



## ANDROID STATIC ANALYSIS REPORT



 WonderDroid X (3.1)

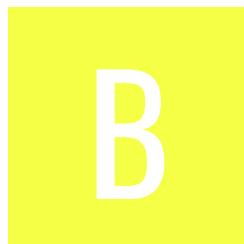
File Name: installer3859.apk

Package Name: com.atelieryl.wonderdroid






Scan Date: May 31, 2022, 6:44 p.m.

App Security Score: 54/100 (MEDIUM RISK)

Grade:



## FINDINGS SEVERITY

 HIGH	 MEDIUM	 INFO	 SECURE	 HOTSPOT
1	3	1	1	1

## FILE INFORMATION

File Name: installer3859.apk

Size: 3.14MB

MD5: 34d7246bf72b1f945d2185cbc3ee57cc

SHA1: b18477f936c9a731af4622f7b2e15cd2ed2ba694

SHA256: e2fc977044e282cf67c27c9a5ab8440e8f0f0a376afa74e35a903a3c453a4796

## APP INFORMATION

App Name: WonderDroid X

Package Name: com.atelieryl.wonderdroid

Main Activity: com.atelieryl.wonderdroid.Select

Target SDK: 28

Min SDK: 14

Max SDK:

Android Version Name: 3.1

Android Version Code: 51

## APP COMPONENTS

Activities: 3

Services: 0

Receivers: 0

Providers: 0

Exported Activities: 0

Exported Services: 0

Exported Receivers: 0

Exported Providers: 0

## CERTIFICATE INFORMATION

APK is signed

v1 signature: True

v2 signature: False

v3 signature: False

Found 1 unique certificates

Subject: C=UK, ST=ORG, L=ORG, O=fdroid.org, OU=FDroid, CN=FDroid

Signature Algorithm: rsassa\_pkcs1v15

Valid From: 2019-09-05 19:44:48+00:00

Valid To: 2047-01-21 19:44:48+00:00

Issuer: C=UK, ST=ORG, L=ORG, O=fdroid.org, OU=FDroid, CN=FDroid

Serial Number: 0x5267123f

Hash Algorithm: sha256

md5: e8f7b2726affb4acadd31847c588caaf

sha1: 99c69c1074c9571c5709d2f7eae3518a74dfe714

sha256: 5b28931bc7636f79d9a5b4b7711271cfb37fe77385064a14cb54ae653bf6f651

sha512: 0a8a63abac8949a1b393ed7c4332b64c765490f89e69bfcdb5d784d905fe55e8c783c0560d8efb75d97a356d13cb50a7a64acec8c265fe8a5dce32a04f3a6a1e

TITLE	SEVERITY	DESCRIPTION
Signed Application	<a href="#">info</a>	Application is signed with a code signing certificate

TITLE	SEVERITY	DESCRIPTION
Application vulnerable to Janus Vulnerability	high	Application is signed with v1 signature scheme, making it vulnerable to Janus vulnerability on Android 5.0-8.0, if signed only with v1 signature scheme. Applications running on Android 5.0-7.0 signed with v1, and v2/v3 scheme is also vulnerable.

## APPLICATION PERMISSIONS

PERMISSION	STATUS	INFO	DESCRIPTION
android.permission.WRITE_EXTERNAL_STORAGE	dangerous	read/modify/delete external storage contents	Allows an application to write to external storage.
android.permission.INTERNET	normal	full Internet access	Allows an application to create network sockets.
android.permission.ACCESS_NETWORK_STATE	normal	view network status	Allows an application to view the status of all networks.
android.permission.VIBRATE	normal	control vibrator	Allows the application to control the vibrator.

## APKID ANALYSIS

FILE	DETAILS
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FILE	DETAILS	
classes.dex	FINDINGS	DETAILS
	Compiler	r8

## NETWORK SECURITY

NO	SCOPE	SEVERITY	DESCRIPTION
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## MANIFEST ANALYSIS

NO	ISSUE	SEVERITY	DESCRIPTION
1	Application Data can be Backed up [android:allowBackup=true]	warning	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.

## CODE ANALYSIS

NO	ISSUE	SEVERITY	STANDARDS	FILES
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NO	ISSUE	SEVERITY	STANDARDS	FILES
1	<a href="#">The App logs information. Sensitive information should never be logged.</a>	info	CWE: CWE-532: Insertion of Sensitive Information into Log File OWASP MASVS: MSTG-STORAGE-3	com/atelieryl/wonderdroid/utils/RomAdapter.java com/atelieryl/wonderdroid/views/EmuView.java com/atelieryl/wonderdroid/Select.java com/atelieryl/wonderdroid/views/HardwareButtonPreference.java com/atelieryl/wonderdroid/utils/ZipUtils.java com/atelieryl/wonderdroid/WonderSwan.java com/atelieryl/wonderdroid/TouchInputHandler.java com/atelieryl/wonderdroid/utils/CpuUtils.java com/atelieryl/wonderdroid/utils/ZipCache.java
2	<a href="#">App can read/write to External Storage. Any App can read data written to External Storage.</a>	warning	CWE: CWE-276: Incorrect Default Permissions OWASP Top 10: M2: Insecure Data Storage OWASP MASVS: MSTG-STORAGE-2	com/atelieryl/wonderdroid/WonderDroid.java com/atelieryl/wonderdroid/Main.java

## SHARED LIBRARY BINARY ANALYSIS

NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
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NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
1	lib/mips/libwonderswan.so	<p>True <a href="#">info</a></p> <p>The shared object has NX bit set. This marks a memory page non-executable making attacker injected shellcode non-executable.</p>	<p>True <a href="#">info</a></p> <p>This shared object has a stack canary value added to the stack so that it will be overwritten by a stack buffer that overflows the return address. This allows detection of overflows by verifying the integrity of the canary before function return.</p>	<p>Partial RELRO <a href="#">warning</a></p> <p>This shared object has partial RELRO enabled. RELRO ensures that the GOT cannot be overwritten in vulnerable ELF binaries. In partial RELRO, the non-PLT part of the GOT section is read only but .got.plt is still writeable. Use the option -z,relro,-z,now to enable full RELRO.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have run-time search path or RPATH set.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have RUNPATH set.</p>	<p>False <a href="#">warning</a></p> <p>The shared object does not have any fortified functions. Fortified functions provides buffer overflow checks against glibc's commons insecure functions like strcpy, gets etc. Use the compiler option -D_FORTIFY_SOURCE=2 to fortify functions.</p>	<p>True <a href="#">info</a></p> <p>Symbols are stripped.</p>



NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
2	lib/armeabi-v7a/libwonderswan.so	<p>True <a href="#">info</a></p> <p>The shared object has NX bit set. This marks a memory page non-executable making attacker injected shellcode non-executable.</p>	<p>True <a href="#">info</a></p> <p>This shared object has a stack canary value added to the stack so that it will be overwritten by a stack buffer that overflows the return address. This allows detection of overflows by verifying the integrity of the canary before function return.</p>	<p>Full RELRO <a href="#">info</a></p> <p>This shared object has full RELRO enabled. RELRO ensures that the GOT cannot be overwritten in vulnerable ELF binaries. In Full RELRO, the entire GOT (.got and .got.plt both) is marked as read-only.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have run-time search path or RPATH set.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have RUNPATH set.</p>	<p>False <a href="#">warning</a></p> <p>The shared object does not have any fortified functions. Fortified functions provides buffer overflow checks against glibc's commons insecure functions like strcpy, gets etc. Use the compiler option -D_FORTIFY_SOURCE=2 to fortify functions.</p>	<p>True <a href="#">info</a></p> <p>Symbols are stripped.</p>

NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
3	lib/armeabi-v7a/libwonderswan-neon.so	<p>True <a href="#">info</a></p> <p>The shared object has NX bit set. This marks a memory page non-executable making attacker injected shellcode non-executable.</p>	<p>True <a href="#">info</a></p> <p>This shared object has a stack canary value added to the stack so that it will be overwritten by a stack buffer that overflows the return address. This allows detection of overflows by verifying the integrity of the canary before function return.</p>	<p>Full RELRO <a href="#">info</a></p> <p>This shared object has full RELRO enabled. RELRO ensures that the GOT cannot be overwritten in vulnerable ELF binaries. In Full RELRO, the entire GOT (.got and .got.plt both) is marked as read-only.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have run-time search path or RPATH set.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have RUNPATH set.</p>	<p>False <a href="#">warning</a></p> <p>The shared object does not have any fortified functions. Fortified functions provides buffer overflow checks against glibc's commons insecure functions like strcpy, gets etc. Use the compiler option -D_FORTIFY_SOURCE=2 to fortify functions.</p>	<p>True <a href="#">info</a></p> <p>Symbols are stripped.</p>

NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
4	lib/x86/libwonderswan.so	<p>True <a href="#">info</a></p> <p>The shared object has NX bit set. This marks a memory page non-executable making attacker injected shellcode non-executable.</p>	<p>True <a href="#">info</a></p> <p>This shared object has a stack canary value added to the stack so that it will be overwritten by a stack buffer that overflows the return address. This allows detection of overflows by verifying the integrity of the canary before function return.</p>	<p>Full RELRO <a href="#">info</a></p> <p>This shared object has full RELRO enabled. RELRO ensures that the GOT cannot be overwritten in vulnerable ELF binaries. In Full RELRO, the entire GOT (.got and .got.plt both) is marked as read-only.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have run-time search path or RPATH set.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have RUNPATH set.</p>	<p>False <a href="#">warning</a></p> <p>The shared object does not have any fortified functions. Fortified functions provides buffer overflow checks against glibc's commons insecure functions like strcpy, gets etc. Use the compiler option - D_FORTIFY_SOURCE=2 to fortify functions.</p>	<p>True <a href="#">info</a></p> <p>Symbols are stripped.</p>

NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
5	lib/armeabi/libwonderswan.so	<p>True <a href="#">info</a></p> <p>The shared object has NX bit set. This marks a memory page non-executable making attacker injected shellcode non-executable.</p>	<p>True <a href="#">info</a></p> <p>This shared object has a stack canary value added to the stack so that it will be overwritten by a stack buffer that overflows the return address. This allows detection of overflows by verifying the integrity of the canary before function return.</p>	<p>Full RELRO <a href="#">info</a></p> <p>This shared object has full RELRO enabled. RELRO ensures that the GOT cannot be overwritten in vulnerable ELF binaries. In Full RELRO, the entire GOT (.got and .got.plt both) is marked as read-only.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have run-time search path or RPATH set.</p>	<p>None <a href="#">info</a></p> <p>The shared object does not have RUNPATH set.</p>	<p>False <a href="#">warning</a></p> <p>The shared object does not have any fortified functions. Fortified functions provides buffer overflow checks against glibc's commons insecure functions like strcpy, gets etc. Use the compiler option -D_FORTIFY_SOURCE=2 to fortify functions.</p>	<p>True <a href="#">info</a></p> <p>Symbols are stripped.</p>

NO	IDENTIFIER	REQUIREMENT	FEATURE	DESCRIPTION
1	FCS_STO_EXT.1.1	Security Functional Requirements	Storage of Credentials	The application does not store any credentials to non-volatile memory.
2	FCS_CKM_EXT.1.1	Security Functional Requirements	Cryptographic Key Generation Services	The application generate no asymmetric cryptographic keys.
3	FDP_DEC_EXT.1.1	Security Functional Requirements	Access to Platform Resources	The application has access to ['network connectivity'].
4	FDP_DEC_EXT.1.2	Security Functional Requirements	Access to Platform Resources	The application has access to no sensitive information repositories.
5	FDP_NET_EXT.1.1	Security Functional Requirements	Network Communications	The application has user/application initiated network communications.
6	FDP_DAR_EXT.1.1	Security Functional Requirements	Encryption Of Sensitive Application Data	The application implement functionality to encrypt sensitive data in non-volatile memory.
7	FMT_MEC_EXT.1.1	Security Functional Requirements	Supported Configuration Mechanism	The application invoke the mechanisms recommended by the platform vendor for storing and setting configuration options.
8	FTP_DIT_EXT.1.1	Security Functional Requirements	Protection of Data in Transit	The application does encrypt some transmitted data with HTTPS/TLS/SSH between itself and another trusted IT product.

## DOMAIN MALWARE CHECK

DOMAIN	STATUS	GEOLOCATION
yearbooklabs.com	ok	IP: 66.113.226.146 Country: United States of America Region: Illinois City: Chicago Latitude: 41.882500 Longitude: -87.636703 View: <a href="#">Google Map</a>
github.com	ok	IP: 140.82.121.4 Country: United States of America Region: California City: San Francisco Latitude: 37.775700 Longitude: -122.395203 View: <a href="#">Google Map</a>
play.google.com	ok	IP: 142.251.36.46 Country: United States of America Region: California City: Mountain View Latitude: 37.405991 Longitude: -122.078514 View: <a href="#">Google Map</a>
www.flaticon.com	ok	IP: 34.149.47.137 Country: United States of America Region: Texas City: Houston Latitude: 29.941401 Longitude: -95.344498 View: <a href="#">Google Map</a>

# HARDCODED SECRETS

POSSIBLE SECRETS
"pressakey" : "ボタンを押してください"
"pressakey" : "请按下一个按键"
"pressakey" : "請按下一個按鍵"

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## Report Generated by - MobSF v3.5.2 Beta

Mobile Security Framework (MobSF) is an automated, all-in-one mobile application (Android/iOS/Windows) pen-testing, malware analysis and security assessment framework capable of performing static and dynamic analysis.

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