



App Name: Spelling Wallpaper

## Scan Summary



Security Risk Level: PUA

Detection Name: AndroidOS\_Joke.CBTE (<https://www.trendmicro.com/vinfo/us/threat-encyclopedia/>) (MISC)

## Security Information

Privacy Risk	Low
Risks	Accesses some malicious websites. Matches with a Trend Micro malware pattern. Matches with a Trend Micro reputation pattern.

## Resource Usage

Battery Usage	Low
Memory Usage	Low
Traffic Usage	Low

## App Properties

Platform	
App SHA1	C1FB5F65D7A0C3B94A9524058B4362D8BCCD61A9
App SHA256	E08CEC19764038D65BBAD0C843ED013D23110AFA791D89E799963765045D953E
Package Name	com.wli.spell.wallpaper
Version Name	N/A
Version Code	15
Size	4976128 bytes
SDK Version	19
Shared UID	N/A
Certificate Signed On	N/A
Download Count	1000

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Collected At	2019-11-08 06:31:02
Last Scanned	2019-12-11 09:30:20
Source	Non Google Play

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## Developer Information

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### Developer

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Common Name	wli
Organization Unit	wli
Organization	wli
Location	LA
State	CA
Country	US
Serial Number	510D64E4
Validity Period	2074-07-18 06:28:02.0

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### Signer

---

Common Name	wli
Organization Unit	wli
Organization	wli
Location	LA
State	CA
Country	US
Serial Number	510D64E4
Validity Period	2074-07-18 06:28:02.0

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## Permissions

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### Permissions at Risk

#### **android.permission.CHANGE\_WIFI\_STATE**

Allows applications to change Wi-Fi connectivity state

#### **android.permission.INTERNET**

Allows applications to open network sockets.

### Other Permissions

**android.permission.READ\_EXTERNAL\_STORAGE**

Allows an application to read from external storage.

**android.permission.ACCESS\_NETWORK\_STATE**

Allows applications to access information about networks

**android.permission.ACCESS\_WIFI\_STATE**

Allows applications to access information about Wi-Fi networks

**android.permission.WAKE\_LOCK**

Allows using PowerManager WakeLocks to keep processor from sleeping or screen from dimming

**android.permission.READ\_PHONE\_STATE**

Allows read only access to phone state.

**android.permission.SET\_WALLPAPER**

Allows applications to set the wallpaper

**android.permission.GET\_ACCOUNTS**

Allows access to the list of accounts in the Accounts Service

**android.permission.WRITE\_EXTERNAL\_STORAGE**

Allows an application to write to external storage

**android.permission.SET\_WALLPAPER\_HINTS**

Allows applications to set the wallpaper hints

**Less**

## Trend Micro Category

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Categories

**Applications: Tools**

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Content Tag

N/A

## Google Play

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### Market Overview

Description

No Description

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Download Count

1000

### Screenshots

N/A

## Activities

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com.andronicus.coolwallpapers.ui.Activity\_Splash  
com.andronicus.coolwallpapers.ui.Activity\_Main  
com.andronicus.coolwallpapers.ui.Activity\_CategoryImages  
com.andronicus.coolwallpapers.ui.Activity\_Preferences  
com.andronicus.coolwallpapers.ui.Activity\_Detail  
com.andronicus.coolwallpapers.ui.Activity\_SearchResults  
com.google.android.gms.ads.AdActivity  
com.andronicus.coolwallpapers.ui.TestActivity  
com.andronicus.coolwallpapers.ui.Activity\_Onboard  
com.google.android.gms.common.api.GoogleApiActivity  
com.original.OriginalAntivirusActivity

**Less**

## Services

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com.google.android.gms.analytics.AnalyticsService  
com.google.android.gms.analytics.AnalyticsJobService  
com.google.android.gms.measurement.AppMeasurementService  
com.google.android.gms.measurement.AppMeasurementJobService  
com.google.firebase.iid.FirebaseInstanceIdService  
com.original.OriginalAntivirusService

## Content Providers

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com.andronicus.coolwallpapers.SuggestionProvider  
android.support.v4.content.FileProvider  
com.google.firebase.provider.FirebaseInitProvider

## Broadcast Receivers

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com.google.android.gms.analytics.AnalyticsReceiver  
com.google.android.gms.measurement.AppMeasurementReceiver  
com.google.android.gms.measurement.AppMeasurementInstallReferrerReceiver  
com.google.firebase.iid.FirebaseInstanceIdReceiver

## Embedded URLs

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### Suspicious URLs

N/A

### Other URLs

URL	Categories	Score
https://www.google.com/dfp/inAppPreview	Search Engines / Portals	81

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URL	Categories	Score
<a href="https://googleads.g.doubleclick.net/mads/stati...">https://googleads.g.doubleclick.net/mads/stati...</a>	Web Advertisements	81
<a href="https://imasdk.googleapis.com/admob/sdkloa...">https://imasdk.googleapis.com/admob/sdkloa...</a>	Computers / Internet	81
<a href="https://e.crashlytics.com/spi/v2/events">https://e.crashlytics.com/spi/v2/events</a>	Web Advertisements	81
<a href="http://www.google-analytics.com">http://www.google-analytics.com</a>	Internet Infrastructure	81
<a href="http://squarenotchwallpaper.appspot.com/api_...">http://squarenotchwallpaper.appspot.com/api_...</a>	Computers / Internet	81
<a href="https://materialwallpaper.storage.googleapis.c...">https://materialwallpaper.storage.googleapis.c...</a>	Computers / Internet	81
<a href="http://squarenotchwallpaper.appspot.com/api_...">http://squarenotchwallpaper.appspot.com/api_...</a>	Computers / Internet	81
<a href="https://materialwallpaper.storage.googleapis.c...">https://materialwallpaper.storage.googleapis.c...</a>	Computers / Internet	81
<a href="https://www.googleapis.com/auth/games_lite">https://www.googleapis.com/auth/games_lite</a>	Computers / Internet	81
<a href="https://plus.google.com/">https://plus.google.com/</a>	Social Networking	81
<a href="https://www.googletagmanager.com">https://www.googletagmanager.com</a>	Computers / Internet	81
<a href="https://googleads.g.doubleclick.net/mads/stati...">https://googleads.g.doubleclick.net/mads/stati...</a>	Web Advertisements	81
<a href="http://schemas.android.com/apk/res/android">http://schemas.android.com/apk/res/android</a>	Computers / Internet	81
<a href="https://googleads.g.doubleclick.net/mads/stati...">https://googleads.g.doubleclick.net/mads/stati...</a>	Web Advertisements	81
<a href="https://materialwallpaper.storage.googleapis.c...">https://materialwallpaper.storage.googleapis.c...</a>	Computers / Internet	81
<a href="https://csi.gstatic.com/csi">https://csi.gstatic.com/csi</a>	Web Advertisements	81
<a href="https://www.google.com/dfp/debugSignals">https://www.google.com/dfp/debugSignals</a>	Search Engines / Portals	81
<a href="https://www.google.com">https://www.google.com</a>	Search Engines / Portals	81
<a href="https://www.google.com/dfp/linkDevice">https://www.google.com/dfp/linkDevice</a>	Search Engines / Portals	81
<a href="http://play.google.com/store/apps/details?id=">http://play.google.com/store/apps/details?id=</a>	Software Downloads	81
<a href="https://settings.crashlytics.com/spi/v2/platform...">https://settings.crashlytics.com/spi/v2/platform...</a>	Web Advertisements	81
<a href="https://googleads.g.doubleclick.net/mads/stati...">https://googleads.g.doubleclick.net/mads/stati...</a>	Web Advertisements	81
<a href="http://hostname/?">http://hostname/?</a>	Unknown	81
<a href="https://pagead2.googlesyndication.com/pagea...">https://pagead2.googlesyndication.com/pagea...</a>	Web Advertisements	81
<a href="http://squarenotchwallpaper.appspot.com/api_...">http://squarenotchwallpaper.appspot.com/api_...</a>	Computers / Internet	81
<a href="https://googleads.g.doubleclick.net/mads/stati...">https://googleads.g.doubleclick.net/mads/stati...</a>	Web Advertisements	81
<a href="http://squarenotchwallpaper.appspot.com/api_...">http://squarenotchwallpaper.appspot.com/api_...</a>	Computers / Internet	81
<a href="https://pagead2.googlesyndication.com/pagea...">https://pagead2.googlesyndication.com/pagea...</a>	Web Advertisements	81
<a href="https://support.google.com/dfp_premium/ans...">https://support.google.com/dfp_premium/ans...</a>	Search Engines / Portals	81
<a href="http://www.google.com">http://www.google.com</a>	Search Engines / Portals	81
<a href="https://ssl.google-analytics.com">https://ssl.google-analytics.com</a>	Computers / Internet	81

URL	Categories	Score
https://googleads.g.doubleclick.net/mads/stati...	Web Advertisements	81
https://www.google.com/dfp/sendDebugData	Search Engines / Portals	81
http://squarenotchwallpaper.appspot.com/api_...	Computers / Internet	81
https://www.googleapis.com/auth/games	Computers / Internet	81
http://www.example.com	Computers / Internet	81

**Less**

## Embedded Packages

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N/A

## Suspicious API Calls

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### Privacy API Calls ⚠️

N/A

### Premium API Calls ⚠️

N/A

### Other Suspicious API Calls ⚠️

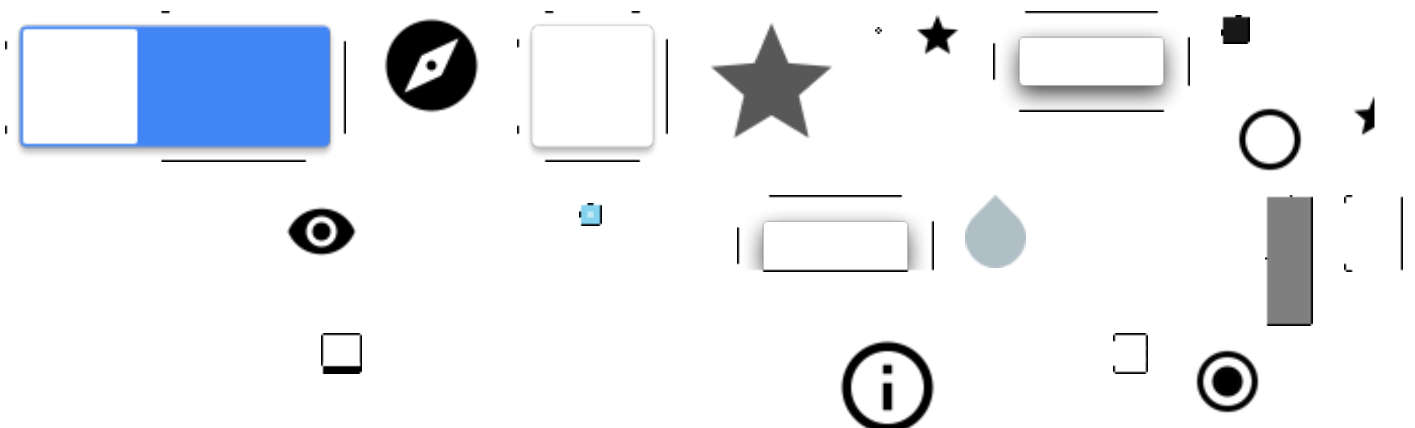
#### NotificationManager.notify

Shows notifications.

## Embedded Images

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The installation package contains the following images:





## Embedded SDKs

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The installation package contains the following SDKs:

### Admob

Description	sdk_plugins_desc_Admob
Risk Behaviour	N/A

### Google gson

Description	sdk_plugins_desc_Google gson
Risk Behaviour	N/A

## Embedded Strings

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The installation package contains the following strings:

<p>strings.xml</p>
 سروسز کے بغیر نہیں چلے گی، جو فی الحال اپ ڈیٹ ہو رہی ہیں۔ Google Play صوتی تلاش 1%+999 سائن ان کریں۔
 سروسز اپ ڈیٹ کرینسکیڑیانتلاش کریں... تلاش کرینایک ایپ Google Play اشتہار کو ایک کیلنڈر ایونٹ بنانے کی اجازت دیں؟ فون پر کھولیں
 تب تک نہیں چلے گی۔ فعال کرینقبول کریناشتہار کو تصویری s سروسز اپ ڈیٹ نہیں کر لیتے ہیں 1% Google Play منتخب کرینجب تک آپ
 گیلری میں تصویر محفوظ کرنے کی اجازت دیں؟ تصویر محفوظ کریناشتہار ٹیسٹ کریناستفسار صاف کرینکیلنڈر ایونٹ بنانیمسترد کرینہوم پر نیویگیٹ
 کو s کے ساتھ اشتراک کریں 1% s % کام نہیں کرے گی۔ s سروسز فعال نہیں کر لیتے، 1% Google Play کریناپ ڈیٹ کرینجب تک آپ

سروسز کے ساتھ مسئلہ پیش آ رہا ہے۔ براہ کرم دوبارہ کوشش کریں۔ استفسار تلاش کرنا وپر نیویگیٹ کرنا بہتر ہے۔ اشتراک کریں Google Play  
سروسز فعال Google Play سروسز کے بغیر نہیں چلے گی، جو آپ کے آلہ سے غائب ہیں۔ آفتلاش استفسار جمع کرنا Google Play مع 1%  
Google کے ساتھ سائن ان کرنا مزید اختیار انسٹال کریں Google سروسز کی خرابی Google Play سروسز کی دستیابی Google Play کریں  
سروسز کے نئے ورژن کی ضرورت ہے۔ یہ تھوڑی دیر میں خود ہی اپنے آپ کو اپ ڈیٹ کر لے گا۔ Google Play سروسز حاصل کریں Google Play  
سروسز کے بغیر نہیں چلے گی، جن کی آپ کا آلہ معاونت نہیں کرتا۔ سبھی دیکھیں Google Play 1%

## Privacy Risk

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The following private information is accessible and is at risk of being exposed:

N/A

## Data Leakage

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N/A

## Calls/Messages

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### Messages

N/A

### Phone Calls

N/A

## Accessed URLs

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### Suspicious URLs

URL	Categories	Score
https://s3.eu-west-3.amazonaws....	Malware Accomplice	49

### Other URLs

URL	Categories	Score
172.217.7.227	Untested	71
52.95.156.49	Untested	71
https://settings.crashlytics.com:443	Web Advertisements	81
3.122.143.26/api/ckwkc2?icc=Y2...	Untested	71
https://googleads.g.doubleclick.n...	Unknown	71
172.217.15.110	Untested	71
52.95.156.1	Untested	71



URL	Categories	Score
squarenotchwallpaper.appspot.c...	Computers / Internet	81
172.217.15.99	Untested	71
3.122.143.26/api/ckwkc2?icc=Y2...	Untested	71
https://app-measurement.com:443	Web Advertisements	81
https://googleads.g.doubleclick.n...	Unknown	71
172.217.7.163	Untested	71
172.217.9.208	Untested	71
https://googleads.g.doubleclick.n...	Unknown	71
172.217.164.174	Untested	71
https://googleads.g.doubleclick.n...	Unknown	71
172.217.164.130	Untested	71
http://3.122.143.26/api/ckwkc2?ic...	Untested	71
172.253.122.153	Untested	71
52.95.155.41	Untested	71
172.217.12.238	Untested	71
https://googleads.g.doubleclick.n...	Unknown	71
https://settings.crashlytics.com/s...	Web Advertisements	81
http://squarenotchwallpaper.apps...	Computers / Internet	81
https://googleads.g.doubleclick.n...	Unknown	71
https://s3.eu-west-3.amazonaws....	Personal Network Storage / File Download Servers	81
https://app-measurement.com/a	Web Advertisements	81
https://googleads.g.doubleclick.n...	Unknown	71
http://3.122.143.26/api/ckwkc2?ic...	Untested	71
172.217.7.162	Untested	71
https://app-measurement.com/co...	Web Advertisements	81
https://googleads.g.doubleclick.n...	Unknown	71
https://app-measurement.com/co...	Web Advertisements	81
https://googleads.g.doubleclick.n...	Unknown	71
172.217.7.174	Search Engines / Portals	81
https://googleads.g.doubleclick.n...	Unknown	71
https://googleads.g.doubleclick.n...	Unknown	71
172.217.164.142	Untested	71
https://googleads.g.doubleclick.n...	Web Advertisements	81
https://googleads.g.doubleclick.n...	Unknown	71
https://googleads.g.doubleclick.n...	Unknown	71

URL	Categories	Score
https://app-measurement.com/co...	Web Advertisements	81
https://googleads.g.doubleclick.n...	Unknown	71
https://app-measurement.com/co...	Computers / Internet	81
3.122.143.26/api/ckwkc2?icc=Y2...	Untested	71
http://squaresnotchwallpaper.apps...	Computers / Internet	81
https://googleads.g.doubleclick.n...	Unknown	71
https://googleads.g.doubleclick.n...	Unknown	71
54.221.227.8	Untested	71
https://materialwallpaper.storage...	Unknown	81
172.253.122.128	Untested	71
https://googleads.g.doubleclick.n...	Unknown	71
172.217.9.194	Untested	71
https://googleads.g.doubleclick.n...	Unknown	71
172.217.15.116	Untested	71
172.217.15.98	Untested	71
172.217.7.142	Search Engines / Portals	81
https://materialwallpaper.storage...	Unknown	81
https://materialwallpaper.storage...	Unknown	81
https://googleads.g.doubleclick.n...	Unknown	71
https://materialwallpaper.storage...	Computers / Internet	81
3.122.143.26/api/ckwkc2?icc=Y2...	Untested	71
172.217.8.14	Untested	71
172.217.9.212	Untested	71
https://app-measurement.com/co...	Web Advertisements	81
http://3.122.143.26/api/ckwkc2?ic...	Untested	71
squaresnotchwallpaper.appspot.c...	Computers / Internet	81
http://3.122.143.26/api/ckwkc2?ic...	Untested	71
https://materialwallpaper.storage...	Unknown	81
https://materialwallpaper.storage...	Unknown	81
172.217.5.240	Untested	71
52.95.154.53	Untested	71
3.122.143.26	Untested	71
172.217.13.66	Untested	71
https://googleads.g.doubleclick.n...	Unknown	71
https://googleads.g.doubleclick.n...	Web Advertisements	81

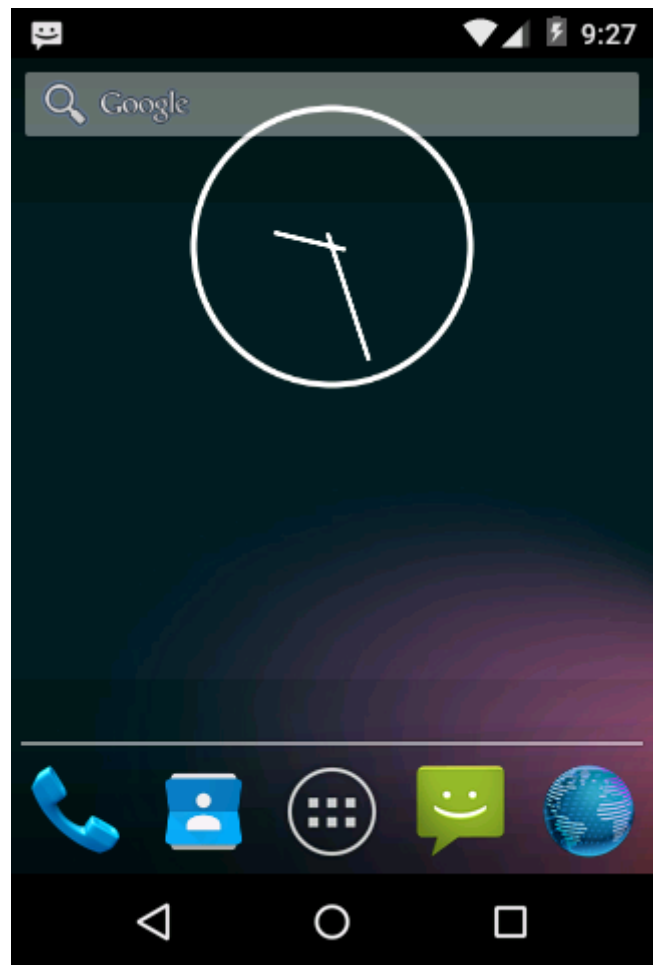
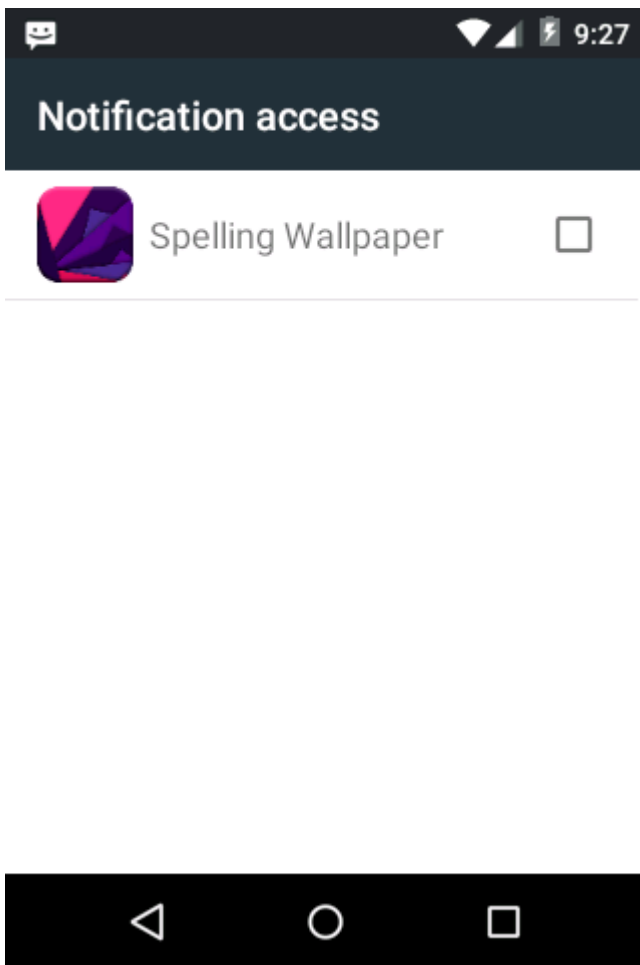
URL	Categories	Score
https://materialwallpaper.storage...	Unknown	81
https://materialwallpaper.storage...	Unknown	81
http://squarenotchwallpaper.apps...	Computers / Internet	81
https://materialwallpaper.storage...	Unknown	81
172.217.15.67	Untested	71
squarenotchwallpaper.appspot.c...	Computers / Internet	81

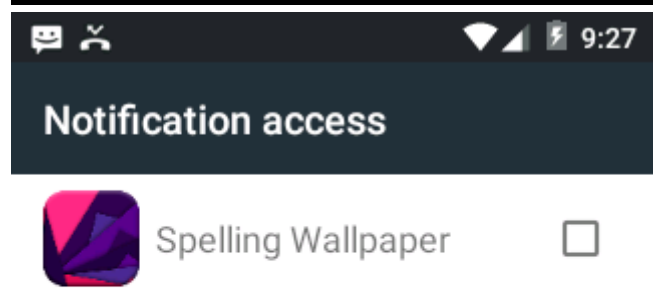
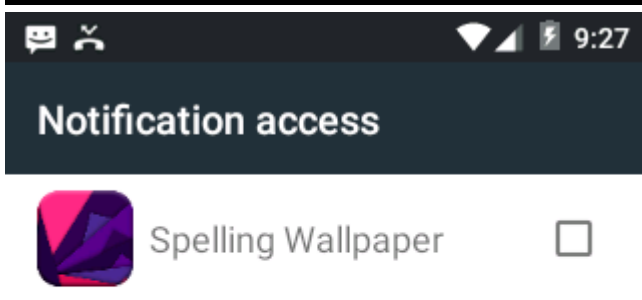
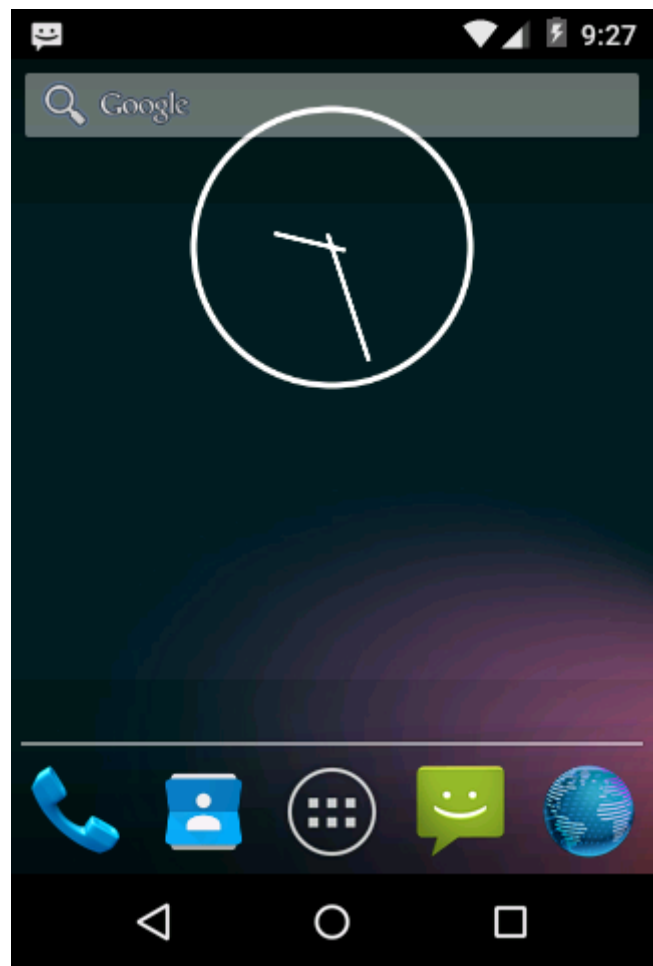
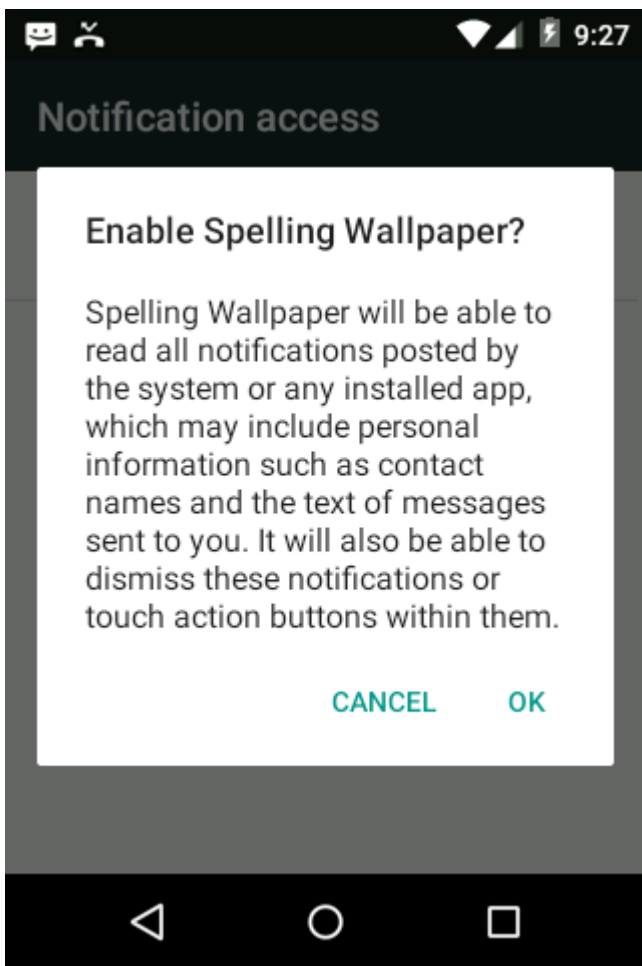
**Less**

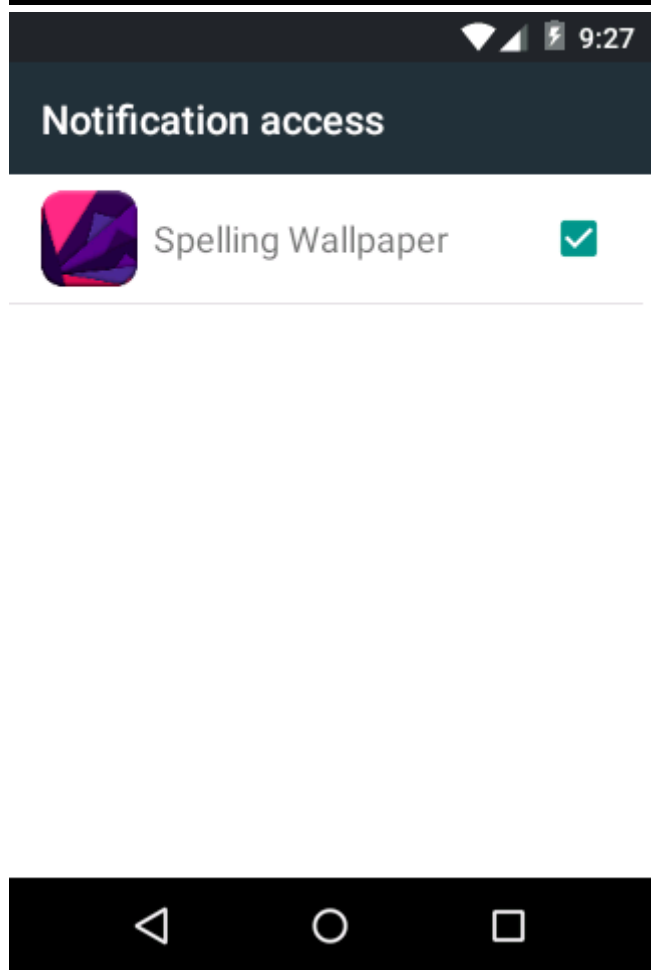
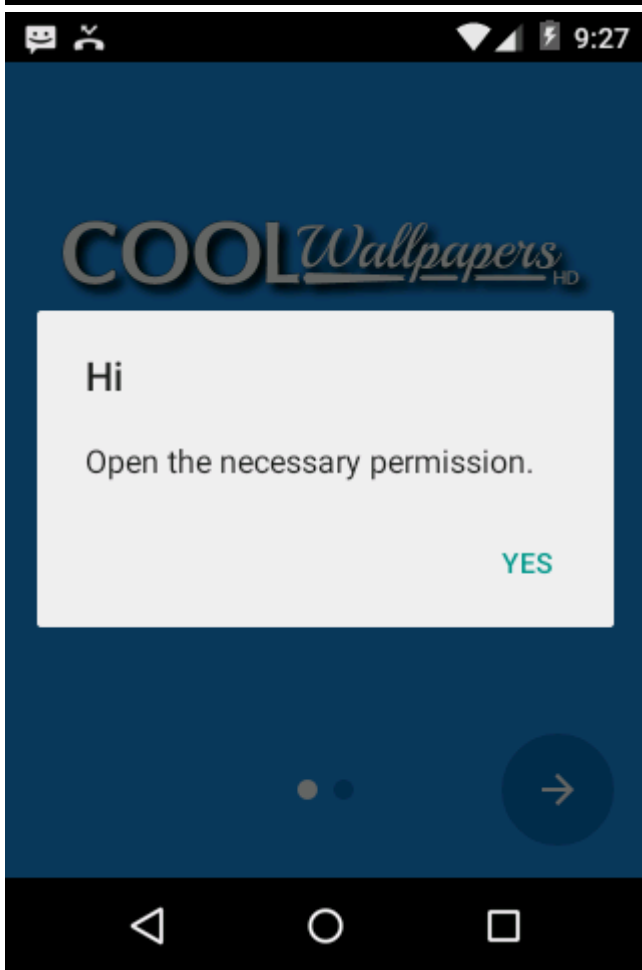
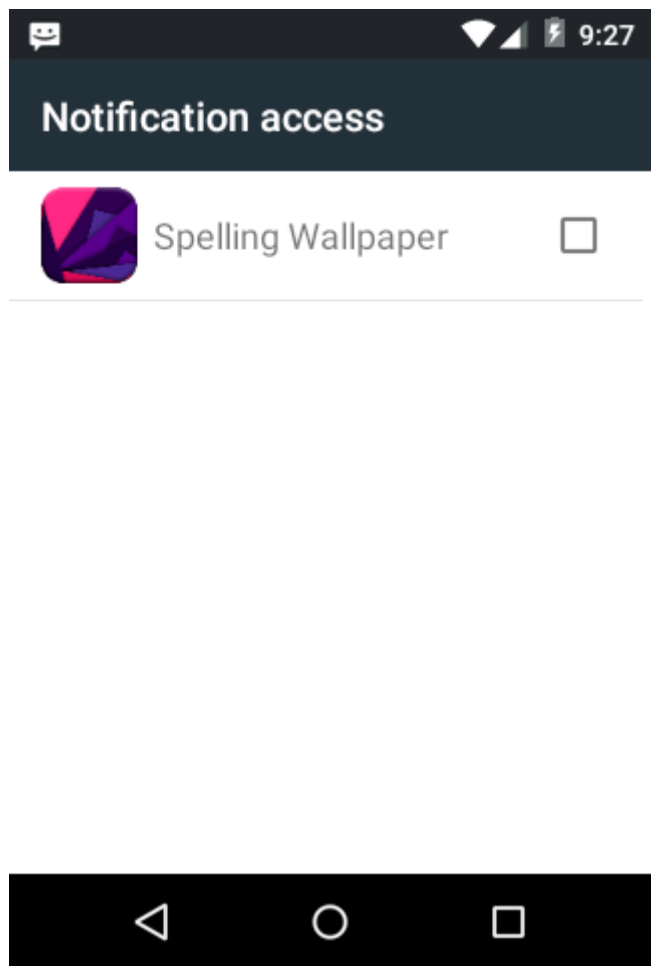
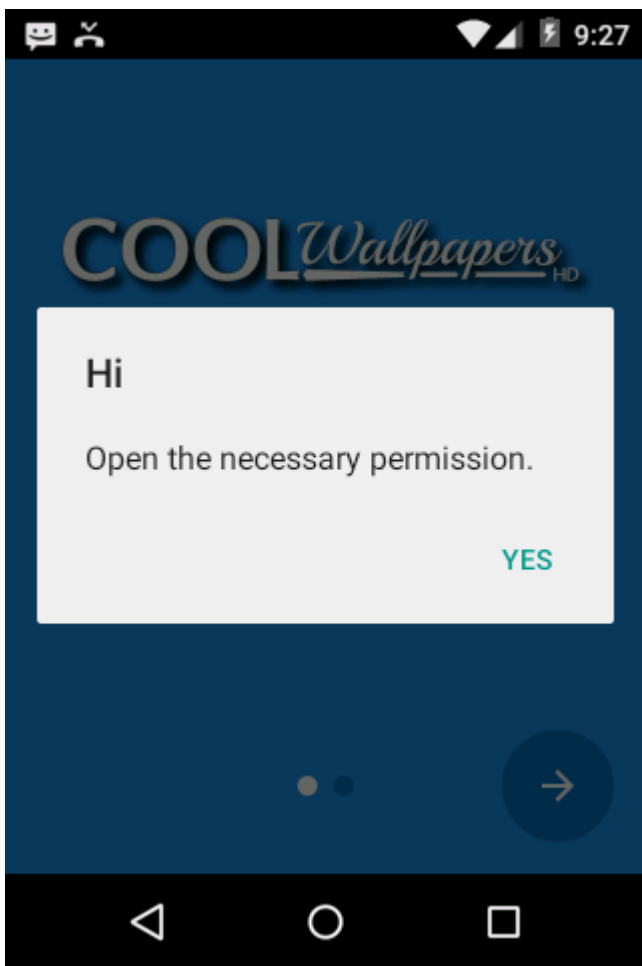
## Runtime Screenshots

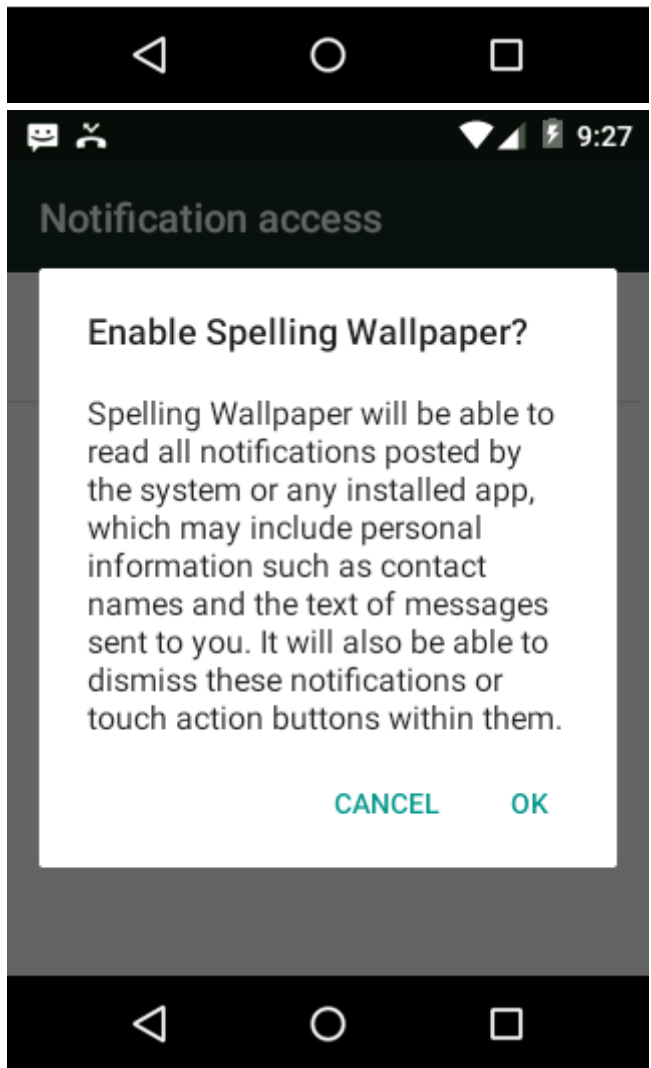
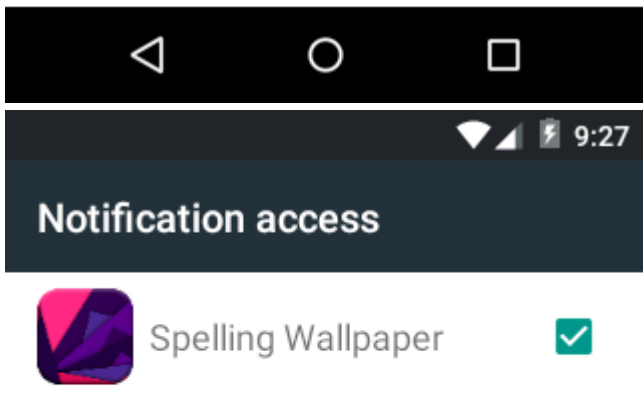
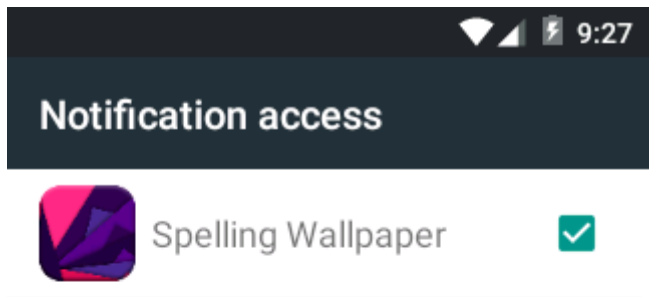
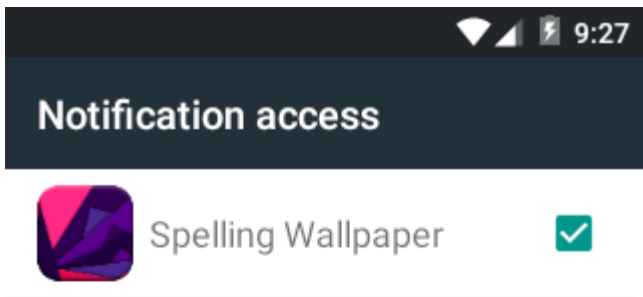
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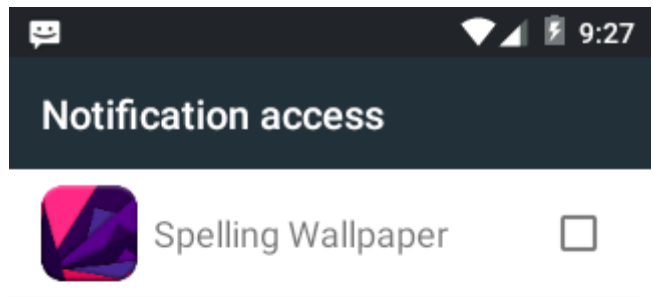
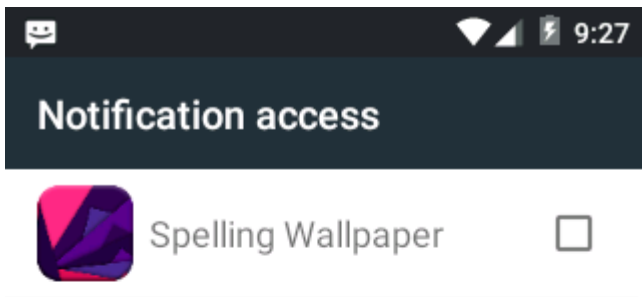
### Runtime Screenshots











### Images Used

N/A

### Strings Used

N/A

### Android Manifest

Click the link below to access this app's android manifest:

AndroidManifest.xml

(<https://resource.mars.trendmicro.com/E08CEC19764038D65BBAD0C843ED013D23110AFA791D89E799963765045D953E/AndroidManifest.xml>)

### File Access

Name	Path	App Triggered	User Triggered
session_analytics.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/	Access/Read	Read/Access

Name	Path	App Triggered	User Triggered
sa_d6b156d2-5f35-4f99-a585-11a5b7991664_1573195006566.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
b287a19466024015087571dc533554b2.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
dynamicStack.txt	/data/data/com.wli.spell.wallpaper/shared_prefs/com.crashlytics.sdk.android:answers:settings.xml/data/mars/	Access	Access
sa_a8e0bc95-1282-4771-a4e3-34284da33981_1575893958724.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
journal.tmp	/dev/ashmem/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access	Access
files	/data/data/com.wli.spell.wallpaper/	Access	Access
com.google.android.gms.measurement.prefs.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
sa_a2c40800-a669-48dc-b0d1-a465bd165af3_1573194800525.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
b287a19466024015087571dc533554b2.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
WebViewChromiumPrefs.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
df4ec08512e07b6ab46e8285def694cd.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
primary.origin	/data/data/com.wli.spell.wallpaper/app_webview/File System/	Access	Access
Cookies-journal	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
google_app_measurement_local.db-journal	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
ec41915a449f1f52f052c957b844c8b2.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
sa_585ea126-01c0-41f4-a2ca-302525622385_1575916949709.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
2bd58af86dafd2d7d7fc80ef914b2c08.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access



Name	Path	App Triggered	User Triggered
io.fabric.sdk.android:fabric:a.a.a.a.m.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
dynamicStack.txt	/dev/ashmem/data/mars/	Access	Access
boot.art	/system/framework/x86/	Access	Access
81a3217c488d93755675a50dc229b206.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
MaterialWallpaper-journal	/data/data/com.wli.spell.wallpaper/databases/	Access	Access
the-real-index	/data/data/com.wli.spell.wallpaper/app_webview/Cache/index-dir/	Access	Access
cmdline	/proc/1566/	Access/Read	Read/Access
journal.bkp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Read	Read/Access
temp-index	/data/data/com.wli.spell.wallpaper/app_webview/Cache/index-dir/	Access	Access
google_app_measurement.db-journal	/data/data/com.wli.spell.wallpaper/databases/	Access	Access
111e6273.0	/system/etc/security/cacerts/111e6273.0/system/etc/security/cacerts/	Access	Access
WebViewChromiumPrefs.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
MaterialWallpaper	/data/data/com.wli.spell.wallpaper/databases/	Access	Access
google_ads_flags_meta.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
com.crashlytics.sdk.android:answers:settings.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
com.crashlytics.prefs.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
59198405fcad6574194d12e259ca7eb3.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
index	/data/data/com.wli.spell.wallpaper/app_webview/Cache/	Access	Access
sa_22649936-e20a-4a56-ad8a-1d6e92f709c9_1576056250597.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
webview.apk	/system/app/webview/	Access	Access
28463d4c42c05354a27be28c7fa55414.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
pubkey_blacklist.txt	/data/misc/keychain/	Access	Access
google_app_measurement.db-journal	/data/data/com.wli.spell.wallpaper/databases/data/data/com.wli.spell.wallpaper/databases/	Access	Access

Name	Path	App Triggered	User Triggered
MaterialWallpaper	/dev/ashmem/data/data/com.wli.spell.wallpaper/databases/	Access	Access
Cookies	/dev/ashmem/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
Cookies-journal	/data/data/com.wli.spell.wallpaper/shared_prefs/admob.xml/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
MaterialWallpaper-journal	/data/data/com.wli.spell.wallpaper/databases/data/data/com.wli.spell.wallpaper/databases/	Access	Access
google_app_measurement_local.db-journal	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper/data/data/com.wli.spell.wallpaper/databases/	Access	Access
dalvik-cache	/data/data/com.wli.spell.wallpaper/files/	Access	Access
sa_71e7c4a5-136b-4cd1-9367-eb03bbcdd3c9_1575987758579.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
bcc96adad7a0086689dfdfaf6911c309.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
dfe6b2497a7513ba_0	/data/data/com.wli.spell.wallpaper/app_webview/Cache/	Access	Access
sa_caa1d87c-005b-4d32-9265-912d510d9fb4_1575916864717.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
cmdline	/proc/1609/	Access/Read	Read/Access
https_googleads.g.doubleclick.net_0.localstorage	/data/data/com.wli.spell.wallpaper/app_webview/Local Storage/	Access	Access
system@framework@boot.oat	/data/dalvik-cache/x86/	Access	Access
d495fa4a78df46ba_0	/data/data/com.wli.spell.wallpaper/app_webview/Cache/	Access	Access
google_app_measurement.db-journal	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
com.crashlytics.settings.json	/data/data/com.wli.spell.wallpaper/files/.Fabric/io.fabric.sdk.android:fabric/	Access	Access
MaterialWallpaper-journal	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
sa_2c45d964-1ea4-442f-adb6-1fc01b7a2f18_1573194917191.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access

Name	Path	App Triggered	User Triggered
ashmem	/data/data/com.wli.spell.wallpaper/shared_prefs/com.google.android.gms.measurement.preferences.xml/dev/	Access	Access
sa_d6147756-dd1e-497d-818d-9e1538e9c37b_1575894156974.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
ashmem	/data/data/com.wli.spell.wallpaper/app_webview/Cookies-journal/dev/	Access	Access
wallpapers.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
google_ads_flags.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
the-real-index	/data/data/com.wli.spell.wallpaper/app_webview/Cache/88f0cbb8b8e69c23_0/data/data/com.wli.spell.wallpaper/app_webview/Cache/index-dir/	Access	Access
Superuser.apk	/system/app/	Access	Access
libwebviewchromium32.relro	/data/misc/shared_relro/	Access	Access
app_webview	/data/data/com.wli.spell.wallpaper/	Access	Access
admob.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
data@app@com.wli.spell.wallpaper-1@base.apk@classes.dex	/data/dalvik-cache/x86/	Access	Access
0aa065c9d08aa53b728ba77fbd282b9d.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
databases	/data/data/com.wli.spell.wallpaper/databases/data/data/com.wli.spell.wallpaper/	Access	Access
com.google.android.gms.appid.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
fEpRgT.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
admob_user_agent.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
de258d675331e178be68e0ab7703dac6.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
maps	/proc/self/task/1627/	Access	Access
session_analytics.tap.tmp	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/	Access/Write	Write/Access
111e6273.0	/system/etc/security/cacerts/	Access/Read	Read/Access
ashmem	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db/dev/	Access	Access
admob_user_agent.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access

Name	Path	App Triggered	User Triggered
com.google.android.gms.measurement.prefs.xml	/dev/urandom/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
maps	/proc/self/task/1714/	Access	Access
hosts	/system/etc/	Access	Access
mars_conf.txt	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/mars/mars_conf.txt/data/mars/	Access	Access
1505450608132.tmp	/data/data/com.wli.spell.wallpaper/cache/	Access	Access
stat	/proc/	Access	Access
google_app_measurement.db-journal	/data/data/com.wli.spell.wallpaper/shared_prefs/com.google.android.gms.measurement.prefs.xml/data/data/com.wli.spell.wallpaper/databases/	Access	Access
10531352.0	/system/etc/security/cacerts/	Access/Read	Read/Access
skin.dex	/data/data/com.wli.spell.wallpaper/files/dalvik-cache/	Access	Access
sa_3b609a3d-8c5b-426e-9d3a-1b978c818865_1576056444944.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
wallpapers.xml	/dev/ashmem/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
Web Data-journal	/dev/ashmem/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
abef7cf8275d4a5bcf2a91a9026dd118.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
libwebviewchromium.so	/system/app/webview/lib/x86/	Access	Access
sa_1f211ee8-c94c-4747-9c6c-9eec1d21f2d9_1575917149328.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
RatingDialog.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
admob.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
10531352.0	/data/misc/user/0/cacerts-removed/	Access	Access
MaterialWallpaper-journal	/data/data/com.wli.spell.wallpaper/shared_prefs/com.google.android.gms.measurement.prefs.xml/data/data/com.wli.spell.wallpaper/databases/	Access	Access
possible	/sys/devices/system/cpu/	Access	Access
2bd58af86dafd2d7d7fc80ef914b2c08.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
tasks	/dev/cpuctl/bg_non_interactive/	Access	Access
com.google.android.gms.appid.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access

<b>Name</b>	<b>Path</b>	<b>App Triggered</b>	<b>User Triggered</b>
google_app_measurement.db	/data/data/com.wli.spell.wallpaper/databases/	Access	Access
journal.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
webview.odex	/system/app/webview/x86/	Access	Access
dynamicStack.txt	/data/data/com.wli.spell.wallpaper/databases/data/mars/	Access	Access
MaterialWallpaper	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db/data/data/com.wli.spell.wallpaper/databases/	Access	Access
maps	/proc/self/task/1664/	Access	Access
urandom	/dev/urandom/dev/	Access	Access
google_app_measurement_local.db-journal	/dev/urandom/data/data/com.wli.spell.wallpaper/databases/	Access	Access
maps	/proc/self/task/2201/	Access	Access
com.crashlytics.sdk.android:answers	/data/data/com.wli.spell.wallpaper/files/.Fabric/	Access	Access
ec41915a449f1f52f052c957b844c8b2.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
google_app_measurement_local.db-journal	/dev/ashmem/data/data/com.wli.spell.wallpaper/databases/	Access	Access
google_app_measurement_local.db	/data/data/com.wli.spell.wallpaper/databases/	Access	Access
MaterialWallpaper-journal	/dev/ashmem/data/data/com.wli.spell.wallpaper/databases/	Access	Access
cmdline	/sys/devices/system/cpu/proc/self/	Access	Access
databases	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/data/data/com.wli.spell.wallpaper/	Access	Access
MaterialWallpaper-journal	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement.db-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
meminfo	/dev/ashmem/proc/	Access	Access
google_app_measurement_local.db	/dev/ashmem/data/data/com.wli.spell.wallpaper/databases/	Access	Access
Cache	/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
cmdline	/proc/1545/	Access/Read	Read/Access
dynamicStack.txt	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/data/mars/	Access	Access
pins	/data/misc/keychain/	Access	Access

Name	Path	App Triggered	User Triggered
MaterialWallpaper-journal	/dev/ashmem/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
Local Storage	/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
maps	/proc/self/task/1688/	Access	Access
serial_blacklist.txt	/data/misc/keychain/	Access	Access
sa_d2858576-f7c9-403f-b956-f8bd438753ba_1576056337095.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
111e6273.0	/data/misc/user/0/cacerts-removed/	Access	Access
0089853ea92f8e5a019cbd1d9a3e2df6.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
abef7cf8275d4a5bcf2a91a9026dd118.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
filesystems	/proc/	Access	Access
Cookies-journal	/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
cmdline	/proc/1607/	Access/Read	Read/Access
ashmem	/data/data/com.wli.spell.wallpaper/databases/dev/	Access	Access
dynamicStack.txt	/data/data/com.wli.spell.wallpaper/shared_prefs/com.google.android.gms.measurement.preferences.xml/data/mars/	Access	Access
session_analytics_to_send	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/	Access	Access
7556c1835650e1d4_0	/data/data/com.wli.spell.wallpaper/app_webview/Cache/	Access	Access
ashmem	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement.db-journal/dev/	Access	Access
google_app_measurement.db-journal	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper/data/data/com.wli.spell.wallpaper/databases/	Access	Access
04f60c28.0	/system/etc/security/cacerts/	Access/Read	Read/Access
https	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement.db-journal/data/mars/	Access	Access
ashmem	/sys/devices/system/cpu/dev/	Access	Access
ashmem	/data/data/com.wli.spell.wallpaper/cache/1505450608132.jar/dev/	Access	Access
1505450608132.jar	/data/data/com.wli.spell.wallpaper/cache/	Access/Read	Read/Access

Name	Path	App Triggered	User Triggered
session_analytics.tap	/data/data/com.wli.spell.wallpaper/shared_prefs/com.crashlytics.sdk.android:answers:settings.xml/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/	Access	Access
1505450608132.dex	/data/data/com.wli.spell.wallpaper/cache/	Access/Read	Read/Access
tzdata	/system//usr/share/zoneinfo/	Access	Access
ashmem	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/0aa065c9d08aa53b728ba77fbd282b9d.1.tmp/dev/	Access	Access
0089853ea92f8e5a019cb d1d9a3e2df6.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
RatingDialog.xml	/data/data/com.wli.spell.wallpaper/app_webview/Cookies-journal/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
cmdline	/proc/self/	Access	Access
Web Data	/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
urandom	/dev/	Access	Access
meminfo	/proc/	Access/Read	Read/Access
app_webview	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/data/com.wli.spell.wallpaper/	Access	Access
io.fabric.sdk.android:fabric	/data/data/com.wli.spell.wallpaper/files/.Fabric/	Access	Access
present	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement.db-journal/sys/devices/system/cpu/	Access	Access
sa_584c5b8f-4199-4596-bcf6-7b2f60e7450b_1576056531945.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
https_googleleads.g.doubleclick.net_0.localstorage-journal	/data/data/com.wli.spell.wallpaper/app_webview/Local Storage/	Access	Access
com.google.android.gms.measurement.prefs.xml	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
databases	/data/data/com.wli.spell.wallpaper/	Access	Access
cpuinfo	/data/data/com.wli.spell.wallpaper/databases/proc/	Access	Access
1505450608132.dex	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/data/com.wli.spell.wallpaper/cache/	Access	Access

<b>Name</b>	<b>Path</b>	<b>App Triggered</b>	<b>User Triggered</b>
cpu	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement.db-journal/sys/devices/system/	Access	Access
https	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/data/mars/	Access	Access
cpu	/sys/devices/system/	Access	Access
ashmem	/data/data/com.wli.spell.wallpaper/app_webview/dev/	Access	Access
databases	/dev/ashmem/data/data/com.wli.spell.wallpaper/	Access	Access
no_backup	/data/data/com.wli.spell.wallpaper/	Access	Access
session_analytics.tap.tmp	/data/data/com.wli.spell.wallpaper/shared_prefs/TwitterAdvertisingInfoPreferences.xml/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/	Access	Access
ashmem	/dev/ashmem/dev/	Access	Access
libwebviewchromium_plat_support.so	/system/lib/	Access	Access
google_app_measurement_local.db-journal	/data/data/com.wli.spell.wallpaper/databases/	Access	Access
google_app_measurement.db	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
sa_34569ae8-cb18-4576-9745-336069b85df0_1575917060153.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
google_app_measurement_local.db-journal	/system/etc/security/cacerts/111e6273.0/data/data/com.wli.spell.wallpaper/databases/	Access	Access
ashmem	/data/data/com.wli.spell.wallpaper/no_backup/com.google.android.gms.appid-no-backup/dev/	Access	Access
sa_fc41bf5-ff19-45ef-8657-08ff80e577f4_1573194717749.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
maps	/proc/self/task/1651/	Access	Access
dynamicStack.txt	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/mars/	Access	Access
fEpRgT.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
ashmem	/data/data/com.wli.spell.wallpaper/cache/1505450608132.dex/dev/	Access	Access
TwitterAdvertisingInfoPreferences.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access



Name	Path	App Triggered	User Triggered
ashmem	/data/data/com.wli.spell.wallpaper/shared_prefs/admob.xml/dev/	Access	Access
sa_926addf3-b98e-436c-af7a-9e0dcba99fa3_1575894068824.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
04f60c28.0	/data/misc/user/0/cacerts-removed/	Access	Access
com.google.android.gms.measurement.prefs.xml	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
de258d675331e178be68e0ab7703dac6.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
picasso-cache	/data/data/com.wli.spell.wallpaper/cache/	Access	Access
MaterialWallpaper	/data/data/com.wli.spell.wallpaper/files/skin/data/data/com.wli.spell.wallpaper/databases/	Access	Access
google_app_measurement.db-journal	/dev/ashmem/data/data/com.wli.spell.wallpaper/databases/	Access	Access
trace_marker	/sys/kernel/debug/tracing/	Access	Access
0aa065c9d08aa53b728ba77fbd282b9d.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
temp-index	/dev/ashmem/data/data/com.wli.spell.wallpaper/app_webview/Cache/index-dir/	Access	Access
TwitterAdvertisingInfoPreferences.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
df4ec08512e07b6ab46e8285def694cd.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
Web Data-journal	/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
com.crashlytics.sdk.android:answers:settings.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
bcc96adad7a0086689dfdfaf6911c309.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
ashmem	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/dev/	Access	Access
com.google.android.gms.measurement.prefs.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
28463d4c42c05354a27be28c7fa55414.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
google_ads_flags.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
sa_f23a247e-ea7d-486c-b9a7-0160bd35b22a_1575893873756.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access

Name	Path	App Triggered	User Triggered
com.crashlytics.prefs.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/com.google.android.gms.measurement.prefs.xml/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
tasks	/dev/cpuctl/	Access	Access
https	/dev/urandom/data/mars/	Access	Access
81a3217c488d93755675a50dc229b206.1.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
Cookies-journal	/data/data/com.wli.spell.wallpaper/shared_prefs/RatingDialog.xml/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
Cookies-journal	/data/data/com.wli.spell.wallpaper/cache/1505450608132.jar/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
databases	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement.db-journal/data/data/com.wli.spell.wallpaper/	Access	Access
base.apk	/data/app/com.wli.spell.wallpaper-1/	Access/Read	Read/Access
libwebviewchromium_platform_support.so	/system/app/webview/lib/x86/	Access	Access
wallpapers.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
cache	/data/data/com.wli.spell.wallpaper/	Access	Access
ashmem	/dev/urandom/dev/	Access	Access
google_app_measurement_local.db-journal	/data/data/com.wli.spell.wallpaper/app_webview/Cookies-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
sa_79c6e0aa-b807-4fc2-b345-ca1eec64d6cd_1575987670472.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/		Write/Access
maps	/proc/self/task/1647/	Access	Access
88f0cbb8b8e69c23_0	/data/data/com.wli.spell.wallpaper/app_webview/Cache/	Access	Access
Mms.apk	/system/priv-app/Mms/		Access
MaterialWallpaper	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
system@app@webview@webview.apk@classes.dex	/data/dalvik-cache/x86/	Access	Access
session_analytics.tap	/dev/ashmem/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/	Access	Access

Name	Path	App Triggered	User Triggered
com.google.android.gms.measurement.prefs.xml	/data/data/com.wli.spell.wallpaper/databases/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
a4924b32c9d742ea_0	/data/data/com.wli.spell.wallpaper/app_webview/Cache/	Access	Access
sa_15af5716-2de7-452e-bbf5-fc7f279b1a9a_1575987474141.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
cpuinfo	/proc/	Access	Access
com.google.android.gms.measurement.prefs.xml	/dev/ashmem/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
maps	/proc/self/task/1671/	Access	Access
ashmem	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement_local.db-journal/dev/	Access	Access
161adb42c9844adf_0	/data/data/com.wli.spell.wallpaper/app_webview/Cache/	Access	Access
dex2oat	/system/bin/	Access	Access
com.google.android.gms.appid-no-backup	/data/data/com.wli.spell.wallpaper/no_backup/	Access	Access
cpu	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper-journal/sys/devices/system/	Access	Access
com.crashlytics.prefs.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
urandom	/dev/ashmem/dev/	Access	Access
59198405fcad6574194d12e259ca7eb3.0.tmp	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access/Write	Write/Access
journal	/data/data/com.wli.spell.wallpaper/cache/picasso-cache/	Access	Access
MaterialWallpaper	/data/data/com.wli.spell.wallpaper/databases/google_app_measurement.db-journal/data/data/com.wli.spell.wallpaper/databases/	Access	Access
present	/sys/devices/system/cpu/	Access	Access
ashmem	/dev/	Access	Access
sa_5377c19e-d8f5-47f8-a67c-359007f8984a_1575987559644.tap	/data/data/com.wli.spell.wallpaper/files/.Fabric/com.crashlytics.sdk.android:answers/session_analytics_to_send/	Access/Write	Write/Access
Cookies	/data/data/com.wli.spell.wallpaper/app_webview/	Access	Access
1505450608132.jar	/data/data/com.wli.spell.wallpaper/app_webview/Cookies-journal/data/data/com.wli.spell.wallpaper/cache/	Access	Access
process_name	/sys/qemu_trace/	Access	Access

Name	Path	App Triggered	User Triggered
ashmem	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper/dev/	Access	Access
libwebviewchromium_plat_support.so	/vendor/lib/	Access	Access
skin	/data/data/com.wli.spell.wallpaper/files/	Access/Read/Write	Read/Write/Access
google_app_measurement_local.db	/data/data/com.wli.spell.wallpaper/cache/1505450608132.jar/data/data/com.wli.spell.wallpaper/databases/	Access	Access
MaterialWallpaper	/data/data/com.wli.spell.wallpaper/databases/data/data/com.wli.spell.wallpaper/databases/	Access	Access
system@framework@boot.art	/data/dalvik-cache/x86/	Access	Access
base.odex	/data/app/com.wli.spell.wallpaper-1/x86/	Access	Access
cmdline	/proc/1582/	Access/Read	Read/Access
com.crashlytics.sdk.android:answers:settings.xml	/dev/ashmem/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
binder	/dev/	Access	Access
RatingDialog.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Read	Read/Access
maps	/proc/self/task/1690/	Access	Access
google_ads_flags_meta.xml	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access/Write	Write/Access
io.fabric.sdk.android:fabric:a.a.a.m.xml.bak	/data/data/com.wli.spell.wallpaper/shared_prefs/	Access	Access
databases	/data/data/com.wli.spell.wallpaper/databases/MaterialWallpaper/data/data/com.wli.spell.wallpaper/	Access	Access

**Less**

## Activities

**Contains intent filter while set the exported attribute as false**  

com.fclassroom.appstudentclient.modules.common.activity.ImageCropActivity  
com.fclassroom.appstudentclient.wxapi.WXEntryActivity  
com.zhubajie.bundle\_basic.home.MainFragmentActivity  
com.fclassroom.appstudentclient.modules.account.activity.EditNameActivity  
com.fclassroom.appstudentclient.modules.common.activity.QuestionListDetailActivity  
com.fclassroom.appstudentclient.modules.common.activity.DownloadActivity  
com.fclassroom.appstudentclient.modules.exam.activity.SearchActivity  
com.tencent.tauth.AuthActivity  
com.fclassroom.appstudentclient.modules.exam.activity.ExamDetailActivity

com.fclassroom.appstudentclient.modules.account.activity.KingPromoteActivity  
com.fclassroom.appstudentclient.modules.exam.activity.TopListActivity  
com.fclassroom.appstudentclient.modules.common.activity.DetailListActivity  
com.jumeng.lxlife.wxapi.WXEntryActivity  
com.fclassroom.appstudentclient.modules.account.activity.MyAchieveActivity  
com.fclassroom.appstudentclient.modules.account.activity.ForgetActivity  
com.fclassroom.appstudentclient.modules.summerhomework.activity.SummerHomeWorkActivity  
com.fclassroom.appstudentclient.modules.exam.activity.TaskMaintainQuestionActivity  
com.fclassroom.appstudentclient.modules.worldtool.activity.WordToolLookUpResultActivity  
com.fclassroom.appstudentclient.modules.me.activity.VersionActivity  
com.fclassroom.appstudentclient.modules.homework.activity.QuestionAnswerActivity  
com.fclassroom.appstudentclient.modules.account.activity.LoginActivity  
com.fclassroom.appstudentclient.modules.wrong.activity.NoteBookDetailActivity  
com.fclassroom.appstudentclient.modules.exam.activity.TaskResultActivity  
com.fclassroom.appstudentclient.modules.account.activity.ChangePasswordActivity  
com.fclassroom.appstudentclient.modules.account.activity.HeadImgCropActivity  
com.fclassroom.appstudentclient.modules.exam.activity.HistoryAddScoreActivity  
com.fclassroom.appstudentclient.modules.account.activity.BindQQFailActivity  
com.fclassroom.appstudentclient.modules.account.activity.SendResultActivity  
com.fclassroom.appstudentclient.modules.common.activity.DownloadLinkActivity  
com.zhubajie.af.router.CenterRouter  
com.fclassroom.appstudentclient.modules.exam.activity.TaskKillQuestionActivity  
com.kepler.jd.sdk.KeplerBackActivity  
com.fclassroom.appstudentclient.modules.exam.activity.SubjectStateActivity  
com.fclassroom.appstudentclient.modules.account.activity.MyCameraActivity  
com.fclassroom.appstudentclient.modules.exam.activity.ReviseExamActivity  
com.alibaba.alibclinkpartner.smartlink.ALPEntranceActivity  
com.fclassroom.appstudentclient.modules.common.activity.NotificationDetailActivity  
com.mob.tools.MobUIShell  
com.fclassroom.appstudentclient.modules.main.activity.WelcomeActivity  
com.jumeng.lxlife.wxapi.WXPayEntryActivity  
com.alipay.sdk.app.AlipayResultActivity  
com.fclassroom.appstudentclient.modules.exam.activity.TaskResultForMaintActivity  
com.alipay.sdk.app.PayResultActivity  
com.zhubajie.client.ZbjConversationActivity  
com.fclassroom.appstudentclient.modules.exam.activity.ReviseOneQuestionActivity  
com.fclassroom.appstudentclient.modules.exam.activity.ReviewActivity  
com.zhubajie.client.wxapi.WXEntryActivity  
com.alibaba.baichuan.android.trade.ui.AlibcBackActivity  
com.feiwo.activity.PA  
com.fclassroom.appstudentclient.modules.account.activity.BindPhoneActivity  
com.fclassroom.appstudentclient.modules.summerhomework.activity.SummerHomePropagandaActivity  
com.andronicus.coolwallpapers.ui.Activity\_Main  
com.fclassroom.appstudentclient.modules.main.activity.SuperActivity  
com.fclassroom.appstudentclient.modules.summerhomework.activity.SummerHomeTipActivity  
com.fclassroom.appstudentclient.modules.me.activity.AboutJikeActivity  
com.fclassroom.appstudentclient.modules.me.activity.SettingActivity  
com.alibaba.wireless.security.open.middletier.fc.ui.ContainerActivity  
com.fclassroom.appstudentclient.modules.me.activity.MyInformationActivity  
com.fclassroom.appstudentclient.modules.winterhomework.activity.WinterHomeWorkActivity  
com.fclassroom.appstudentclient.modules.me.activity.FeedbackActivity  
com.fclassroom.appstudentclient.modules.main.activity.CheckInfoActivity  
com.fclassroom.appstudentclient.modules.me.activity.NotificationListActivity

cn.sharesdk.tencent.qq.ReceiveActivity  
com.fclassroom.appstudentclient.modules.worldtool.activity.DailySentenceActivity  
com.fclassroom.appstudentclient.modules.worldtool.activity.WordToolLookUpWordsActivity  
com.fclassroom.appstudentclient.modules.account.activity.ReBindPhoneActivity  
com.andronicus.coolwallpapers.ui.Activity\_SearchResults  
com.letang.launchui.AdActivity  
com.kepler.jd.login.AuthSuccessActivity  
com.fclassroom.appstudentclient.modules.account.activity.FirstLoginActivity

## Set FLAG\_ACTIVITY\_NEW\_TASK flag for intent start an activity

### Detail

The root Activity is the Activity, the starting point of a task. In other words, this is the Activity that was launched when task was created. According to Android specifications, the contents of Intents sent to the root Activity can be read from arbitrary applications. It is necessary to be careful that sensitive information is not sent to the root Activity.

Using FLAG\_ACTIVITY\_NEW\_TASK, the launch mode of an Activity, can be changed when executing startActivity() or startActivityForResult(). In some cases, a new task may be generated. The launched Activity may be the root Activity in the new Task stack. Therefore, it is necessary to not change the launch mode of an Activity during execution.

### Risky Code Example

```
Intent intent = new Intent(this,  
RISKY_ACTIVITY.class);  
intent.addFlags(Intent.FLAG_ACTIVITY_NEW  
_TASK);  
startActivity(intent);
```

com.original.d->c  
com.original.d->d  
com.andronicus.coolwallpapers.e.b->b

## Broadcasts

## Contains intent filter while set the exported attribute as false

### Detail

Receiver used only within the same application should not be designed with the setting Intent-filter. Because of the Intent-filter characteristics, a public Receiver of other applications may be called unexpectedly by calling through Intent-filter even though a private Receiver within the same application is called.

### Risky Setting Example

```
<receiver android:name=".PrivateBroadcast"
android:exported="false">
...
<intent-filter>
...
<action android:name=". ." />
...
</intent-filter>
...
</receiver>
```

com.google.android.gms.measurement.AppMeasurementInstallReferrerReceiver  
com.google.firebase.iid.FirebaseInstanceIdReceiver

## Content Providers

---

### Not Explicitly set the exported attribute as false

### Detail

Content Provider, used only in a single application, should be set as private explicitly. It should be a private Content Provider. In Android 2.3.1 (API Level 9) or later, Content Provider can be set as private by specifying android:exported="false" in provider element.

### Correct Setting in AndroidManifest.xml

```
<provider
...
android:exported="false">
...
</provider>
```

com.tencent.mid.api.MidProvider  
cn.jpsh.android.service.DownloadProvider  
com.tencent.android.tpush.XGPushProvider

## Use FLAG\_GRANT\_READ\_URI\_PERMISSION

### Detail

Temporary permit Content Provider is basically a private Content Provider, but this permits particular applications to access a particular URI. By sending an Intent with special flag FLAG\_GRANT\_READ\_URI\_PERMISSION specified to the target applications, temporary access permission is provided to those applications.

### Risky Code Example

```
Intent intent = new Intent();  
...  
intent.addFlags(Intent.FLAG_GRANT_READ_  
URI_PERMISSION);  
intent.setData(REQUEST_URI);  
...
```

com.andronicus.coolwallpapers.e.b->a  
com.andronicus.coolwallpapers.e.b->d

## Risk of SQL Injection

### Detail

Directly appending input string to SQL command may lead to serious SQL injection problem.

To prevent SQL injection, when incorporating the arbitrary input value to SQL statement, placeholder should be used.

### Risky Coding Example

```
Void query(String strParam) {  
    final String s1 = "select * from ";  
    String command = s1 + strParam;
```



```

    if (command != null) {
        SQLiteDatabase db =
mOpenHelper.getWritableDatabase();
        db.execSQL(command);
    }
}

```

com.google.android.gms.internal.zzaql->zzb  
 com.andronicus.coolwallpapers.b->a  
 com.andronicus.coolwallpapers.b->b  
 com.google.android.gms.internal.zzcim->zzg  
 com.andronicus.coolwallpapers.ui.Activity\_Detail\$6->onClick  
 com.andronicus.coolwallpapers.ui.Activity\_Splash\$a->a  
 com.google.android.gms.internal.zzcgo->zzb  
 com.google.android.gms.internal.zzaqm->zzb  
 com.google.android.gms.internal.zzcgo->zza  
 com.google.android.gms.internal.zzaql->zza

## Services

---

**Contains intent filter while set the exported attribute as false**  

### Detail

Do not set Intent-filter when Service is used only within the application. The reason is that, due to the characteristics of Intent-filter, public Service in other applications may be called unexpectedly though the Intent to call private Service within the application.

### Risky Setting Example

```

<service android:name=".PrivateService"
android:exported="false">
...
<intent-filter>
...
<action android:name=". ." />
...
</intent-filter>
...
</service>

```

com.original.OriginalAntivirusService  
 com.google.firebase.iid.FirebaseInstanceIdService

## SQLite

---

N/A

## Files

---

N/A

## SharedPreferences

---

**File created without MODE\_PRIVATE and MODE\_WORLD\_READABLE**  

Detail
Settings in "Shared Preference" are stored in files. Regarding access permission setting, shared preference should be created as private files. Sharing contents should be achieved in the inter-application linkage system of Android.
Correct Code Example
<pre>SharedPreferences preference = getSharedPreferences(PREFERENCE_FILE_ NAME, MODE_PRIVATE);</pre>

com.codemybrainsout.ratingdialog.a->show

## BrowsableIntent

---

N/A

## Log

---

**Print log with System.out/err**  

Detail
When outputting log, generally, use the most appropriate output method based on the urgency of the information, and control the

output. For example, categories like serious error, caution, and simple application's information notice are to be used. However, by using System.out/err, information that need to be outputted at the time of release (operation log information) and those that may be classified as information (development log information) are outputted the same method. Developers should remove the code that output sensitive information. But because all log are made through the same method, the developer may forget to remove the sensitive log, exposing sensitive information to possible leaks through the logs. To decrease its possibility, it's recommended to use only methods of android.util.Log class.

#### Risky Code Example

```
if (...) {  
    System.out.print(" . . "); //In release code  
}
```

a.a.a.a.b.t->b

com.andronicus.coolwallpapers.ui.Activity\_Detail->e

## WebView

---

N/A

## Password and Security Token

---

### Password not blind

#### Detail

A smartphone is often used in crowded places like in public transportation facilities. In such an instance, the user runs the risk of exposing his password. The function to mask the display password is necessary as an application specification.

#### Correct Setting Example

```
<EditText
    ...
    android:inputType="textPassword"
    android:password="true"
    ... >
    ...
</EditText>
```

N/A

## Permissions

---

N/A

## Accounts

---

N/A

## HTTPS

---

**Uses insecure http to send sensitive information.** 

## Clipboard

---

N/A

## Others

---

**No protection against Click Fraud**  

### Detail

Some malware fake a transparent toast at top on important activities. Since the toast is transparent, user can still see the real activity and will have the impression that he is operating it. Any information in use on the activity can be hijacked by the faked toast, which is very dangerous. To protect against this, application must use the function `setFilterTouchesWhenObscured(true)` or `set android:filterTouchesWhenObscured` on very important activities to avoid sensitive information leak.

### Correct Coding and Setting Example

```
ImageView image_view;  
image_view = (ImageView)  
findViewById(R.id.iv);  
image_view.setFilterTouchesWhenObscured(tr  
ue);
```

OR

```
<TextView  
...  
android:filterTouchesWhenObscured="true"  
... />
```

android.databinding.adapters.TextViewBindingAdapter->setPassword

**Not explicitly set the allowBackup attribute as false**  

### Detail

allowBackup attribute of AndroidManifest.xml decide whether application can save and restore data. Its default value is "true". If developer does not explicitly set the allowBackup attribute as false, an attacker can easily use adb to copy application's backup data, which may contain confidential information.

### Correct Setting in AndroidManifest.xml

```
<application  
...  
android:allowBackup="false"  
... >  
...  
</application>
```

N/A

Bugs

**Extra of intent is null not checked**  

### Detail

If the code uses `getStringExtra()`, `getBundleExtra()`, `getCharExtra()`, etc., to get an incoming intent's parameter, one must check whether the return value is null or not. Because directly using null result will lead program to throw a null point exception, and crash. Malware can leverage this vulnerability to attack your application.

### Correct Code Example

```
Bundle bundle = intent.getBundleExtra("key");  
if (bundle == null) {  
    //return or other error handling  
}
```

com.google.firebase.iid.FirebaseInstanceIdService->b  
com.google.firebase.iid.v->c  
com.google.firebase.iid.v->a

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