Introduction to **Secure Coding Checker**

A diagnostic tool for identifying vulnerabilities in Android apps

Sony Digital Network Applications, Inc.

What is Secure Coding Checker?

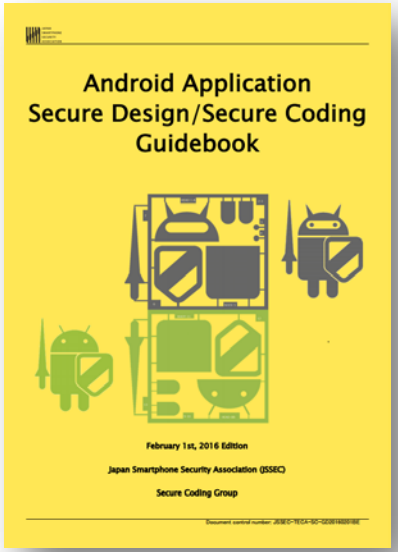
- A web-based diagnostic tool that identifies vulnerabilities in Android apps, explains their causes, and proposes remedies (code revisions that address the vulnerability).

- The tool scans an .apk file, checks for the presence of vulnerabilities, and displays remedies—all in a few tens of seconds.

Key features of Secure Coding Checker

1. **Developers need only upload .apk files to get diagnostic results within a few tens of seconds**
2. **100% compliant with JSSEC secure coding guidelines**
3. **Provides comprehensive information, from vulnerability diagnoses to proposed fixes**
4. **Priced to allow easy access to developers (around 500,000 yen)**

Diagnostic criteria taken from the Android Secure Design / Secure Coding Guidebook



The PDF version may be downloaded free of charge.
https://www.jssec.org/report/securecoding.html

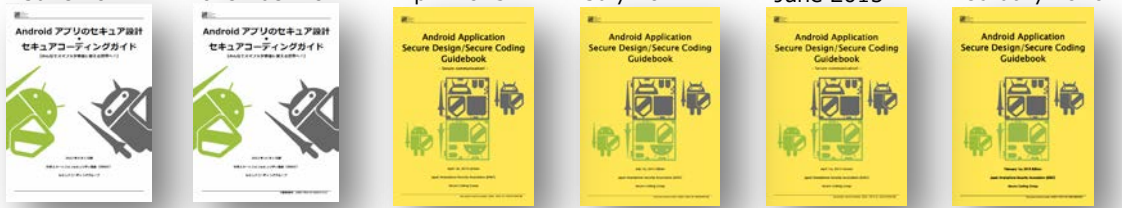
The *Android Secure Design / Secure Coding Guidebook*, issued by the Japan Smartphone Security Forum, is the canonical textbook of Android security and the basis of security recommendations issued by Japan's Ministry of Internal Affairs and Communications.

総務省 MIC Ministry of Internal Affairs and Communications

- Used by telecommunications carriers and many app vendors
- Used by app-development outsourcing firms to establish acceptance criteria

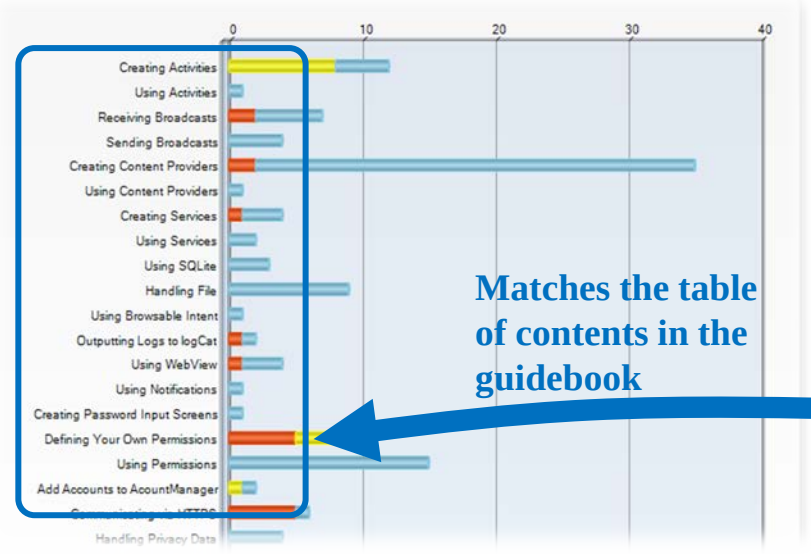
Updated one to two times annually

June 2012 November 2012 April 2013 July 2014 June 2015 February 2016



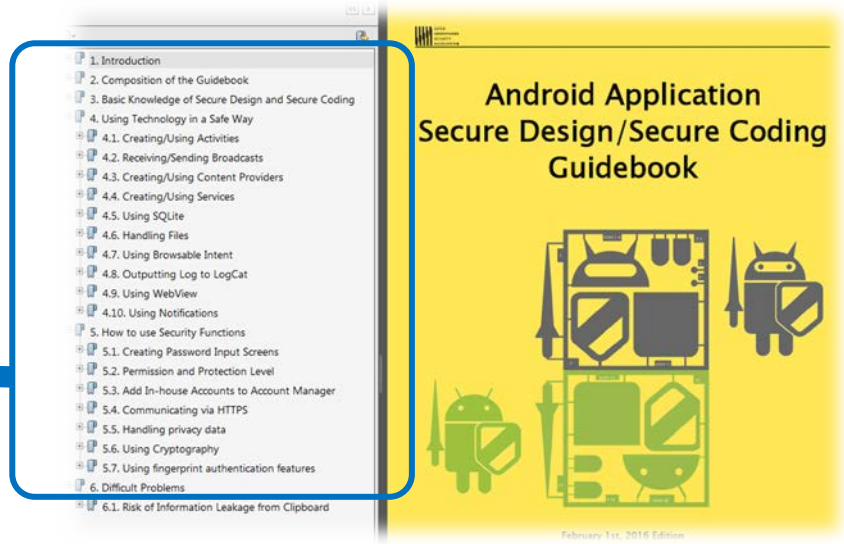
Visualizing the effects of security provisions

Apps are automatically analyzed, and their vulnerabilities are displayed in a graphical format.



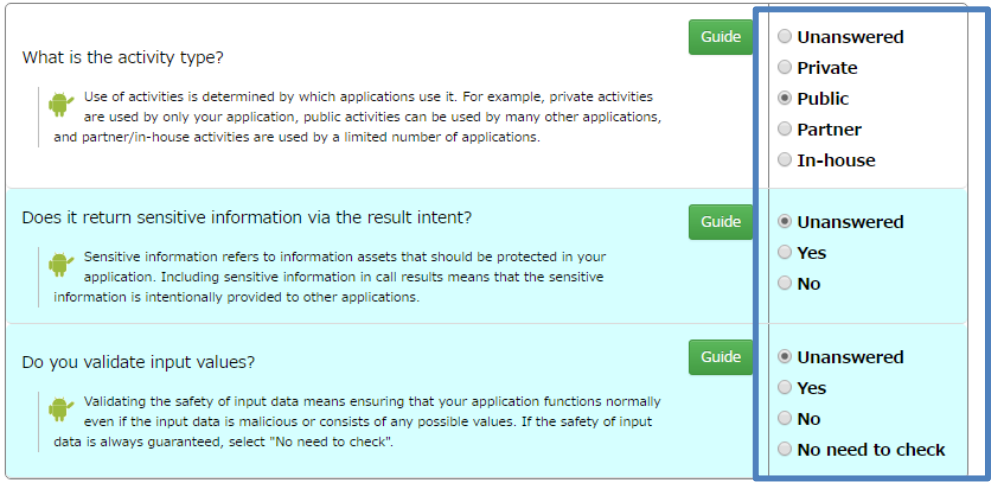
Matches the table of contents in the guidebook

Guidebook



Question-asking functionality

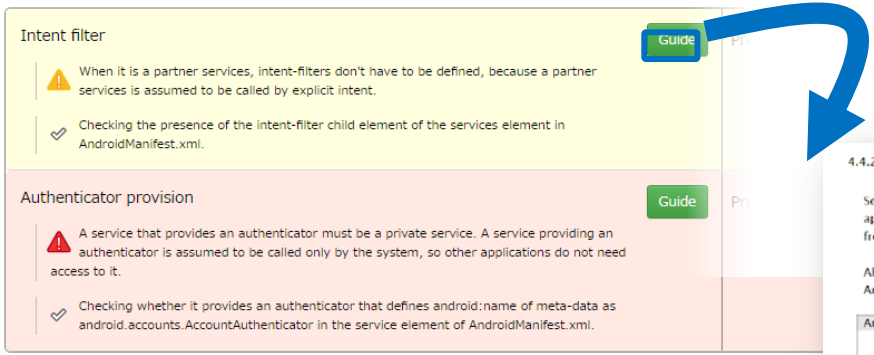
The tester asks developers questions to improve the accuracy of tests for vulnerabilities in specifications



The information contained in the .apk file alone is insufficient to ensure accurate security assessments. Additional information regarding the specifications and design of the app is also required.

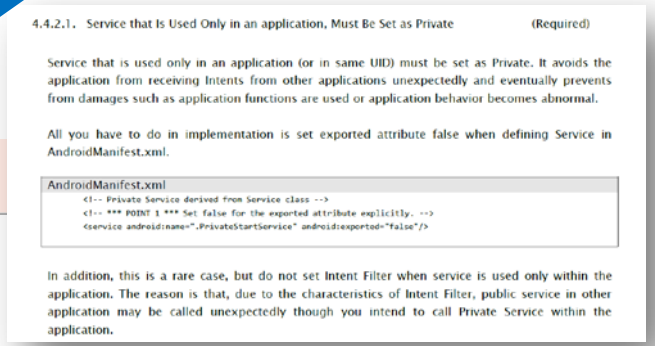
Full coverage from identification to correction of vulnerabilities

The tool suggests methods for fixing the vulnerabilities it detects



Jump directly to the section of the guidebook that discusses the security issue in question

Guidebook

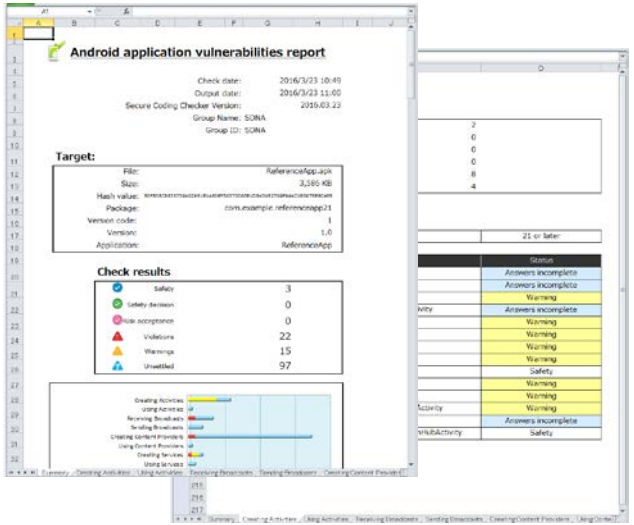


The guidebook contains commercially-usable sample code that may be copied and pasted to fix vulnerabilities

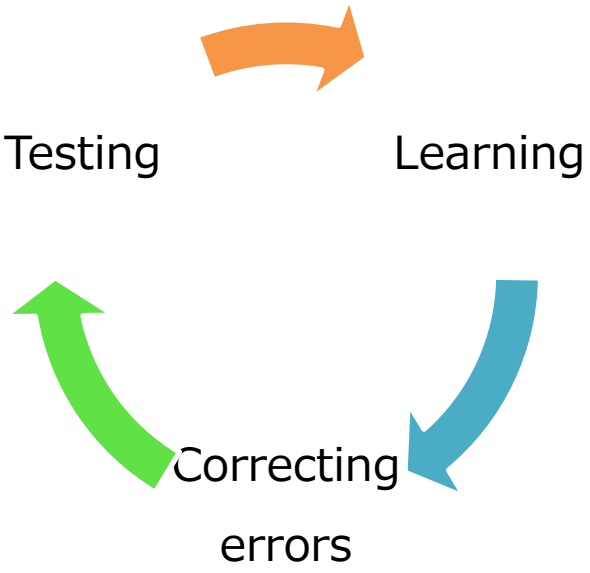
Evidence exporting functionality

Test results may be exported to Excel.
The resulting spreadsheet may be used as evidence that an application was developed in compliance with the JSSEC secure coding guidebook

Export



Facilitating a virtuous cycle of learning



Advantage #1

Developers learn what is necessary—and *only* the minimal number of new concepts necessary—to complete their current task. This ensures that new concepts learned are immediately used for practical applications.

Advantage #2

Methods for fixing problems are always provided for all problems detected, ensuring no delays or lagtime in the code-revision process.

Advantage #3

Developers learn security concepts based on specific examples of vulnerabilities in apps they have designed themselves. This ensures that newly acquired knowledge becomes deeply embedded, making the learning process more effective.

How to contact us

Now offering free 2-week trials

Product website:
http://www.sonydna.com/sdna/e/solution/scc.html

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Secure Coding Checker Department

FAQ

FAQ 1/3

Q: Are the items tested, and the content of the tests, ever updated?
A: Yes! The items tested and the content of the tests are updated whenever the JSSEC guidelines are updated.

Q: It is possible to run tests on obfuscated apps?
A: Yes, this is possible. We recommend that testing be performed before obfuscation.

Q: How does your billing system count the number of apps tested?
A: Apps are distinguished by their package names. Version upgrades of apps for which the package name remains unchanged are considered to be the same app as the original app.

Q: What languages are supported?
A: Both English and Japanese are supported. You may select your desired language from the login window.

FAQ 2/3

Q: What cloud service do you use?
A: We use Microsoft Azure.

Q: How are uploaded .apk files handled?
A: .apk files are deleted immediately after testing is complete. Only the test results are saved.

Q: Does the tester check program sections written in C or C++?
A: No, these sections lie outside the tester’s purview. **Secure Coding Checker** only tests code sections written in Java.

FAQ 3/3

Q: How do you determine the number of apps that may be tested at any one time?
A: You may test a fixed number of apps within any given month. More specifically, suppose that in a given month you are working in a framework that allows for an upper limit of 3 apps, and suppose you have tested three apps named A, B, and C during that month. Then apps A, B, and C are the only apps you may test during that month. However, the apps included in the three-app limit may change every month; thus, next month you may delete apps A, B, and C and instead test three new apps D, E, and F. However, note that the test history for apps will be deleted together with those apps.

Q: Is there a limit on the number of times I may test an app?
A: No. You may test an app any number of times within the period of your contract.

Q: Is there a limit on the size of apps that may be tested?
A: Yes. The size limit on apps is 500 MB.

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