

ANDROID STATIC ANALYSIS REPORT



Simple Chess Clock (2.2.0)

| File Name: | installer225.apk |
|---------------------|------------------------|
| Package Name: | com.chessclock.android |
| Scan Date: | May 31, 2022, 3 p.m. |
| App Security Score: | 42/100 (MEDIUM RISK) |
| Grade: | |
| | |

FINDINGS SEVERITY

| 派 HIGH | ▲ MEDIUM | i INFO | ✓ SECURE | ♥ HOTSPOT |
|---------------|----------|---------------|-----------------|-----------|
| 2 | 1 | 1 | 1 | 0 |

FILE INFORMATION

File Name: installer225.apk

Size: 0.1MB

MD5: b9fd44f51b99be0b0007531d51cc6427

SHA1: 58fcae70a2053c36d043e7302f1c7715d533af52

SHA256: 854922060136b177ff462a4703801e3cc8a1e7610926b75bb8ccb86eaa809319

i APP INFORMATION

App Name: Simple Chess Clock

Package Name: com.chessclock.android

Main Activity: .ChessClock

Target SDK: 23 Min SDK: 21 Max SDK:

Android Version Name: 2.2.0
Android Version Code: 13

B APP COMPONENTS

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

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



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: 2012-01-08 15:19:56+00:00 Valid To: 2039-05-26 15:19:56+00:00

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

Serial Number: 0x4f09b41c Hash Algorithm: sha1

md5: c14ceb553533286970aa9a80f3d9515c

sha1: c0241c3e0a664bea75aad98d9091694aad68a01b

sha256: b5d42fd5df73fb73df6afd4271124abe33913cceafc34882616ccd9d8cd60306

| 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. | |
| Certificate algorithm might be vulnerable to hash collision | high | Application is signed with SHA1withRSA. SHA1 hash algorithm is known to have collision issues. | |

⋮ APPLICATION PERMISSIONS

| PERMISSION | STATUS | INFO | DESCRIPTION |
|------------------------------|--------|-----------------------------|---|
| android.permission.WAKE_LOCK | normal | prevent phone from sleeping | Allows an application to prevent the phone from going to sleep. |

M APKID ANALYSIS

| FILE | DETAILS | | |
|-------------|----------|---------|--|
| classes dev | FINDINGS | DETAILS | |
| classes.dex | Compiler | dx | |



| NO | SCOPE | SEVERITY | DESCRIPTION |
|----|-------|----------|-------------|
| | | | |

Q MANIFEST ANALYSIS

| NO | ISSUE | SEVERITY | DESCRIPTION |
|----|---|----------|---|
| 1 | Application Data can be Backed up [android:allowBackup] flag is missing. | warning | The flag [android:allowBackup] should be set to false. By default it is set to true and 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 |
|----|---|----------|--|---|
| 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/chessclock/android/Prefs.java com/chessclock/android/ChessClock. 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. |

| NO | IDENTIFIER | REQUIREMENT | FEATURE | DESCRIPTION |
|----|-----------------|-------------------------------------|---|---|
| 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 | 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 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 |
|--------|--------|-------------|
|--------|--------|-------------|

| 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 |
| www.gnu.org | ok | IP: 209.51.188.116 Country: United States of America Region: Massachusetts City: Boston Latitude: 42.358429 Longitude: -71.059769 View: Google Map |
| www.apache.org | ok | IP: 151.101.2.132 Country: United States of America Region: California City: San Francisco Latitude: 37.775700 Longitude: -122.395203 View: Google Map |

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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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