# Android Analysis Report



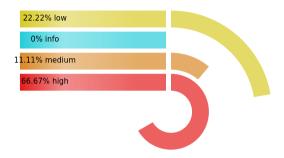
Demo app com.android.insecurebankv2

Date 2018-06-13

# Contents

1	FIN	DINGS SUMMARY	1
2 DETAILED FINDINGS			
	2.1	A1: JavascriptInterfaceAnalyser	3
	2.2	A2: MixedContentAnalyser	3
	2.3	A3: Non-random XOR	3
	2.4	A4:	4
	2.5	A5: Electronic Codebook (ECB) used for encryption	4
	2.6	A6: Application Data can be Backed up	5
	2.7	A7: Activity (com. android. insecurebankv2. PostLogin) is not Protected. [an-	
		droid:exported=true	5
	2.8	A8: Activity (com. android. insecurebankv2. DoTransfer) is not Protected. [an-	
		droid:exported=true]	6
	2.9	A9: Activity (com. android. insecurebankv2. ViewStatement) is not Protected.	
		$[and roid: exported = true]  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	6
	2.10	A10: Content Provider (com. android. insecurebankv2. TrackUserContentProvider)	
		is not Protected. [android:exported=true]	6
	2.11	A11: Broadcast Receiver (com. android. insecurebankv2. MyBroadCastReceiver) is	
		not Protected. [android:exported=true]	6
	2.12	A12: Activity (com. android. insecurebankv2. ChangePassword) is not Protected.	
		[android:exported=true]	7
	2.13	A13:	7

### 1 FINDINGS SUMMARY



Index	Title	Impact
A1		Low
A2	Application Data can be Backed up	Medium
A3	Activity (com. android. insecurebankv2. PostLogin) is not Protected. [android:exported=true]	High
A4	Activity (com. android. insecurebankv2. DoTransfer) is not Protected. [android:exported=true]	High
A5	Activity (com. android. insecurebankv2. ViewStatement) is not Protected. [android:exported=true]	High

A6	Content Provider (com. android. insecurebankv2. TrackUserContentProvider) is not Protected. [android:exported=true]	High
A7	Broadcast Receiver (com. android. insecurebankv2. MyBroadCastReceiver) is not Protected. [android:exported=true]	High
A8	Activity (com. android. insecurebankv2. ChangePassword) is not Protected. [android:exported=true]	High
A9		Low

#### 2 DETAILED FINDINGS

#### 2.1 A1:

Description

© Evidence

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/
android/support/v4/text/ICUCompatIcs.smaliLandroid/util/Log->w(Ljava/lang/String;Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/text/ICUCompatIcs.smaliLandroid/util/Log->w(Ljava/lang/String;Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/text/ICUCompatIcs.smaliLandroid/util/Log->w(Ljava/lang/String;Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/text/ICUCompatIcs.smaliLandroid/util/Log->w(Ljava/lang/String;Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/
android/support/v4/text/ICUCompatIcs.smaliLandroid/util/Log->w(Ljava/lang/String;Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/print/PrintHelperKitkat\$1.smaliLandroid/util/Log->e(Ljava/lang/String; Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/print/PrintHelperKitkat.smaliLandroid/util/Log->w(Ljava/lang/String; Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/
android/support/v4/print/PrintHelperKitkat.smaliLandroid/util/Log->w(Ljava/lang/String;
Ljava/lang/String;Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/print/PrintHelperKitkat\$2.smaliLandroid/util/Log->e(Ljava/lang/String;Ljava/lang/Throwable;)

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/util/AtomicFile.smaliLandroid/util/Log->w(Ljava/lang/String;Ljava/lang/String;Ljava/lang/Throwable;)

snip

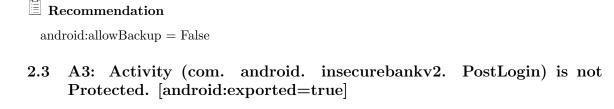
For the full list view /home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/report

### **Recommendation**

#### 2.2 A2: Application Data can be Backed up

### Description

This flag allows anyone to backup your application data via adb. It allows users who have enabled USB debugging to copy application data off of the device.



A Activity is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device.

### Recommendation

Description

It is recommended to set the protection level to signature, so only applications signed with the same certificate can obtain the permission.

# 2.4 A4: Activity (com. android. insecurebankv2. DoTransfer) is not Protected. [android:exported=true]

# Description

A Activity is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device.

## Recommendation

It is recommended to set the protection level to signature, so only applications signed with the same certificate can obtain the permission.

# 2.5 A5: Activity (com. android. insecurebankv2. ViewStatement) is not Protected. [android:exported=true]

## Description

A Activity is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device.

### Recommendation

It is recommended to set the protection level to signature, so only applications signed with the same certificate can obtain the permission.

# 2.6 A6: Content Provider (com. android. insecurebankv2. TrackUser-ContentProvider) is not Protected. [android:exported=true]

### Description

A Content Provider is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device.

### **Recommendation**

It is recommended to set the protection level to signature, so only applications signed with the same certificate can obtain the permission.

# 2.7 A7: Broadcast Receiver (com. android. insecurebankv2. MyBroad-CastReceiver) is not Protected. [android:exported=true]

### Description

A Broadcast Receiver is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device.

### Recommendation

It is recommended to set the protection level to signature, so only applications signed with the same certificate can obtain the permission.

# 2.8 A8: Activity (com. android. insecurebankv2. ChangePassword) is not Protected. [android:exported=true]

### Description

A Activity is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device.

#### Recommendation

It is recommended to set the protection level to signature, so only applications signed with the same certificate can obtain the permission.

#### 2.9 A9:

## Description

#### **Evidence**

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/text/ICUCompatIcs.smaliforName

 $/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/text/ICUCompatIcs.smaliinvoke$ 

 $/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/text/ICUCompatIcs.smaliinvoke$ 

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/util/MapCollections.smaligetComponentType

/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/app/NotificationCompatJellybean.smaliforName

 $/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/app/ActionBarDrawerToggleHoneycomb.smallinvoke$ 

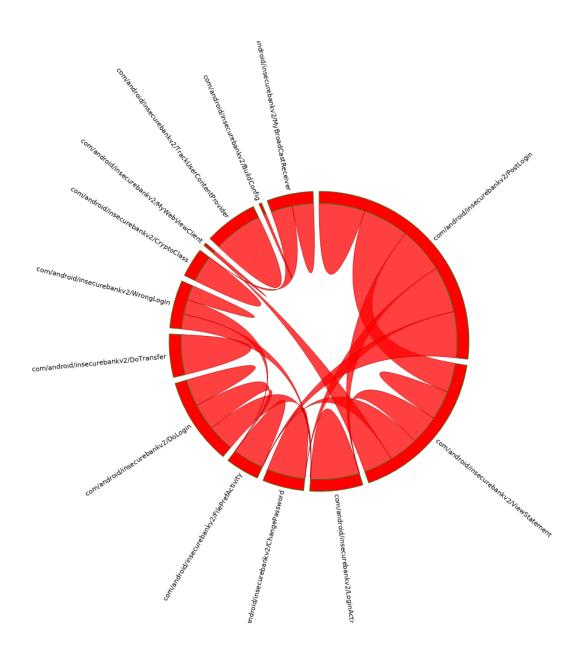
/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/app/ActionBarDrawerToggleHoneycomb.smallinvoke

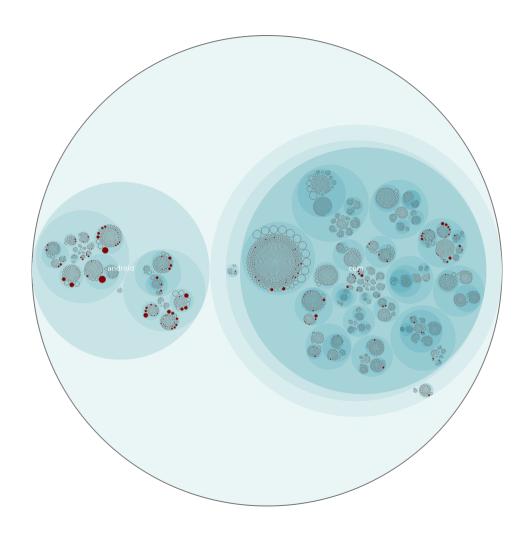
/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/media/routing/MediaRouterJellybean\$GetDefaultRouteWorkaround.smaliinvoke

 $/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/media/routing/MediaRouterJellybeanMr1\$IsConnectingWorkaround.smaliinvoke/home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/media/routing/MediaRouterJellybeanMr1\$ActiveScanWorkaround.smaliinvoke/snip$ 

For the full list view  $/miki/Documents/GITHUB/AndroidPermissions/apks/test_apks/insecurebank/report$ 

### **Recommendation**





Index	Class
1	/home/miki/Documents/GITHUB/AndroidPermissions/apks/test_apks/insecurebank/app/smali/com/google/android/gms/iid/zzc.smali
2	<pre>/home/miki/Documents/GITHUB/AndroidPermissions/apks/test_ apks/insecurebank/app/smali/android/support/v7/media/ MediaRouter\$GlobalMediaRouter.smali</pre>
3	<pre>/home/miki/Documents/GITHUB/AndroidPermissions/apks/test_apks/ insecurebank/app/smali/com/google/android/gms/internal/zzqx\$zzb. smali</pre>
4	/home/miki/Documents/GITHUB/AndroidPermissions/apks/test_apks/insecurebank/app/smali/com/google/android/gms/common/internal/zzf.smali
5	/home/miki/Documents/GITHUB/AndroidPermissions/apks/test_ apks/insecurebank/app/smali/android/support/v4/media/session/ MediaControllerCompat\$MediaControllerImplBase.smali

- 6 /home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/media/session/MediaControllerCompat\$TransportControlsBase.smali
- 7 /home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v7/media/RegisteredMediaRouteProvider.smali
- 8 /home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v7/media/MediaRouteProviderService.smali
- 9 /home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/com/google/android/gms/internal/zzal.smali
- /home/miki/Documents/GITHUB/AndroidPermissions/apks/test\_apks/insecurebank/app/smali/android/support/v4/app/NotificationManagerCompat\$SideChannelManager.smali