

## ANDROID STATIC ANALYSIS REPORT



Missed Notifications Reminder (1.6.4.0.10)

File Name:	installer311.apk
Package Name:	com.app.missednotificationsreminder
Scan Date:	May 31, 2022, 8:51 a.m.
App Security Score:	59/100 (MEDIUM RISK)
Grade:	

#### FINDINGS SEVERITY

兼 HIGH	▲ MEDIUM	<b>i</b> INFO	✓ SECURE	<b>्र</b> HOTSPOT
1	7	2	2	2

#### FILE INFORMATION

File Name: installer311.apk

Size: 6.08MB

MD5: a967d20e2dc20ccf0fcb1efc195123b9

**SHA1**: 44430b1de22919fea1a755e5da5e5ebd6e3bc402

SHA256: 619b310f6228382c276baea6caab754313126fa57660f168733ae95324dc4389

## **i** APP INFORMATION

App Name: Missed Notifications Reminder

Package Name: com.app.missednotificationsreminder

Main Activity: com.app.missednotificationsreminder.settings.MainActivity

Target SDK: 28 Min SDK: 14 Max SDK:

Android Version Name: 1.6.4.0.10
Android Version Code: 2010604010

#### **B** APP COMPONENTS

Activities: 2 Services: 5 Receivers: 8 Providers: 2

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

## **\*** CERTIFICATE INFORMATION

APK is signed v1 signature: True v2 signature: True v3 signature: False

Found 1 unique certificates Subject: CN=Eugene Popovich

Signature Algorithm: rsassa\_pkcs1v15 Valid From: 2015-11-10 12:09:52+00:00 Valid To: 2040-11-03 12:09:52+00:00

Issuer: CN=Eugene Popovich Serial Number: 0x2872b85b Hash Algorithm: sha256

md5: 4729e07302b759d78754679026efe698

sha1: 680041fdd95a297f88d02feeb5b1170f8577ddf3

sha256: 33e70fe85e6477e023cc9b71b4cbd74d769596ee5166553c5b9e28b6fe46c654

sha512: 25f2490fbb8d7612d2d5346935b4d6532cd801dd2a4cfa5ee00ea2f8067b912a4751c84f84a839c54e63100b9e204c4474d64c6a6946649500d1cd425038e843

PublicKey Algorithm: rsa

Bit Size: 2048

Fingerprint: 13dbde729c9dc507d17115863bb45161b1974a2f3eab682d614a6d8fd6dabe82

TITLE	SEVERITY	DESCRIPTION		
Signed Application	info	Application is signed with a code signing certificate		
Application vulnerable to Janus Vulnerability	warning	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.BIND_ACCESSIBILITY_SERVICE	signature		Must be required by an AccessibilityService, to ensure that only the system can bind to it.
android.permission.WAKE_LOCK	normal	prevent phone from sleeping	Allows an application to prevent the phone from going to sleep.
android.permission.READ_EXTERNAL_STORAGE	dangerous	read external storage contents	Allows an application to read from external storage.
android.permission.VIBRATE	normal	control vibrator	Allows the application to control the vibrator.
android.permission.WRITE_EXTERNAL_STORAGE	dangerous	read/modify/delete external storage contents	Allows an application to write to external storage.
android.permission.RECEIVE_BOOT_COMPLETED	normal	automatically start at boot	Allows an application to start itself as soon as the system has finished booting. This can make it take longer to start the phone and allow the application to slow down the overall phone by always running.

PERMISSION	STATUS	INFO	DESCRIPTION
android.permission.FOREGROUND_SERVICE	normal		Allows a regular application to use Service.startForeground.
com.android.vending.BILLING	unknown	Unknown permission	Unknown permission from android reference

# **M** APKID ANALYSIS

FILE	DETAILS			
	FINDINGS	DETAILS		
classes.dex	Anti-VM Code	Build.FINGERPRINT check Build.MANUFACTURER check		
	Compiler	r8		
classes2.dex	FINDINGS	DETAILS		
Clustestack	Compiler	r8 without marker (suspicious)		



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NO	SCOPE	SEVERITY	DESCRIPTION	

# **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	Service (com.app.missednotificationsreminder.service.ReminderNotificationListenerService) is Protected by a permission, but the protection level of the permission should be checked. Permission: android.permission.BIND_ACCESSIBILITY_SERVICE [android:exported=true]	warning	A Service is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device. It is protected by a permission which is not defined in the analysed application. As a result, the protection level of the permission should be checked where it is defined. If it is set to normal or dangerous, a malicious application can request and obtain the permission and interact with the component. If it is set to signature, only applications signed with the same certificate can obtain the permission.
3	Launch Mode of Activity (com.app.missednotificationsreminder.settings.MainActivity) 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.

NO	ISSUE	SEVERITY	DESCRIPTION
4	Service (androidx.work.impl.background.systemjob.SystemJobService) is Protected by a permission, but the protection level of the permission should be checked.  Permission: android.permission.BIND_JOB_SERVICE [android:exported=true]	warning	A Service is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device. It is protected by a permission which is not defined in the analysed application. As a result, the protection level of the permission should be checked where it is defined. If it is set to normal or dangerous, a malicious application can request and obtain the permission and interact with the component. If it is set to signature, only applications signed with the same certificate can obtain the permission.
5	Broadcast Receiver (androidx.work.impl.diagnostics.DiagnosticsReceiver) is Protected by a permission, but the protection level of the permission should be checked. Permission: android.permission.DUMP [android:exported=true]	warning	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. It is protected by a permission which is not defined in the analysed application. As a result, the protection level of the permission should be checked where it is defined. If it is set to normal or dangerous, a malicious application can request and obtain the permission and interact with the component. If it is set to signature, only applications signed with the same certificate can obtain the permission.

# </> CODE ANALYSIS

Ν	Ο	ISSUE	SEVERITY	STANDARDS	FILES

NO	ISSUE	SEVERITY	STANDARDS	FILES
1	The App logs information. Sensitive information should never be logged.	info	CWE: CWE-532: Insertion of Sensitive Information into Log File OWASP MASVS: MSTG-STORAGE-3	com/app/missednotificationsreminder/service/ReminderN otificationListenerService.java com/wdullaer/materialdatetimepicker/time/TimePickerDia log.java com/wdullaer/materialdatetimepicker/time/RadialPickerL ayout.java timber/log/Timber.java dagger/android/AndroidInjection.java com/wdullaer/materialdatetimepicker/time/AmPmCircles View.java com/wdullaer/materialdatetimepicker/time/RadialSelector View.java com/wdullaer/materialdatetimepicker/time/RadialTextsVie w.java com/wdullaer/materialdatetimepicker/time/CircleView.jav a com/wdullaer/materialdatetimepicker/time/CircleView.jav a com/wdullaer/materialdatetimepicker/date/DayPickerVie w.java com/materialdatetimepicker/date/DayPickerVie w.java com/app/missednotificationsreminder/service/ReminderN otificationListenerService\$initialize\$1.java
2	App can write to App Directory. Sensitive Information should be encrypted.	info	CWE: CWE-276: Incorrect Default Permissions OWASP MASVS: MSTG-STORAGE- 14	com/app/missednotificationsreminder/data/DataModule.j ava
3	This App uses SSL certificate pinning to detect or prevent MITM attacks in secure communication channel.	secure	OWASP MASVS: MSTG-NETWORK-4	com/app/missednotificationsreminder/data/DataModule.j ava
4	IP Address disclosure	warning	CWE: CWE-200: Information Exposure OWASP MASVS: MSTG-CODE-2	com/app/missednotificationsreminder/BuildConfig.java

NC	ISSUE	SEVERITY	STANDARDS	FILES
5	App can read/write to External Storage. Any App can read data written to External Storage.	warning	CWE: CWE-276: Incorrect Default Permissions OWASP Top 10: M2: Insecure Data Storage OWASP MASVS: MSTG-STORAGE-2	com/jakewharton/u2020/data/LumberYard\$save\$1.java com/jakewharton/u2020/data/LumberYard\$cleanUp\$1.ja va

## ■ NIAP ANALYSIS v1.3

NO	IDENTIFIER	REQUIREMENT	FEATURE	DESCRIPTION
1	FCS_RBG_EXT.1.1	Security Functional Requirements	Random Bit Generation Services	The application use no DRBG functionality for its cryptographic operations.
2	FCS_STO_EXT.1.1	Security Functional Requirements	Storage of Credentials	The application does not store any credentials to non-volatile memory.
3	FCS_CKM_EXT.1.1	Security Functional Requirements	Cryptographic Key Generation Services	The application generate no asymmetric cryptographic keys.
4	FDP_DEC_EXT.1.1	Security Functional Requirements	Access to Platform Resources	The application has access to no hardware resources.
5	FDP_DEC_EXT.1.2	Security Functional Requirements	Access to Platform Resources	The application has access to no sensitive information repositories.

NO	IDENTIFIER	REQUIREMENT	FEATURE	DESCRIPTION
6	FDP_NET_EXT.1.1	Security Functional Requirements	Network Communications	The application has no network communications.
7	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.
8	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.
9	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.
10	FCS_HTTPS_EXT.1.2	Selection-Based Security Functional Requirements	HTTPS Protocol	The application implement HTTPS using TLS.
11	FCS_HTTPS_EXT.1.3	Selection-Based Security Functional Requirements	HTTPS Protocol	The application notify the user and not establish the connection or request application authorization to establish the connection if the peer certificate is deemed invalid.
12	FIA_X509_EXT.2.1	Selection-Based Security Functional Requirements	X.509 Certificate Authentication	The application use X.509v3 certificates as defined by RFC 5280 to support authentication for HTTPS , TLS.

## **Q DOMAIN MALWARE CHECK**

DOMAIN	STATUS	GEOLOCATION
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: Google Map
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: Google Map
dontkillmyapp.com	ok	IP: 185.199.108.153 Country: United States of America Region: Pennsylvania City: California Latitude: 40.065632 Longitude: -79.891708 View: Google Map

## **₽** HARDCODED SECRETS

#### **POSSIBLE SECRETS**

"mdtp\_deleted\_key" : "%1\$sを削除しました"

#### 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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