

ANDROID STATIC ANALYSIS REPORT



Hue (0.0.3)

File Name:	installer34.apk
Package Name:	is.zi.huewidgets
Scan Date:	May 31, 2022, 4:17 p.m.
App Security Score:	54/100 (MEDIUM RISK)
Grade:	

FINDINGS SEVERITY

派 HIGH	▲ MEDIUM	i INFO	✓ SECURE	≪ HOTSPOT
2	6	1	2	1

FILE INFORMATION

File Name: installer34.apk

Size: 0.1MB

MD5: 906dea6480d06c8c1134010c06938564

SHA1: a72b1fbc7be60ff023a9448eebddc37c0bd1178e

SHA256: 6fff995a479c578737a56996b519d06fe38049609e950c45d42e380d7a8a7490

i APP INFORMATION

App Name: Hue

Package Name: is.zi.huewidgets

Main Activity: is.zi.huewidgets.MainActivity

Target SDK: 29 Min SDK: 21 Max SDK:

Android Version Name: 0.0.3 Android Version Code: 7

EE APP COMPONENTS

Activities: 4 Services: 3 Receivers: 1 Providers: 0

Exported Activities: 2 Exported Services: 2 Exported Receivers: 1 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: 2019-05-11 06:42:07+00:00 Valid To: 2046-09-26 06:42:07+00:00

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

Serial Number: 0x77392d0f Hash Algorithm: sha256

md5: 668f5e1cc89851dbbf7c52aad27eca87

sha1: 8c45a2856656f850ffebb7b1069f40f557d71444

sha256: 0b318b9bb7452f5cd25dc2bc1562ddac823ab1008c27509b1d4d132ec6809b28

sha512: 853ce7af9699d35f93b72f1af711a60efb9dbc949c78c3670b84f8bb36c18c4927dec1f0344deb564ffa3783a842053fcdf9d46edee392954096f362ac7acff0

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.

⋮ APPLICATION PERMISSIONS

PERMISSION	STATUS	INFO	DESCRIPTION
android.permission.AUTHENTICATE_ACCOUNTS	dangerous	act as an account authenticator	Allows an application to use the account authenticator capabilities of the Account Manager, including creating accounts as well as obtaining and setting their passwords.
android.permission.GET_ACCOUNTS	dangerous	list accounts	Allows access to the list of accounts in the Accounts Service.
android.permission.INTERNET	normal	full Internet access	Allows an application to create network sockets.
android.permission.USE_CREDENTIALS	dangerous	use the authentication credentials of an account	Allows an application to request authentication tokens.
com.android.launcher.permission.lNSTALL_SHORTCUT	unknown	Unknown permission	Unknown permission from android reference
com.android.vending.BILLING	unknown	Unknown permission	Unknown permission from android reference

ক্ল APKID ANALYSIS

FILE	DETAILS		
classes.dex	FINDINGS DETAILS		
	Compiler	r8	

BROWSABLE ACTIVITIES

ACTIVITY	INTENT
is.zi.huewidgets.MainActivity	Schemes: https://, Hosts: huewidgets.zi.is, Paths: /app,

△ NETWORK SECURITY

NO	SCOPE	SEVERITY	DESCRIPTION
1	*	secure	Base config is configured to disallow clear text traffic to all domains.

Q MANIFEST ANALYSIS

NO	ISSUE	SEVERITY	DESCRIPTION
1	App has a Network Security Configuration [android:networkSecurityConfig=@xml/network_security_config]		The Network Security Configuration feature lets apps customize their network security settings in a safe, declarative configuration file without modifying app code. These settings can be configured for specific domains and for a specific app.
2	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.
3	Activity (is.zi.huewidgets.ConfigureActivity) is not Protected. An intent-filter exists.	warning	An Activity is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device. The presence of intent-filter indicates that the Activity is explicitly exported.
4	Activity (is.zi.huewidgets.PopupActivity) is not Protected. An intent-filter exists.	warning	An Activity is found to be shared with other apps on the device therefore leaving it accessible to any other application on the device. The presence of intent-filter indicates that the Activity is explicitly exported.
5	Service (is.zi.hueaccounts.AccountAuthenticatorService) is Protected by a permission, but the protection level of the permission should be checked. Permission: android.permission.MANAGE_ACCOUNTS [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.
6	Broadcast Receiver (is.zi.huewidgets.WidgetProvider) is not Protected. An intent-filter exists.	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. The presence of intent-filter indicates that the Broadcast Receiver is explicitly exported.

NO	ISSUE	SEVERITY	DESCRIPTION
7	Service (is.zi.huewidgets.QSTileService) is Protected by a permission, but the protection level of the permission should be checked. Permission: android.permission.BIND_QUICK_SETTINGS_TILE [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.

</> CODE ANALYSIS

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	is/zi/hue/HueColorPicker.java is/zi/hueaccounts/AuthenticatorActivit y.java is/zi/hue/HueBridgeService.java is/zi/coffee/Coffee.java is/zi/huewidgets/PopupActivity.java is/zi/hue/HueBridge.java is/zi/huewidgets/ConfigureActivity.java is/zi/comm/Http.java
2	Insecure Implementation of SSL. Trusting all the certificates or accepting self signed certificates is a critical Security Hole. This application is vulnerable to MITM attacks	high	CWE: CWE-295: Improper Certificate Validation OWASP Top 10: M3: Insecure Communication OWASP MASVS: MSTG-NETWORK-3	is/zi/comm/Http.java

■ NIAP ANALYSIS v1.3

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 does not encrypt files 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.

NO	IDENTIFIER	REQUIREMENT	FEATURE	DESCRIPTION
9	FCS_HTTPS_EXT.1.1	Selection-Based Security Functional Requirements	HTTPS Protocol	The application implement the HTTPS protocol that complies with RFC 2818.
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.1.1	Selection-Based Security Functional Requirements	X.509 Certificate Validation	The application invoked platform-provided functionality to validate certificates in accordance with the following rules: ['The certificate path must terminate with a trusted CA certificate'].
13	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.

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.

@ 2022 Mobile Security Framework - MobSF | <u>Ajin Abraham</u> | <u>OpenSecurity</u>.