "Android Virtual Device Manager" window is open, showing the "Your Virtual Devices" section with the Android Studio logo. The window displays icons for a smartphone, a smartwatch, a tablet, and a car. Below these icons, the text reads: "Virtual devices allow you to test your application without having to own the physical devices." At the bottom of the window, there is a button labeled "+ Create Virtual Device..." with a red arrow pointing to it.

Mobile APPS: Distribution/Installation/Logs

Virtual Device Configuration

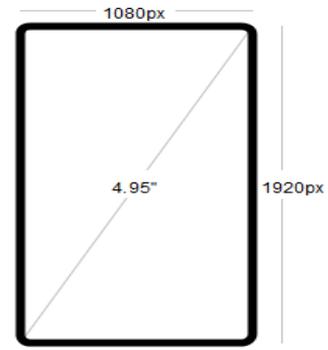
Select Hardware
Android Studio

Choose a device definition

Category	Name	Size	Resolution	Density
TV	Nexus S	4.0"	480x800	hdpi
Wear	Nexus One	3.7"	480x800	hdpi
Phone	Nexus 6P	5.7"	1440x2560	560dpi
Tablet	Nexus 6	5.96"	1440x2560	560dpi
	Nexus 5X	5.2"	1080x1920	420dpi
	Nexus 5	4.95"	1080x1920	xxhdpi
	Nexus 4	4.7"	768x1280	xhdpi
	Galaxy Nexus	4.65"	720x1280	xhdpi
	5.4" FWVGA	5.4"	480x854	mdpi
	5.1" WVGA	5.1"	480x800	mdpi
	4.7" WXGA	4.7"	720x1280	xhdpi

New Hardware Profile Import Hardware Profiles Refresh Clone Device...

Nexus 5



Size: normal
Ratio: long
Density: 420dpi

Previous **Next** Cancel Finish Help

Mobile APPS: Distribution/Installation/Logs

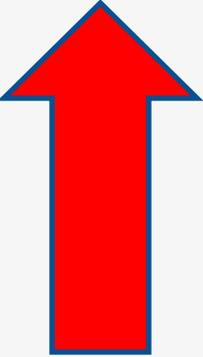
Virtual Device Configuration

 System Image
Android Studio

Select a system image

Recommended x86 Images Other Images

Release Name	API Level	ABI	Target
null Download	25	x86_64	Android API 25 (with Google APIs)
null Download	25	x86	Android API 25 (with Google APIs)
Lollipop	22	x86	Android 5.1 (with Google APIs)



Lollipop



API Level
22

Android
5.1

Google Inc.

System Image
x86

Mobile APPS: Distribution/Installation/Logs

Virtual Device Configuration

Android Virtual Device (AVD)
Android Studio

Verify Configuration

AVD Name:

 Nexus 5	4.95 1080x1920 420dpi	<input type="button" value="Change..."/>
 Lollipop	Android 5.1 x86	<input type="button" value="Change..."/>

Startup orientation

Portrait Landscape

Emulated Performance: Graphics:

Device Frame Enable Device Frame

AVD Name

The name of this AVD.

Recommendation
Virtual machine acceleration driver is out-of-date.
[Reinstall Haxm](#)



Mobile APPS: *Distribution/Installation/Logs*

Android Virtual Device Manager



Your Virtual Devices
Android Studio

Virtual machine acceleration driver is out-of-date.

[Reinstall Haxm](#)

Type	Name	Resolution	API	Target	CPU/ABI	Size on Disk	Actions
	Nexus 5 API 22	1080 × 1920: xxhdpi	22	Android 5.1 (Goog...	x86	650 MB	



Mobile APPS: *Distribution/Installation: Android .APK*



Through an App Marketplace (*Google Play*)



by Email (*Android system recognizes the APK and displays an Install Now button in the email message*)



Through a Website (*host the release-ready APK file on your website and provide a download link*)



Google Drive



Android Studio



Test Fairy TOOL



enable allow "Unknown Sources" on the device
(*Settings > Applications > Unknown Sources*)

Mobile APPS: Distribution/Installation: Android .APK

Manually Install APK in Android Studio Emulator

1. Verify the presence of
X:\Program Files (x86)\Android \android-studio\sdk\platform-tools



2. Copy APK file into
X:\Program Files (x86)\Android \android-studio\sdk\platform-tools



3. go to Android Studio > Run Android Virtual Device Manager (AVD) > Start emulator



In this session we will use APK file get from "Candy Crush"

AVD Name	Target Name	Platform	API Level	CPU/Arch	
✓ MyAvd0	Android 4.4	4.4	19	ARM	New...
✓ instinct-emulator	Android 4.4	4.4	19	ARM	Edit...
✓ instinctcoder-phone	Android 4.4	4.4	19	ARM	Delete...
✗ A	?	?	?	?	Repair...
✗ AVD_for_10_in_WXGA_Tablet	?	?	?	?	Details...
✗ Test2	?	?	?	?	Start...

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

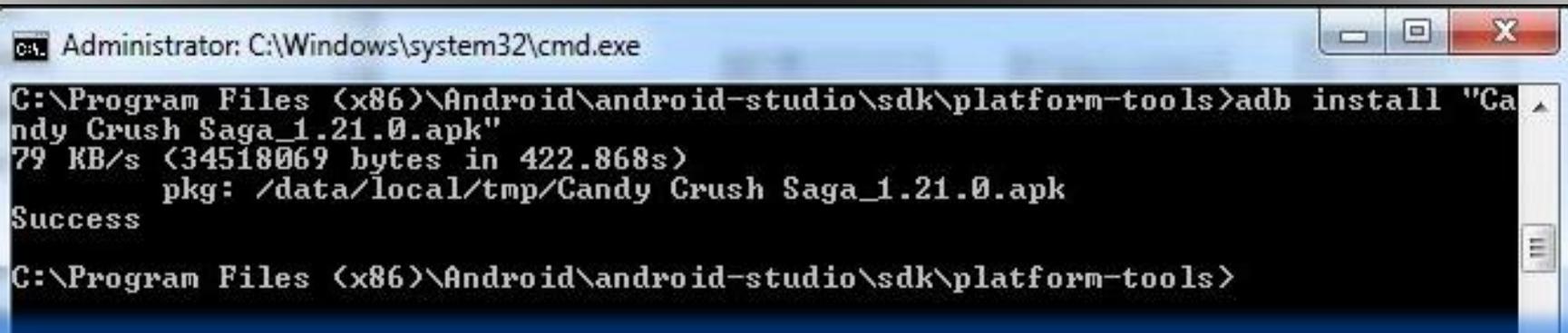
Mobile APPS: *Distribution/Installation: Android .APK*

Cont. : Manually Install APK in Android Studio Emulator

4. Go to Start > Run > Cmd

```
1 Type cd "C:\Program Files (x86)\Android\android-studio\sdk\platform-tools"  
2 Type adb install "Candy Crush Saga_1.21.0.apk"
```

5. After successfully installed, you will see result in command prompt like below



```
Administrator: C:\Windows\system32\cmd.exe  
C:\Program Files (x86)\Android\android-studio\sdk\platform-tools>adb install "Candy Crush Saga_1.21.0.apk"  
79 KB/s (34518069 bytes in 422.868s)  
  pkg: /data/local/tmp/Candy Crush Saga_1.21.0.apk  
Success  
C:\Program Files (x86)\Android\android-studio\sdk\platform-tools>
```

It will take about 5-6 minutes to install successfully

Mobile APPS: **Distribution/Installation: Android .APK**

Manually Install APK in Android Studio Emulator

6. Go to the emulator and you will see Candy Crush install in the emulator like below



Mobile APPS: **Distribution/Installation: Android .APK**

*What is
TEST
FAIRY ?*

TestFairy offers some great features for app developers. One of the stand out features is client side Video recording and not just screen shots.

TestFairy provides a video recording of the exact test from the client side, including CPU, Memory, GPS, Network monitoring, logs, crash reports and more.

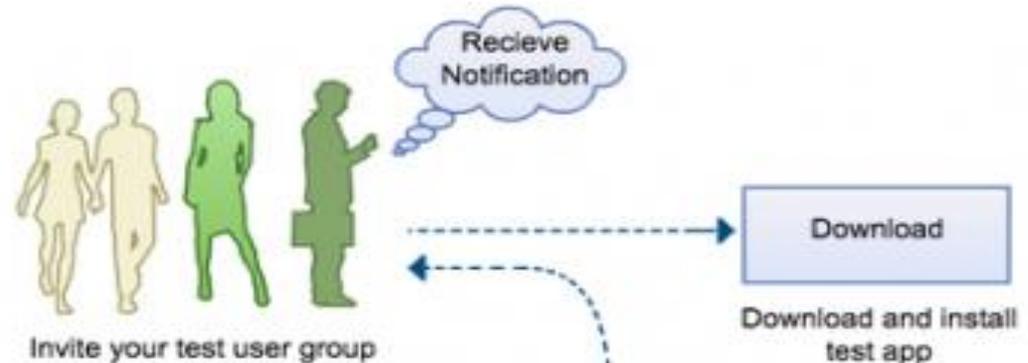
With Android apps you don't need to integrate any SDK or APIs into your app builds. You upload your APK (Android application file) to the TestFairy platform.

TEST FAIRY is for ANDROID ONLY

Mobile APPS: **Distribution/Installation: Android .APK**

TEST FAIRY

*You will receive
an invitation by
email*



Build and generate .apk

You may manually build or use build automation tools

Upload your app

You may upload using scripts, for CI builds.

Processing Build

Build ready

Now build is ready to download

TEST FAIRY is for ANDROID ONLY



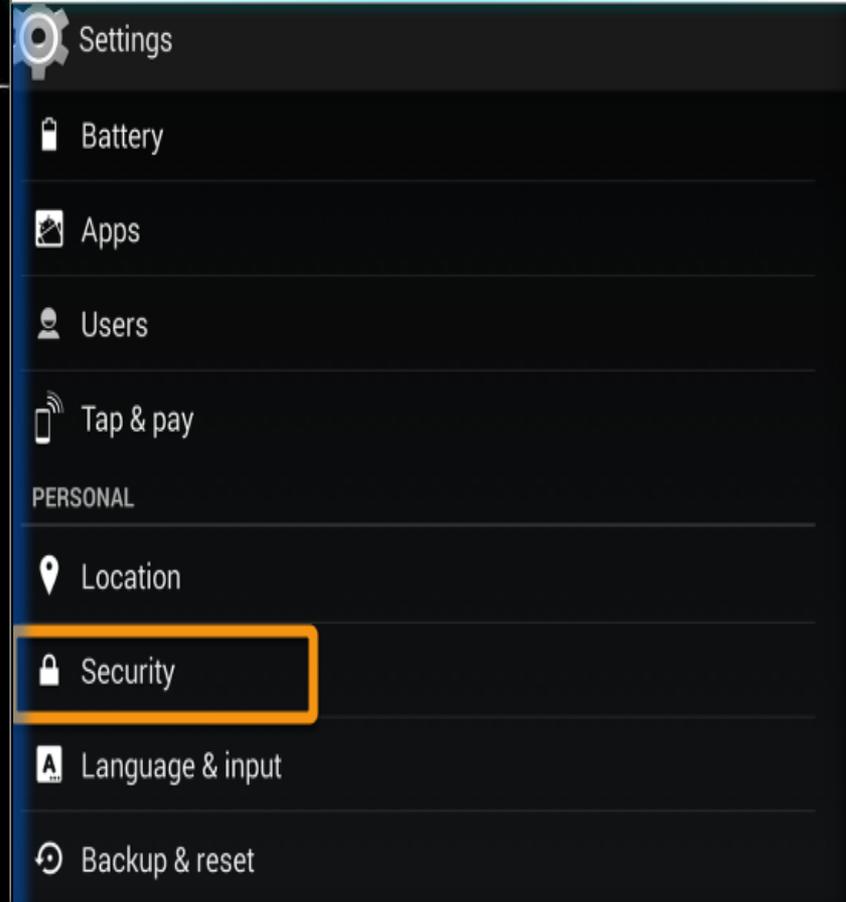
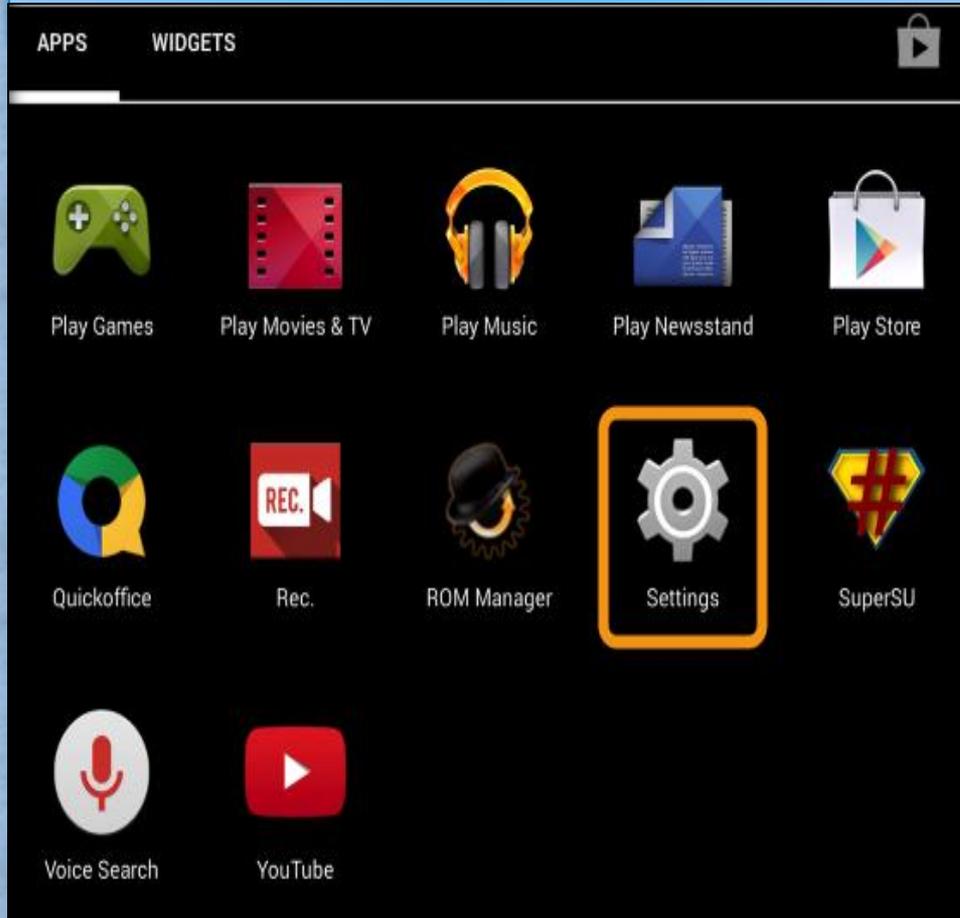
Test Fairy
Smart Android testing

Mobile APPS: *Distribution/Installation: Android .APK*

Installing THIRD PARTY APK

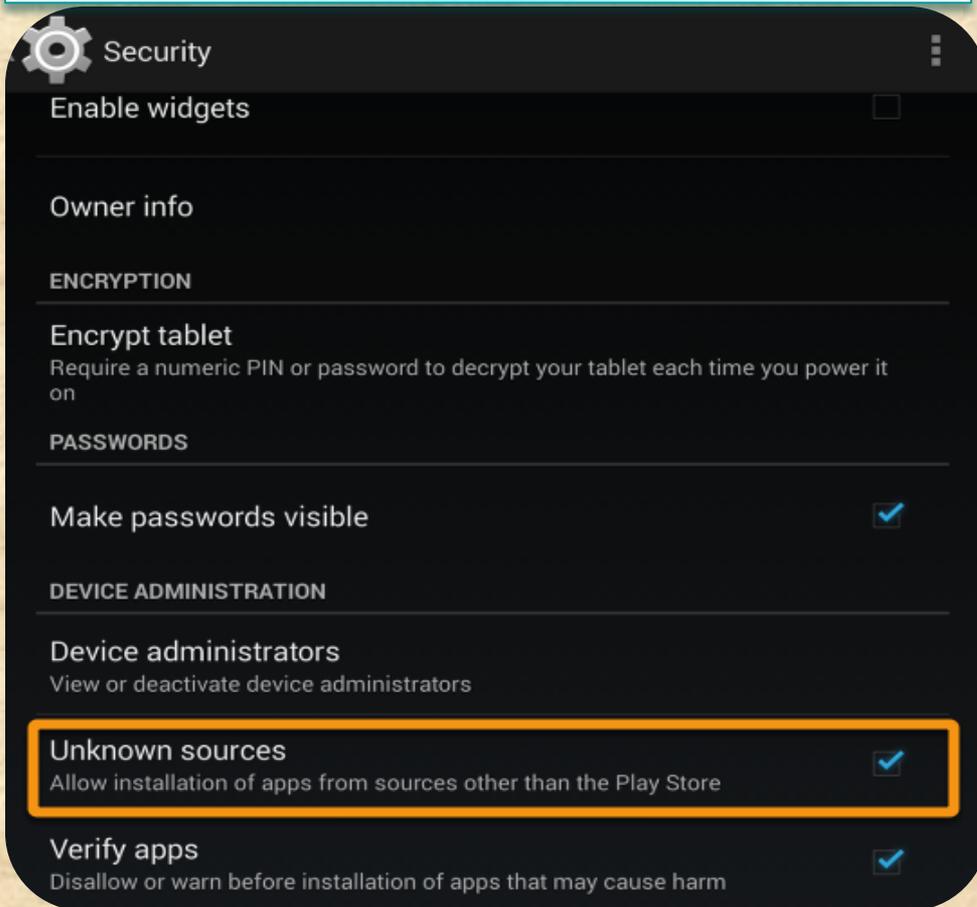
1. Go to the "Settings" application on your Android device

2. Choose the "Security" option located under the heading "Personal"



Installing THIRD PARTY APK

3. Under "Device Administration" place a checkbox next to the option "Unknown Sources"



This allows you to install applications on your Android device that are not downloaded directly from the Google Play store

Mobile APPS: *Distribution/Installation: Android .APK*

Transferring APK to your Device

1. On your computer, attach the ".apk" file to an e-mail and send it to an account that you can access via your Android device.



2. On the Android device, click on the ".apk" attachment in the e-mail in order to download it.



3. Follow the on-screen instructions to install the application.

Do you want to install this application? It will get access to:



read phone status and identity



modify or delete the contents of your USB storage
read the contents of your USB storage



find accounts on the device

DEVICE ACCESS



full network access
receive data from Internet
view network connections
view Wi-Fi connections

Cancel

Install



Mobile APPS: Android LOGS : EXTRA

Installing LOGCAT APP to your Device

Download
LOGCAT EXTREME
from PlayStore to
your Device directly
*(this is only an
example, there are
many other similar
apps)*



LOGCAT EXTREME
is an enhanced
Logcat reader and
Logcat recorder
which comes with a
rich set of features
and handy user
interface.



Please note: From
Android 4.1 onwards
ANY logcat app needs
root access in order to
show logs properly.

