

ANDROID STATIC ANALYSIS REPORT



HyperRogue (10.4b)

File Name:	installer3796.apk
Package Name:	com.roguetemple.hyperroid
Scan Date:	May 31, 2022, 6:37 p.m.
App Security Score:	34/100 (HIGH RISK)
Grade:	C

FINDINGS SEVERITY

派 HIGH	▲ MEDIUM	i INFO	✓ SECURE	♥ HOTSPOT
3	1	0	1	0

FILE INFORMATION

File Name: installer3796.apk

Size: 18.12MB

MD5: 2a76c905561303cb1b7f586e6c9e2e4f

SHA1: e89405352b57a86b34b92ab37e0dbdce6cf0c4d1

SHA256: 1e6ea989517956dea9e1dc6bce11162502e05ca12543c44ad94c2653e6d7643f

i APP INFORMATION

App Name: HyperRogue

Package Name: com.roguetemple.hyperroid

Main Activity: com.roguetemple.hyperroid.HyperRogue

Target SDK: 18 Min SDK: 18 Max SDK:

Android Version Name: 10.4b Android Version Code: 10042

EE APP COMPONENTS

Activities: 2 Services: 1 Receivers: 0 Providers: 1

Exported Activities: O Exported Services: O Exported Receivers: O Exported Providers: 1



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: 2013-07-08 08:47:13+00:00 Valid To: 2040-11-23 08:47:13+00:00

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

Serial Number: 0x2a26f399 Hash Algorithm: sha256

md5: 144b8afff275ece4c61230c8ba6ac771

sha1: 49304558db12448222075f9949cbd454543052f2

sha256: f83f95b2eb5dee7e59276266fada5c0f21a10440cefc72ff4d3ceadbd7d4c878

sha512: f328e96c28317ff2d7574ed14fdb4fb132dbe23eb553f1704efd5db4b8cba133e83d8696b15c8e8049bae64ca8f4f504a627ae467716bbceb5d9a7cab116f051

TITLE	SEVERITY	DESCRIPTION
Signed Application	info	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.

M APKID ANALYSIS

FILE	DETAILS					
	FINDINGS	DETAILS				
classes.dex	Compiler	dx (possible dexmerge)				
	Manipulator Found	dexmerge				

△ NETWORK SECURITY

NO SCOPE	SEVERITY	DESCRIPTION
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Q 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.
2	Launch Mode of Activity (com.roguetemple.hyperroid.HyperRogue) is not standard.	high	An Activity should not be having the launch mode attribute set to "singleTask/singleInstance" as it becomes root Activity and it is possible for other applications to read the contents of the calling Intent. So it is required to use the "standard" launch mode attribute when sensitive information is included in an Intent.
3	Content Provider (com.roguetemple.hyperroid.HyperProvider) is not Protected. [android:exported=true]	high	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.

</> CODE ANALYSIS

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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/armeabi-v7a/libhyper.so	True info The shared object has NX bit set. This marks a memory page non- executable making attacker injected shellcode non- executable.	True info 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.	Full RELRO info 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.	None info The shared object does not have run-time search path or RPATH set.	None info The shared object does not have RUNPATH set.	False warning 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.	True info Symbols are stripped.

NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
2	lib/x86/libhyper.so	True info The shared object has NX bit set. This marks a memory page non- executable making attacker injected shellcode non- executable.	True info 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.	Full RELRO info 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.	None info The shared object does not have run-time search path or RPATH set.	None info The shared object does not have RUNPATH set.	False warning 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.	True info Symbols are stripped.

NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
3	lib/arm64-v8a/libhyper.so	True info The shared object has NX bit set. This marks a memory page non- executable making attacker injected shellcode non- executable.	True info 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.	Partial RELRO warning 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.	None info The shared object does not have run-time search path or RPATH set.	None info The shared object does not have RUNPATH set.	False warning 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.	True info Symbols are stripped.

NO	SHARED OBJECT	NX	STACK CANARY	RELRO	RPATH	RUNPATH	FORTIFY	SYMBOLS STRIPPED
4	lib/x86_64/libhyper.so	True info The shared object has NX bit set. This marks a memory page non- executable making attacker injected shellcode non- executable.	True info 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.	Full RELRO info 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.	None info The shared object does not have run-time search path or RPATH set.	None info The shared object does not have RUNPATH set.	False warning 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.	True info Symbols are stripped.

■ NIAP ANALYSIS v1.3

10 1	IDENTIFIER	REQUIREMENT	FEATURE	DESCRIPTION
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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 no hardware resources.
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 no network communications.
6	FDP_DAR_EXT.1.1	Security Functional Requirements	Encryption Of Sensitive Application Data	The application does not encrypt files in non-volatile memory.
7	FTP_DIT_EXT.1.1	Security Functional Requirements	Protection of Data in Transit	The application does not encrypt any data in traffic or does not transmit any data between itself and another trusted IT product.

Q DOMAIN MALWARE CHECK

DOMAIN	STATUS	GEOLOCATION
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DOMAIN	STATUS	GEOLOCATION
www.roguetemple.com	ok	IP: 69.195.108.174 Country: United States of America Region: Utah City: Provo Latitude: 40.213909 Longitude: -111.634071 View: Google Map
creativecommons.org	ok	IP: 104.20.151.16 Country: United States of America Region: California City: San Francisco Latitude: 37.775700 Longitude: -122.395203 View: Google Map
www.shawnparrotte.com	ok	IP: 173.236.153.136 Country: United States of America Region: California City: Brea Latitude: 33.930222 Longitude: -117.888420 View: Google Map
roguetemple.com	ok	IP: 69.195.108.174 Country: United States of America Region: Utah City: Provo Latitude: 40.213909 Longitude: -111.634071 View: Google Map

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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