

Fortify Standalone Report Generator

Developer Workbook

scan_results



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Executive Summary

This workbook is intended to provide all necessary details and information for a developer to understand and remediate the different issues discovered during the scan_results project audit. The information contained in this workbook is targeted at project managers and developers.

This section provides an overview of the issues uncovered during analysis.

Project Name:	scan_results		<u>Issues by</u>	Priority
Project Version:				
SCA:	Results Present	Impact	35 High	0 Critical
WebInspect:	Results Not Present			CIRSICUI
WebInspect Agent:	Results Not Present		477	0
Other:	Results Not Present		Low	Medium
				→
			Likel	lihood

Top Ten Critical Categories

This project does not contain any critical issues



Project Description

This section provides an overview of the Fortify scan engines used for this project, as well as the project meta-information.

SCA

Date of Last Analysis:	Aug 5, 2025, 7:36 AM	Engine Version:	21.1.2.0002
Host Name:	3228f58ffe82	Certification:	VALID
Number of Files:	364	Lines of Code:	35,851

Rulepack Name	Rulepack Version
Fortify Secure Coding Rules, Community, Cloud	2025.3.0.0007
Fortify Secure Coding Rules, Community, Universal	2025.3.0.0007
Fortify Secure Coding Rules, Core, Android	2025.3.0.0007
Fortify Secure Coding Rules, Core, Annotations	2025.3.0.0007
Fortify Secure Coding Rules, Core, Cloud	2025.3.0.0007
Fortify Secure Coding Rules, Core, Java	2025.3.0.0007
Fortify Secure Coding Rules, Core, Kotlin	2025.3.0.0007
Fortify Secure Coding Rules, Core, Universal	2025.3.0.0007
Fortify Secure Coding Rules, Extended, Configuration	2025.3.0.0007
Fortify Secure Coding Rules, Extended, Content	2025.3.0.0007
Fortify Secure Coding Rules, Extended, Java	2025.3.0.0007
Fortify Secure Coding Rules, Extended, JSP	2025.3.0.0007



Issue Breakdown by Fortify Categories

The following table depicts a summary of all issues grouped vertically by Fortify Category. For each category, the total number of issues is shown by Fortify Priority Order, including information about the number of audited issues.

Category	Fortif	Fortify Priority (audited/total)			Total
	Critical	High	Medium	Low	Issues
Access Control: SecurityManager Bypass	0	0	0	0/5	0/5
Access Specifier Manipulation	0	0/2	0	0	0/2
Code Correctness: Byte Array to String Conversion	0	0	0	0/3	0/3
Code Correctness: Call to notify()	0	0	0	0 / 13	0 / 13
Code Correctness: Constructor Invokes Overridable Function	0	0	0	0 / 17	0 / 17
Denial of Service	0	0	0	0 / 16	0 / 16
Insecure Randomness	0	0 / 11	0	0	0 / 11
J2EE Bad Practices: Leftover Debug Code	0	0	0	0 / 1	0 / 1
J2EE Bad Practices: Threads	0	0	0	0 / 75	0 / 75
Key Management: Hardcoded Encryption Key	0	0/5	0	0	0/5
Missing XML Validation	0	0	0	0 / 4	0 / 4
Null Dereference	0	0	0	0 / 1	0 / 1
Often Misused: Authentication	0	0	0	0 / 2	0/2
Password Management: Password in Comment	0	0	0	0 / 1	0 / 1
Poor Error Handling: Empty Catch Block	0	0	0	0 / 43	0 / 43
Poor Error Handling: Overly Broad Catch	0	0	0	0 / 101	0 / 101
Poor Error Handling: Overly Broad Throws	0	0	0	0 / 13	0 / 13
Poor Error Handling: Program Catches NullPointerException	0	0	0	0 / 1	0 / 1
Poor Error Handling: Throw Inside Finally	0	0	0	0 / 1	0 / 1
Poor Logging Practice: Use of a System Output Stream	0	0	0	0 / 25	0 / 25
Poor Style: Non-final Public Static Field	0	0	0	0/5	0/5
Poor Style: Redundant Initialization	0	0	0	0/3	0/3
Poor Style: Value Never Read	0	0	0	0 / 114	0 / 114
Portability Flaw: Locale Dependent Comparison	0	0	0	0/3	0/3
Race Condition: Format Flaw	0	0	0	0 / 1	0 / 1
Redundant Null Check	0	0	0	0/3	0/3
System Information Leak	0	0	0	0/8	0/8
Unchecked Return Value	0	0	0	0 / 10	0 / 10
Unreleased Resource: Streams	0	0 / 11	0	0	0 / 11
Unsafe JNI	0	0	0	0 / 1	0 / 1
Weak Cryptographic Hash	0	0	0	0 / 1	0 / 1
XML Entity Expansion Injection	0	0	0	0/6	0/6
XML External Entity Injection	0	0/6	0	0	0/6



Results Outline

Access Control: SecurityManager Bypass (5 issues)

Abstract

Invoking this function on untrusted code can allow attackers to access restricted packages and the ability to execute arbitrary code.

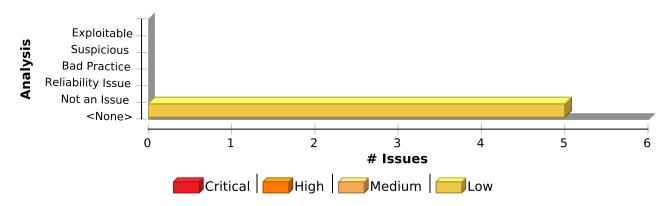
Explanation

Java APIs that perform tasks using the immediate caller's class loader check should be used with caution. These APIs bypass the SecurityManager check that ensures all callers in the execution chain have been granted the requisite security permission. These APIs should not be invoked on behalf of untrusted code, as they may compromise system security. In this case, : 1. The enclosing function is reachable via a public function. 2. The current application has a Process Control and/or Unsafe JNI(Java Native Interface) vulnerability. These two findings imply the current application loads a library from an untrusted source or in an untrusted environment. The untrusted library can use JNI to access this vulnerable API to get access to restricted packages and execute arbitrary code making the application vulnerable to remote attacks. Note: This finding is only applicable if the application is configured with a SecurityManager and the code is enclosed within a privileged class. Please refer to Guideline 9 of The Secure Coding Guidelines for the Java Programming Language, for further details on SecurityManager and this vulnerability.

Recommendation

Ensure that these sensitive APIs are not reachable by untrusted code and cannot be invoked on behalf of untrusted code. Also, do not propagate objects returned from this method back to untrusted code. Please refer to Guideline 9 of The Secure Coding Guidelines for the Java Programming Language, for further details on this vulnerability.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Access Control: SecurityManager Bypass	5	0	0	5
Total	5	0	0	5



Access Control: SecurityManager Bypass

Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 195 (Access Control: SecurityManager Bypass)

Low

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: getDeclaredMethod

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:195

Taint Flags:

192 try {

193 String desc = dataset.GetDescription();

194

195 Method openImpl = GdalLibrary.class.getDeclaredMethod("openImpl", String.class, Long.TYPE, Vector.class, Vector.class);

196 openImpl.setAccessible(true);

197 geotiff = (Dataset) openImpl.invoke(null,

198 desc,

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 205 (Access Control: SecurityManager Bypass)

Low

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: invoke **Enclosing Method:** isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:205

Taint Flags:

202 if (geotiff != null) {

203 Method setThreadLocalConfigOption = GdalLibrary.class.getDeclaredMethod("setThreadLocalConfigOption", String.class, String.class);

204 setThreadLocalConfigOption.setAccessible(true);

205 setThreadLocalConfigOption.invoke(null, "GTIFF_REPORT_COMPD_CS", "YES");

206 wkt = geotiff.GetProjectionRef();

207 setThreadLocalConfigOption.invoke(null, "GTIFF_REPORT_COMPD_CS", null);

208 }



Access Control: SecurityManager Bypass

Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 207 (Access Control: SecurityManager Bypass)

Low

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: invoke **Enclosing Method:** isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:207

Taint Flags:

204 setThreadLocalConfigOption.setAccessible(true);

205 setThreadLocalConfigOption.invoke(null, "GTIFF_REPORT_COMPD_CS", "YES");

206 wkt = geotiff.GetProjectionRef();

 ${\bf 207}\ set Thread Local Config Option. invoke (null, "GTIFF_REPORT_COMPD_CS", null);$

208 }

209 } catch (InvocationTargetException | NoSuchMethodException | IllegalAccessException e) {

210 Log.e(TAG, "error", e);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 197 (Access Control: SecurityManager Bypass)

Low

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: invoke **Enclosing Method:** isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:197

Taint Flags:

194

 $\textbf{195} \ \ \textbf{Method openImpl} = \textbf{GdalLibrary.class.getDeclaredMethod} ("openImpl", String.class, Long.TYPE, Vector.class, Vector.class); \\ \textbf{195} \ \ \textbf{Method openImpl} = \textbf{GdalLibrary.class.getDeclaredMethod} ("openImpl", String.class, Long.TYPE, Vector.class, Vector.class); \\ \textbf{196} \ \ \textbf{197} \ \ \textbf{198} \ \ \textbf{19$

196 openImpl.setAccessible(true);

197 geotiff = (Dataset) openImpl.invoke(null,

198 desc,

199 gdalconst.GA_ReadOnly,

200 new Vector(Collections.singleton(driver)),



Access Control: SecurityManager Bypass

Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 203 (Access Control: SecurityManager Bypass)

Low

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: getDeclaredMethod

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:203

Taint Flags:

200 new Vector(Collections.singleton(driver)),

201 null);

202 if (geotiff != null) {

 $\textbf{203} \ \ \textbf{Method} \ setThreadLocalConfigOption = GdalLibrary.class.getDeclaredMethod("setThreadLocalConfigOption", String.class, String.class); \\$

204 setThreadLocalConfigOption.setAccessible(true);

 $205 \ \ set Thread Local Config Option. in voke (null, "GTIFF_REPORT_COMPD_CS", "YES"); \\$

206 wkt = geotiff.GetProjectionRef();

Access Specifier Manipulation (2 issues)

Abstract

The method call changes an access specifier.

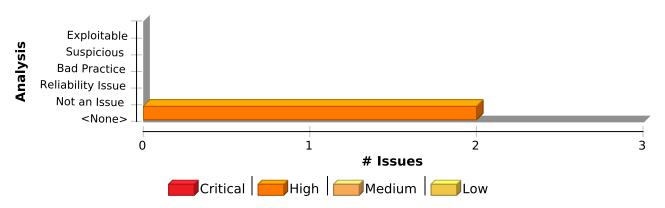
Explanation

The AccessibleObject API allows the programmer to get around the access control checks provided by Java access specifiers. In particular it enables the programmer to allow a reflected object to bypass Java access controls and in turn change the value of private fields or invoke private methods, behaviors that are normally disallowed.

Recommendation

Access specifiers should only be changed by a privileged class using arguments that an attacker cannot set. All occurrences should be examined carefully.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Access Specifier Manipulation	2	0	0	2
Total	2	0	0	2

Access Specifier Manipulation	High
Package: com.atakmap.android.elevation.dsm	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 196 (Access Specifier Manipulation)	High

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: setAccessible()

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:196



Access Specifier Manipulation

High

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 196 (Access Specifier Manipulation)

High

Taint Flags:

193 String desc = dataset.GetDescription();

194

195 Method openImpl = GdalLibrary.class.getDeclaredMethod("openImpl", String.class, Long.TYPE, Vector.class, Vector.class);

196 openImpl.setAccessible(true);

197 geotiff = (Dataset) openImpl.invoke(null,

198 desc.

199 gdalconst.GA_ReadOnly,

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 204 (Access Specifier Manipulation)

High

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: setAccessible()

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:204

Taint Flags:

201 null);

202 if (geotiff != null) {

203 Method setThreadLocalConfigOption = GdalLibrary.class.getDeclaredMethod("setThreadLocalConfigOption", String.class, String.class);

204 setThreadLocalConfigOption.setAccessible(true);

 $205 \ \ set Thread Local Config Option. invoke (null, "GTIFF_REPORT_COMPD_CS", "YES"); \\$

206 wkt = geotiff.GetProjectionRef();

 ${\bf 207} \ \ set Thread Local Config Option. invoke (null, "GTIFF_REPORT_COMPD_CS", null); \\$



Code Correctness: Byte Array to String Conversion (3 issues)

Abstract

Converting a byte array into a String may lead to data loss.

Explanation

When data from a byte array is converted into a String, it is unspecified what will happen to any data that is outside of the applicable character set. This can lead to data being lost, or a decrease in the level of security when binary data is needed to ensure proper security measures are followed. **Example 1:** The following code converts data into a String in order to create a hash.

```
FileInputStream fis = new FileInputStream(myFile);
byte[] byteArr = byte[BUFSIZE];
...
int count = fis.read(byteArr);
...
String fileString = new String(byteArr);
String fileSHA256Hex = DigestUtils.sha256Hex(fileString);
// use fileSHA256Hex to validate file
```

Assuming the size of the file is less than BUFSIZE, this works fine as long as the information in myFile is encoded the same as the default character set, however if it's using a different encoding, or is a binary file, it will lose information. This in turn will cause the resulting SHA hash to be less reliable, and could mean it's far easier to cause collisions, especially if any data outside of the default character set is represented by the same value, such as a question mark.

Recommendation

Generally speaking, a byte array potentially containing noncharacter data should never be converted into a String object as it may break functionality, but in some cases this can cause much larger security concerns. In a lot of cases there is no need to actually convert a byte array into a String, but if there is a specific reason to be able to create a String object from binary data, it must first be encoded in a way such that it will fit into the default character set.

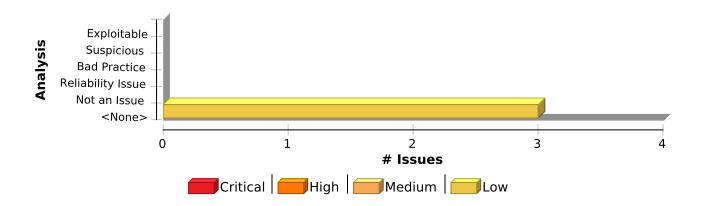
Example 2: The following uses a different variant of the API in Example 1 to prevent any validation problems.

```
FileInputStream fis = new FileInputStream(myFile);
byte[] byteArr = byte[BUFSIZE];
...
int count = fis.read(byteArr);
...
byte[] fileSHA256 = DigestUtils.sha256(byteArr);
// use fileSHA256 to validate file, comparing hash byte-by-byte.
```

In this case, it is straightforward to rectify, since this API has overloaded variants including one that accepts a byte array, and this could be simplified even further by using another overloaded variant of <code>DigestUtils.sha256()</code> that accepts a <code>FileInputStream</code> object as its argument. Other scenarios may need careful consideration as to whether it's possible that the byte array could contain data outside of the character set, and further refactoring may be required.

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Code Correctness: Byte Array to String Conversion	3	0	0	3
Total	3	0	0	3

Code Correctness: Byte Array to String Conversion	Low
Package: com.atakmap.android.commout	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/	
atakmap/android/commout/CommoutMapComponent.java, line 210 (Code Correctness:	Low
Ryte Array to String Conversion)	

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Semantic)

Sink Details

Sink: String()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:210

Taint Flags:

207 if (!p.getAddress().toString()
208 .contains(NetworkUtils.getIP())) {
209 byte[] b = p.getData();
210 String s = new String(b);
211 s = s.substring(0, p.getLength());
212 toMapItem(s.getBytes());
213 Log.d(TAG, "received: " + s);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 359 (Code Correctness: Byte Array to String Conversion)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Semantic)



Code Correctness: Byte Array to String Conversion

Low

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 359 (Code Correctness: Byte Array to String Conversion)

Low

Sink Details

Sink: String()

Enclosing Method: toMapItem()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:359

Taint Flags:

356

357 private void toMapItem(byte[] data) {

358 // very crude example

359 String s = new String(data);

360 String[] sarray = s.split("\\|");

361 Log.d(TAG, "received: " + Arrays.toString(sarray));

362 Log.d(TAG, "attempting to find: " + sarray[1]);

Package: com.atakmap.android.externalbt

sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/ExternalBtMapComponent.java, line 100 (Code Correctness: Byte Array to String Conversion)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Semantic)

Sink Details

Sink: String()

Enclosing Method: onRead()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/

ExternalBtMapComponent.java:100

Taint Flags:

97

98 @Override

99 public void onRead(final byte[] data) {

100 String ascii = new String(data);

101 Log.d(TAG, "just print out the line: " + ascii);

102 // parse packet

103 Packet packet = null;



Code Correctness: Call to notify() (13 issues)

Abstract

It is ambiguous which thread will wake up when notify() is called.

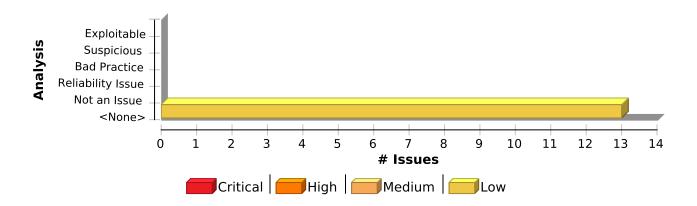
Explanation

In this case, the developer intends to wake up the thread that calls wait(), but it is possible that notify() will notify a different thread than the intended one. This category was derived from the Cigital Java Rulepack.

Recommendation

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Code Correctness: Call to notify()	13	0	0	13
Total	13	0	0	13

Code Correctness: Call to notify()	Low
Package: com.atakmap.android.hellobuildings.opengl	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLBuildingCacheBatch.java, line 67 (Code Correctness:	Low
Call to notify())	

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: notify **Enclosing Method:** release()

 $\textbf{File:} \ sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/opengl/scales/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/app/src/main/java/com/atakmap$

GLBuildingCacheBatch.java:67

Taint Flags:

64 textured = true;
65
66 this.worker = null;
67 this.notify();
68 }
69
70 public void draw(GLMapView view, int renderPass) {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLBuildingCacheBatch.java, line 78 (Code Correctness: Call to notify())

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)



Code Correctness: Call to notify() Package: com.atakmap.android.hellobuildings.opengl sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/opengl/GLBuildingCacheBatch.java, line 78 (Code Correctness: Call to notify()) Low

Sink Details

Sink: SynchronizedBlock **Enclosing Method:** draw()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

GLBuildingCacheBatch.java:78

Taint Flags:

75

76 final int terrainVersion = view.terrain.getTerrainVersion();

77

78 synchronized (this) {

79 for (CachePage page : cache) {

80 if (page.srid != view.drawSrid ||

81 page.terrainVersion != terrainVersion) {

Package: com.atakmap.android.hellobuildings.opengl.examples

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 53 (Code Correctness: Call to notify())

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: SynchronizedBlock **Enclosing Method:** draw()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLBuildingCacheBatch.java:53

Taint Flags:

50

51 final int terrainVersion = view.terrain.getTerrainVersion();

52

53 synchronized (this) {

54 for (CachePage page : cache) {

55 if (page.srid != view.drawSrid ||

56 page.terrainVersion != terrainVersion) {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 44 (Code Correctness: Call to notify())

Low

Issue Details

Kingdom: Code Quality



Code Correctness: Call to notify() Package: com.atakmap.android.hellobuildings.opengl.examples sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 44 (Code Correctness: Call to notify())

Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: notify **Enclosing Method:** release()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLBuildingCacheBatch.java:44

Taint Flags:

```
41 this.idxTransfer = null;
42
43 this.worker = null;
44 this.notify();
45 }
46
47 public void draw(GLMapView view, int renderPass) {
```

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/OffscreenMapCapture.java, line 310 (Code Correctness: Call to notify())

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: SynchronizedBlock **Enclosing Method:** run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

OffscreenMapCapture.java:310

Taint Flags:

```
307 final EGLContext[] shared_ctx = new EGLContext[1];
308 MapView.getMapView().getGLSurface().queueEvent(new Runnable() {
309  public void run() {
310    synchronized (shared_ctx) {
311    EGL egl = EGLContext.getEGL();
312    shared_ctx[0] = ((EGL10) egl).eglGetCurrentContext();
313    shared_ctx.notify();
```



Low

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/ android/platformsim/PlatformSimulatorReceiver.java, line 227 (Code Correctness: Call to Low notify())

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: SynchronizedBlock Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:227

Taint Flags:

224 platformSimResumeButton.setOnClickListener(new View.OnClickListener() {

225 @Override

226 public void onClick(View v) {

227 synchronized (PlatformSimulatorReceiver.this) {

228 paused = false;

229 PlatformSimulatorReceiver.this.notify();

230 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/ android/platformsim/PlatformSimulatorReceiver.java, line 112 (Code Correctness: Call to Low notify())

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: notify

Enclosing Method: disposeImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:112

Taint Flags:

109

110 public synchronized void disposeImpl() {

111 this.disposed = true;

112 this.notify();

113 }

114

115 @Override



Low

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/ android/platformsim/PlatformSimulatorReceiver.java, line 169 (Code Correctness: Call to Low notify())

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: SynchronizedBlock

Enclosing Method: onCoordUpdated()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:169

Taint Flags:

166 platformSimOrbitRadiusPickPointButton, _prefs,

167 new CoordUpdateHandler() {

168 public void onCoordUpdated(GeoPointMetaData point) {

169 synchronized (PlatformSimulatorReceiver.this) {

170 if (point == null || orbitCenter == null) {

171 orbitRadiusMeters = 0d;

172 } else {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/ android/platformsim/PlatformSimulatorReceiver.java, line 207 (Code Correctness: Call to Low notify())

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: SynchronizedBlock Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:207

Taint Flags:

204 platformSimClearButton.setOnClickListener(new View.OnClickListener() {

205 @Override

206 public void onClick(View v) {

207 synchronized (PlatformSimulatorReceiver.this) {

208 spi = null;

209 orbitCenter = null;

210 orbitRadiusMeters = 0d;



Low

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/ android/platformsim/PlatformSimulatorReceiver.java, line 187 (Code Correctness: Call to Low notify())

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: SynchronizedBlock

 $Enclosing\ Method: \ on Coord Updated ()$

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:187

Taint Flags:

184 185 final CoordUpdateHandler spiPointHandler = new CoordUpdateHandler() { **186** public void onCoordUpdated(final GeoPointMetaData point) { 187 synchronized (PlatformSimulatorReceiver.this) { **188** spi = point; 189 PlatformSimulatorReceiver.this.notify();

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/ android/platformsim/PlatformSimulatorReceiver.java, line 147 (Code Correctness: Call to Low notify())

Issue Details

190 }

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: SynchronizedBlock

Enclosing Method: onCoordUpdated()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:147

Taint Flags:

144 } 145 }); 146 147 synchronized (PlatformSimulatorReceiver.this) { **148** orbitCenter = point; **149** PlatformSimulatorReceiver.this.notify(); **150** }



Low

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/ android/platformsim/PlatformSimulatorReceiver.java, line 218 (Code Correctness: Call to Low notify())

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: SynchronizedBlock Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:218

Taint Flags:

215 platformSimPauseButton.setOnClickListener(new View.OnClickListener() {

216 @Override

217 public void onClick(View v) {

218 synchronized (PlatformSimulatorReceiver.this) {

219 paused = true;

220 PlatformSimulatorReceiver.this.notify();

221 }

Package: com.atakmap.android.plugins.videomosaic

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/ android/plugins/videomosaic/MosaicDataPipe.java, line 71 (Code Correctness: Call to notify())

Low

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: SynchronizedBlock

Enclosing Method: videoFrame()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

MosaicDataPipe.java:71

Taint Flags:

68

70 public void videoFrame(Bitmap frame, GeoPoint upperLeft, GeoPoint upperRight, GeoPoint lowerRight, GeoPoint lowerLeft) {

71 synchronized (_listener) {

72 if (!_allowFrameDrop) {

73 _sink.updateMosaic(upperLeft, upperRight, lowerRight, lowerLeft, frame);

74 if (_listener[0] != null)



Abstract

A constructor of the class calls a function that can be overridden.

Explanation

When a constructor calls an overridable function, it may allow an attacker to access the this reference prior to the object being fully initialized, which can in turn lead to a vulnerability. **Example 1:** The following calls a method that can be overridden.

```
class User {
  private String username;
  private boolean valid;
  public User(String username, String password) {
    this.username = username;
    this.valid = validateUser(username, password);
  }
  public boolean validateUser(String username, String password) {
    //validate user is real and can authenticate
    ...
  }
  public final boolean isValid() {
    return valid;
  }
}
```

Since the function validateUser and the class are not final, it means that they can be overridden, and then initializing a variable to the subclass that overrides this function would allow bypassing of the validateUser functionality. For example:

```
class Attacker extends User{
  public Attacker(String username, String password){
     super(username, password);
  }
  public boolean validateUser(String username, String password){
     return true;
  }
}
...
class MainClass{
  public static void main(String[] args){
     User hacker = new Attacker("Evil", "Hacker");
     if (hacker.isValid()){
        System.out.println("Attack successful!");
     }else{
        System.out.println("Attack failed");
     }
}
```

The code in Example 1 prints "Attack successful!", since the Attacker class overrides the validateUser() function that is called from the constructor of the superclass User, and Java will first look in the subclass for functions called from the constructor.



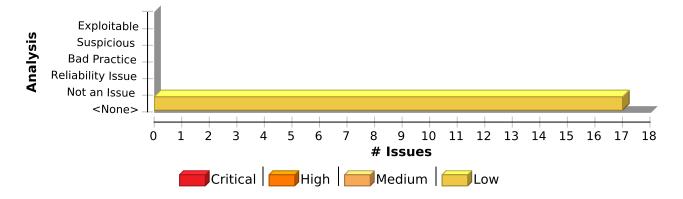
Recommendation

Constructors should not call functions that can be overridden, either by specifying them as final, or specifying the class as final. Alternatively if this code is only ever needed in the constructor, the private access specifier can be used, or the logic could be placed directly into the constructor of the superclass. **Example 2:** The following makes the class final to prevent the function from being overridden elsewhere.

```
final class User {
  private String username;
  private boolean valid;
  public User(String username, String password) {
    this.username = username;
    this.valid = validateUser(username, password);
  }
  private boolean validateUser(String username, String password) {
    //validate user is real and can authenticate
    ...
  }
  public final boolean isValid() {
    return valid;
  }
}
```

This example specifies the class as final, so that it cannot be subclassed, and changes the validateUser() function to private, since it is not needed elsewhere in this application. This is programming defensively, since at a later date it may be decided that the User class needs to be subclassed, which would result in this vulnerability reappearing if the validateUser() function was not set to private.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Code Correctness: Constructor Invokes Overridable	17	0	0	17
Function				
Total	17	0	0	17



Low

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 52 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: setBounds **Enclosing Method:** CotInjector()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:52 **Taint Flags:**

49 double lat2, double lon2,

50 int count, int interval, int threads,

51 boolean updates) {

52 setBounds(lat1, lon1, lat2, lon2);

53 this.count.set(count);

54 this.interval = interval;

55 this.threads = threads;

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMDatabase.java, line 84 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: addOnContentChangedListener

Enclosing Method: DSMDatabase()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMDatabase.java:84

Taint Flags:

- **81** public DSMDatabase(File db) {
- 82 super(Databases.openOrCreateDatabase(db.getAbsolutePath()),
- 83 currencyRegistry);
- **84** addOnContentChangedListener(_observable);
- **85** }

86

87 public ElevationInfo getElevationInfo(String path) {



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 502 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: addPluginContact

Enclosing Method: HelloWorldDropDownReceiver()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:502

Taint Flags:

499 helloView = PluginLayoutInflater.inflate(pluginContext,

500 R.layout.hello_world_layout, null);

501 // Add "Hello World" contact

502 this.helloContact = addPluginContact(pluginContext.getString(

503 R.string.hello_world));

504

505 //Find buttons by id and implement code for long click

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 454 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: registerOnActivityResultListener **Enclosing Method:** HelloWorldDropDownReceiver()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:454

Taint Flags:

451 this.pluginContext = context;

452 this.mapOverlay = overlay;

453 final Activity parentActivity = (Activity) mapView.getContext();

454 registerOnActivityResultListener();

455

456 _joystickView = new JoystickListener();



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 490 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: printNetworks

Enclosing Method: HelloWorldDropDownReceiver()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:490

Taint Flags:

487

488 }; 489

490 printNetworks();

491

492 AtakBroadcast.DocumentedIntentFilter dif = new AtakBroadcast.DocumentedIntentFilter(

493 "com.atakmap.android.helloworld.FAKE_PHONE_CALL");

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechLinker.java, line 30 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: startActivity **Enclosing Method:** SpeechLinker()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechLinker.java:30

Taint Flags:

27 selfArray = getPluginContext().getResources()

28 .getStringArray(R.array.self_array);

29 analyzeSpeech(input);

30 startActivity();

31

32 }



Low

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechNineLine.java, line 34 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: startActivity
Enclosing Method: SpeechNineLine()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechNineLine.java:34

Taint Flags:

31 super(view, pluginContext);
32 cotGroup = view.getRootGroup().findMapGroup("Cursor on Target");
33 analyzeSpeech(input);
34 startActivity();
35 }
36

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechPointDropper.java, line 70 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

37 /**

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: analyzeSpeech **Enclosing Method:** SpeechPointDropper()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechPointDropper.java:70

Taint Flags:



Low

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechPointDropper.java, line 71 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: startActivity

Enclosing Method: SpeechPointDropper()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechPointDropper.java:71

Taint Flags:

```
68 Log.d(TAG, "======INSIDE SpeechPointDropper Constructor=====");
69 loadResources();
70 analyzeSpeech(input);
71 startActivity();
72 }
73
74 /**
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechNineLine.java, line 33 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: analyzeSpeech **Enclosing Method:** SpeechNineLine()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechNineLine.java:33

Taint Flags:

- ${\bf 30}\ \ public\ SpeechNineLine(String\ input,\ MapView\ view,\ Context\ pluginContext)\ \{$
- 31 super(view, pluginContext);
- 32 cotGroup = view.getRootGroup().findMapGroup("Cursor on Target");
- 33 analyzeSpeech(input);
- 34 startActivity();
- **35** }



Low

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechNavigator.java, line 40 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: analyzeSpeech **Enclosing Method:** SpeechNavigator()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechNavigator.java:40

Taint Flags:

37 public SpeechNavigator(MapView mapview, String input, Boolean quickNav) {

38 super(mapview, mapview.getContext());

39 this.navFlag = quickNav;

40 analyzeSpeech(input);

41 }

42

43 /**

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechBrightness.java, line 33 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: analyzeSpeech **Enclosing Method:** SpeechBrightness()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechBrightness.java:33

Taint Flags:

30 .getStringArray(R.array.medium_array);

31 lowArray = getPluginContext().getResources()

32 .getStringArray(R.array.low_array);

33 analyzeSpeech(input);

34 }

35

36 /**



Low

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechLinker.java, line 29 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: analyzeSpeech **Enclosing Method:** SpeechLinker()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechLinker.java:29

Taint Flags:

26 super(view, pluginContext);

27 selfArray = getPluginContext().getResources()

28 .getStringArray(R.array.self_array);

29 analyzeSpeech(input);

30 startActivity();

31

32 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechItemRemover.java, line 44 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: startActivity

Enclosing Method: SpeechItemRemover()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechItemRemover.java:44

Taint Flags:

- **41** wordNumberArray = context.getResources()
- **42** .getStringArray(R.array.word_number_array);
- 43 analyzeSpeech(input);
- 44 startActivity();
- **45** }
- 46
- 47 /**



Low

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechBloodHound.java, line 50 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: analyzeSpeech **Enclosing Method:** SpeechBloodHound()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechBloodHound.java:50

Taint Flags:

47 routeArray = context.getResources().getStringArray(R.array.route_array);

48 callsignArray = context.getResources()

49 .getStringArray(R.array.callsign_array);

50 analyzeSpeech(input);

51 }

52

53 /**

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechItemRemover.java, line 43 (Code Correctness: Constructor Invokes Overridable Function)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: analyzeSpeech **Enclosing Method:** SpeechItemRemover()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechItemRemover.java:43

Taint Flags:

- **40** routeArray = context.getResources().getStringArray(R.array.route_array);
- **41** wordNumberArray = context.getResources()
- **42** .getStringArray(R.array.word_number_array);
- 43 analyzeSpeech(input);
- 44 startActivity();
- **45** }



Code Correctness: Constructor Invokes Overridable Function	Low
Package: com.skyfi.atak.plugin	
app/src/main/java/com/skyfi/atak/plugin/AOIVisualizationManager.java, line 41 (Code Correctness: Constructor Invokes Overridable Function)	Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: loadAndDisplayAllAOIs **Enclosing Method:** AOIVisualizationManager()

File: app/src/main/java/com/skyfi/atak/plugin/AOIVisualizationManager.java:41

Taint Flags:

38 this.aoiMapItems = new HashMap<>();
39
40 initializeMapGroup();
41 loadAndDisplayAllAOIs();
42 }
43
44 private void initializeMapGroup() {



Denial of Service (16 issues)

Abstract

An attacker could cause the program to crash or otherwise become unavailable to legitimate users.

Explanation

Attackers may be able to deny service to legitimate users by flooding the application with requests, but flooding attacks can often be defused at the network layer. More problematic are bugs that allow an attacker to overload the application using a small number of requests. Such bugs allow the attacker to specify the quantity of system resources their requests will consume or the duration for which they will use them. **Example 1:** The following code allows a user to specify the amount of time for which a thread will sleep. By specifying a large number, an attacker may tie up the thread indefinitely. With a small number of requests, the attacker may deplete the application's thread pool.

```
int usrSleepTime = Integer.parseInt(usrInput);
Thread.sleep(usrSleepTime);
```

Example 2: The following code reads a String from a zip file. Because it uses the readLine() method, it will read an unbounded amount of input. An attacker may take advantage of this code to cause an OutOfMemoryException or to consume a large amount of memory so that the program spends more time performing garbage collection or runs out of memory during some subsequent operation.

```
InputStream zipInput = zipFile.getInputStream(zipEntry);
Reader zipReader = new InputStreamReader(zipInput);
BufferedReader br = new BufferedReader(zipReader);
String line = br.readLine();
```

Recommendation

Validate user input to ensure that it will not cause inappropriate resource utilization. **Example 3:** The following code allows a user to specify the amount of time for which a thread will sleep just as in Example 1, but only if the value is within reasonable bounds.

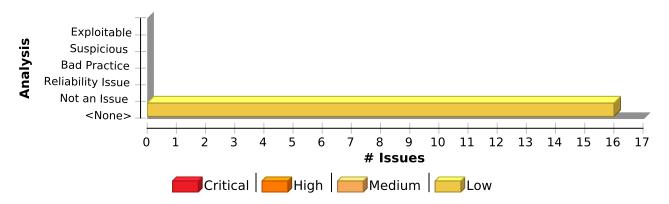
```
int usrSleepTime = Integer.parseInt(usrInput);
if (usrSleepTime >= SLEEP_MIN &&
    usrSleepTime <= SLEEP_MAX) {
   Thread.sleep(usrSleepTime);
} else {
   throw new Exception("Invalid sleep duration");
}</pre>
```

Example 4: The following code reads a String from a zip file just as in Example 2, but the maximum string length it will read is MAX_STR_LEN characters.

```
InputStream zipInput = zipFile.getInputStream(zipEntry);
Reader zipReader = new InputStreamReader(zipInput);
BufferedReader br = new BufferedReader(zipReader);
StringBuffer sb = new StringBuffer();
int intC;
while ((intC = br.read()) != -1) {
   char c = (char) intC;
   if (c == '\n') {
      break;
   }
   if (sb.length() >= MAX_STR_LEN) {
      throw new Exception("input too long");
   }
   sb.append(c);
}
```



Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Denial of Service	16	0	0	16
Total	16	0	0	16

Denial of Service Low

Package: com.atakmap.android.importexportexample

sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/importexportexample/ExFmtMarshal.java, line 46 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: marshal()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/

importexportexample/ExFmtMarshal.java:46

Taint Flags:

43 InputStreamReader isr = new InputStreamReader(fis);
44 BufferedReader reader = new BufferedReader(isr)) {
45
46 return isExFmt(reader.readLine()) ? ExFmtImporter.TEXT_CSV : null;
47 }
48 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/importexportexample/ExFmtImporter.java, line 44 (Denial of Service)

Low

Issue Details



Denial of Service Low

Package: com.atakmap.android.importexportexample

sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/importexportexample/ExFmtImporter.java, line 44 (Denial of Service)

Low

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: importData()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/

importexportexample/ExFmtImporter.java:44

Taint Flags:

41 BufferedReader reader = new BufferedReader(new InputStreamReader(inputStream));

42 do {

43 // iterate each row

44 final String line = reader.readLine();

45 if(line == null)

46 break;

47

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 262 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: isSupported()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:262

Taint Flags:

```
259
260 // read the next line
261 Log.d(TAG, "Reading next line: " + line);
262 line = reader.readLine();
263 }
264
265 } catch (Exception e) {
```



Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 241 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: isSupported()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:241

Taint Flags:

```
238 while (line != null && (++count < 4)) {
239 if (line.trim().length() == 0) {
240 Log.d(TAG, "Found empty line");
241 line = reader.readLine();
242 continue;
243 }
244</pre>
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 231 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: isSupported()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:231

Taint Flags:

228 isr = new InputStreamReader(fos, FileSystemUtils.UTF8_CHARSET);

229 reader = new BufferedReader(isr);

230

231 String line = reader.readLine();

232

233 // for each row, pull out and check the values

 $234\,$ // if the values are valid, save them, otherwise skip that altitude entry



Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 168 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:168

Taint Flags:

```
165 }
166
167 // read the next line
168 line = reader.readLine();
169 }
170 }
171 } catch (Exception e) {
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 138 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:138

Taint Flags:

```
135 String[] toks = decodeLine(line);
136 if (toks == null || toks.length < 3) {
137 Log.d(TAG, "Skipping invalid line: " + line);
138 line = reader.readLine();
139 continue;
140 }
141
```



Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 128 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:128

Taint Flags:

```
125
126 if (isTitleLine(line)) {
127 Log.d(TAG, "Skipping title line: " + line);
128 line = reader.readLine();
129 continue;
130 }
131
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 122 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:122

Taint Flags:

```
119 int count = 0;
120 while (line != null) {
121 if (line.trim().length() == 0) {
122 line = reader.readLine();
123 continue;
124 }
125
```



Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 115 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:115

Taint Flags:

112 try (InputStreamReader isr = new InputStreamReader(input, FileSystemUtils.UTF8_CHARSET);

113 BufferedReader reader = new BufferedReader(isr)) {

114

115 String line = reader.readLine();

116

117 // for each row, pull out and check the values

118 // if the values are valid, save them, otherwise skip that altitude entry

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/WindFileParser.java, line 284 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: setArrayIndices()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/WindFileParser.java:284

Taint Flags:

281 while (line != null) {

282 line = line.toLowerCase(LocaleUtil.getCurrent());

283 if (!isTitleLine(line)) {

284 line = reader.readLine();

285 continue;

286 }

287 //after the title line is found, use the title line to determine the delimiter



Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/WindFileParser.java, line 279 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: setArrayIndices()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/WindFileParser.java:279

Taint Flags:

```
276 boolean spdHeader = false;
277
278 try {
279 String line = reader.readLine();
280
281 while (line != null) {
282 line = line.toLowerCase(LocaleUtil.getCurrent());
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/WindFileParser.java, line 154 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/WindFileParser.java:154

Taint Flags:

```
151 }
152
153 // read the next line
154 line = reader.readLine();
155 }
156 }
157 } catch (Exception e) {
```



Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/WindFileParser.java, line 114 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/WindFileParser.java:114

Taint Flags:

111 // if the values are valid, save them, otherwise skip that altitude entry

112 while (line != null) {

113 if $(line.trim().length() == 0) {$

114 line = reader.readLine();

115 continue;

116 }

117 // tokenize the line and return the altitude, direction and speed in an array

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/WindFileParser.java, line 102 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/WindFileParser.java:102

Taint Flags:

99 String line = reader.readLine();

100 //get units that are in the line after the header

101 if (!unitsInHeader) {

102 if (line == null || line.trim().length() == 0) line = reader.readLine();

103 if (line != null && line.contains("(")) {

104 String[] unitList = decodeLine(line);

105 setAltitudeUnit(unitList[0]);



Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/WindFileParser.java, line 99 (Denial of Service)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/WindFileParser.java:99

Taint Flags:

96 return windInfo;

97 }

98

99 String line = reader.readLine();

100 //get units that are in the line after the header

101 if (!unitsInHeader) {

102 if (line == null || line.trim().length() == 0) line = reader.readLine();



Insecure Randomness (11 issues)

Abstract

Standard pseudorandom number generators cannot withstand cryptographic attacks.

Explanation

Insecure randomness errors occur when a function that can produce predictable values is used as a source of randomness in a security-sensitive context. Computers are deterministic machines, and as such are unable to produce true randomness. Pseudorandom Number Generators (PRNGs) approximate randomness algorithmically, starting with a seed from which subsequent values are calculated. There are two types of PRNGs: statistical and cryptographic. Statistical PRNGs provide useful statistical properties, but their output is highly predictable and form an easy to reproduce numeric stream that is unsuitable for use in cases where security depends on generated values being unpredictable. Cryptographic PRNGs address this problem by generating output that is more difficult to predict. For a value to be cryptographically secure, it must be impossible or highly improbable for an attacker to distinguish between the generated random value and a truly random value. In general, if a PRNG algorithm is not advertised as being cryptographically secure, then it is probably a statistical PRNG and should not be used in security-sensitive contexts, where its use can lead to serious vulnerabilities such as easy-to-guess temporary passwords, predictable cryptographic keys, session hijacking, and DNS spoofing. **Example 1:** The following code uses a statistical PRNG to create a URL for a receipt that remains active for some period of time after a purchase.

```
String GenerateReceiptURL(String baseUrl) {
   Random ranGen = new Random();
   ranGen.setSeed((new Date()).getTime());
   return (baseUrl + ranGen.nextInt(400000000) + ".html");
}
```

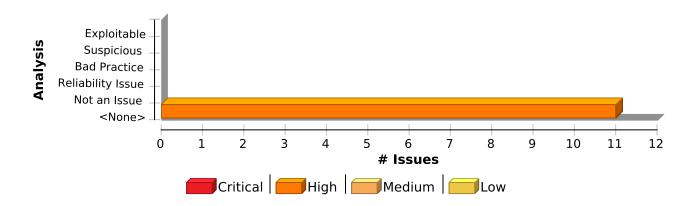
This code uses the Random.nextInt() function to generate "unique" identifiers for the receipt pages it generates. Since Random.nextInt() is a statistical PRNG, it is easy for an attacker to guess the strings it generates. Although the underlying design of the receipt system is also faulty, it would be more secure if it used a random number generator that did not produce predictable receipt identifiers, such as a cryptographic PRNG.

Recommendation

When unpredictability is critical, as is the case with most security-sensitive uses of randomness, use a cryptographic PRNG. Regardless of the PRNG you choose, always use a value with sufficient entropy to seed the algorithm. (Do not use values such as the current time because it offers only negligible entropy.) The Java language provides a cryptographic PRNG in java.security.SecureRandom. As is the case with other algorithm-based classes in java.security, SecureRandom provides an implementation-independent wrapper around a particular set of algorithms. When you request an instance of a SecureRandom object using SecureRandom.getInstance(), you can request a specific implementation of the algorithm. If the algorithm is available, then it is given as a SecureRandom object. If it is unavailable or if you do not specify a particular implementation, then you are given a SecureRandom implementation selected by the system. Sun provides a single SecureRandom implementation with the Java distribution named SHA1PRNG, which Sun describes as computing: "The SHA-1 hash over a truerandom seed value concatenated with a 64-bit counter which is incremented by 1 for each operation. From the 160-bit SHA-1 output, only 64 bits are used [1]." However, the specifics of the Sun implementation of the SHA1PRNG algorithm are poorly documented, and it is unclear what sources of entropy the implementation uses and therefore what amount of true randomness exists in its output. Although there is speculation on the Web about the Sun implementation, there is no evidence to contradict the claim that the algorithm is cryptographically strong and can be used safely in security-sensitive contexts.

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Insecure Randomness	11	0	0	11
Total	11	0	0	11

Insecure Randomness High

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 208 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: nextDouble()

Enclosing Method: getRandomPoint()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:208

Taint Flags:

205 public GeoPoint getRandomPoint()

206 {

207 double latitude = minLat + random.nextDouble() * deltaLat;

208 double longitude = minLon + random.nextDouble() * deltaLon;

209 return new GeoPoint(latitude, longitude);

210 }

211

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 207 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details



Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 207 (Insecure Randomness)

High

Sink: nextDouble()

Enclosing Method: getRandomPoint()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:207

Taint Flags:

204 */
205 public GeoPoint getRandomPoint()
206 {
207 double latitude = minLat + random.nextDouble() * deltaLat;
208 double longitude = minLon + random.nextDouble() * deltaLon;
209 return new GeoPoint(latitude, longitude);
210 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 219 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: nextInt()

Enclosing Method: getRandomType()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:219

Taint Flags:

```
216 */
217 public String getRandomType()
218 {
219 return "a-" + AFFINITY[random.nextInt(4)] + "-" + DIMENSION[random.nextInt(5)];
220 }
221
222 /**
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 219 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: nextInt()

Enclosing Method: getRandomType()



Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 219 (Insecure Randomness)

High

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java:219

Taint Flags:

```
216 */
217 public String getRandomType()
218 {
219 return "a-" + AFFINITY[random.nextInt(4)] + "-" + DIMENSION[random.nextInt(5)];
220 }
221
222 /**
```

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1765 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: random()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1765

Taint Flags:

```
1762 public void onClick(View view) {
1763 double distance = Math.random() * 1000;
1764 double azimuth = Math.random() * 360;
1765 double elevation = Math.random() * 10;
1766
1767 // note: do not call onRangeFinderInfo as it will bypass other listeners looking to get
1768 // the data. The format for the process command is documented as
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1764 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: random()

Enclosing Method: onClick()



Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1764 (Insecure Randomness)

ligh

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java:1764

Taint Flags:

1761 @Override

1762 public void onClick(View view) {

1763 double distance = Math.random() * 1000;

1764 double azimuth = Math.random() * 360;

1765 double elevation = Math.random() * 10;

1766

1767 // note: do not call onRangeFinderInfo as it will bypass other listeners looking to get

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1763 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: random()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1763

Taint Flags:

1760 lrfFire.setOnClickListener(new OnClickListener() {
1761 @Override
1762 public void onClick(View view) {
1763 double distance = Math.random() * 1000;
1764 double azimuth = Math.random() * 360;
1765 double elevation = Math.random() * 10;
1766

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 2976 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: random()

Enclosing Method: createOrModifySensorFOV()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2976



Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 2976 (Insecure Randomness)

High

Taint Flags:

2973 sFov.setColor(color); // currently broken

2974 sFov.setColor(r, g, b);

2975 sFov.setMetrics((int) (90 * Math.random()),

2976 (int) (70 * Math.random()), 400);

2977 } else { // use this case

2978 float r = ((0x00FF0000 & color) >> 16) / 256f;

2979 float g = ((0x0000FF00 & color) >> 8) / 256f;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 2975 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: random()

Enclosing Method: createOrModifySensorFOV()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2975

Taint Flags:

2972

2973 sFov.setColor(color); // currently broken

2974 sFov.setColor(r, g, b);

2975 sFov.setMetrics((int) (90 * Math.random()),

2976 (int) (70 * Math.random()), 400);

2977 } else { // use this case

2978 float r = ((0x00FF0000 & color) >> 16) / 256f;

Package: com.atakmap.android.selfmarkerdata

sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/SelfMarkerDataMapComponent.java, line 247 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: random()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/



Package: com.atakmap.android.selfmarkerdata

sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/SelfMarkerDataMapComponent.java, line 247 (Insecure Randomness)

High

SelfMarkerDataMapComponent.java:247

Taint Flags:

- **244** CotDetail cd = new CotDetail("health");
- 245 int maxHeartRate = (int) Math.round(Math.random() * 15 + 60);
- 246 cd.setAttribute("maxHeartRate", Integer.toString(maxHeartRate));
- 247 int averageHeartRate = (int) Math.round(Math.random() * 10 + 60);
- 248 cd.setAttribute("averageHeartRate",
- **249** Integer.toString(averageHeartRate));
- **250** CoordinatedTime currentTime = new CoordinatedTime();

sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/SelfMarkerDataMapComponent.java, line 245 (Insecure Randomness)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)

Sink Details

Sink: random()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/

SelfMarkerDataMapComponent.java:245

Taint Flags:

242 */

243 // <health maxHeartRate="80" averageHeartRate="65" start="2019-01-23T21:22:55.3074679Z"

stop="2019-01-23T21:23:55.3074679Z"/>

244 CotDetail cd = new CotDetail("health");

245 int maxHeartRate = (int) Math.round(Math.random() * 15 + 60);

246 cd.setAttribute("maxHeartRate", Integer.toString(maxHeartRate));

247 int averageHeartRate = (int) Math.round(Math.random() * 10 + 60);

 ${\bf 248}\ cd.set Attribute ("average Heart Rate",$



J2EE Bad Practices: Leftover Debug Code (1 issue)

Abstract

Debug code can create unintended entry points in a deployed web application.

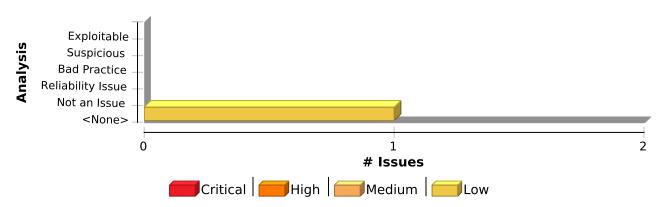
Explanation

A common development practice is to add "back door" code specifically designed for debugging or testing purposes that is not intended to be shipped or deployed with the application. When this sort of debug code is accidentally left in the application, the application is open to unintended modes of interaction. These back door entry points create security risks because they are not considered during design or testing and fall outside of the expected operating conditions of the application. The most common example of forgotten debug code is a main() method appearing in a web application. Although this is an acceptable practice during product development, classes that are part of a production J2EE application should not define a main().

Recommendation

Remove debug code before deploying a production version of an application. Regardless of whether a direct security threat can be articulated, it is unlikely that there is a legitimate reason for such code to remain in the application after the early stages of development.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
J2EE Bad Practices: Leftover Debug Code	1	0	0	1
Total	1	0	0	1

J2EE Bad Practices: Leftover Debug Code	Low
Package: com.atakmap.android.hellobuildings.parser	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/OSMParser.java, line 61 (J2EE Bad Practices: Leftover Debug Code)	Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)



J2EE Bad Practices: Leftover Debug Code	Low
Package: com.atakmap.android.hellobuildings.parser	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/OSMParser.java, line 61 (J2EE Bad Practices: Leftover Debug Code)	Low

Sink Details

Sink: Function: main **Enclosing Method:** main()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

OSMParser.java:61 **Taint Flags:**

58 E_LAT;
59 }
60
61 public static void main(String[] args) {
62
63 try {
64 //File inputFile = new File("input.txt");



J2EE Bad Practices: Threads (75 issues)

Abstract

Thread management in a web application is forbidden in some circumstances and is always highly error prone.

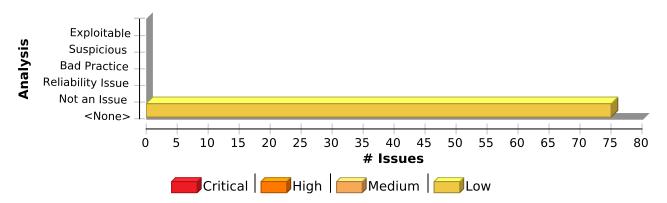
Explanation

Thread management in a web application is forbidden by the J2EE standard in some circumstances and is always highly error prone. Managing threads is difficult and is likely to interfere in unpredictable ways with the behavior of the application container. Even without interfering with the container, thread management usually leads to bugs that are hard to detect and diagnose like deadlock, race conditions, and other synchronization errors.

Recommendation

Avoid managing threads directly from within the web application. Instead use standards such as message driven beans and the EJB timer service that are provided by the application container.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
J2EE Bad Practices: Threads	75	0	0	75
Total	75	0	0	75

J2EE Bad Practices: Threads

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/
atakmap/android/commout/CommoutMapComponent.java, line 267 (J2EE Bad Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

 ${\bf Enclosing\ Method:}\ sendMessage()$



Low

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 267 (J2EE Bad Practices: Low Threads)

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/ CommoutMapComponent.java:267

Taint Flags:

264 * @param data the byte array to be sent. 265 */ 266 private void sendMessage(final byte[] data) { **267** Thread t = new Thread(new Runnable() { 268 public void run() { **269** send(data); 270 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 86 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:86

Taint Flags:

- **83** MapEventDispatcher dispatcher = _mapView.getMapEventDispatcher();
- **84** dispatcher.addMapEventListener(MapEvent.ITEM_SHARED, sedl);
- **85** dispatcher.addMapEventListener(MapEvent.ITEM_PERSIST, sedl);

86 new Thread(new UDPListener()).start();

87 }

88

89 /**

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 272 (J2EE Bad Practices: Low Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details



Low

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 272 (J2EE Bad Practices: Low Threads)

Sink: start()

Enclosing Method: sendMessage()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:272

Taint Flags:

```
269 send(data);
270 }
271 });
272 t.start();
273
274 }
275
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 244 (J2EE Bad Practices: Low Threads)

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:244

Taint Flags:

241 242 // general error 243 try { 244 Thread.sleep(retryTimeout); 245 } catch (Exception e) { 246 } 247 socket.close();

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 233 (J2EE Bad Practices: Low Threads)

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)



Low

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 233 (J2EE Bad Practices: Low Threads)

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:233

Taint Flags:

```
230 e1.printStackTrace();
231 // receive error
232 try {
233 Thread.sleep(retryTimeout);
234 } catch (Exception e) {
235 }
236 socket.close();
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 86 (J2EE Bad Practices: Threads)

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:86

Taint Flags:

- **83** MapEventDispatcher dispatcher = _mapView.getMapEventDispatcher();
- **84** dispatcher.addMapEventListener(MapEvent.ITEM_SHARED, sedl);
- **85** dispatcher.addMapEventListener(MapEvent.ITEM_PERSIST, sedl);
- **86** new Thread(new UDPListener()).start();

87 }

88

89 /**

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/ android/cotinjector/CotInjector.java, line 87 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)



Low

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 87 (J2EE Bad Practices: Threads)

Low

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:87 **Taint Flags:**

```
84 diagnostic.stop();
85 try {
86 if (interval > 0) // prevents a thread yield
87 Thread.sleep(interval);
88 } catch (Exception ignored) {
89 }
90 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 96 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: InjectorThread()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:96

Taint Flags:

```
93 + ", count= " + diagnostic.getCount()
94 + ", avg= " + (((double) diagnostic.getDuration() / diagnostic.getCount()) / 1000.0) + " microsec");
95 }
96 }, "CotInjector-" + threadIndex);
97 }
98
99 void start() {
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 128 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details



Low

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 128 (J2EE Bad Practices: Threads)

Low

Sink: run()

Enclosing Method: start()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:128

Taint Flags:

125

126 final int threadListSize = threadList.size();

127 if (threadList.size() > 1) {

128 new Thread(new Runnable() {

129 @Override

130 public void run() {

131 double maxThreadDuration = 0.0;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 156 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: start()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:156

Taint Flags:

```
153 + ", count= " + totalCount

154 + ", approx_rate= " + ((double)totalCount / average) + " events/s");

155 }

156 }).start();

157 }

158 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 137 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: join()

Enclosing Method: run()



Low

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 137 (J2EE Bad Practices: Threads)

Low

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java:137

Taint Flags:

```
134 int totalCount = 0;
135 for (InjectorThread thread : threadList) {
136 try {
137 thread.thread.join();
138 } catch (InterruptedException e) {
139 // ignore
140 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 100 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: start()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:100

Taint Flags:

```
97 }
98
99 void start() {
100 thread.start();
101 }
102
103 Diagnostic diagnostic = new Diagnostic();
```

Package: com.atakmap.android.cotinjector.plugin

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/plugin/CotInjectorPlugin.java, line 200 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: onClick()



Low

Package: com.atakmap.android.cotinjector.plugin

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/plugin/CotInjectorPlugin.java, line 200 (J2EE Bad Practices: Threads)

Low

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/plugin/CotInjectorPlugin.java:200

Taint Flags:

```
197 resetButton.setOnClickListener(new View.OnClickListener() {
198 @Override
199 public void onClick(View view) {
200 resetAction.run();
201 }
202 });
203
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/plugin/CotInjectorPlugin.java, line 143 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: showPane()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/plugin/

CotInjectorPlugin.java:143

Taint Flags:

```
140 }
141 };
142
143 resetAction.run();
144
145 controlButton.setOnClickListener(new View.OnClickListener() {
146 @Override
```

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManager.java, line 84 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: refresh()



Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManager.java, line 84 (J2EE Bad Practices: Threads)

Low

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManager.java:84

Taint Flags:

```
81 }
82
83 public static void refresh() {
84 _refreshThread.submit(new Runnable() {
85 @Override
86 public void run() {
87 db.validateCatalog();
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManagerDropDownReceiver.java, line 163 (J2EE Bad

Low

Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMManagerDropDownReceiver.java:163

Taint Flags:

```
160 DSMManager.refresh();
161 refreshDsm();
162 try {
163 Thread.sleep(5000);
164 } catch (Exception ignored) {}
165 }
166 });
```

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 494 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()



Low

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 494 (J2EE Bad Practices: Threads)

Low

Enclosing Method: simulateMovingFeature()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

Hello3DMapComponent.java:494

Taint Flags:

```
491 }
492 }
493 };
494 movementThread.start();
495
496 }
497
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 508 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: interrupt()

Enclosing Method: onDestroyImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

Hello3DMapComponent.java:508

Taint Flags:

```
505 protected void onDestroyImpl(Context context, MapView view) {
506 cancelled = true;
507 if (movementThread != null)
508 movementThread.interrupt();
509 try {
510 if (buildingsDataStore != null)
511 buildingsDataStore.deleteFeatureSet(fsid);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 462 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: Thread()

Enclosing Method: simulateMovingFeature()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/



Low

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 462 (J2EE Bad Practices: Threads)

Low

Hello 3D Map Component. java: 462

Taint Flags:

```
459 */
460 private static void simulateMovingFeature(final FeatureDataStore3 fds, final long fid) {
461
462 movementThread = new Thread() {
463 public void run() {
464 int i = 0;
465 try {
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 468 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

Hello3DMapComponent.java:468

Taint Flags:

```
465 try {
466 while (!cancelled) {
467 try {
468 Thread.sleep(5000);
469 } catch (Exception e) {
470 }
471 final GeoPoint gp = new GeoPoint(35.77202, -78.78946 + (i * .00001));
```

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingDataStore.java, line 158 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: checkCache()



Low

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore, java, line 158 (J2EE Bad **Practices: Threads**)

Low

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/ datastore/OSMBuildingDataStore.java:158

Taint Flags:

- 155 queuedDownloads.add(k);
- 156 Log.d(TAG, "Queueing building tile download" + col
- **157** + "," + row);
- 158 downloadWorker.execute(new Runnable() {
- 159 public void run() {
- 160 try {
- 161 download(CACHE_LEVEL, col, row,

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore, java, line 138 (J2EE Bad **Practices: Threads**)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: checkCache()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:138

Taint Flags:

- **135** queuedFiles.add(k);
- 136 Log.d(TAG, "Queueing building tile from file cache "
- 137 + col + "," + row);
- 138 fileCacheWorker.execute(new Runnable() {
- 139 public void run() {
- **140** try {
- **141** loadFromDisk(CACHE_LEVEL, col, row);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore.java, line 264 (J2EE Bad **Practices: Threads**)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details



Low

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingDataStore.java, line 264 (J2EE Bad Practices: Threads)

Low

Sink: run()

Enclosing Method: download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:264

Taint Flags:

261 final Long k = Long

262 .valueOf(((long) column << 32L) | (row & 0xFFFFFFFL));

263 queuedFiles.add(k);

264 fileCacheWorker.execute(new Runnable() {

265 public void run() {

266 try {

267 loadFromDisk(zoom, column, row);

Package: com.atakmap.android.hellobuildings.opengl

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLBuildingCacheBatch.java, line 108 (J2EE Bad

Low

Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: draw()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

GLBuildingCacheBatch.java:108

Taint Flags:

105 this.worker.setName("GLBuildingCacheBatch-worker@"

106 + Integer.toString(this.hashCode(), 16));

107 this.worker.setPriority(Thread.NORM_PRIORITY);

108 this.worker.start();

109 }

110

111 this.cacheRequest.polys = new ArrayList<GLExtrudingPolygon>(

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLBuildingCacheBatch.java, line 104 (J2EE Bad

Low

Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)



Low

Package: com.atakmap.android.hellobuildings.opengl

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLBuildingCacheBatch.java, line 104 (J2EE Bad Practices: Threads)

Low

Sink Details

Sink: run()

Enclosing Method: draw()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

GLBuildingCacheBatch.java:104

Taint Flags:

101 this.cacheRequest = new CacheRequest();

102

103 if (this.worker == null) {

104 this.worker = new Thread(this);

105 this.worker.setName("GLBuildingCacheBatch-worker@"

106 + Integer.toString(this.hashCode(), 16));

107 this.worker.setPriority(Thread.NORM_PRIORITY);

Package: com.atakmap.android.hellobuildings.opengl.examples

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 83 (J2EE Badameter)

Low

Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: draw()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLBuildingCacheBatch.java:83

Taint Flags:

80 this.worker.setName("GLBuildingCacheBatch-worker@"

81 + Integer.toString(this.hashCode(), 16));

82 this.worker.setPriority(Thread.NORM_PRIORITY);

83 this.worker.start();

84 }

85

86 this.cacheRequest.polys = new ArrayList<GLExtrudingPolygon>(

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 79 (J2EE Bad) and a substitution of the property of th

Low

Practices: Threads)





J2EE Bad Practices: Threads

Package: com.atakmap.android.hellobuildings.opengl.examples

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/
android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 79 (J2EE Bad
Practices: Threads)

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: draw()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLBuildingCacheBatch.java:79

Taint Flags:

```
76 this.cacheRequest = new CacheRequest();
77
78 if (this.worker == null) {
79 this.worker = new Thread(this);
80 this.worker.setName("GLBuildingCacheBatch-worker@"
81 + Integer.toString(this.hashCode(), 16));
82 this.worker.setPriority(Thread.NORM_PRIORITY);
```

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 686 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:686

Taint Flags:

```
683 false);
684
685 try {
686 Thread.sleep(1000);
687 } catch (Exception ignored) {
688 }
689 }
```



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver, java, line 3588 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: Thread()

Enclosing Method: exampleCreateMissionPackage()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:3588

Taint Flags:

3585 ImportResolver importer = new ImportMissionV1PackageSort(

3586 getMapView().getContext(), true, true, true);

3587

3588 Thread t = new Thread("import-thread") {

3589 public void run() {

3590 if (!importer.beginImport(f)) {

3591 getMapView().post(new Runnable() {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/OffscreenMapCapture.java, line 373 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: capture()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

OffscreenMapCapture.java:373

Taint Flags:

370 // background thread as opposed to enqueueing at the end of

371 // the event pump due to the way the GL thread is

372 // implemented by Android.

373 offscreenRefreshThread = new Thread(new Runnable() {

374 @Override

375 public void run() {

376 final long interval = 30L;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/HelloWorldRobot.java, line 35 (J2EE Bad Practices: Threads)

Issue Details



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/HelloWorldRobot.java, line 35 (J2EE Bad Practices: Threads)

Low

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: sleep()

Enclosing Method: installPlugin()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

HelloWorldRobot.java:35

Taint Flags:

32 public static void installPlugin() {
33
34 try {
35 Thread.sleep(3000);
36 } catch (Exception ignored) {
37 }
38 HELPER.installPlugin("Hello World Tool");

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldMapComponent.java, line 790 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: reprocessMapItems()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldMapComponent.java:790

Taint Flags:

787 private void reprocessMapItems() {

788 final MapGroup rootGroup = MapView.getMapView().getRootGroup();

789 // look for all things that start with any of the items

790 reprocessMapItemsService.submit(new Runnable() {

791 @Override

792 public void run() {

793 rootGroup.deepForEachItem(new FilterMapOverlay.TypeFilter(

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/OffscreenMapCapture.java, line 382 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/OffscreenMapCapture.java, line 382 (J2EE Bad Practices: Threads)

Low

Scan Engine: SCA (Semantic)

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

OffscreenMapCapture.java:382

Taint Flags:

```
379 // texture
380 while (Thread.currentThread() == offscreenRefreshThread) {
381 try {
382 Thread.sleep(interval);
383 } catch (InterruptedException ignored) {
384 }
385
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/HelloWorldRobot.java, line 64 (J2EE Bad Practices: Threads)

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: sleep()

Enclosing Method: sleep()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

HelloWorldRobot.java:64

Taint Flags:

62 public static void sleep(int millis) { 63 try { **64** Thread.sleep(millis); **65** } catch (InterruptedException e) { 66 e.printStackTrace(); **67** }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver, java, line 2888 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)



J2EE Bad Practices: Threads

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/
android/helloworld/HelloWorldDropDownReceiver.java, line 2888 (J2EE Bad Practices:

Low

Sink Details

Threads)

Sink: start()

Enclosing Method: createSpeechMarker()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2888

Taint Flags:

```
2885 }
2886
2887 }
2888 }).start();
2889
2890 m.setMetaBoolean("readiness", true);
2891 m.setMetaBoolean("archive", true);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1529 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1529

Taint Flags:

	· ·
1526	
1527	}
1528	<pre>};</pre>
1529	}; t.start();
1530	
1531	}
1532	}) ;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 2883 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 2883 (J2EE Bad Practices: Threads)

Low

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2883

Taint Flags:

```
2880 mgrsPoint, false);
2881
2882 try {
2883 Thread.sleep(1000);
2884 } catch (Exception ignored) {
2885 }
2886
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1518 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: Thread()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1518

Taint Flags:

```
1515 _mapGroup.addItem(m);
1516
1517 // looking for the color red for the text
1518 Thread t = new Thread() {
1519 public void run() {
1520 try {
1521 Thread.sleep(10000);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 3600 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)



J2EE Bad Practices: Threads Package: com.atakmap.android.helloworld sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 3600 (J2EE Bad Practices: Threads) Low

Sink Details

Sink: start()

Enclosing Method: exampleCreateMissionPackage()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:3600

Taint Flags:

```
3597 }
3598 }
3599 };
3600 t.start();
3601 }
3602
3603 undefined
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 691 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:691

Taint Flags:

688	}
689	}
690	}
691	<pre>} }).start(); } });</pre>
692	}
693	<pre>});</pre>
694	

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1183 (J2EE Bad Practices: Threads)

Low

Issue Details



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1183 (J2EE Bad Practices: Threads)

Low

Sink Details

Sink: Thread()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1183

Taint Flags:

```
1180 externalGps.setOnClickListener(new OnClickListener() {
1181 @Override
1182 public void onClick(View v) {
1183 Thread t = new Thread() {
1184 public void run() {
1185 runSim();
1186 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/OffscreenMapCapture.java, line 400 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: capture()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

OffscreenMapCapture.java:400

Taint Flags:

```
397 });
398 offscreenRefreshThread.setPriority(Thread.NORM_PRIORITY);
399 offscreenRefreshThread.setDaemon(true);
400 offscreenRefreshThread.start();
401 } else {
402 offscreenRefreshThread = null;
403 MapView.getMapView().getGLSurface()
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 2872 (J2EE Bad Practices: Threads)

Low

Issue Details



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 2872 (J2EE Bad Practices: Threads)

Low

Sink Details

Sink: run()

Enclosing Method: createSpeechMarker()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2872

Taint Flags:

```
2869 break;
2870 }
2871
2872 new Thread(new Runnable() {
2873 public void run() {
2874 CameraController.Programmatic.zoomTo(
2875 getMapView().getRenderer3(),
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 673 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:673

Taint Flags:

670
671 @Override
672 public void onClick(View v) {
673 new Thread(new Runnable() {
674 public void run() {
675
676 CameraController.Programmatic.zoomTo(

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1521 (J2EE Bad Practices: Threads)

Low

Issue Details



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1521 (J2EE Bad Practices: Threads)

Low

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1521

Taint Flags:

```
1518 Thread t = new Thread() {
1519 public void run() {
1520 try {
1521 Thread.sleep(10000);
1522 } catch (Exception ignored) {
1523 }
1524 m.setTextColor(0xFFFF0000);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1188 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1188

Taint Flags:

```
1185 runSim();
1186 }
1187 };
1188 t.start();
1189 }
1190 });
```

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechNavigator.java, line 181 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State



J2EE Bad Practices: Threads

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/
android/helloworld/speechtotext/SpeechNavigator.java, line 181 (J2EE Bad Practices:
Threads)

Low

Scan Engine: SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: originFinder()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechNavigator.java:181

Taint Flags:

```
178 }
179 }
180 });
181 t.start();
182 }
183
184 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechPointDropper.java, line 271 (J2EE Bad Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: coordFormatter()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechPointDropper.java:271

Taint Flags:

268 } else {
269 GeoBounds gb = getView().getBounds();
270
271 Thread t = new Thread(new Runnable() {
272 @Override
273 public void run() {
274 List<Address> addressList =

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechNavigator.java, line 103 (J2EE Bad Practices: Threads)

Low

Issue Details



J2EE Bad Practices: Threads

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/
android/helloworld/speechtotext/SpeechNavigator.java, line 103 (J2EE Bad Practices:

Low

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Threads)

Sink: run()

Enclosing Method: startActivity()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechNavigator.java:103

Taint Flags:

100 source = getView().getSelfMarker().getPoint();
101 GeoBounds gb = getView().getBounds();
102
103 Thread t = new Thread(new Runnable() {
104 @Override
105 public void run() {
106 List<Address> addressList =

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechBloodHound.java, line 106 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: analyzeSpeech()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechBloodHound.java:106

Taint Flags:

103 //If no callsign or route, plots a point at the address and BloodHounds to it.

104 GeoBounds gb = getView().getBounds();

105

106 Thread t = new Thread(new Runnable() {

107 @Override

108 public void run() {

109 List<Address> addressList =



Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/speechtotext/SpeechNavigator.java, line 146 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: startActivity()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechNavigator.java:146

Taint Flags:

143 } **144** } 145 }); 146 t.start(); **147** } 148 149 /**

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/speechtotext/SpeechNavigator.java, line 156 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: originFinder()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechNavigator.java:156

Taint Flags:

153 */

154 private void originFinder(String s) {

155 GeoBounds gb = getView().getBounds();

156 Thread t = new Thread(new Runnable() {

157 @Override

158 public void run() {

159 List<Address> addressList =



Low

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechBloodHound.java, line 136 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: analyzeSpeech()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechBloodHound.java:136

Taint Flags:

```
133 }
134 }
135 });
136 t.start();
137
138 }
139 }
```

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/PlatformSimulatorReceiver.java, line 426 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: sleep()

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:426

Taint Flags:

423	}
424	
425	try {
426	Thread.sleep(updateInterval);
427	} catch (InterruptedException ignored) {
428	}
429	}



J2EE Bad Practices: Threads

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/
android/platformsim/PlatformSimulatorReceiver.java, line 104 (J2EE Bad Practices:
Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: PlatformSimulatorReceiver()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:104

Taint Flags:

101
102 this.disposed = false;
103
104 Thread t = new Thread(new Simulator());
105 t.setDaemon(true);
106 t.setPriority(Thread.NORM_PRIORITY);
107 t.start();

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/PlatformSimulatorReceiver.java, line 107 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: PlatformSimulatorReceiver()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:107

Taint Flags:

104 Thread t = new Thread(new Simulator());
105 t.setDaemon(true);
106 t.setPriority(Thread.NORM_PRIORITY);
107 t.start();
108 }
109
110 public synchronized void disposeImpl() {



Low

Package: com.atakmap.android.plugins.videomosaic

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/MosaicDataPipe.java, line 39 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: start()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

MosaicDataPipe.java:39

Taint Flags:

36 Thread t = new Thread(this);

37 t.setName("MosaicDataPipe");

38 t.setPriority(Thread.NORM_PRIORITY);

39 t.start();

40 }

41

42 _source.setVideoFrameListener(this);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/MosaicDataPipe.java, line 36 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: start()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

MosaicDataPipe.java:36

Taint Flags:

33

34 _allowFrameDrop = allowFrameDrop;

35 if(_allowFrameDrop) {

36 Thread t = new Thread(this);

37 t.setName("MosaicDataPipe");

38 t.setPriority(Thread.NORM_PRIORITY);

39 t.start();



Low

Package: com.atakmap.android.windprovider.importwind

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/OnlineWindImport.java, line 74 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: getWinds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:74

Taint Flags:

71 public void getWinds(WindParser parser, GeoPoint point, int offset, boolean pressureOnly,

72 WindReceiver wr) {

73 Thread t = new RequestWindImportTask(parser, point, offset, pressureOnly, wr);

74 t.start();

75 }

76

77

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/OnlineWindImport.java, line 89 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: Thread()

Enclosing Method: RequestWindImportTask()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:89

Taint Flags:

86 private final GeoPoint location;

87

88

89 RequestWindImportTask(final WindParser parser,

90 final GeoPoint point,

91 final int offset,

92 final boolean pressureOnly,



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 360 (J2EE Bad

Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: cacheRegionImages()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:360

Taint Flags:

```
357 return;
358 }
359
360 executorService.execute(() -> {
361 // Filter images based on current AOR settings
362 List<String> filteredUrls = new ArrayList<>();
363 for (int i = 0; i < imageUrls.size(); i++) {
```

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line 227 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: handleCacheButtonClick()

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java:227

Taint Flags:

224 holder.cacheProgressText.setText(context.getString(R.string.caching_progress));

225

226 // Start caching in background thread

227 Thread cacheThread = new Thread(() -> {

228 try {

229 URL url = new URL(imageUrl);

230 URLConnection connection = url.openConnection();

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 97 (J2EE Bad Practices: Threads)

Low

Issue Details



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/Image Cache Manager.java, line~97~(J2EE~Bad~Cache Manager.java)

Practices: Threads)

Low

Sink Details

Sink: run()

Enclosing Method: cacheImageData()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:97

Taint Flags:

```
94 return;
95 }
96
97 executorService.execute(() -> {
98 try {
99 Bitmap bitmap = BitmapFactory.decodeByteArray(data, 0, data.length);
100 if (bitmap != null) {
```

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 156 (J2EE Bad

Low

Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: clearCache()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:156

Taint Flags:

```
public void clearCache() {
154 memoryCache.evictAll();
155
156 executorService.execute(() -> {
157 File[] files = diskCacheDir.listFiles();
158 if (files != null) {
159 for (File file : files) {
```

app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line 115 (J2EE

Low

Bad Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

 $\textbf{Enclosing Method:} \ load Thumbnail Image()$



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line 115 (J2EE Bad Practices: Threads)

Low

File: app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java:115 **Taint Flags:**

112

113 private void loadThumbnailImage(ImageView imageView, String imageUrl) {

114 Handler handler = new Handler(Looper.getMainLooper());

115 Thread thread = new Thread(() -> {

116 try {

117 URL thumbnailUrl = new URL(imageUrl);

118 URLConnection connection = thumbnailUrl.openConnection();

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 244 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: cleanupOldCache()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:244

Taint Flags:

241 }

242

243 private void cleanupOldCache() {

244 executorService.execute(() -> {

245 long totalSize = getCacheSize();

246 if (totalSize > DISK_CACHE_SIZE) {

247 // Delete oldest files until under limit

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 278 (J2EE Bad

Г _{ОТТ}

Practices: Threads)

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Issue Details

Sink: run()

Enclosing Method: cacheHighResImages()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:278

Taint Flags:

275 return;



J2EE Bad Practices: Threads Low Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 278 (J2EE Bad Low **Practices: Threads**) 276 } 277 278 executorService.execute(() -> { **279** int total = imageUrls.size(); **280** int completed = 0; **281** int failed = 0; app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line **266 (J2EE Bad Practices: Threads) Issue Details Kingdom:** Time and State Scan Engine: SCA (Semantic) **Sink Details** Sink: start() Enclosing Method: handleCacheButtonClick() File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java:266 **Taint Flags:** 263 } 264 }); 265 266 cacheThread.start(); 267 } 268 269 } app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line 86 (J2EE Bad Practices: Threads) **Issue Details** Kingdom: Time and State Scan Engine: SCA (Semantic) **Sink Details** Sink: start() **Enclosing Method:** onBindViewHolder() File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java:86 **Taint Flags: 83** } **84** });



85

86 thread.start();

J2EE Bad Practices: Threads

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line
86 (J2EE Bad Practices: Threads)

Low

87
88
89 holder.productType.setText(archive.getProductType());

app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line~133~(J2EE~app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line~133~(J2EE~app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line~133~(J2EE~app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line~133~(J2EE~app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line~133~(J2EE~app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line~133~(J2EE~app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line~133~(J2EE~app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line~133~(J2EE~app/src/main/java/com/src/main/s

Low

Bad Practices: Threads)

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: start()

Enclosing Method: loadThumbnailImage()

File: app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java:133

Taint Flags:

130 handler.post(() -> imageView.setImageResource(R.drawable.placeholder));
131 }
132 });
133 thread.start();
134 }
135
136 public static class ViewHolder extends RecyclerView.ViewHolder {

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 83 (J2EE Bad

Low

Practices: Threads)

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Issue Details

Sink: run()

Enclosing Method: cacheImage()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:83

Taint Flags:

80 memoryCache.put(key, bitmap);
81
82 // Save to disk cache asynchronously
83 executorService.execute(() -> {
84 boolean success = saveToDisk(key, bitmap);
85 if (callback != null) {
86 callback.onCached(success);



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line 68 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: onBindViewHolder()

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java:68

Taint Flags:

65 }*/

66

67 Handler handler = new Handler(Looper.getMainLooper());

68 Thread thread = new Thread(() -> {

69 try {

70 Map.Entry<String, String> entry = archive.getThumbnailUrls().entrySet().iterator().next();

71 String key = entry.getKey();

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 133 (J2EE Bad Practices: Threads)

Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Semantic)

Sink Details

Sink: maxMemory()

Enclosing Method: testMemoryCacheSize()

File: app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java:133

Taint Flags:

130 @Test

131 public void testMemoryCacheSize() {

132 // Test that memory cache is properly sized

133 int maxMemory = (int) (Runtime.getRuntime().maxMemory() / 1024);

134 int expectedCacheSize = maxMemory / 8; // Should use 1/8 of available memory

135

136 // This would require accessing private fields, so we just verify behavior

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 398 (J2EE Bad Practices: Threads)

Low

Issue Details



J2EE Bad Practices: Threads Low Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 398 (J2EE Bad Low

Sink Details

Sink: run()

Practices: Threads)

Enclosing Method: getCacheStats()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:398

Taint Flags:

395 * Get cache statistics for region vs world 396 */ **397** public void getCacheStats(CacheStatsCallback callback) { **398** executorService.execute(() -> { **399** File[] files = diskCacheDir.listFiles(); **400** if (files == null) { 401 if (callback != null) {

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 437 (J2EE Bad **Practices: Threads**)

Low

Issue Details

Kingdom: Time and State Scan Engine: SCA (Semantic)

Sink Details

Sink: run()

Enclosing Method: clearNonRegionCache()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:437

Taint Flags:

434 return; 435 } 436 437 executorService.execute(() -> { 438 // In a full implementation, you would need to track which cached files 439 // correspond to which geographic locations to selectively clear them 440 // For now, this is a placeholder that could be enhanced with metadata storage



Key Management: Hardcoded Encryption Key (5 issues)

Abstract

Hardcoded encryption keys can compromise security in a way that is not easy to remedy.

Explanation

It is never a good idea to hardcode an encryption key because it allows all of the project's developers to view the encryption key, and makes fixing the problem extremely difficult. After the code is in production, a software patch is required to change the encryption key. If the account that is protected by the encryption key is compromised, the owners of the system must choose between security and availability. **Example 1:** The following code uses a hardcoded encryption key:

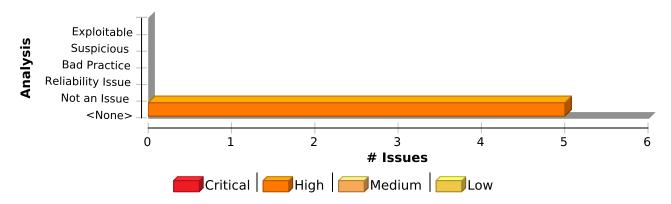
```
private static final String encryptionKey = "lakdsljkalkjlksdfkl";
byte[] keyBytes = encryptionKey.getBytes();
SecretKeySpec key = new SecretKeySpec(keyBytes, "AES");
Cipher encryptCipher = Cipher.getInstance("AES");
encryptCipher.init(Cipher.ENCRYPT_MODE, key);
```

Anyone with access to the code has access to the encryption key. After the application has shipped, there is no way to change the encryption key unless the program is patched. An employee with access to this information can use it to break into the system. If attackers had access to the executable for the application, they could extract the encryption key value.

Recommendation

Encryption keys should never be hardcoded and should be obfuscated and managed in an external source. Storing encryption keys in plain text anywhere on the system allows anyone with sufficient permissions to read and potentially misuse the encryption key.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Key Management: Hardcoded Encryption Key	5	0	0	5
Total	5	0	0	5



Key Management: Hardcoded Encryption Key

High

Package: com.skyfi.atak.plugin

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 85 (Key Management: Hardcoded Encryption Key)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: key

Enclosing Method: testGetBitmapFromDiskCache()

File: app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java:85

Taint Flags:

82 public void testGetBitmapFromDiskCache() throws IOException {

83 // This test would require mocking the disk cache behavior

84 // Since DiskLruCache is final and hard to mock, we'll test the logic flow

85 String key = "disk-cache-test";

86

87 // Try to get bitmap from disk cache (will return null in test environment)

88 Bitmap bitmap = cacheManager.getBitmapFromDiskCache(key);

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 97 (Key Management: Hardcoded Encryption Key)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: key

Enclosing Method: testClearCache()

File: app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java:97

Taint Flags:

94

95 @Test

96 public void testClearCache() {

97 String key = "clear-cache-test";

98 when(mockBitmap.getByteCount()).thenReturn(1024);

99

100 // Add bitmap to cache

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 71 (Key Management: Hardcoded Encryption Key)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)



Key Management: Hardcoded Encryption Key

High

Package: com.skyfi.atak.plugin

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 71 (Key Management: Hardcoded Encryption Key)

High

Sink Details

Sink: VariableAccess: key

Enclosing Method: testAddBitmapToDiskCache()

File: app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java:71

Taint Flags:

68

69 @Test

70 public void testAddBitmapToDiskCache() throws IOException {

71 String key = "disk-cache-test";

72 when(mockBitmap.compress(any(), anyInt(), any())).thenReturn(true);

73

74 // Add bitmap to disk cache

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 47 (Key Management: Hardcoded Encryption Key)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: key

Enclosing Method: testAddAndGetBitmapFromMemCache()

File: app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java:47

Taint Flags:

44

45 @Test

46 public void testAddAndGetBitmapFromMemCache() {

47 String key = "test-image-key";

48 when(mockBitmap.getByteCount()).thenReturn(1024);

49

50 // Add bitmap to cache

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 62 (Key Management: Hardcoded Encryption Key)

High

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: key

 $\textbf{Enclosing Method:} \ testGetBitmapFromMemCacheMiss()$



Key Management: Hardcoded Encryption Key	High
Package: com.skyfi.atak.plugin	
app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 62 (Key Management: Hardcoded Encryption Key)	High

 $\textbf{File:} \ app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java: 62 \\ \textbf{Taint Flags:}$

59
60 @Test
61 public void testGetBitmapFromMemCacheMiss() {
62 String key = "non-existent-key";
63
64 Bitmap retrieved = cacheManager.getBitmapFromMemCache(key);
65



Missing XML Validation (4 issues)

Abstract

Failure to enable validation when parsing XML gives an attacker the opportunity to supply malicious input.

Explanation

Most successful attacks begin with a violation of the programmer's assumptions. By accepting an XML document without validating it against a DTD or XML schema, the programmer leaves a door open for attackers to provide unexpected, unreasonable, or malicious input. It is not possible for an XML parser to validate all aspects of a document's content; a parser cannot understand the complete semantics of the data. However, a parser can do a complete and thorough job of checking the document's structure and therefore guarantee to the code that processes the document that the content is well-formed.

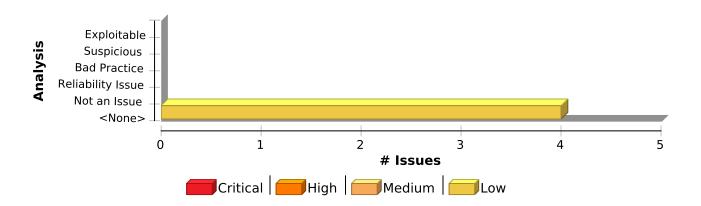
Recommendation

Always enable validation when you create an XML parser or parser factory. If enabling validation causes problems because the rules for defining a well-formed document are Byzantine or altogether unknown, chances are good that there are security errors nearby. The following examples demonstrate how to enable validation for the Xerces parsers (both DOM and SAX):

```
org.apache.xerces.framework.XMLParser: parser.setValidation(true);
org.apache.xerces.framework.XMLParser: parser.setValidationSchema(true);
The following examples demonstrate how to enable validation for the SAX and DOM parser factories in the javax
library. javax SAX parser factory:
javax.xml.parsers.SAXParserFactory: factory.setValidating(true);
javax.xml.parsers.SAXParserFactory: factory.setFeature("http://xml.org/sax/
features/validation", true);
javax DOM parser factory:
javax.xml.parsers.DocumentBuilderFactory: factory.setValidating(true);
The following examples demonstrate how to enable validation for individual parsers and XMLReaders in the javax
library. Note: The Fortify Software Security Research group does not recommend enabling validation by this method.
Instead, you should enable validation at the parser factory, javax SAX parser and reader:
javax.xml.parsers.SAXParser: parser.setProperty("http://xml.org/sax/features/
validation", new Boolean(true));
org.xml.sax.XMLReader: reader.setFeature("http://xml.org/sax/features/
validation", true);
The following examples demonstrate how to set the XML return type for Apache Axis. Axis client Call:
call.addParameter("testParam", org.apache.axis.Constants.XSD_STRING,
javax.xml.rpc.ParameterMode.IN);
call.setReturnType(org.apache.axis.Constants.XSD_STRING);
String ret = (String) call.invoke( new Object[] { "Hello!" } );
```

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Missing XML Validation	4	0	0	4
Total	4	0	0	4

Missing XML Validation	Low
Package: com.atakmap.android.hellobuildings.datastore	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/	
android/hellobuildings/datastore/OSMBuildingDataStore.java, line 187 (Missing XML	Low
Validation)	

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: saxParser.parse(...)

Enclosing Method: loadFromDisk()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:187

Taint Flags:

184 NodeList nl = new NodeList();

185 final BuildingList bl = new BuildingList();

186 final ParserHandler userhandler = new ParserHandler(nl, bl);

187 saxParser.parse(cacheFile, userhandler);

188 long e = System.currentTimeMillis();

189

190 Log.d(TAG, "Loaded building tile from file cache " + column + "," + row

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingClient.java, line 430 (Missing XML Validation)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)



Missing XML Validation

Low

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingClient.java, line 430 (Missing XML Validation)

Low

Sink Details

Sink: saxParser.parse(...)

Enclosing Method: download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingClient.java:430

Taint Flags:

427 NodeList nl = new NodeList();

428 final BuildingList bl = new BuildingList();

429 final ParserHandler userhandler = new ParserHandler(nl, bl);

430 saxParser.parse(cacheFile, userhandler);

431 e = System.currentTimeMillis();

432

433 Log.d(TAG, "Parsed building tile " + nLat + "," + wLng + " " + sLat

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/OSMParser.java, line 71 (Missing XML Validation)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: saxParser.parse(...)
Enclosing Method: main()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

OSMParser.java:71 **Taint Flags:**

68 NodeList nl = new NodeList();

69 BuildingList bl = new BuildingList();

70 ParserHandler userhandler = new ParserHandler(nl, bl);

71 saxParser.parse(inputFile, userhandler);

72

73 //System.out.println("Size: "+ nl.size());

74

Package: com.atakmap.android.sampledetailtester

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentMapComponent.java, line 54 (Missing XML Validation)

Low

Issue Details



Missing XML Validation	Low
Package: com.atakmap.android.sampledetailtester	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentMapComponent.java, line 54 (Missing XML Validation)	Low

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: db.parse(...)

Enclosing Method: encode()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentMapComponent.java:54

Taint Flags:

51 try {

- **52** DocumentBuilderFactory dbf = DocumentBuilderFactory.newInstance();
- **53** DocumentBuilder db = dbf.newDocumentBuilder();
- **54** Document doc = db.parse(new StringBufferInputStream(xml));
- **55** Element studentElement = doc.getDocumentElement();

56

57 if (!studentElement.getTagName().equals("student"))



Null Dereference (1 issue)

Abstract

The program can potentially dereference a null-pointer, thereby causing a null-pointer exception.

Explanation

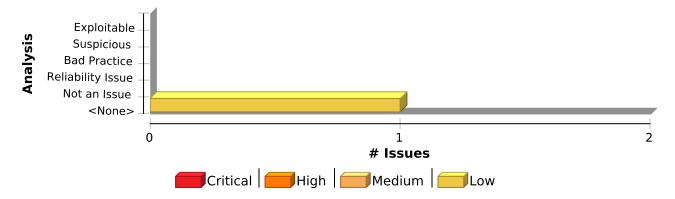
Null-pointer exceptions usually occur when one or more of the programmer's assumptions is violated. A dereference-after-store error occurs when a program explicitly sets an object to null and dereferences it later. This error is often the result of a programmer initializing a variable to null when it is declared. Most null-pointer issues result in general software reliability problems, but if attackers can intentionally trigger a null-pointer dereference, they can use the resulting exception to bypass security logic or to cause the application to reveal debugging information that will be valuable in planning subsequent attacks. **Example 1:** In the following code, the programmer explicitly sets the variable foo to null. Later, the programmer dereferences foo before checking the object for a null value.

```
Foo foo = null;
...
foo.setBar(val);
...
}
```

Recommendation

Implement careful checks before dereferencing objects that might be null. When possible, abstract null checks into wrappers around code that manipulates resources to ensure that they are applied in all cases and to minimize the places where mistakes can occur.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Null Dereference	1	0	0	1
Total	1	0	0	1



Null Dereference Low

Package: com.atakmap.android.selfmarkerdata

sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/SelfMarkerDataMapComponent.java, line 203 (Null Dereference)

Low

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: Dereferenced : start
Enclosing Method: setMarker()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/

SelfMarkerDataMapComponent.java:203

Taint Flags:

200 else {

201 final int timeInSeconds = (int) Math

202 .round((stop.getMilliseconds() -

203 start.getMilliseconds())

204 / 1000f);

205 tv.setText("HeartRate\n\tavg: "

206 + averageHeartRate + " max: " +



Often Misused: Authentication (2 issues)

Abstract

Attackers may spoof DNS entries. Do not rely on DNS names for security.

Explanation

Many DNS servers are susceptible to spoofing attacks, so you should assume that your software will someday run in an environment with a compromised DNS server. If attackers are allowed to make DNS updates (sometimes called DNS cache poisoning), they can route your network traffic through their machines or make it appear as if their IP addresses are part of your domain. Do not base the security of your system on DNS names. **Example 1:** The following code uses a DNS lookup to determine whether an inbound request is from a trusted host. If an attacker can poison the DNS cache, they can gain trusted status.

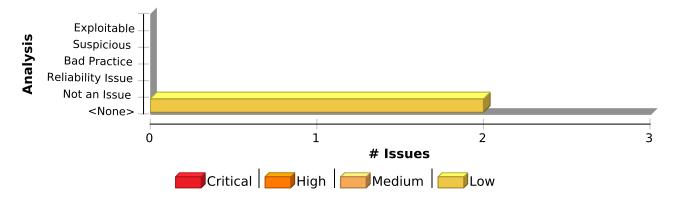
```
String ip = request.getRemoteAddr();
InetAddress addr = InetAddress.getByName(ip);
if (addr.getCanonicalHostName().endsWith("trustme.com")) {
trusted = true;
}
```

IP addresses are more reliable than DNS names, but they can also be spoofed. Attackers may easily forge the source IP address of the packets they send, but response packets will return to the forged IP address. To see the response packets, the attacker has to sniff the traffic between the victim machine and the forged IP address. In order to accomplish the required sniffing, attackers typically attempt to locate themselves on the same subnet as the victim machine. Attackers may be able to circumvent this requirement by using source routing, but source routing is disabled across much of the Internet today. In summary, IP address verification can be a useful part of an authentication scheme, but it should not be the single factor required for authentication.

Recommendation

You can increase confidence in a domain name lookup if you check to make sure that the host's forward and backward DNS entries match. Attackers will not be able to spoof both the forward and the reverse DNS entries without controlling the nameservers for the target domain. This is not a foolproof approach however: attackers may be able to convince the domain registrar to turn over the domain to a malicious nameserver. Basing authentication on DNS entries is simply a risky proposition. While no authentication mechanism is foolproof, there are better alternatives than host-based authentication. Password systems offer decent security, but are susceptible to bad password choices, insecure password transmission, and bad password management. A cryptographic scheme like SSL is worth considering, but such schemes are often so complex that they bring with them the risk of significant implementation errors, and key material can always be stolen. In many situations, multi-factor authentication including a physical token offers the most security available at a reasonable price.

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Often Misused: Authentication	2	0	0	2
Total	2	0	0	2

Often Misused: Authentication

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/
atakmap/android/commout/CommoutMapComponent.java, line 182 (Often Misused:
Authentication)

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getByName()
Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:182

Taint Flags:

179

180 try {

181 // create socket and set properties

182 address = InetAddress.getByName(outputAddress);

183 } catch (UnknownHostException e1) {

184 // unknown host error

185 return;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 289 (Often Misused: Authentication)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getByName()
Enclosing Method: send()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:289

Taint Flags:

286

287 InetAddress local = null;

288 try {

289 local = InetAddress.getByName(outputAddress);

290 } catch (UnknownHostException e) {



Often Misused: Authentication	Low
Package: com.atakmap.android.commout	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 289 (Often Misused: Authentication)	Low
291 Log.e(TAG,"error",e);	
292 }	



Password Management: Password in Comment (1 issue)

Abstract

Storing passwords or password details in plain text anywhere in the system or system code might compromise system security in a way that is not easy to remedy.

Explanation

It is never a good idea to hardcode a password. Storing password details within comments is equivalent to hardcoding passwords. Not only is the password visible to the project's developers, it also makes fixing the problem extremely difficult. After the code is in production, the password is now leaked to the outside world and cannot be protected or changed without patching the software. If the account protected by the password is compromised, the owners of the system must choose between security and availability. **Example 1:** The following comment specifies the default password to connect to a database:

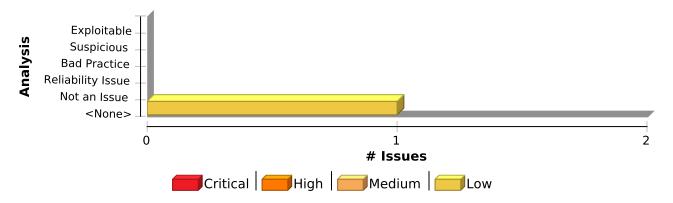
```
// Default username for database connection is "scott" // Default password for database connection is "tiger"
```

This code will run successfully, but anyone who has access to it will have access to the password. An employee with access to this information can use it to break into the system.

Recommendation

Passwords should never be hardcoded and should generally be obfuscated and managed in an external source. Storing passwords in plain text anywhere on the system allows anyone with sufficient permissions to read and potentially misuse the password.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Password Management: Password in Comment	1	0	0	1
Total	1	0	0	1



Password Management: Password in Comment	Low
Package: .com.atakmap.android.helloworld	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldMapComponent.java, line 504 (Password Management:	Low
Password in Comment)	

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Structural)

Sink Details

Sink: Comment

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldMapComponent.java:504

Taint Flags:

501 prefs = AtakPreferences.getInstance(context);

502 prefs.registerListener(this);

503

504 // handling encrypted username and password from a preference

505 authenticationCredentials =

 $\textbf{506}\ A tak Authentication Database. get Credentials (Hello World Preference Fragment. CREDENTIALS_DB_KEY);$

507 if (authenticationCredentials != null) {



Poor Error Handling: Empty Catch Block (43 issues)

Abstract

Ignoring an exception can cause the program to overlook unexpected states and conditions.

Explanation

Just about every serious attack on a software system begins with the violation of a programmer's assumptions. After the attack, the programmer's assumptions seem flimsy and poorly founded, but before an attack many programmers would defend their assumptions well past the end of their lunch break. Two dubious assumptions that are easy to spot in code are "this method call can never fail" and "it doesn't matter if this call fails". When a programmer ignores an exception, they implicitly state that they are operating under one of these assumptions. **Example 1:** The following code excerpt ignores a rarely-thrown exception from doExchange().

```
try {
  doExchange();
}
catch (RareException e) {
  // this can never happen
}
```

If a RareException were to ever be thrown, the program would continue to execute as though nothing unusual had occurred. The program records no evidence indicating the special situation, potentially frustrating any later attempt to explain the program's behavior.

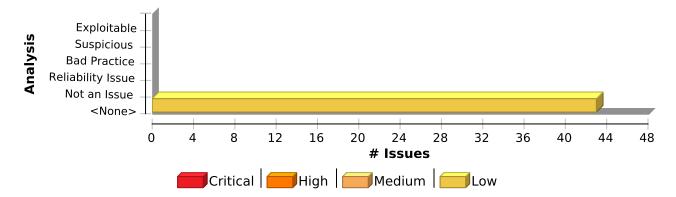
Recommendation

At a minimum, log the fact that the exception was thrown so that it will be possible to come back later and make sense of the resulting program behavior. Better yet, abort the current operation. If the exception is being ignored because the caller cannot properly handle it but the context makes it inconvenient or impossible for the caller to declare that it throws the exception itself, consider throwing a RuntimeException or an Error, both of which are unchecked exceptions. As of JDK 1.4, RuntimeException has a constructor that makes it easy to wrap another exception.

Example 2: The code in Example 1 could be rewritten in the following way:

```
try {
  doExchange();
}
catch (RareException e) {
  throw new RuntimeException("This can never happen", e);
```

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Error Handling: Empty Catch Block	43	0	0	43
Total	43	0	0	43

Poor Error Handling: Empty Catch Block	Low
Package: com.atakmap.android.commout	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/	
atakmap/android/commout/CommoutMapComponent.java, line 316 (Poor Error	Low
Handling: Empty Catch Block)	

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: send()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:316

Taint Flags:

```
313 }
314 try {
315 socket.close();
316 } catch (Exception e) {
317 }
318
319 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 256 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:256

Taint Flags:

```
253 if (socket != null) {
254 try {
255 socket.close();
256 } catch (Exception e) {
257 }
```



Poor Error Handling: Empty Catch Block Package: com.atakmap.android.commout sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/ atakmap/android/commout/CommoutMapComponent.java, line 256 (Poor Error Handling: Empty Catch Block) Low 258 } 259 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 234 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:234

Taint Flags:

```
231 // receive error
232 try {
233 Thread.sleep(retryTimeout);
234 } catch (Exception e) {
235 }
236 socket.close();
237 socket = null;
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 245 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:245

Taint Flags:

242 // general error	
243 try {	
244 Thread.sleep(retryTimeout);	
245 } catch (Exception e) {	



Low

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 245 (Poor Error Handling: Empty Catch Block)

Low

246 }
247 socket.close();
248 socket = null;

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 88 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock
Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:88 **Taint Flags:**

85 try {

86 if (interval > 0) // prevents a thread yield

87 Thread.sleep(interval);

88 } catch (Exception ignored) {

89 }

90 }

91 }

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManagerDropDownReceiver.java, line 82 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

 ${\bf Enclosing\ Method:}\ DSMManagerDropDownReceiver()$

 $\textbf{File:} \ sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/samples/dsm/sa$

DSMManagerDropDownReceiver.java:82

Taint Flags:

79 try {



Poor Error Handling: Empty Catch Block Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/DSMManagerDropDownReceiver.java, line 82 (Poor Error **Handling: Empty Catch Block)**

Low

Low

80 ((FeatureLayer3) this.outlinesLayer).getDataStore()

81 .setFeaturesVisible(new FeatureDataStore2.FeatureQueryParameters(), true);

82 } catch(DataStoreException ignored) { }

83

84 // Use the inflater service to get the UI ready to show

85 LayoutInflater inflater = (LayoutInflater) context

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/ImportDSMSort.java, line 93 (Poor Error Handling: Empty Catch Low **Block**)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:93

Taint Flags:

90 try { **91** ds = GdalLibrary.openDatasetFromPath(GdalLayerInfo.getGdalFriendlyUri(image)); 92 return isDSM(ds); 93 } catch (Exception e) {} 94 } 95 } **96** } catch (Exception e) {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/ImportDSMSort.java, line 96 (Poor Error Handling: Empty Catch Low Block)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:96



Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 96 (Poor Error Handling: Empty Catch Block)

Lov

```
93 } catch (Exception e) {}
94 }
95 }
96 } catch (Exception e) {
97 } finally {
98 if (workingDir != null)
99 FileSystemUtils.delete(workingDir);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManagerDropDownReceiver.java, line 164 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMManagerDropDownReceiver.java:164

Taint Flags:

```
161 refreshDsm();
162 try {
163 Thread.sleep(5000);
164 } catch (Exception ignored) {}
165 }
166 });
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManagerDropDownReceiver.java, line 143 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: refreshDsm()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMManagerDropDownReceiver.java:143



Poor Error Handling: Empty Catch Block Package: com.atakmap.android.elevation.dsm sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/DSMManagerDropDownReceiver.java, line 143 (Poor Error Low

Taint Flags:

Handling: Empty Catch Block)

140 try {
141 ((FeatureLayer3) outlinesLayer).getDataStore()
142 .setFeaturesVisible(new FeatureDataStore2.FeatureQueryParameters(), true);
143 } catch(DataStoreException ignored) {}
144
145 mapView.addLayer(RenderStack.MAP_SURFACE_OVERLAYS, outlinesLayer);
146

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 127 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: beginImport()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:127

Taint Flags:

```
124 try {
125 FileSystemUtils.copyFile(src, dst);
126 DSMManager.refreshSync(dst);
127 } catch (Exception ignore) {
128 }
129 } else if (flags.contains(SortFlags.IMPORT_MOVE)) {
130 try {
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 137 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: beginImport()



Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 137 (Poor Error Handling: Empty Catch Block)

Low

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java:137

Taint Flags:

```
134 try {
135 FileSystemUtils.copyFile(src, dst);
136 DSMManager.refreshSync(dst);
137 } catch (Exception ignore2) {
138 }
139 }
140 } else {
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManagerDropDownReceiver.java, line 190 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMManagerDropDownReceiver.java:190

Taint Flags:

187 try {

188 ((FeatureLayer3) this.outlinesLayer).getDataStore()

189 .setFeaturesVisible(new FeatureDataStore2.FeatureQueryParameters(), true);

190 } catch(DataStoreException ignored) {}

191

192 mapView.addLayer(RenderStack.MAP_SURFACE_OVERLAYS, outlinesLayer);

193

Package: com.atakmap.android.externalbt

sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/ExternalBtMapComponent.java, line 106 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details



Poor Error Handling: Empty Catch Block Package: com.atakmap.android.externalbt sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/ android/externalbt/ExternalBtMapComponent.java, line 106 (Poor Error Handling: Low

Sink: CatchBlock

Empty Catch Block)

Enclosing Method: onRead()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/

ExternalBtMapComponent.java:106

Taint Flags:

```
103 Packet packet = null;
104 try {
105 packet = SentenceHandler.makePacket(ascii, false);
106 } catch (Exception e) {
107 // sentence handler throws an exception if it does not like the string
108 }
109 if (packet == null) {
```

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 469 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

Hello3DMapComponent.java:469

Taint Flags:

```
466 while (!cancelled) {
467 try {
468 Thread.sleep(5000);
469 } catch (Exception e) {
470 }
471 final GeoPoint gp = new GeoPoint(35.77202, -78.78946 + (i * .00001));
472 final String name = "test change - " + (i++);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/GLHelloBuildings.java, line 242 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details



Low

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/GLHelloBuildings.java, line 242 (Poor Error Handling: Empty Catch Block)

Low

Sink: CatchBlock

Enclosing Method: query()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

GLHelloBuildings.java:242

Taint Flags:

239 // add the feature to the list to be returned
240 retval.add(result.get());
241 }
242 } catch (DataStoreException dse) {
243 }
244 } finally {
245 if (result != null)

Package: com.atakmap.android.hellobuildings.opengl

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLOSMBuildingsLayer.java, line 274 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: queryImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

GLOSMBuildingsLayer.java:274

Taint Flags:

271 if (f.getGeometry() instanceof Polygon)
272 retval.add(f);
273 }
274 } catch (DataStoreException e) {
275 } finally {
276 if (result != null)
277 result.close();

Package: com.atakmap.android.hellobuildings.opengl.examples

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/examples/GLOSMBuildingsCacheBatch.java, line 274 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors



Poor Error Handling: Empty Catch Block Low Package: com.atakmap.android.hellobuildings.opengl.examples sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/opengl/examples/GLOSMBuildingsCacheBatch.java, line 274 Low (Poor Error Handling: Empty Catch Block)

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: queryImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLOSMBuildingsCacheBatch.java:274

Taint Flags:

271 if (f.getGeometry() instanceof Polygon) 272 retval.add(f); 273 } 274 } catch (DataStoreException e) { **275** } finally { **276** if (result != null) 277 result.close();

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/opengl/examples/GLOSMBuildingsRenderBatch.java, line 269 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: queryImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLOSMBuildingsRenderBatch.java:269

Taint Flags:

266 if (f.getGeometry() instanceof Polygon) **267** retval.add(f); 268 } 269 } catch (DataStoreException e) { 270 } finally { **271** if (result != null) 272 result.close();

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/opengl/examples/GLOSMBuildingsUnbatched, java, line 264 (Poor Low **Error Handling: Empty Catch Block)**

Issue Details



Low

Package: com.atakmap.android.hellobuildings.opengl.examples

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/examples/GLOSMBuildingsUnbatched.java, line 264 (Poor Error Handling: Empty Catch Block)

Low

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: queryImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLOSMBuildingsUnbatched.java:264

Taint Flags:

```
261 if (f.getGeometry() instanceof Polygon)
262 retval.add(f);
263 }
264 } catch (DataStoreException e) {
265 } finally {
266 if (result != null)
267 result.close();
```

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/CameraActivity.java, line 69 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

CameraActivity.java:69

```
66 if (bm != null && cdr != null)
67 cdr.onCameraDataReceived(bm);
68 }
69 } catch (Exception ignored) {
70 }
71 if (registered) {
72 context.unregisterReceiver(this);
```



Poor Error Handling: Empty Catch Block Low Package: com.atakmap.android.helloworld sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/SpeechToTextActivity.java, line 471 (Poor Error Handling: Empty Low Catch Block)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

SpeechToTextActivity.java:471

Taint Flags:

```
468 if (s != null && sdr != null)
469 sdr.onSpeechDataReceived(s);
470 }
471 } catch (Exception ignored) {
472 }
473 if (registered) {
474 context.unregisterReceiver(this);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 2884 (Poor Error Handling: Low **Empty Catch Block**)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock **Enclosing Method:** run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2884

```
2881
2882 try {
2883 Thread.sleep(1000);
2884 } catch (Exception ignored) {
2885 }
2886
2887
```



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 687 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:687

Taint Flags:

```
684
685 try {
686 Thread.sleep(1000);
687 } catch (Exception ignored) {
688 }
689 }
690 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/HelloWorldRobot.java, line 36 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: installPlugin()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

HelloWorldRobot.java:36

```
33
34 try {
35 Thread.sleep(3000);
36 } catch (Exception ignored) {
37 }
38 HELPER.installPlugin("Hello World Tool");
39 // TODO: Replace line above with line below once HelperFunctions has been updated to
```



Poor Error Handling: Empty Catch Block

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/
android/helloworld/HelloWorldMapComponent.java, line 768 (Poor Error Handling:
Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onServiceConnected()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldMapComponent.java:768

Taint Flags:

765 Log.d(TAG, "connected to the simple service");
766 try {
767 service.registerLogger(logger);
768 } catch (RemoteException ignored) {
769 }
770
771 // this could be anywhere in your plugin code.

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldMapComponent.java, line 774 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onServiceConnected()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldMapComponent.java:774

```
771 // this could be anywhere in your plugin code.
772 try {
773 Log.d(TAG, "result from the service: " + service.add(2, 2));
774 } catch (RemoteException ignored) {
775 }
776
777 }
```



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldPreferenceFragment.java, line 57 (Poor Error Handling: **Empty Catch Block**)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldPreferenceFragment.java:57

Taint Flags:

```
54 try {
55 ((PanEditTextPreference) findPreference("key_for_helloworld"))
56 .checkValidInteger();
57 } catch (Exception ignored) {
58 }
59 findPreference("test_file_browser")
60 .setOnPreferenceClickListener(new OnPreferenceClickListener() {
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 1522 (Poor Error Handling: Low **Empty Catch Block**)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock **Enclosing Method:** run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1522

```
1519 public void run() {
1520 try {
1521 Thread.sleep(10000);
1522 } catch (Exception ignored) {
1523 }
1524 m.setTextColor(0xFFFF0000);
1525 Log.d(TAG, "text color set");
```



Low

Package: com.atakmap.android.helloworld.menu

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/menu/MenuFactory,java, line 56 (Poor Error Handling: Empty Catch Low Block)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: MenuFactory()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/menu/

MenuFactory.java:56

Taint Flags:

53 final MenuMapAdapter adapter = new MenuMapAdapter();

55 adapter.loadMenuFilters(mapAssets, "filters/menu_filters.xml");

56 } catch (IOException e) {

57 // do something better here

58 }

59 resourceFactory = new MenuResourceFactory(mapView, mapView.getMapData(),

Package: com.atakmap.android.helloworld.notification

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/notification/NotificationService.java, line 114 (Poor Error Handling: **Empty Catch Block**)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/notification/

NotificationService.java:114

```
111
112 try {
113 startForeground(9999, n);
114 } catch (Exception e) { }
115 stopSelf();
116
117 }
```



Low

Package: com.atakmap.android.importexportexample

sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/importexportexample/ExFmtImporter.java, line 94 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/

importexportexample/ExFmtImporter.java:94

Taint Flags:

```
91 if(parts.length >= 6) {
92 try {
93 altitude = Double.parseDouble(parts[5]);
94 } catch(NumberFormatException ignored) {}
95 }
96 String remarks = null;
97 if(parts.length >= 7) {
```

Package: com.atakmap.android.plugins.videomosaic

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/MosaicDataPipe.java, line 45 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: start()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

MosaicDataPipe.java:45

```
42 _source.setVideoFrameListener(this);
43 try {
44 _source.start();
45 } catch(MediaException ignored) {}
46 }
47
48 public synchronized void stop() {
```



Low

Package: com.atakmap.android.plugins.videomosaic.tiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/tiles/MosaickingTileLayer.java, line 134 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock Enclosing Method: fn()

 $\textbf{File:} \ sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/app/src/main/java/com/atakmap/ata$

tiles/MosaickingTileLayer.java:134

Taint Flags:

131 // set updated tile

132 try {

133 foreground.setTile(zoomLevel, tx, ty, ancestor, -1L);

134 } catch(TileEncodeException ignored) {}

135 ancestor.recycle();

136

137 return true;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/tiles/MosaickingTileLayer.java, line 101 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock Enclosing Method: fn()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

tiles/MosaickingTileLayer.java:101

Taint Flags:

98 // set tile

99 try {

100 foreground.setTile(zoomLevel, tx, ty, foregroundTile, -1L);

101 } catch(TileEncodeException ignored) {}

102 foregroundTile.recycle();

103 }

104 return true;



Low

Package: com.atakmap.android.sms.service

sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/SmsReceiver.java, line 33 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/

SmsReceiver.java:33

Taint Flags:

```
30
31 try {
32 log.d(TAG, "received sms", "");
33 } catch (RemoteException ignored) { }
34
35 if (intentExtras != null) {
36 Object[] sms = (Object[]) intentExtras.get(SMS_BUNDLE);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/SmsReceiver.java, line 46 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/

SmsReceiver.java:46

- **43** String address = smsMessage.getOriginatingAddress();
- 44 try {
- 45 callback.receivedSms(address, smsBody);
- 46 } catch (RemoteException ignored) {
- 47 // error occurred
- 48 }
- **49** }



Low

Package: com.atakmap.android.videocollections.plugin.ui

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videocollections/app/src/main/java/com/atakmap/ android/videocollections/plugin/ui/VideoMenuFactory,java, line 40 (Poor Error Handling: Low **Empty Catch Block**)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: VideoMenuFactory()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videocollections/app/src/main/java/com/atakmap/android/videocollections/

plugin/ui/VideoMenuFactory.java:40

Taint Flags:

37 final MapAssets mapAssets = new MapAssets(atakCtx);

38 final MenuMapAdapter adapter = new MenuMapAdapter();

39 try { adapter.loadMenuFilters(mapAssets, "filters/menu_filters.xml"); }

40 catch (IOException ignored) {}

41

42 this.resourceFactory = new MenuResourceFactory(mapView, mapView.getMapData(), mapAssets, adapter);

43 }

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/ android/windprovider/importwind/parsers/CNSParser.java, line 107 (Poor Error **Handling: Empty Catch Block)**

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getWindTable()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/CNSParser.java:107

```
104 dir = val;
105 } else
106 break;
107 } catch (NumberFormatException ignored) {
108 }
109 }
110
```



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 207 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: saveToDisk()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:207

Taint Flags:

```
204 if (fos != null) {
205 try {
206 fos.close();
207 } catch (IOException e) {
208 // Ignore
209 }
210 }
```

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 188 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getCurrentLocation()

File: app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java:188

Taint Flags:

```
185 return new GeoPoint(selfPoint.getLatitude(), selfPoint.getLongitude());
186 }
187 }
188 } catch (Exception e) {
189 // Fall back to default location if ATAK location is not available
190 }
191
```

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 228 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 228 (Poor Error Handling: Empty Catch Block)

Low

Sink Details

Sink: CatchBlock

Enclosing Method: saveRawToDisk()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:228

Taint Flags:

```
225 if (fos != null) {
226 try {
227 fos.close();
228 } catch (IOException e) {
229 // Ignore
230 }
231 }
```

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 96 (Poor Error Handling: Empty Catch Block)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: SkyFiPlugin()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:96

```
93
94 try {
95 Looper.prepare();
96 } catch (Exception e) {}
97
98 // initialize the toolbar button for the plugin
99
```



Poor Error Handling: Overly Broad Catch (101 issues)

Abstract

The catch block handles a broad swath of exceptions, potentially trapping dissimilar issues or problems that should not be dealt with at this point in the program.

Explanation

Multiple catch blocks can get repetitive, but "condensing" catch blocks by catching a high-level class such as Exception can obscure exceptions that deserve special treatment or that should not be caught at this point in the program. Catching an overly broad exception essentially defeats the purpose of Java's typed exceptions, and can become particularly dangerous if the program grows and begins to throw new types of exceptions. The new exception types will not receive any attention. **Example 1:** The following code excerpt handles three types of exceptions in an identical fashion.

```
try {
    doExchange();
}
catch (IOException e) {
    logger.error("doExchange failed", e);
}
catch (InvocationTargetException e) {
    logger.error("doExchange failed", e);
}
catch (SQLException e) {
    logger.error("doExchange failed", e);
}
At first blush, it may seem preferable to deal with these exceptions in a single catch block, as follows:
    try {
        doExchange();
    }
    catch (Exception e) {
        logger.error("doExchange failed", e);
}
```

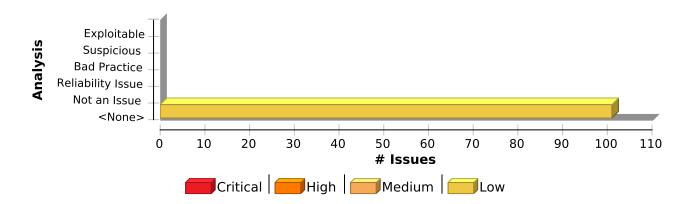
However, if doExchange() is modified to throw a new type of exception that should be handled in some different kind of way, the broad catch block will prevent the compiler from pointing out the situation. Further, the new catch block will now also handle exceptions derived from RuntimeException such as ClassCastException, and NullPointerException, which is not the programmer's intent.

Recommendation

Do not catch broad exception classes such as Exception, Throwable, Error, or RuntimeException except at the very top level of the program or thread.

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Error Handling: Overly Broad Catch	101	0	0	101
Total	101	0	0	101

Poor Error Handling: Overly Broad Catch	Low
Package: com.atakmap.android.commout	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/	
atakmap/android/commout/CommoutMapComponent.java, line 316 (Poor Error	Low
Handling: Overly Broad Catch)	

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: send()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:316

Taint Flags:

```
313 }
314 try {
315 socket.close();
316 } catch (Exception e) {
317 }
318
319 }
```

Package: com.atakmap.android.cotinjector.plugin

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/ android/cotinjector/plugin/CotInjectorPlugin.java, line 177 (Poor Error Handling: Overly Low **Broad Catch)**

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)



Low

Package: com.atakmap.android.cotinjector.plugin

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/ android/cotinjector/plugin/CotInjectorPlugin.java, line 177 (Poor Error Handling: Overly Low **Broad Catch)**

Sink Details

Sink: CatchBlock

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/plugin/

CotInjectorPlugin.java:177

Taint Flags:

174 cotInjector.setThreads(threads);

175 cotInjector.setUpdates(updates);

176 cotInjector.start();

177 } catch (Exception ex) {

178 Toast.makeText(pluginContext, "Invalid entry(s)", Toast.LENGTH_SHORT).show();

179 }

180 } else {

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/ android/customtiles/CustomTilesMonitor, java, line 122 (Poor Error Handling: Overly **Broad Catch**)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onDataStoreContentChanged()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesMonitor.java:122

Taint Flags:

119 // update our bookkeeping

120 this.datasets.put(desc.getUri(), info);

121 }

122 } catch(Throwable t) {

123 Log.e("CustomTilesMonitor", "Unexpected error updating monitored items", t);

124 } finally {

125 if(result != null)

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/ android/customtiles/CustomTilesFeatureExtractor.java, line 119 (Poor Error Handling: **Overly Broad Catch**)

Low

Issue Details



Poor Error Handling: Overly Broad Catch

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/
android/customtiles/CustomTilesFeatureExtractor.java, line 119 (Poor Error Handling:
Overly Broad Catch)

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: extractFeatures()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesFeatureExtractor.java:119

Taint Flags:

116
117 // return data store
118 return retval;
119 } catch(Throwable t) {
120 Log.e("CustomTilesFeatureExtractor", "Error occured extracting features from " + path, t);
121 return null;
122 } finally {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/TileContainerTileReader.java, line 50 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: create()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

TileContainerTileReader.java:50

47	()
48	
49	return new TileContainerTileReader(uri, id, zoom, col, row, asyncIO);
50	} catch(Throwable t) {
51	return null;
52	}
53	



Poor Error Handling: Overly Broad Catch

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/
android/customtiles/CustomTilesTileContainer.java, line 193 (Poor Error Handling:
Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getTile()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesTileContainer.java:193

Taint Flags:

190 return null;
191 try {
192 return BitmapFactory.decodeByteArray(data, 0, data.length);
193 } catch(Throwable t) {
194 if(error != null)
195 error[0] = t;
196 return null;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/CustomTilesTileContainer.java, line 216 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getTileData()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesTileContainer.java:216

213 return null;
214
215 return result.getBlob(0);
216 } catch(Throwable t) {
217 if(error != null)
218 error[0] = t;
219 return null;



Low

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/CustomTilesTileContainerSpi.java, line 59 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: open()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesTileContainerSpi.java:59

Taint Flags:

56 final TileContainer retval = new CustomTilesTileContainer(new File(s), db);

57 db = null; // ownership was transferred to the container

58 return retval;

59 } catch(Throwable t) {

60 return null;

61 } finally {

62 if(db != null)

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/CustomTilesDatasetDescriptorSpi.java, line 126 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: create()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesDatasetDescriptorSpi.java:126

Taint Flags:

123 if(tiles != null)

124 tiles.dispose();

125 }

126 } catch(Throwable t) {

127 // deliver the error to the callback if one was provided

128 if(callback != null)

129 callback.errorOccurred("Failed to parse " + sourceFile.getName(), t);



Poor Error Handling: Overly Broad Catch

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/
android/elevation/dsm/DSMElevationData.java, line 87 (Poor Error Handling: Overly
Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getElevation()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMElevationData.java:87

Taint Flags:

```
84 longitude, height);
85 }
86 return SpanUtilities.convert(height, this.info.units, Span.METER);
87 } catch (Throwable t) {
88 return Double.NaN;
89 } finally {
90 if (chunk != null)
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMElevationData.java, line 134 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getElevation()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMElevationData.java:134

131 }
132 elevations[i] = SpanUtilities.convert(height, this.info.units, Span.METER);;
133 }
134 } catch (Throwable t) {
135 Arrays.fill(elevations, Double.NaN);
136 t.printStackTrace();
137 } finally {



Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 127 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: beginImport()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:127

Taint Flags:

124 try {

125 FileSystemUtils.copyFile(src, dst);

126 DSMManager.refreshSync(dst);

127 } catch (Exception ignore) {

128 }

129 } else if (flags.contains(SortFlags.IMPORT_MOVE)) {

130 try {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 137 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: beginImport()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:137

Taint Flags:

134 try {

135 FileSystemUtils.copyFile(src, dst);

136 DSMManager.refreshSync(dst);

137 } catch (Exception ignore2) {

138 }

139 }

140 } else {



Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 133 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: beginImport()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:133

Taint Flags:

130 try {

131 FileSystemUtils.renameTo(src, dst);

132 DSMManager.refreshSync(dst);

133 } catch (Exception ignore) {

134 try {

135 FileSystemUtils.copyFile(src, dst);

136 DSMManager.refreshSync(dst);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManager.java, line 199 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMManager.java:199

Taint Flags:

196 }

197

198 return null;

199 } catch (Throwable t) {

200 // XXX - log error

201 return null;

202 } finally {



Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/DSMManager.java, line 50 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: initialize()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMManager.java:50

Taint Flags:

```
47 Log.d(TAG, "error creating dsm directory");
48 }
49 }
50 } catch (Exception e) {
51 Log.d(TAG, "error creating dsm directory", e);
52 }
53 dsmDirs = FileSystemUtils.getItems("tools/dsm");
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/ImportDSMSort.java, line 93 (Poor Error Handling: Overly Broad Low Catch)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:93

```
90 try {
91 ds = GdalLibrary.openDatasetFromPath(GdalLayerInfo.getGdalFriendlyUri(image));
92 return isDSM(ds);
93 } catch (Exception e) {}
94 }
95 }
96 } catch (Exception e) {
```



Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/ImportDSMSort.java, line 96 (Poor Error Handling: Overly Broad Low Catch)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:96

Taint Flags:

```
93 } catch (Exception e) {}
94 }
95 }
96 } catch (Exception e) {
97 } finally {
98 if (workingDir != null)
99 FileSystemUtils.delete(workingDir);
```

Package: com.atakmap.android.externalbt

sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/ android/externalbt/ExternalBtMapComponent.java, line 265 (Poor Error Handling: **Overly Broad Catch)**

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getAngle()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/

ExternalBtMapComponent.java:265

```
262 private double getAngle(String valString) {
263 try {
264 return Double.parseDouble(valString);
265 } catch (Exception e) {
266 return Double.NaN;
267 }
268 }
```



Poor Error Handling: Overly Broad Catch

Package: com.atakmap.android.externalbt

sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/
android/externalbt/ExternalBtMapComponent.java, line 106 (Poor Error Handling:
Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onRead()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/

ExternalBtMapComponent.java:106

Taint Flags:

```
103 Packet packet = null;
104 try {
105 packet = SentenceHandler.makePacket(ascii, false);
106 } catch (Exception e) {
107 // sentence handler throws an exception if it does not like the string
108 }
109 if (packet == null) {
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/ExternalBtMapComponent.java, line 256 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getDistance()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/

ExternalBtMapComponent.java:256

```
253 val /= ConversionFactors.METERS_TO_YARDS;
254 }
255 return val;
256 } catch (Exception e) {
257 return Double.NaN;
258 }
259
```



Poor Error Handling: Overly Broad Catch Package: com.atakmap.android.externalbt

sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/ExternalBtMapComponent.java, line 242 (Poor Error Handling: Overly Broad Catch)

Low

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: fireLRFUpdate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/

ExternalBtMapComponent.java:242

Taint Flags:

```
239 + " values are d: " + distance + " " + "a: "

240 + azimuth + "i: " + inclination);

241 }

242 } catch (Exception e) {

243 Log.d(TAG, "error reading line: " + line, e);

244 }

245 }
```

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/FeatureDropDownReceiver.java, line 66 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

FeatureDropDownReceiver.java:66

```
63 Feature f = null;
64 try {
65 f = Utils.getFeature(spatialDb, fid);
66 } catch (Exception e) {
67 Log.d(TAG, "could not find feature described by id " + fid);
68 return;
69 }
```



Low

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingDataStore2.java, line 61 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: queryFeatures()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore2.java:61

Taint Flags:

58 return this.cache.queryFeatures(params);

59 try {

60 return this.client.queryFeatures(params);

61 } catch (Exception e) {

62 // before this would return a FileNotFoundException which is not expected.

63 // if the file is not found, just consider the FeatureCursor to be empty.

64 Log.d(TAG, "error has occured, returnning empty cursor", e);

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/BuildingList.java, line 46 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: writeKML()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

BuildingList.java:46

Taint Flags:

43

44 writer.print(Building.kmlFooter());

45 writer.close();

46 } catch (Exception e) {

47 Log.e(TAG,"error",e);

48 }

49 }



Low

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/Building.java, line 31 (Poor Error Handling: Overly Broad Catch)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getLevels()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

Building.java:31 **Taint Flags:**

```
28 if (mTags.containsKey("building:levels")) {
29 return Double.parseDouble(mTags.get("building:levels"));
30 }
31 } catch (Exception e) {
32 Log.e(TAG,"error",e);
33 }
34 return 1d;
```

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 1953 (Poor Error Handling: Low **Overly Broad Catch)**

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1953

```
1950 "logo.png",
1951 fos);
1952 }
1953 } catch (Exception e) {
1954 toast("file: " + f
1955 + " does not exist, please create it before trying this example");
1956 Log.e(TAG, "error exracting: " + f);
```



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/PluginPermissionActivity.java, line 143 (Poor Error Handling: Overly Low **Broad Catch**)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: checkAndRequest()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

PluginPermissionActivity.java:143

Taint Flags:

140 ACTION_REQUEST_IGNORE_BATTERY_OPTIMIZATIONS);

141 intent.setData(Uri.parse("package:" + getPackageName()));

142 startActivityForResult(intent, ACTION_REQUEST_IGNORE_BATTERY_OPTIMIZATIONS_CODE);

143 } catch (Exception e) {

144 Log.w(TAG, "Failed to disable battery optimizations.");

145 }

146 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 2598 (Poor Error Handling: Low **Overly Broad Catch**)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: disposeImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2598

Taint Flags:

2595 removeContact(this.helloContact);

2596 try {

2597 AtakBroadcast.getInstance().unregisterReceiver(fordReceiver);

2598 } catch (Exception e) {

2599 Log.e(TAG, "error", e);

2600 }

2601



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 2634 (Poor Error Handling: Low **Overly Broad Catch)**

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: disposeImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2634

Taint Flags:

```
2631 GLLayerFactory.unregister(GLExampleLayer.SPI);
2632 }
2633 exampleLayer = null;
2634 } catch (Exception e) {
2635 Log.e(TAG, "error", e);
2636 }
2637 GLLayerFactory.unregister(GLExampleMultiLayer.SPI);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 1895 (Poor Error Handling: Low **Overly Broad Catch)**

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1895

```
1892 "logo.png",
1893 fos);
1894 }
1895 } catch (Exception e) {
1896 toast("file: " + f
1897 + " does not exist, please create it before trying this example");
1898 Log.e(TAG, "error exracting: " + f);
```



Poor Error Handling: Overly Broad Catch Low Package: com.atakmap.android.helloworld sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/CameraActivity.java, line 69 (Poor Error Handling: Overly Broad Low

Issue Details

Catch)

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

CameraActivity.java:69

Taint Flags:

66 if (bm != null && cdr != null) 67 cdr.onCameraDataReceived(bm); **68** } 69 } catch (Exception ignored) { **70** } 71 if (registered) { 72 context.unregisterReceiver(this);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 3313 (Poor Error Handling: Low **Overly Broad Catch)**

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: plotISSLocation()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:3313

```
3310 }
3311 }
3312 jr.endObject();
3313 } catch (Exception e) {
3314 Log.e(TAG, "error", e);
3315 }
3316 if (!Double.isNaN(lat) && !Double.isNaN(lon)) {
```



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldMapComponent.java, line 709 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: BuildExternalMunitionsQuery()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldMapComponent.java:709

Taint Flags:

706

707 transformer.transform(domSource, result);

708 xmlString = output.toString();

709 } catch (Exception ex) {

710 Log.d(TAG, "Exception in BuildExternalMunitionsQuery: "

711 + ex.getMessage());

712 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/HelloWorldRobot.java, line 36 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: installPlugin()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

HelloWorldRobot.java:36

Taint Flags:

33

34 try {

35 Thread.sleep(3000);

36 } catch (Exception ignored) {

37 }

38 HELPER.installPlugin("Hello World Tool");

 $39\,$ // TODO: Replace line above with line below once HelperFunctions has been updated to



Poor Error Handling: Overly Broad Catch Low Package: com.atakmap.android.helloworld sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 2210 (Poor Error Handling: Low

Issue Details

Kingdom: Errors

Overly Broad Catch)

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2210

Taint Flags:

```
2207 });
2208 try {
2209 missionPackageExportMarshal.execute(exportables);
2210 } catch (Exception e) {
2211 Log.d(TAG, "error building a new datapackage", e);
2212 }
2213 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 1353 (Poor Error Handling: Low **Overly Broad Catch)**

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1353

```
1350 }
1351 }
1352 }
1353 } catch (Exception ioe) {
1354 Log.d(TAG, "error: ", ioe);
1355 }
1356 }
```



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldPreferenceFragment.java, line 57 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldPreferenceFragment.java:57

Taint Flags:

```
54 try {
55 ((PanEditTextPreference) findPreference("key_for_helloworld"))
56 .checkValidInteger();
57 } catch (Exception ignored) {
58 }
59 findPreference("test_file_browser")
60 .setOnPreferenceClickListener(new OnPreferenceClickListener() {
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/SpeechToTextActivity.java, line 471 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

SpeechToTextActivity.java:471

```
468 if (s != null && sdr != null)
469 sdr.onSpeechDataReceived(s);
470 }
471 } catch (Exception ignored) {
472 }
473 if (registered) {
474 context.unregisterReceiver(this);
```



Low

Package: com.atakmap.android.helloworld.notification

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/notification/NotificationService.java, line 114 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/notification/

NotificationService.java:114

Taint Flags:

```
111
112 try {
113 startForeground(9999, n);
114 } catch (Exception e) {}
115 stopSelf();
116
117 }
```

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/SpeechToActivity.java, line 350 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechToActivity.java:350

```
347 .getBundleExtra(ACTIVITY_INFO_BUNDLE);
348 if (activityInfoBundle != null && sdra != null)
349 sdra.onSpeechDataReceived(activityInfoBundle);
350 } catch (Exception e) {
351 Log.e(TAG, e.getMessage());
352 }
353 if (registered) {
```



Low

Package: com.atakmap.android.plugins

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/ android/plugins/VideoOverlayManager.java, line 35 (Poor Error Handling: Overly Broad Low Catch)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: add()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/android/plugins/

VideoOverlayManager.java:35

Taint Flags:

32 file.getAbsolutePath());

33 this.overlays.put(file, overlay);

34 overlay.start();

35 } catch (Exception e) {

36 Log.e("VideoOverlayManager",

37 "Failed to load " + file.getAbsolutePath(), e);

38 return false;

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/ android/plugins/support/OSMDroidTileContainer2.java, line 289 (Poor Error Handling: **Overly Broad Catch)**

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getTileData()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:289

Taint Flags:

286 if(!result.moveToNext())

287 return null;

288 return result.getBlob(0);

289 } catch(Throwable t) {

290 if(error != null)

291 error[0] = t:

292 return null:



Low

Package: com.atakmap.android.plugins.videomosaic

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/VideoMosaicManager.java, line 73 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: add()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

VideoMosaicManager.java:73

Taint Flags:

70 overlay.setListener(_mosaicListener);

71 this.overlays.put(file, overlay);

72 overlay.start(true);

73 } catch (Exception e) {

74 Log.e("VideoOverlayManager",

75 "Failed to load " + file.getAbsolutePath(), e);

76 return false;

Package: com.atakmap.android.plugins.videomosaic.tiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/tiles/ForegroundBackgroundTileMatrix.java, line 90 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getTileData()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

tiles/ForegroundBackgroundTileMatrix.java:90

Taint Flags:

87 tile.compress(Bitmap.CompressFormat.PNG, 100, bos);

88 tile.recycle();

89 return bos.toByteArray();

90 } catch(Throwable t) {

91 if(error != null)

92 error[0] = t;

93 return null:



Low

Package: com.atakmap.android.plugins.videomosaic.tiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/tiles/BackgroundTileMatrix.java, line 77 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getTileData()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

tiles/BackgroundTileMatrix.java:77

Taint Flags:

74 tile.compress(Bitmap.CompressFormat.PNG, 100, bos);

75 tile.recycle();

76 return bos.toByteArray();

77 } catch(Throwable t) {

78 if(error != null)

79 error[0] = t;

80 return null;

Package: com.atakmap.android.selfmarkerdata

sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/SelfMarkerDataMapComponent.java, line 141 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: toItemMetadata()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/

SelfMarkerDataMapComponent.java:141

Taint Flags:

138 maxHeartRate + " "

139 + averageHeartRate);

140

141 } catch (Exception e) {

142 Log.e(TAG,

143 "silly error["

 $144 \ + item.getMetaString("callsign",$



Poor Error Handling: Overly Broad Catch

Package: com.atakmap.android.sms.service

sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/
android/sms/service/SmsManagerService.java, line 46 (Poor Error Handling: Overly
Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/

SmsManagerService.java:46

Taint Flags:

```
43
44 try {
45 startActivity(i);
46 } catch (Exception e) {
47 e.printStackTrace();
48 }
49 }
```

Package: com.atakmap.android.windprovider.importwind

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/OnlineWindImport.java, line 235 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: parseWinds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:235

- 232 data.getBytes(FileSystemUtils.UTF8_CHARSET)));
- 233 Collections.sort(windInfo);
- 234 windReceiver.receivedWindFromServer(windInfo);
- 235 } catch (Exception e) {
- 236 Log.e(TAG, "Error parsing values", e);
- **237** Log.e(TAG, "server response: ####" + data + "####");
- 238 windReceiver.error("error parsing values");



Low

Package: com.atakmap.android.windprovider.importwind

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/ImportWindFile.java, line 75 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: parseFile()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/ImportWindFile.java:75

Taint Flags:

72 }

73

74 return !windInfo.isEmpty();

75 } catch (Exception e) {

76 Log.e(TAG,

77 "Failed to import winds from file: "

78 + windFile.getAbsolutePath(),

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/OnlineWindImport.java, line 175 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getWindDataStandard()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:175

Taint Flags:

172 byte[] array = read(is);

173 try {

174 array = decompress(array);

175 } catch (Exception e) {

176 Log.d(TAG, "could not decompress");

177 }

178 responseString = new String(array,



Low

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 265 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: isSupported()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:265

Taint Flags:

```
262 line = reader.readLine();
263 }
264
265 } catch (Exception e) {
266 Log.v(TAG, "Failed to parse" + file.getAbsolutePath(), e);
267 } finally {
268 IoUtils.close(reader);
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 163 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:163

```
160 );
161
162 windInfo.add(new WindInfo(altitude, intDir, intVel));
163 } catch (Exception e) {
164 Log.v(TAG, "invalid value in text file, skipping entry.");
165 }
166
```



Low

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/NOAAParser.java, line 184 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: parseResponseWinds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/NOAAParser.java:184

Taint Flags:

```
181 }
182 }
183
184 } catch (Exception e) {
185 Log.e(TAG, "error", e);
186 }
187 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/WindFileParser.java, line 149 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/WindFileParser.java:149

```
146
147 windInfo.add(new WindInfo(altitude, intDir, intVel));
148
149 } catch (Exception e) {
150 Log.v(TAG, "invalid value in text file, skipping entry.");
151 }
152
```



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 441 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: extractCenterFromArchive()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:441

Taint Flags:

438

439 return new GeoPoint(lat, lon);

440

441 } catch (Exception e) {

442 Log.w(LOGTAG, "Could not parse archive footprint: " + archive.getFootprint(), e);

443

444 // Fallback: try to extract center point from footprint string using simple parsing

app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java, line 121 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: testMGRSCaseInsensitive()

File: app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java:121

Taint Flags:

118 assertTrue("Case variations should produce same result",

119 result1.distanceTo(result3) < 0.1);

120

121 } catch (Exception e) {

122 fail("Case insensitive MGRS parsing should work: " + e.getMessage());

123 }

124 }

app/src/main/java/com/skyfi/atak/plugin/OrdersRecyclerViewAdapter.java, line 93 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/OrdersRecyclerViewAdapter.java, line 93 (Poor Error Handling: Overly Broad Catch)

Low

Sink Details

Sink: CatchBlock

Enclosing Method: onBindViewHolder()

File: app/src/main/java/com/skyfi/atak/plugin/OrdersRecyclerViewAdapter.java:93

Taint Flags:

90 } else {

91 holder.opacityControlSection.setVisibility(View.GONE);

92 }

93 } catch (Exception e) {

94 Log.d(LOGTAG, "Failed", e);

95 }

96 }

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 731 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: placeOrder()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:731

Taint Flags:

728 showError(context.getString(R.string.order_error), context.getString(R.string.window_end_error));

729 return;

730 }

731 } catch (Exception e) {

732 Log.d(LOGTAG, "Invalid window start: " + taskingOrder.getWindowStart(), e);

 $733 \ show Error (context.get String (R.string.order_error), context.get String (R.string.window_start_error));$

734 return;

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java, line 219 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

 $\label{lem:enclosing Method: parseResponse()} Enclosing \ Method: \ parseResponse()$



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java, line 219 (Poor Error Handling: Overly Broad Catch)

Low

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java:219 **Taint Flags:**

216 synchronized (recyclerViewAdapter) {217 recyclerViewAdapter.notifyDataSetChanged();

218 }

219 } catch (Exception e) {

220 Log.e(LOGTAG, "Failed to search archives", e);

221 showError("Failed to search archives", e.getMessage());

222 }

app/src/main/java/com/skyfi/atak/plugin/ArchiveSearch.java, line 231 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onTextChanged()

File: app/src/main/java/com/skyfi/atak/plugin/ArchiveSearch.java:231

Taint Flags:

228 request.setMinOverlapRatio(value);

229 else

230 Toast.makeText(context, R.string.min_overlap_ratio_error, Toast.LENGTH_LONG).show();

231 } catch (Exception e) {

232 Toast.makeText(context, R.string.min_overlap_ratio_error, Toast.LENGTH_LONG).show();

233 }

234 }

app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java, line 41 (Poor Error Handling: Overly Broad Catch)

Lov

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: testValidMGRS()

File: app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java:41

Taint Flags:

38 result.getLatitude() >= -90 && result.getLatitude() <= 90);



Low

Package: com.skyfi.atak.plugin

app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java, line 41 (Poor Error Handling: Overly Broad Catch)

Low

39 assertTrue("Longitude should be within bounds",
40 result.getLongitude() >= -180 && result.getLongitude() <= 180);
41 } catch (Exception e) {
42 fail("Valid MGRS coordinate should not throw exception: " + mgrs + " - " + e.getMessage());
43 }
44 }</pre>

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 254 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onTextChanged()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:254

Taint Flags:

251 float value = Float.parseFloat(charSequence.toString());
252 taskingOrder.setMaxOffNadirAngle(value);
253 }
254 } catch (Exception e) {
255 showError(context.getString(R.string.max_off_nadir_error), e.getMessage());
256 }
257 }

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 1183 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: convertPointsToWKT()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:1183

Taint Flags:

1180 factory.createPolygon(coordinates.toArray(new Coordinate[coordinates.size()]));

1181 org.locationtech.jts.io.WKTWriter wktWriter = new org.locationtech.jts.io.WKTWriter();

1182 return wktWriter.write(polygon);

1183 } catch (Exception e) {



Poor Error Handling: Overly Broad Catch Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 1183 (Poor Error Handling: Overly Broad Catch) Low 1184 Log.e(LOGTAG, "Failed to convert points to WKT", e); 1185 return null; 1186 }

app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java, line 214 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: extractCenterFromFootprint()

File: app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java:214

Taint Flags:

```
211 double lon = Double.parseDouble(parts[1]);
212 return new GeoPoint(lat, lon);
213 }
214 } catch (Exception e) {
215 Log.w(TAG, "Could not parse coordinates from footprint: " + footprint, e);
216 }
217
```

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 453 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: extractCenterFromArchive()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:453

```
450 double lon = Double.parseDouble(parts[1]);
451 return new GeoPoint(lat, lon);
452 }
453 } catch (Exception e2) {
454 Log.w(LOGTAG, "Could not extract center point from footprint", e2);
455 }
456 }
```



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 862 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: updateTotalPrice()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:862

Taint Flags:

```
859 }
860 break;
861 }
862 catch (Exception e) {
863 Log.e(LOGTAG, "Failed to calculate price", e);
864 }
865 }
```

app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java, line 65 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: testInvalidMGRS()

File: app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java:65

Taint Flags:

```
62 if (result != null) {
63 assertFalse("Invalid MGRS should produce invalid GeoPoint: " + mgrs, result.isValid());
64 }
65 } catch (Exception e) {
66 // Expected behavior - invalid MGRS should throw exception
67 assertTrue("Exception should be thrown for invalid MGRS: " + mgrs, true);
```

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 416 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)



68 }

Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 416 (Poor Error Handling: Overly Broad Catch)

Low

Sink Details

Sink: CatchBlock

Enclosing Method: createAOIAroundPoint()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:416

Taint Flags:

```
413 WKTWriter wktWriter = new WKTWriter();
414
415 return wktWriter.write(polygon);
416 } catch (Exception e) {
417 Log.e(LOGTAG, "Failed to create AOI around point", e);
418 return null;
```

app/src/main/java/com/skyfi/atak/plugin/AOIVisualizationManager.java, line 109 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

419 }

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: displayAOI()

File: app/src/main/java/com/skyfi/atak/plugin/AOIVisualizationManager.java:109

Taint Flags:

```
106
107 Log.d(TAG, "Displayed AOI: " + aoi.name);
108
109 } catch (Exception e) {
110 Log.e(TAG, "Failed to display AOI: " + aoi.name, e);
111 }
112 }
```

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 496 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: squareWkt()



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 496 (Poor Error Handling: Overly Broad Catch)

Low

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:496 **Taint Flags:**

493 Polygon polygon = factory.createPolygon(coordinates.toArray(new Coordinate[coordinates.size()]));

494 WKTWriter wktWriter = new WKTWriter();

495 return wktWriter.write(polygon);

496 } catch (Exception e) {

497 Log.e(LOGTAG, "Failed to make square WKT", e);

498 }

499

app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java, line 183 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: isArchiveInAOR()

File: app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java:183

Taint Flags:

180 // Check if the archive geometry intersects with the AOR

181 return aorPolygon.intersects(archiveGeometry);

182

183 } catch (Exception e) {

184 Log.w(TAG, "Could not parse archive footprint: " + archive.getFootprint(), e);

185

186 // Fallback: try to extract center point from footprint string

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 433 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onShapeComplete()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:433

Taint Flags:

430 .setNegativeButton("Later", null)



Poor Error Handling: Overly Broad Catch Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 433 (Poor Error Handling: Overly Broad Catch) Low 431 .show(); 432 433 } catch (Exception e) { 434 Log.e(LOGTAG, "Failed to save AOI", e); 435 Toast.makeText(pluginContext, "Failed to save AOI: " + e.getMessage(), 436 Toast.LENGTH_SHORT).show(); app/src/main/java/com/skyfi/atak/plugin/Orders.java, line 345 (Poor Error Handling: Low

Issue Details

Overly Broad Catch)

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onShowAdvancedOpacityDialog() **File:** app/src/main/java/com/skyfi/atak/plugin/Orders.java:345

Taint Flags:

342 ordersRecyclerViewAdapter.notifyDataSetChanged();
343 }
344);
345 } catch (Exception e) {
346 Log.e(LOGTAG, "Failed to show advanced opacity dialog", e);
347 }
348 }

app/src/main/java/com/skyfi/atak/plugin/Orders.java, line 324 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onOpacityChanged()

File: app/src/main/java/com/skyfi/atak/plugin/Orders.java:324

Taint Flags:

321 AtakBroadcast.getInstance().sendBroadcast(opacityIntent);

322

323 Log.d(LOGTAG, "Set opacity for layer " + layerName + " to " + opacity + "%");

324 } catch (Exception e) {



Poor Error Handling: Overly Broad Catch

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/Orders.java, line 324 (Poor Error Handling: Overly Broad Catch)

325 Log.e(LOGTAG, "Failed to set layer opacity", e);
326 }
327 }

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 233 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onTextChanged()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:233

Taint Flags:

230 float value = Float.parseFloat(charSequence.toString());
231 taskingOrder.setMaxCloudCoveragePercent(value);
232 }
233 } catch (Exception e) {
234 showError(context.getString(R.string.error), context.getString(R.string.max_cloud_coverage_error));
235 }

app/src/main/java/com/skyfi/atak/plugin/ArchiveSearch.java, line 209 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

236 }

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onTextChanged()

File: app/src/main/java/com/skyfi/atak/plugin/ArchiveSearch.java:209

Taint Flags:

206 request.setMaxOffNadirAngle(value);
207 else
208 Toast.makeText(context, R.string.max_off_nadir_error, Toast.LENGTH_LONG).show();
209 } catch (Exception e) {
210 Toast.makeText(context, R.string.max_off_nadir_error, Toast.LENGTH_LONG).show();
211 }
212 }



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java, line 338 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onResponse()

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java:338

Taint Flags:

335 .setPositiveButton(context.getString(R.string.ok), null)

336 .create()

337 .show();

338 } catch (Exception e) {

339 Log.e(LOGTAG, "Failed to fail", e);

340 }

341 }

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 790 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: calculateAreaFromWKT()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:790

Taint Flags:

787 org.locationtech.jts.io.WKTReader reader = new org.locationtech.jts.io.WKTReader();

788 org.locationtech.jts.geom.Geometry geometry = reader.read(wkt);

789 return TaskingOrderFragment.calculatePolygonArea(geometry.getCoordinates());

790 } catch (Exception e) {

791 Log.e(LOGTAG, "Failed to calculate area from WKT", e);

792 return 1.0; // Default fallback

793 }

app/src/main/java/com/skyfi/atak/plugin/Orders.java, line 149 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/Orders.java, line 149 (Poor Error Handling: Overly Broad Catch)

Low

Sink Details

Sink: CatchBlock

Enclosing Method: onResponse()

File: app/src/main/java/com/skyfi/atak/plugin/Orders.java:149

Taint Flags:

146 synchronized (ordersRecyclerViewAdapter) {

147 ordersRecyclerViewAdapter.notifyDataSetChanged();

148 }

149 } catch (Exception e) {

150 Log.e(LOGTAG, "Failed to get orders", e);

151 showAlert(context.getString(R.string.failed_to_get_orders), e.toString());

152 }

app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java, line 161 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: filterArchivesByAOR()

File: app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java:161

Taint Flags:

158 filteredArchives.add(archive);

159 }

160 }

161 } catch (Exception e) {

 $162 \ \, \text{Log.e}(\text{TAG, "Error filtering archives by AOR", e});$

163 return archives; // Return original list if filtering fails

164 }

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 340 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onItemClick()



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 340 (Poor Error Handling: Overly Broad Catch)

Low

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:340

Taint Flags:

337 alertDialog.setView(linearLayout);

338

339 alertDialog.create().show();

340 } catch (Exception e) {

341 Log.e(LOGTAG, "Failed", e);

342 }

343 break;

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 1194 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: calculateAreaFromWKT()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:1194

Taint Flags:

1191 org.locationtech.jts.io.WKTReader reader = new org.locationtech.jts.io.WKTReader();

1192 org.locationtech.jts.geom.Geometry geometry = reader.read(wkt);

1193 return calculatePolygonArea(geometry.getCoordinates());

1194 } catch (Exception e) {

1195 Log.e(LOGTAG, "Failed to calculate area from WKT", e);

1196 return 1.0; // Default fallback

1197 }

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 926 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: updateFeasibility()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:926

Taint Flags:

923 // Update UI



Poor Error Handling: Overly Broad Catch Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 926 (Poor Error Handling: Overly Broad Catch) 924 updateFeasibilityDisplay(feasibility); 925 926 } catch (Exception e) { 927 Log.e(LOGTAG, "Error updating feasibility", e); 928 resetFeasibilityDisplay(); 929 } app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 96 (Poor Error Handling: Low Overly Broad Catch)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: SkyFiPlugin()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:96

Taint Flags:

```
93
94 try {
95 Looper.prepare();
96 } catch (Exception e) {}
97
98 // initialize the toolbar button for the plugin
99
```

app/src/main/java/com/skyfi/atak/plugin/SkyFiDrawingToolsHandler.java, line 194 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: saveShapeAsAOI()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiDrawingToolsHandler.java:194

```
191 aoiVisualizationManager.displayAOI(aoi);
192 }
193
194 } catch (Exception e) {
```



Poor Error Handling: Overly Broad Catch Low Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/SkyFiDrawingToolsHandler.java, line 194 (Poor Low **Error Handling: Overly Broad Catch)** 195 Log.e(TAG, "Failed to save AOI", e); 196 Toast.makeText(context, "Failed to save AOI: " + e.getMessage(), Toast.LENGTH_SHORT).show(); **197** }

app/src/main/java/com/skyfi/atak/plugin/SatelliteFeasibilityCalculator.java, line 61 (Poor **Error Handling: Overly Broad Catch)**

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: calculateFeasibility()

File: app/src/main/java/com/skyfi/atak/plugin/SatelliteFeasibilityCalculator.java:61

Taint Flags:

58 return new FeasibilityInfo(expectedPasses, level, sensorType, explanation,

59 latitude, longitude, dateRange);

60

61 } catch (Exception e) {

62 return createDefaultFeasibility();

63 }

64 }

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line 99 (Poor Error Handling: Overly Broad Catch)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onBindViewHolder()

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java:99

Taint Flags:

96 // Update button states based on preferences and cache status

97 updateButtonStates(holder, archive.getArchiveId());

98 updateCacheButtonState(holder, archive);

99 } catch (Exception e) {

100 Log.d(LOGTAG, "Failed", e);

101 }

102 }



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 779 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: convertPointsToWKT()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:779

Taint Flags:

776 Polygon polygon = factory.createPolygon(coordinates.toArray(new Coordinate[coordinates.size()]));

777 WKTWriter wktWriter = new WKTWriter();

778 return wktWriter.write(polygon);

779 } catch (Exception e) {

780 Log.e(LOGTAG, "Failed to convert points to WKT", e);

781 return null;

782 }

app/src/main/java/com/skyfi/atak/plugin/Profile.java, line 73 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onResponse()

File: app/src/main/java/com/skyfi/atak/plugin/Profile.java:73

Taint Flags:

70 .show();

71 try {

72 Log.e(LOGTAG, response.errorBody().string() + " " + response.code());

73 } catch (Exception e) {

74 Log.e(LOGTAG, "no error message " + response.code());

75 }

76

app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line 79 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line 79 (Poor Error Handling: Overly Broad Catch)

Low

Sink Details

Sink: CatchBlock

Enclosing Method: onBindViewHolder()

File: app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java:79

Taint Flags:

76 } else {
77 holder.dateText.setText("N/A");
78 }
79 } catch (Exception e) {
80 holder.dateText.setText("N/A");
81 }
82

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 788 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onResponse()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:788

Taint Flags:

785 Log.d(LOGTAG, call.request().body().toString());

786 Log.e(LOGTAG, message);

 $\textbf{787} \hspace{0.1cm} \textbf{showError} (context.getString} (R.string.get_pricing_failed), \hspace{0.1cm} message); \\$

788 } catch (Exception e) {

789 Log.e(LOGTAG, "Failed to fail", e);

790 }

791 }

app/src/main/java/com/skyfi/atak/plugin/Orders.java, line 307 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onItemClick()



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/Orders.java, line 307 (Poor Error Handling: Overly Broad Catch)

Low

File: app/src/main/java/com/skyfi/atak/plugin/Orders.java:307 **Taint Flags:**

304 GeoPoint[] points = geoPoints.toArray(new GeoPoint[geoPoints.size()]);
305
306 ATAKUtilities.scaleToFit(MapView.getMapView(), points, 1000, 1000);
307 } catch (Exception e) {
308 Log.e(LOGTAG, "Failed to make map source", e);
309 }

app/src/main/java/com/skyfi/atak/plugin/ArchiveSearch.java, line 187 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

310 }

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onTextChanged()

File: app/src/main/java/com/skyfi/atak/plugin/ArchiveSearch.java:187

Taint Flags:

184 else

185 maxCloudCoverage.setError(context.getString(R.string.max_cloud_coverage_error));

186 //Toast.makeText(context, R.string.max_cloud_coverage_error, Toast.LENGTH_LONG).show();

187 } catch (Exception e) {

188 Toast.makeText(context, R.string.max_cloud_coverage_error, Toast.LENGTH_LONG).show();

189 }

190 }

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 755 (Poor Error Handling: Overly Broad Catch)

Lov

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: onResponse()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:755

Taint Flags:

752 Log.d(LOGTAG, call.request().body().toString());



Poor Error Handling: Overly Broad Catch Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 755 (Poor Error Handling: Overly Broad Catch) 753 Log.e(LOGTAG, message); 754 showError(context.getString(R.string.order_error), message); 755 } catch (Exception e) { 756 Log.e(LOGTAG, "Failed to fail", e); 757 } 758 } app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java, line 94 (Poor Error Handling: Overly Broad Catch)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: testMGRSRoundTrip()

File: app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java:94

Taint Flags:

```
91 assertTrue("Round-trip conversion should be accurate within 1 meter, but was: " + distance + "m",
92 distance < 1.0);
93
94 } catch (Exception e) {
95 fail("Round-trip MGRS conversion should not throw exception: " + e.getMessage());
96 }
97 }
```

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 188 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getCurrentLocation()

File: app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java:188

```
185 return new GeoPoint(selfPoint.getLatitude(), selfPoint.getLongitude());
186 }
187 }
188 } catch (Exception e) {
```



Poor Error Handling: Overly Broad Catch Low Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 188 (Poor Low **Error Handling: Overly Broad Catch)** 189 // Fall back to default location if ATAK location is not available **190** } 191 app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 941 (Poor Low **Error Handling: Overly Broad Catch) Issue Details Kingdom:** Errors Scan Engine: SCA (Structural) **Sink Details** Sink: CatchBlock **Enclosing Method:** extractCenterFromAOI() File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:941 **Taint Flags:** 938 Geometry geometry = reader.read(aoi); **939** Coordinate centroid = geometry.getCentroid().getCoordinate(); 940 return new double[]{centroid.y, centroid.x}; // lat, lon 941 } catch (Exception e) { 942 Log.e(LOGTAG, "Error extracting center from AOI", e); 943 return null; 944 } app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java, line 183 (Poor Error Low **Handling: Overly Broad Catch) Issue Details** Kingdom: Errors Scan Engine: SCA (Structural) **Sink Details** Sink: CatchBlock **Enclosing Method:** parseResponse() File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java:183 **Taint Flags: 180** } **181** } **182** } 183 catch (Exception e) {



185 } 186

184 Log.e(LOGTAG, "Failed to parse page hash", e);

Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java, line 233 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: parseResponse()

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java:233

Taint Flags:

230 Log.d(LOGTAG, call.request().body().toString());

231 Log.e(LOGTAG, message);

232 showError("Error searching archives", message);

233 } catch (Exception e) {

234 Log.e(LOGTAG, "Failed to fail", e);

235 }

236 }

app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java, line 193 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: isArchiveInAOR()

File: app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java:193

Taint Flags:

190 Point point = geometryFactory.createPoint(new Coordinate(centerPoint.getLongitude(), centerPoint.getLatitude()));

191 return aorPolygon.contains(point);

192 }

193 } catch (Exception e2) {

194 Log.w(TAG, "Could not extract center point from footprint", e2);

195 }

196 }



Poor Error Handling: Overly Broad Throws (13 issues)

Abstract

The method throws a generic exception making it harder for callers to do a good job of error handling and recovery.

Explanation

Declaring a method to throw Exception or Throwable makes it difficult for callers to do good error handling and error recovery. Java's exception mechanism is set up to make it easy for callers to anticipate what can go wrong and write code to handle each specific exceptional circumstance. Declaring that a method throws a generic form of exception defeats this system. **Example 1:** The following method throws three types of exceptions. public void doExchange()

```
throws IOException, InvocationTargetException, SQLException { ... }
```

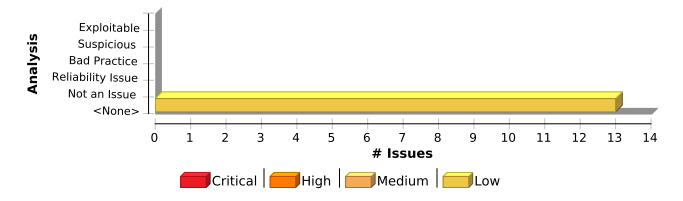
```
While it might seem tidier to write
public void doExchange()
   throws Exception {
    ...
}
```

doing so hampers the caller's ability to understand and handle the exceptions that occur. Further, if a later revision of doExchange() introduces a new type of exception that should be treated differently than previous exceptions, there is no easy way to enforce this requirement.

Recommendation

Do not declare methods to throw Exception or Throwable. If the exceptions thrown by a method are not recoverable or should not generally be caught by the caller, consider throwing unchecked exceptions rather than checked exceptions. This can be accomplished by implementing exception classes that extend RuntimeException or Error instead of Exception, or add a try/catch wrapper in your method to convert checked exceptions to unchecked exceptions.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Error Handling: Overly Broad Throws	13	0	0	13
Total	13	0	0	13



Poor Error Handling: Overly Broad Throws

Low

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingDataStore.java, line 235 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: download **Enclosing Method:** download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:235

Taint Flags:

232 }

233 }

234

235 private void download(final int zoom, final int column, final int row,

236 boolean prefetchOnly) throws Exception {

237 final File cacheFile = getCacheFile(this.cacheDir, zoom, column, row);

238 cacheFile.getParentFile().mkdirs();

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingDataStore.java, line 176 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: loadFromDisk **Enclosing Method:** loadFromDisk()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:176

Taint Flags:

173 }

174 }

175

176 private void loadFromDisk(int zoom, int column, int row) throws Exception {

177 final File cacheFile = getCacheFile(this.cacheDir, zoom, column, row);

178

179 SAXParserFactory factory = SAXParserFactory.newInstance();



Low

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingClient, java, line 397 (Poor Error **Handling: Overly Broad Throws**)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: download Enclosing Method: download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingClient.java:397

Taint Flags:

394 }

395 }

396

397 private static BuildingList download(String serverUrl, Envelope bounds)

398 throws Exception {

399 File cacheFile = null;

400 try {

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/MapTest.java, line 40 (Poor Error Handling: Overly Broad Throws)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: setupBeforeAllTests Enclosing Method: setupBeforeAllTests()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

MapTest.java:40 **Taint Flags:**

37

38 // TODO: move these to ATAKTestClass if they're useful to generalize, but may need to be tailored a bit for each test class

39 @BeforeClass

40 public static void setupBeforeAllTests() throws Exception {

41 helper.deleteAllMarkers();

42 }

43



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/MapTest.java, line 99 (Poor Error Handling: Overly Broad Throws)

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: selectRadialMenuButton **Enclosing Method:** selectRadialMenuButton()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

MapTest.java:99 **Taint Flags:**

96 }

97

98 @Test

99 public void selectRadialMenuButton() throws Exception {

100 helper.pressButtonFromLayoutManager("Red X Tool");

101 //see assets\menus\redx_menu.xml for all the actions you can perform for red x radial

102 helper.pressMapLocation(MapView.getMapView().getCenterPoint().get());

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/ExampleTest.java, line 27 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: restoreClassLoader **Enclosing Method:** restoreClassLoader()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

ExampleTest.java:27

Taint Flags:

24 }

25 26 @AfterClass

27 public static void restoreClassLoader() throws Exception {

28 restoreLoader(ExampleTest.class);

29 }

30

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/MapTest.java, line 61 (Poor Error Handling: Overly Broad Throws)

Issue Details



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/MapTest.java, line 61 (Poor Error Handling: Overly Broad Throws)

Low

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: useAppContext **Enclosing Method:** useAppContext()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

MapTest.java:61 **Taint Flags:**

58 }

59

60 @Test

61 public void useAppContext() throws Exception {

62 Assert.assertEquals("com.atakmap.app.civ", appContext.getPackageName());

63 }

64

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/ExampleTest.java, line 20 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: setupPlugin Enclosing Method: setupPlugin()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

ExampleTest.java:20

Taint Flags:

17 private final HelloWorldRobot helloWorldRobot = new HelloWorldRobot();

18

19 @BeforeClass

20 public static void setupPlugin() throws Exception {

21 HelloWorldRobot.installPlugin();

 ${\bf 22} \;\; fix Class Loader For Class (Example Test. class,$

23 "com.atakmap.android.helloworld.plugin");

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/MapTest.java, line 66 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/MapTest.java, line 66 (Poor Error Handling: Overly Broad Throws)

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: placeMarker Enclosing Method: placeMarker()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

MapTest.java:66 **Taint Flags:**

63 }

64

65 @Test

66 public void placeMarker() throws Exception {

67 // Short-term fix for first hint dialog, just disable that hint so the rest of the test works:

68 new AtakPreferences(appContext)

69 .set("atak.hint.iconset", false);

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/ android/windprovider/importwind/parsers/CNSParser.java, line 81 (Poor Error **Handling: Overly Broad Throws**)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: getWindTable **Enclosing Method:** getWindTable()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/CNSParser.java:81

Taint Flags:

78 }

79

80

81 private List<WindInfo> getWindTable(List<String> winds) throws Exception {

82

83 // pull from string

84 if (winds == null \parallel winds.size() < 1) {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/ android/windprovider/importwind/parsers/MarkSchulzeParser.java, line 115 (Poor Error Low **Handling: Overly Broad Throws**)

Issue Details



Low

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/ android/windprovider/importwind/parsers/MarkSchulzeParser.java, line 115 (Poor Error Low **Handling: Overly Broad Throws**)

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: parseJsonWinds **Enclosing Method:** parseJsonWinds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MarkSchulzeParser.java:115

Taint Flags:

112 * @return - the table of wind data

113 * @throws Exception - exceptions can be thrown if data is not valid json

114 */

115 public List<WindInfo> parseJsonWinds(String data)

116 throws Exception {

117 if (FileSystemUtils.isEmpty(data)) {

118 throw new Exception("Unable to parse empty data");

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/ android/windprovider/importwind/parsers/NOAAParser.java, line 125 (Poor Error **Handling: Overly Broad Throws**)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: parseResponseWinds **Enclosing Method:** parseResponseWinds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/NOAAParser.java:125

Taint Flags:

122 * @param data - the GSD Sounding Format response from the wind data query

123 * @return - the table of wind data

124 */

125 public List<WindInfo> parseResponseWinds(String data) throws Exception {

126 if (FileSystemUtils.isEmpty(data)) {

127 throw new Exception("Unable to parse empty data");

128 }



Poor Error Handling: Overly Broad Throws

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/
android/windprovider/importwind/parsers/RyanCarltonParser.java, line 61 (Poor Error

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Handling: Overly Broad Throws)

Sink Details

Sink: Function: parseJsonWinds **Enclosing Method:** parseJsonWinds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/RyanCarltonParser.java:61

Taint Flags:

58 * @return Array of wind information with altitude, direction, speed.

59 * @throws Exception - exceptions can be thrown if data is not valid json

60 */

61 public ArrayList<WindInfo> parseJsonWinds(String data)

62 throws Exception {

63 if (FileSystemUtils.isEmpty(data)) {

64 throw new Exception("Unable to parse empty data");



Poor Error Handling: Program Catches NullPointerException (1 issue)

Abstract

It is generally a bad practice to catch NullPointerException.

Explanation

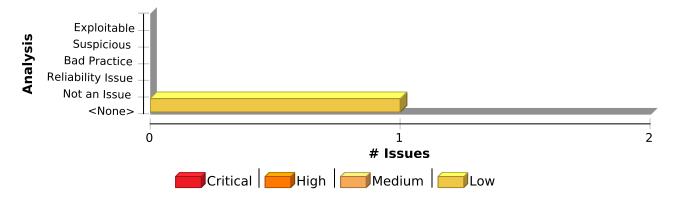
Programmers typically catch NullPointerException under three circumstances: 1. The program contains a null-pointer dereference. Catching the resulting exception was easier than fixing the underlying problem. 2. The program explicitly throws a NullPointerException to signal an error condition. 3. The code is part of a test harness that supplies unexpected input to the classes under test. Of these three circumstances, only the last is acceptable. **Example 1:** The following code mistakenly catches a NullPointerException.

```
try {
  mysteryMethod();
}
catch (NullPointerException npe) {
}
```

Recommendation

The program should not dereference null-pointers. If you cannot eliminate the cause of the null-pointer dereference, you must carefully review the code to make sure that the exception is handled in such a way that the program does not enter into an unexpected or illegal state. If the NullPointerException is being thrown explicitly, change the program to throw an exception derived from RuntimeException or Error instead.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Error Handling: Program Catches NullPointerException	1	0	0	1
Total	1	0	0	1



Poor Error Handling: Program Catches NullPointerException Package: com.atakmap.android.windprovider.importwind sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/ android/windprovider/importwind/OnlineWindImport.java, line 185 (Poor Error Handling: Program Catches NullPointerException) Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: getWindDataStandard()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:185

182 is.close();	
183 conn.disconnect();	
184 }	
185 } catch (MalformedURLException ClassCastException	
186 NullPointerException e) {	
187 Log.e(TAG, "error", e);	
188 return null;	



Poor Error Handling: Throw Inside Finally (1 issue)

Abstract

Using a throw statement inside a finally block breaks the logical progression through the try-catch-finally.

Explanation

```
In Java, finally blocks are always executed after their corresponding try-catch blocks and are often used to
free allocated resources, such as file handles or database cursors. Throwing an exception in a finally block can
bypass critical cleanup code since normal program execution will be disrupted. Example 1: In the following code, the
call to stmt.close() is bypassed when the FileNotFoundException is thrown.
public void processTransaction(Connection conn) throws FileNotFoundException
    FileInputStream fis = null;
    Statement stmt = null;
    try
         stmt = conn.createStatement();
         fis = new FileInputStream("badFile.txt");
    catch (FileNotFoundException fe)
         log("File not found.");
    catch (SQLException se)
         //handle error
    finally
         if (fis == null)
              throw new FileNotFoundException();
         if (stmt != null)
              try
                   stmt.close();
              catch (SQLException e)
                   log(e);
         }
```

This category is from the Cigital Java Rulepack.

Recommendation

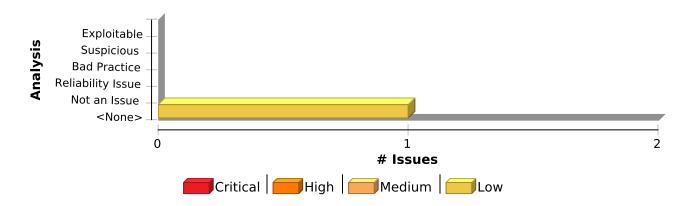
Never throw exceptions from within finally blocks. If you must re-throw an exception, do it inside a catch block so as not to interrupt the normal execution of the finally block. **Example 2:** The following code re-throws the



```
FileNotFoundException in the catch block.
public void processTransaction(Connection conn) throws FileNotFoundException
    FileInputStream fis = null;
    Statement stmt = null;
    try
        stmt = conn.createStatement();
        fis = new FileInputStream("badFile.txt");
    catch (FileNotFoundException fe)
        log("File not found.");
        throw fe;
    catch (SQLException se)
        //handle error
    finally
        if (fis != null)
            try
                fis.close();
            catch (IOException ie)
                log(ie);
        }
        if (stmt != null)
            try
                stmt.close();
            catch (SQLException e)
                log(e);
        }
}
```

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Error Handling: Throw Inside Finally	1	0	0	1
Total	1	0	0	1

Poor Error Handling: Throw Inside Finally	Low
Package: com.atakmap.android.windprovider.importwind	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/	
android/windprovider/importwind/OnlineWindImport.java, line 125 (Poor Error	Low
Handling: Throw Inside Finally)	

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: FinallyBlock Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:125

22 FileSystemUtils.UTF8_CHARSET);
23 } catch (IOException e) {
124 Log.e(TAG, "error", e);
125 } finally {
26 assert urlConnection!= null;
127 urlConnection.disconnect();
128 }



Poor Logging Practice: Use of a System Output Stream (25 issues)

Abstract

Using System.out or System.err rather than a dedicated logging facility makes it difficult to monitor the program behavior.

Explanation

Example 1: The first Java program that a developer learns to write is the following: public class MyClass

```
System.out.println("hello world");
...
```

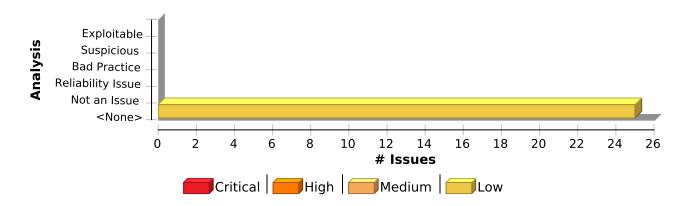
While most programmers go on to learn many nuances and subtleties about Java, a surprising number hang on to this first lesson and never give up on writing messages to standard output using <code>System.out.println()</code>. The problem is that writing directly to standard output or standard error is often used as an unstructured form of logging. Structured logging facilities provide features like logging levels, uniform formatting, a logger identifier, timestamps, and, perhaps most critically, the ability to direct the log messages to the right place. When the use of system output streams is jumbled together with the code that uses loggers properly, the result is often a well-kept log that is missing critical information. Developers widely accept the need for structured logging, but many continue to use system output streams in their "pre-production" development. If the code you are reviewing is past the initial phases of development, use of <code>System.out</code> or <code>System.err</code> may indicate an oversight in the move to a structured logging system.

Recommendation

Use a Java logging facility rather than System.out or System.err. **Example 2:** For example, you can rewrite the "hello world" program in Example 1 using log4j as follows:

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Logging Practice: Use of a System Output Stream	25	0	0	25
Total	25	0	0	25

Poor Logging Practice: Use of a System Output Stream	Low
Package: com.atakmap.android.hellobuildings.opengl	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLBuildingCacheBatch.java, line 332 (Poor Logging Practice: Use of a System Output Stream)	Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println **Enclosing Method:** run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

GLBuildingCacheBatch.java:332

Taint Flags:

329 long e = System.currentTimeMillis();

330 if (!polys.isEmpty()) {

331 stats.observe(e - s);

332 System.out.println("Constructed " + filling.result.size()

333 + " pages for " + filling.polys.size()

334 + " polys in " + (e - s) + "ms (avg "

335 + (long) (stats.mean) + "ms)");

Package: com. at a kmap. and roid. hello buildings. open gl. examples

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 234 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)



Low

Package: com.atakmap.android.hellobuildings.opengl.examples

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 234 (Poor **Logging Practice: Use of a System Output Stream)**

Low

Sink Details

Sink: FunctionCall: println **Enclosing Method:** run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLBuildingCacheBatch.java:234

Taint Flags:

- 231 long e = System.currentTimeMillis();
- 232 if (!polys.isEmpty()) {
- 233 stats.observe(e s);
- 234 System.out.println("Constructed " + filling.result.size()
- 235 + " pages for " + filling.polys.size()
- 236 + "polys in " + (e s) + "ms (avg "
- 237 + (long) (stats.mean) + "ms)");

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 137 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println **Enclosing Method:** characters()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:137

Taint Flags:

- **134** mMember = false;
- **135** } else if (mWay) {
- **136** if (D)
- 137 System.out.println("Way: " + new String(ch, start, length));
- 138 mWay = false;
- 139 } else if (mRelation) {
- **140** if (D)

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler, java, line 92 (Poor Logging Practice: Use of Low a System Output Stream)

Issue Details



Low

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/ParserHandler.java, line 92 (Poor Logging Practice: Use of a System Output Stream)

Low

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: endElement()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:92

Taint Flags:

89 public void endElement(String uri,

90 String localName, String qName) throws SAXException {

91 if (D)

92 System.out.println("End Element:" + qName);

93

94 if (qName.equalsIgnoreCase("way")) {

95

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/ParserHandler.java, line 133 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println **Enclosing Method:** characters()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:133

Taint Flags:

130 mNode = false;

131 } else if (mMember) {

132 if (D)

133 System.out.println("member: " + new String(ch, start, length));

134 mMember = false;

135 } else if (mWay) {

136 if (D)



Low

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 129 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println **Enclosing Method:** characters()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:129

Taint Flags:

126 int start, int length) throws SAXException {

127 if (mNode) {

128 if (D)

129 System.out.println("Node: " + new String(ch, start, length));

130 mNode = false;

131 } else if (mMember) {

132 if (D)

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 44 (Poor Logging Practice: Use of Low a System Output Stream)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: startElement()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:44

- **41** String lat = attributes.getValue("lat");
- **42** String lon = attributes.getValue("lon");
- **43** if (D)
- 44 System.out.println(
- **45** "Node: id: " + id + " (" + lat + "," + lon + ")");
- **46** mTempNode = new Node(Long.parseLong(id), Double.parseDouble(lat),
- 47 Double.parseDouble(lon));



Low

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/ParserHandler.java, line 103 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println **Enclosing Method:** endElement()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:103

Taint Flags:

100 mTempWay.setTags(mTags);

101 mTempWay.setNodeList(mTempNodeList);

102 if (D)

103 System.out.println(((Building) mTempWay).toString());

104 mBuildingList.put(mTempId, (Building) mTempWay);

105 } else {

106 mTempWay = new Way(Long.parseLong(mTempId));

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/ParserHandler.java, line 146 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println **Enclosing Method:** characters()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:146

Taint Flags:

143 mRelation = false;

144 } else if (mTag) {

145 if (D)

146 System.out.println("tag: " + new String(ch, start, length));

147 mTag = false;

148 }

149 }



Low

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 60 (Poor Logging Practice: Use of Low a System Output Stream)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: startElement()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:60

Taint Flags:

57 String id = attributes.getValue("id");

58 mTempId = id;

59 if (D)

60 System.out.println("Way: id: " + id);

61 mWay = true;

62 mTags = new HashMap<String, String>();

63 mTempNodeList = new ArrayList<Node>();

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 68 (Poor Logging Practice: Use of Low a System Output Stream)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: startElement()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:68

Taint Flags:

- **65** } else if (qName.equalsIgnoreCase("relation")) {
- **66** String id = attributes.getValue("id");

67 if (D)

- **68** System.out.println("Relation: id: " + id);
- **69** mRelation = true;
- **70** mTags = new HashMap<String, String>();
- 71 } else if (qName.equalsIgnoreCase("tag")) {



Low

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 142 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println Enclosing Method: characters()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:142

Taint Flags:

```
139 } else if (mRelation) {
140 if (D)
141 System.out
142 .println("relation: " + new String(ch, start, length));
143 mRelation = false;
144 } else if (mTag) {
145 if (D)
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 54 (Poor Logging Practice: Use of Low a System Output Stream)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: startElement()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:54

- **51** } else if (qName.equalsIgnoreCase("member")) {
- **52** String type = attributes.getValue("type");
- **53** if (D)
- **54** System.out.println("member: " + type);
- **55** mMember = true;
- **56** } else if (qName.equalsIgnoreCase("way")) {
- **57** String id = attributes.getValue("id");



Low

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 81 (Poor Logging Practice: Use of Low a System Output Stream)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: startElement()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:81

Taint Flags:

78 } else if (qName.equalsIgnoreCase("nd")) {

79 String ref = attributes.getValue("ref");

80 if (D)

81 System.out.println("nd: ref: " + ref);

82 mNd = true;

83 Node tempNode = mNodeList.get(ref);

84 mTempNodeList.add(tempNode);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/ParserHandler.java, line 75 (Poor Logging Practice: Use of Low a System Output Stream)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: startElement()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

ParserHandler.java:75

Taint Flags:

72 String k = attributes.getValue("k");

73 String v = attributes.getValue("v");

74 if (D)

75 System.out.println("tag: (" + k + "=" + v + ")");

76 mTag = true;

77 mTags.put(k, v);

78 } else if (qName.equalsIgnoreCase("nd")) {



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/ShaderInfo.java, line 73 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: loadImageShader()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

ShaderInfo.java:73 **Taint Flags:**

70 GLES20.glLinkProgram(mProgram);

71 int err = GLES20.glGetError();

72 if (err $!= 0 \parallel \text{errv } != 0 \parallel \text{errf } != 0$) {

73 System.out.println("loadImageShader: err=" + err + " errv="

74 + errv + " errf=" + errf);

75 }

76 return mProgram;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/ShaderInfo.java, line 50 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println **Enclosing Method:** loadShader()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

ShaderInfo.java:50

Taint Flags:

47 int error = GLES20.glGetError();

48 if (error != GLES20.GL_NO_ERROR) {

49 String infoLog = GLES20.glGetShaderInfoLog(shader);

50 System.out.println("loadShader: error=" + error + " status="

51 + status + "type=" + type + "shaderCode=" + shaderCode

 $52 + "\ninfoLog=" + infoLog);$

53 Thread.currentThread().dumpStack();



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/OffscreenMapCapture.java, line 61 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: glFlushErrors()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

OffscreenMapCapture.java:61

Taint Flags:

- **58** boolean glFlushErrors(String msg, boolean quiet) {
- **59** boolean r = false;
- **60** if (!quiet)
- **61** System.out.println("*** " + msg);
- **62** do {
- **63** final int err = GLES20.glGetError();
- **64** if (err == GLES20.GL_NO_ERROR)

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/OffscreenMapCapture.java, line 67 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: glFlushErrors()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

OffscreenMapCapture.java:67

- **64** if (err == GLES20.GL_NO_ERROR)
- 65 break;
- **66** if (!quiet)
- **67** System.out.println("err" + Integer.toString(err, 16));
- **68** r = true;
- **69** } while (true);
- 70 return r;



Poor Logging Practice: Use of a System Output Stream

Package: com.atakmap.android.plugins

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/
android/plugins/VideoOverlayAdapter.java, line 213 (Poor Logging Practice: Use of a
System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: invalidateNoSync()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/android/plugins/

VideoOverlayAdapter.java:213

Taint Flags:

210
211 private void invalidateNoSync() {
212 this.invalid = true;
213 System.out.println("videooverlay INVALIDATE ADAPTER");
214 _mapView.post(new Runnable() {
215 @Override
216 public void run() {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/android/plugins/VideoOverlayAdapter.java, line 92 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: validateNoSync()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/android/plugins/

VideoOverlayAdapter.java:92

Taint Flags:

- **89** Collections.sort(this._overlays, NameSort);
- **90** this.invalid = false:

91

92 System.out.println("videooverlay VALIDATE " + _overlays.size()

93 + " overlays");

94 }

95



Low

Package: com.atakmap.android.plugins.videomosaic

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/MapOverlayParent2.java, line 155 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: deepHitTest()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

MapOverlayParent2.java:155

Taint Flags:

152 query = overlay.getQueryFunction();

153 if (query != null) {

154 result = query.deepHitTest(xpos, ypos, point, view);

155 System.out.println("result ---> " + result);

156 if (result != null)

157 return result;

158 }

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/VideoMosaicAdapter.java, line 213 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: invalidateNoSync()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

VideoMosaicAdapter.java:213

Taint Flags:

210

211 private void invalidateNoSync() {

212 this.invalid = true;

213 System.out.println("videooverlay INVALIDATE ADAPTER");

214 _mapView.post(new Runnable() {

215 @Override

216 public void run() {



Low

Package: com.atakmap.android.plugins.videomosaic

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/VideoMosaicAdapter.java, line 92 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: validateNoSync()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

VideoMosaicAdapter.java:92

Taint Flags:

89 Collections.sort(this._overlays, NameSort);

90 this.invalid = false;

91

92 System.out.println("videooverlay VALIDATE " + _overlays.size()

93 + " overlays");

94 }

95

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/MapOverlayParent2.java, line 148 (Poor Logging Practice: Use of a System Output Stream)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: println

Enclosing Method: deepHitTest()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

MapOverlayParent2.java:148

Taint Flags:

145 @Override

146 public MapItem deepHitTest(int xpos, int ypos, GeoPoint point,

147 MapView view) {

148 System.out.println("DEEP HIT");

149 DeepMapItemQuery query;

150 MapItem result;

151 for (MapOverlay overlay : this.overlaysCopy) {



Poor Style: Non-final Public Static Field (5 issues)

Abstract

Non-final public static fields can be changed by external classes.

Explanation

Typically, you do not want to provide external classes direct access to your object's member fields since a public field can be changed by any external class. Good object oriented designed uses encapsulation to prevent implementation details, such as member fields, from being exposed to other classes. Further, if the system assumes that this field cannot be changed, then malicious code might be able to adversely change the behavior of the system. **Example 1:** In the following code, the field ERROR_CODE is declared as public and static, but not final:

```
public class MyClass
{
public static int ERROR_CODE = 100;
//...
}
```

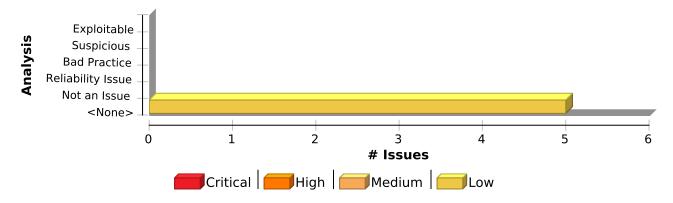
In this case, malicious code might be able to change this error code and cause the program to behave in an unexpected manner. This category is from the Cigital Java Rulepack.

Recommendation

If you intend to expose a field as a constant value, the field should be declared as public static final, otherwise declare the field private. **Example 2:**

```
public class MyClass
{
public static final int ERROR_CODE = 123;
//...
}
```

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Style: Non-final Public Static Field	5	0	0	5
Total	5	0	0	5



Poor Style: Non-final Public Static Field

Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMManagerDropDownReceiver.java, line 49 (Poor Style: Nonfinal Public Static Field)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: Field: TAG

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMManagerDropDownReceiver.java:49

Taint Flags:

46

47 public class DSMManagerDropDownReceiver extends DropDownReceiver

48 implements OnStateListener {

49 public static String TAG = "DSMManagerDropDownReceiver";

50

51 public static final String SHOW_DSM_TOOL = "com.atakmap.android.elevation.dsm.SHOW_DSM_MANAGER";

52 private final View dsmView;

Package: com.atakmap.android.importexportexample

sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/ atakmap/android/importexportexample/ImportExportExampleMapComponent.java, line 19 (Poor Style: Non-final Public Static Field)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: Field: pluginContext

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/

importexportexample/ImportExportExampleMapComponent.java:19

Taint Flags:

16 import com.atakmap.android.maps.MapView;

17

18 public class ImportExportExampleMapComponent extends AbstractMapComponent {

19 public static Context pluginContext;

20 public static final String TAG = "ImportExportExampleMapComponent";

21

22 public void onCreate(Context context, Intent intent, MapView view) {



Poor Style: Non-final Public Static Field

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/
android/platformsim/PlatformSimulatorReceiver.java, line 52 (Poor Style: Non-final Public Static Field)

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: Field: TAG

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:52

Taint Flags:

49

50 public class PlatformSimulatorReceiver extends DropDownReceiver

51 implements OnStateListener {

52 public static String TAG = "PlatformSimulatorReceiver";

53 //private static SimpleDateFormat TIME_FORMATTER = new SimpleDateFormat("HH':'mm':'ss"); Never used EMD

54 public static final String SHOW_PLATFORM_SIM = "com.atakmap.android.platformsim.SHOW_PLATFORM_SIM";

55

Package: com.atakmap.android.plugins

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/android/plugins/VideoOverlayImportFileBrowser.java, line 303 (Poor Style: Non-final Public Static Field)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: Field: WILDCARD

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/android/plugins/

VideoOverlayImportFileBrowser.java:303

300	protected boolean _directoryEmpty;
301	
302	/*************************************
303	public static String WILDCARD = "*";
304	
305	/*************************************
306	



Poor Style: Non-final Public Static Field	Low
Package: com.atakmap.android.plugins.videomosaic	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/VideoImportFileBrowser.java, line 303 (Poor Style: Nonfinal Public Static Field)	Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Structural)

Sink Details

Sink: Field: WILDCARD

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

VideoImportFileBrowser.java:303

300 protected boolean _directoryEmpty;
301
302 /************************************
303 public static String WILDCARD = "*";
304
305 /************************************
306



Poor Style: Redundant Initialization (3 issues)

Abstract

The variable's value is assigned but never used, making it a dead store.

Explanation

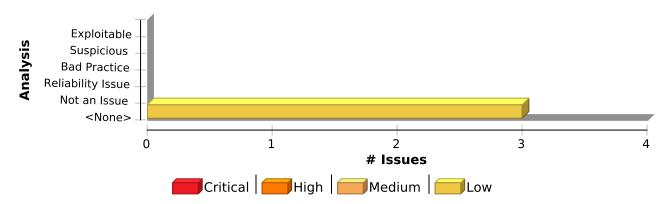
This variable's initial value is not used. After initialization, the variable is either assigned another value or goes out of scope. **Example 1:** The following code excerpt assigns to the variable r and then overwrites the value without using it.

```
int r = getNum();
r = getNewNum(buf);
```

Recommendation

Remove unnecessary assignments in order to make the code easier to understand and maintain.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Style: Redundant Initialization	3	0	0	3
Total	3	0	0	3

Poor Style: Redundant Initialization	Low
Package: com.atakmap.android.hellobuildings.opengl	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLOSMBuildingsLayer.java, line 172 (Poor Style: Redundant Initialization)	Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: color



Poor Style: Redundant Initialization Package: com.atakmap.android.hellobuildings.opengl sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/opengl/GLOSMBuildingsLayer.java, line 172 (Poor Style: Low

Enclosing Method: updateRenderList()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLOSMBuildingsLayer.java:172

Taint Flags:

Redundant Initialization)

```
169 for (Feature f : pendingData) {
170 ExtrudedPolygonData renderer = toRelease.remove(f.getId());
171 if (renderer == null) {
172 int color = Color.WHITE;
173 Style s = f.getStyle();
174 if (s instanceof CompositeStyle)
175 s = CompositeStyle.find((CompositeStyle) s,
```

Package: com.atakmap.android.importexportexample

sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/importexportexample/ExFmtImporter.java, line 90 (Poor Style: Redundant Initialization)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: altitude Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/

importexportexample/ExFmtImporter.java:90

Taint Flags:

```
87 } catch(NumberFormatException e) {
88 return null;
89 }
90 double altitude = Double.NaN;
91 if(parts.length >= 6) {
92 try {
93 altitude = Double.parseDouble(parts[5]);
```

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/TileCompositor.java, line 33 (Poor Style: Redundant Initialization)

Low

Issue Details

Kingdom: Code Quality



Poor Style: Redundant Initialization	Low
Package: com.atakmap.android.plugins.support	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/	
android/plugins/support/TileCompositor.java, line 33 (Poor Style: Redundant	Low
Initialization)	

Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: zoomLevelIdx

Enclosing Method: selectCompositeZoomLevel()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

TileCompositor.java:33

- 30 public static int selectCompositeZoomLevel(TileContainer2 container, double gsd) {
- **31** final TileMatrix.ZoomLevel[] levels = container.getZoomLevel();
- 32 // find closest level (ceil)
- **33** int zoomLevelIdx = levels.length-1;
- **34** for(int i = levels.length-1; $i \ge 0$; i--) {
- 35 // we are going to bias towards lower resolution to maximize throughput; assignment
- 36 // could occur after the comparison to bias towards the higher resolution level



Poor Style: Value Never Read (114 issues)

Abstract

The variable's value is assigned but never used, making it a dead store.

Explanation

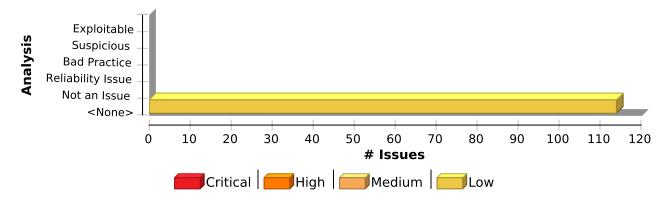
This variable's value is not used. After the assignment, the variable is either assigned another value or goes out of scope. **Example 1:** The following code excerpt assigns to the variable r and then overwrites the value without using it.

```
r = getName();
r = getNewBuffer(buf);
```

Recommendation

Remove unnecessary assignments in order to make the code easier to understand and maintain.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Style: Value Never Read	114	0	0	114
Total	114	0	0	114

Poor Style: Value Never Read	Low
Package: .com.skyfi.atak.plugin	
app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line 71 (Poor Style: Value Never Read)	Low
James Details	

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: key **Enclosing Method:** run()



Poor Style: Value Never Read

Low

Package: .com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line 71 (Poor Style: Value Never Read)

Low

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java:71 **Taint Flags:**

- **68** Thread thread = new Thread(() -> {
- 69 try {
- **70** Map.Entry<String, String> entry = archive.getThumbnailUrls().entrySet().iterator().next();
- **71** String key = entry.getKey();
- **72** String value = entry.getValue();
- **73** URL thumbnailUrl = new URL(value);
- **74** URLConnection connection = thumbnailUrl.openConnection();

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 365 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lat **Enclosing Method:** run()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:365

Taint Flags:

362 List<String> filteredUrls = new ArrayList<>();

363 for (int i = 0; i < imageUrls.size(); i++) {

364 String url = imageUrls.get(i);

365 double lat = latitudes.get(i);

366 double lon = longitudes.get(i);

367

368 // Check if this image should be cached based on AOR filter settings

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 366 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lon Enclosing Method: run()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:366

Taint Flags:

363 for (int i = 0; i < imageUrls.size(); i++) {



Poor Style: Value Never Read

Low

Package: .com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 366 (Poor Style: Value Never Read)

Low

364 String url = imageUrls.get(i);

365 double lat = latitudes.get(i);

366 double lon = longitudes.get(i);

367

368 // Check if this image should be cached based on AOR filter settings

369 // For now, cache all images since we don't have specific point-in-region checking

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java, line 75 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: image Enclosing Method: run()

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowserRecyclerViewAdapter.java:75

Taint Flags:

72 String value = entry.getValue();

73 URL thumbnailUrl = new URL(value);

74 URLConnection connection = thumbnailUrl.openConnection();

75 Bitmap image = BitmapFactory.decodeStream(connection.getInputStream());

76 handler.post(() -> {

77 holder.thumbnail.setImageBitmap(image);

 $\textbf{78} \ \ holder.thumbnail.set} Alpha(1f);$

app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line 119 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: image Enclosing Method: run()

File: app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java:119

Taint Flags:

116 try {

117 URL thumbnailUrl = new URL(imageUrl);

118 URLConnection connection = thumbnailUrl.openConnection();

119 Bitmap image = BitmapFactory.decodeStream(connection.getInputStream());



Poor Style: Value Never Read

Low

Package: .com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line 119 (Poor Style: Value Never Read)

Low

120 handler.post(() -> {

121 if (image != null) {

122 imageView.setImageBitmap(image);

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 178 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: sockAddr Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:178

Taint Flags:

175 Log.d(TAG, "starting the run");

176 DatagramSocket socket = null;

177 InetAddress address = null;

178 SocketAddress sockAddr = null;

179

180 try {

181 // create socket and set properties

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 373 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: m

Enclosing Method: toMapItem()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:373

Taint Flags:

370 mc.setType(sarray[0]);

371 mc.showCotDetails(false);



Poor Style: Value Never Read

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/
atakmap/android/commout/CommoutMapComponent.java, line 373 (Poor Style: Value Never Read)

372 mc.setNeverPersist(true);
373 Marker m = mc.placePoint();
374
375 }

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 207 (Poor Style: Value Never Read)

Low

Issue Details

376

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: latitude

Enclosing Method: getRandomPoint()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:207 **Taint Flags:**

204 */
205 public GeoPoint getRandomPoint()
206 {
207 double latitude = minLat + random.nextDouble() * deltaLat;
208 double longitude = minLon + random.nextDouble() * deltaLon;
209 return new GeoPoint(latitude, longitude);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 208 (Poor Style: Value Never Read)

Low

Issue Details

210 }

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: longitude Enclosing Method: getRandomPoint()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:208

Taint Flags:

205 public GeoPoint getRandomPoint()



Low

Package: com.atakmap.android.cotinjector

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 208 (Poor Style: Value Never Read)

Low

206 {

207 double latitude = minLat + random.nextDouble() * deltaLat;

208 double longitude = minLon + random.nextDouble() * deltaLon;

209 return new GeoPoint(latitude, longitude);

210 }

211

sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/CotInjector.java, line 234 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: now

Enclosing Method: generateCotMessage()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/cotinjector/app/src/main/java/com/atakmap/android/cotinjector/

CotInjector.java:234

Taint Flags:

231 public String generateCotMessage(String uid, String type, GeoPoint loc)

232 {

233 String callsign = "Maverick";

234 long now = System.currentTimeMillis();

235

236 SimpleDateFormat isoDateFormat = new SimpleDateFormat(

237 "yyyy-MM-dd'T'HH:mm:ss.SSS'Z"");

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/CustomTilesTileContainer.java, line 37 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: result

Enclosing Method: CustomTilesTileContainer()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesTileContainer.java:37

Taint Flags:



Low

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/CustomTilesTileContainer.java, line 37 (Poor Style: Value Never Read)

Low

34 CursorIface result;

35

36 // obtain the general metadata about the tile matrix

37 result = null;

38 ZoomLevel minLevel = new ZoomLevel();

39 try {

40 result = db.query("SELECT srid, origin_x, origin_y, min_x, min_y, max_x, max_y, tile_width, tile_height, pixel_size_x_z0, pixel_size_y_z0 FROM info LIMIT 1", null);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/CustomTilesTileContainer.java, line 81 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: result

Enclosing Method: CustomTilesTileContainer()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesTileContainer.java:81

Taint Flags:

78

79 // compute the zoom levels

80

81 result = null;

82 final int maxZoom;

83 try {

84 result = db.query("SELECT max(z) FROM customtiles", null);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/CustomTilesTileContainer.java, line 93 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: result

Enclosing Method: CustomTilesTileContainer()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/



Low

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/CustomTilesTileContainer.java, line 93 (Poor Style: Value Never Read)

Low

CustomTilesTileContainer.java:93

Taint Flags:

90 result.close();

91 }

92

93 result = null;

94 final int minZoom;

95 try {

96 result = db.query("SELECT min(z) FROM customtiles", null);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/TileContainerMosaicDatabase.java, line 191 (Poor Style: Value Never Read)

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: coverageBounds

Enclosing Method: query()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

TileContainerMosaicDatabase.java:191

Taint Flags:

188 // restrict the query bounds to the intersection with the specified spatial filter

189 if(queryParameters.spatialFilter!= null) {

190 Envelope filterBounds = queryParameters.spatialFilter.getEnvelope();

191 Envelope coverageBounds = this.coverage.geometry.getEnvelope();

192

193 // check that the request region intersects the region of coverage

194 if(!Rectangle.intersects(filterBounds.minX,

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/TileContainerTileReader.java, line 78 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: zoomLevel

Enclosing Method: TileContainerTileReader()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/



Low

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/ android/customtiles/TileContainerTileReader.java, line 78 (Poor Style: Value Never Read)

TileContainerTileReader.java:78

Taint Flags:

75

76 TileContainer tiles = TileContainerMosaicDatabase.find(this.id);

77 if(tiles != null) {

78 TileMatrix.ZoomLevel zoomLevel = TileMatrix.Util.findZoomLevel(tiles, zoom);

79 this.width = zoomLevel.tileWidth;

80 this.height = zoomLevel.tileHeight;

81 } else {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/ android/customtiles/CustomTilesDatasetDescriptorSpi.java, line 76 (Poor Style: Value **Never Read**)

Low

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: bounds **Enclosing Method:** create()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

CustomTilesDatasetDescriptorSpi.java:76

Taint Flags:

73

74 // compute the bounds of the dataset. We'll obtain the bounds from the TileContainer

75 // specified in the native spatial reference, then convert to WGS84

76 Envelope bounds = tiles.getBounds();

77 // obtain the Projection object that will allow us to perform the coordinate

78 // conversions

79 Projection proj = ProjectionFactory.getProjection(tiles.getSRID());

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/ android/customtiles/TileContainerMosaicDatabase, java, line 190 (Poor Style: Value Never Low Read)

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: filterBounds **Enclosing Method:** query()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/



Low

Package: com.atakmap.android.customtiles

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/ android/customtiles/TileContainerMosaicDatabase.java, line 190 (Poor Style: Value Never Low Read)

TileContainerMosaicDatabase.java:190

Taint Flags:

187

188 // restrict the query bounds to the intersection with the specified spatial filter

189 if(queryParameters.spatialFilter != null) {

190 Envelope filterBounds = queryParameters.spatialFilter.getEnvelope();

191 Envelope coverageBounds = this.coverage.geometry.getEnvelope();

192

193 // check that the request region intersects the region of coverage

sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/ android/customtiles/TileContainerMosaicDatabase, java, line 129 (Poor Style: Value Never Low Read)

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: zoomLevels

Enclosing Method: query()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/customtiles/app/src/main/java/com/atakmap/android/customtiles/

TileContainerMosaicDatabase.java:129

Taint Flags:

126 if(this.impl == null)

127 return EMPTY:

128

129 TileMatrix.ZoomLevel[] zoomLevels = this.impl.value.getZoomLevel();

130 int queryMinZoomIdx = 0;

131 int queryMaxZoomIdx = zoomLevels.length-1;

132 Envelope queryBounds = this.impl.value.getBounds();

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/DSMDatabase.java, line 249 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: idx



Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMDatabase.java, line 249 (Poor Style: Value Never Read)

Low

Enclosing Method: insert()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMDatabase.java:249

Taint Flags:

- 246 info.upperRight.getLatitude(),
- 247 info.lowerRight.getLatitude(),
- 248 info.lowerLeft.getLatitude()));
- 249 stmt.bind(idx++, MathUtils.max(info.upperLeft.getLongitude(),
- 250 info.upperRight.getLongitude(),
- 251 info.lowerRight.getLongitude(),
- 252 info.lowerLeft.getLongitude()));

Package: com.atakmap.android.externalbt

sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/ExternalBtMapComponent.java, line 160 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: time

Enclosing Method: fireGPSUpdate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/externalbt/app/src/main/java/com/atakmap/android/externalbt/

ExternalBtMapComponent.java:160

Taint Flags:

157

158 //pull location, time, course, speed from RMC

159 Geocoordinate pos = rmc.getPosition();

160 Date time = rmc.getDate();

161 //pull altitude from GGA

 $162 \ \ double \ hae = EGM96.getHAE (pos.getLatitudeDegrees(), pos.getLongitudeDegrees(), pos.getLon$

163 gga.getAltitude());

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/GLExtrudedPolygonsExample.java, line 127 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)



Low

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/GLExtrudedPolygonsExample.java, line 127 (Poor Style: Value Never Read)

Low

Sink Details

Sink: VariableAccess: mbb **Enclosing Method:** drawImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

GLExtrudedPolygonsExample.java:127

Taint Flags:

- 124 // get the exterior ring of the polygon
- 125 LineString exterior = p.getExteriorRing();
- 126 // obtain the render elevation at the center of the polygon
- **127** Envelope mbb = exterior.getEnvelope();
- **128** double baseElevation = view.getTerrainMeshElevation(
- **129** (mbb.maxY + mbb.minY) / 2d, (mbb.maxX + mbb.minX) / 2d);
- 130 // if no terrain elevation is available, assume ellipsoid surface

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/GLExtrudedPolygonsBatchExample.java, line 149 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: mbb **Enclosing Method:** drawImpl()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

GLExtrudedPolygonsBatchExample.java:149

Taint Flags:

146 // get the exterior ring of the polygon

147 LineString exterior = p.getExteriorRing();

148 // obtain the render elevation at the center of the polygon

149 Envelope mbb = exterior.getEnvelope();

150 double baseElevation = view.getTerrainMeshElevation(

151 (mbb.maxY + mbb.minY) / 2d, (mbb.maxX + mbb.minX) / 2d);

152 // if no terrain elevation is available, assume ellipsoid surface

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 288 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details



Low

Package: com.atakmap.android.hello3d

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/Hello3DMapComponent.java, line 288 (Poor Style: Value Never Read)

Low

Sink: VariableAccess: moving_feature_id

Enclosing Method: createExampleFeatureDataStore()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hello3d/app/src/main/java/com/atakmap/android/hello3d/

Hello3DMapComponent.java:288

Taint Flags:

285

286

287

288 long moving_feature_id =

289 retval.insertFeature(new Feature(fsid,

290 "Moving Icon",

291 new Point(-78.78596, 35.76602, 100),

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingDataStore.java, line 93 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: sf

Enclosing Method: checkCache()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:93

Taint Flags:

90 if (params.spatialFilter == null)

91 return;

92

93 RegionSpatialFilter sf = (RegionSpatialFilter) params.spatialFilter;

94

95 // XXX - compute tiles in view

96 int stx = OSMUtils.mapnikTileX(CACHE_LEVEL,

Package: com.atakmap.android.hellobuildings.opengl

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLOSMBuildingsLayer.java, line 178 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality



Poor Style: Value Never Read

Package: com.atakmap.android.hellobuildings.opengl

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/
android/hellobuildings/opengl/GLOSMBuildingsLayer.java, line 178 (Poor Style: Value Never Read)

Low

Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: color

Enclosing Method: updateRenderList()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

GLOSMBuildingsLayer.java:178

Taint Flags:

 $\textbf{175} \ \ s = CompositeStyle.find((CompositeStyle) \ s,$

176 BasicFillStyle.class);

177 if (s instanceof BasicFillStyle)

178 color = ((BasicFillStyle) s).getColor();

179 renderer = new ExtrudedPolygonData();

180 }

181

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/GLBuildingCacheBatch.java, line 244 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: filling Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

GLBuildingCacheBatch.java:244

Taint Flags:

241 for (CachePage page: filling.result)

242 page.dispose();

243 filling.result.clear();

244 filling = null;

245 }

246 break;

247 }



Low

Package: com.atakmap.android.hellobuildings.opengl.examples

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/examples/GLBuildingCacheBatch.java, line 154 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: filling Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/opengl/

examples/GLBuildingCacheBatch.java:154

Taint Flags:

151 for (CachePage page : filling.result)

152 page.dispose();

153 filling.result.clear();

154 filling = null;

155 }

156 break;

157 }

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 3583 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: fName

Enclosing Method: exampleCreateMissionPackage()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:3583

Taint Flags:

3580 //mpm.getConfiguration().setParameter("onReceiveDelete", "true");

3581

3582 MissionPackageBuilder mpb = new MissionPackageBuilder(null, mpm, getMapView().getRootGroup());

3583 String fName = mpb.build();

3584

3585 ImportResolver importer = new ImportMissionV1PackageSort(

3586 getMapView().getContext(), true, true, true);



Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/OffscreenMapCapture.java, line 227 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: mapWidth **Enclosing Method:** onDrawFrame()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

OffscreenMapCapture.java:227

Taint Flags:

224 GLES20.glUseProgram(prog);

225 GLMapView glMapView = MapView.getMapView().getGLSurface()

226 .getGLMapView();

227 int mapWidth = glMapView.getRight() - glMapView.getLeft();

228 int mapHeight = glMapView.getTop() - glMapView.getBottom();

229 // synchronize on the shared GL resource, the offscreen texture

230 synchronized (textures) {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/OffscreenMapCapture.java, line 228 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: mapHeight **Enclosing Method:** onDrawFrame()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

OffscreenMapCapture.java:228

Taint Flags:

- 225 GLMapView glMapView = MapView.getMapView().getGLSurface()
- 226 .getGLMapView();
- ${\bf 227} \ \ int \ mapWidth = glMapView.getRight() glMapView.getLeft(); \\$
- 228 int mapHeight = glMapView.getTop() glMapView.getBottom();
- 229 // synchronize on the shared GL resource, the offscreen texture
- 230 synchronized (textures) {
- **231** if (textures[0] != 0) {



Low

Package: com.atakmap.android.helloworld.image

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/image/MapScreenshotExample.java, line 52 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: w Enclosing Method: start()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/image/

MapScreenshotExample.java:52

Taint Flags:

49 // interest. For this example we'll simply use the user's current map

50 // view focus. You can use any area on the map, regardless of whether

51 // it's on screen or not.

52 int w = _mapView.getWidth(), h = _mapView.getHeight();

53 GeoPoint[] quad = new GeoPoint[] {

54 _mapView.inverse(new PointF(0, 0)).get(), // Top-left corner

55 _mapView.inverse(new PointF(w, 0)).get(), // Top-right corner

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/image/MapScreenshotExample.java, line 52 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: h Enclosing Method: start()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/image/

MapScreenshotExample.java:52

Taint Flags:

49 // interest. For this example we'll simply use the user's current map

50 // view focus. You can use any area on the map, regardless of whether

51 // it's on screen or not.

52 int w = _mapView.getWidth(), h = _mapView.getHeight();

53 GeoPoint[] quad = new GeoPoint[] {

54 _mapView.inverse(new PointF(0, 0)).get(), // Top-left corner

55 _mapView.inverse(new PointF(w, 0)).get(), // Top-right corner



Poor Style: Value Never Read

Package: com.atakmap.android.helloworld.layers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/
android/helloworld/layers/LayerDownloadExample.java, line 165 (Poor Style: Value
Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: maxAvailableRes **Enclosing Method:** downloadLayer()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/layers/

LayerDownloadExample.java:165

Taint Flags:

162

163 // Get the min/max tile resolution

164 double minAvailableRes = mobac.getMinResolution(null);

165 double maxAvailableRes = mobac.getMaxResolution(null);

166

167 // Get the total number of resolution levels

168 int numLevels = Integer.parseInt(DatasetDescriptor.getExtraData(mobac,

Package: com.atakmap.android.helloworld.menu

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/menu/CancelAction.java, line 24 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: cancel Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/menu/

CancelAction.java:24

Taint Flags:

- 21 final DialogInterface.OnClickListener handler = new DialogInterface.OnClickListener() {
- 22 @Override
- 23 public void onClick(DialogInterface dialog, int which) {
- 24 for (String cancel: cancelIntents) {
- 25 Intent intent = new Intent(cancel);
- **26** AtakBroadcast.getInstance().sendBroadcast(intent);

27 }



Poor Style: Value Never Read

Package: com.atakmap.android.helloworld.navstack

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/
android/helloworld/navstack/NavigationStackDropDown.java, line 27 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: _itemView

Enclosing Method: NavigationStackDropDown()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/navstack/

NavigationStackDropDown.java:27

Taint Flags:

- 24 public NavigationStackDropDown(MapView mapView, View itemView,
- 25 Context context) {
- 26 super(mapView);
- 27 _itemView = itemView;
- **28** pluginContext = context;

29

30 Button toolbar = itemView.findViewById(R.id.toolbarBtn);

Package: com.atakmap.android.helloworld.routes

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/routes/RouteExportMarshal.java, line 54 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: route **Enclosing Method:** execute()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/routes/

RouteExportMarshal.java:54

Taint Flags:

- 51 continue;
- 52
- 53 // Process route accordingly
- **54** Route route = (Route) mi;
- 55 exported++;
- **56** }
- 57



Poor Style: Value Never Read

Package: com.atakmap.android.helloworld.speechtotext

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/
android/helloworld/speechtotext/SpeechPointDropper.java, line 271 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: t

274 List<Address> addressList =

Enclosing Method: coordFormatter()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/speechtotext/

SpeechPointDropper.java:271

Taint Flags:

268 } else {
269 GeoBounds gb = getView().getBounds();
270
271 Thread t = new Thread(new Runnable() {
272 @Override
273 public void run() {

Package: com.atakmap.android.helloworld.view

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/view/ViewOverlayExample.java, line 110 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: viewBounds

Enclosing Method: updateOverlayPosition()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/view/

ViewOverlayExample.java:110

Taint Flags:

107 Rect viewBounds = LayoutHelper.getBounds(overlayView);

108

109 // Find the best position aligned to the top-right

110 viewBounds = layoutHelper.findBestPosition(viewBounds,

111 RootLayoutWidget.TOP_RIGHT);

112

113 // OPTIONAL: If you want to extend the view to take up as much space as



Poor Style: Value Never Read Package: com.atakmap.android.importexportexample sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/jaya/com/

sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/importexportexample/ExFmtImporter.java, line 93 (Poor Style: Value Never Read)

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: altitude Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/

importexportexample/ExFmtImporter.java:93

Taint Flags:

```
90 double altitude = Double.NaN;
91 if(parts.length >= 6) {
92 try {
93 altitude = Double.parseDouble(parts[5]);
94 } catch(NumberFormatException ignored) {}
95 }
96 String remarks = null;
```

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/PlatformSimulatorReceiver.java, line 490 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: now

Enclosing Method: generatePPLICoTMessage()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:490

Taint Flags:

```
487 }
488
489 private static String generatePPLICoTMessage(String uid, String callsign, GeoPoint loc) {
490 long now = System.currentTimeMillis();
491
492 SimpleDateFormat isoDateFormat = new SimpleDateFormat(
493 "yyyy-MM-dd'T'HH:mm:ss.SSS'Z"");
```



Low

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/PlatformSimulatorReceiver.java, line 590 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: now

Enclosing Method: generateSPICoTMessage()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:590

Taint Flags:

587 return spi;

588 }

589 private static String generateSPICoTMessage(String uid, String callsign, GeoPoint loc) {

590 long now = System.currentTimeMillis();

591

592 SimpleDateFormat isoDateFormat = new SimpleDateFormat(

593 "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'");

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/PlatformSimulatorReceiver.java, line 551 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: now

Enclosing Method: generateSPIMarker()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:551

Taint Flags:

548 }

549

550 private static Marker generateSPIMarker(String uid, String callsign, GeoPoint loc) {

551 long now = System.currentTimeMillis();

552

553 SimpleDateFormat isoDateFormat = new SimpleDateFormat(

554 "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'");



Low

Package: com.atakmap.android.platformsim

sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/PlatformSimulatorReceiver.java, line 454 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: now

Enclosing Method: generatePPLIMarker()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/platformsim/app/src/main/java/com/atakmap/android/platformsim/

PlatformSimulatorReceiver.java:454

Taint Flags:

451 }

452

453 private static Marker generatePPLIMarker(String uid, String callsign, GeoPoint loc) {

454 long now = System.currentTimeMillis();

455

456 SimpleDateFormat isoDateFormat = new SimpleDateFormat(

457 "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'");

Package: com.atakmap.android.plugins

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/android/plugins/VideoOverlayLayer.java, line 178 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: rgb

Enclosing Method: dispatchVideoFrameNoSync()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videooverlay/app/src/main/java/com/atakmap/android/plugins/

VideoOverlayLayer.java:178

Taint Flags:

175 MetadataItemIDs.METADATA_ITEMID_CORNER_LONGITUDE_POINT_4);

176

177 // copy the video frame

178 NativeIntArray rgb = (NativeIntArray) this.frameConverter

179 .getOutputArray();

180 if (this.converterStride == this.frameWidth) {

 $\textbf{181} \ \ System. array copy (rgb. int Array, \ rgb. of fset + this. converter Offset,$



Poor Style: Value Never Read

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/
android/plugins/support/OSMDroidTileContainer2.java, line 522 (Poor Style: Value
Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: bnds

Enclosing Method: isCompatible()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:522

Taint Flags:

519 switch(spec.getSRID()) {
520 case 4326:
521 zoomLevels = OSMDROID_ZOOM_LEVELS_4326;
522 bnds = BOUNDS_4326;
523 break;
524 case 900913:
525 case 3857:

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/OSMDroidTileContainer2.java, line 527 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: bnds

Enclosing Method: isCompatible()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:527

Taint Flags:

524 case 900913 :

525 case 3857 :

526 zoomLevels = OSMDROID_ZOOM_LEVELS_3857;

527 bnds = BOUNDS_3857;

528 break;

529 default:

530 return false;



Poor Style: Value Never Read

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/
android/plugins/support/OSMDroidTileContainer2.java, line 460 (Poor Style: Value

Low

Never Read) Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: upperLeft **Enclosing Method:** createLevel0()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:460

Taint Flags:

457 }
458
459 private static TileMatrix.ZoomLevel createLevel0(Projection proj, int gridCols, int gridRows) {
460 PointD upperLeft = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMinLongitude()), null);
461 PointD lowerRight = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMaxLongitude()), null);
462
463 // XXX - better resolution for 4326???

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/OSMDroidTileContainer2.java, line 545 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: level **Enclosing Method:** isCompatible()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:545

Taint Flags:

542

543 // NOTE: resolution is only 'informative' so we aren't going to

544 // check it

545 TileMatrix.ZoomLevel level = zoomLevels[specLevels[i].level];

 $\mathbf{546} \hspace{0.1in} if(specLevels[i].pixelSizeX \hspace{0.1in} != level.pixelSizeX \hspace{0.1in} \|$

547 specLevels[i].pixelSizeY != level.pixelSizeY ||

548 specLevels[i].tileWidth != level.tileWidth ||



Poor Style: Value Never Read

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/
android/plugins/support/OSMDroidTileContainer2.java, line 447 (Poor Style: Value

Low

Never Read) Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: ur

Enclosing Method: getMatrixBounds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:447

Taint Flags:

444
445 private static Envelope getMatrixBounds(Projection proj) {
446 PointD ul = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMinLongitude()), null);
447 PointD ur = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMaxLongitude()), null);
448 PointD lr = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMaxLongitude()), null);
449 PointD ll = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMinLongitude()), null);
450

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/OSMDroidTileContainer2.java, line 448 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lr

Enclosing Method: getMatrixBounds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:448

Taint Flags:

445 private static Envelope getMatrixBounds(Projection proj) {

446 PointD ul = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMinLongitude()), null);

447 PointD ur = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMaxLongitude()), null);

448 PointD lr = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMaxLongitude()), null);

449 PointD ll = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMinLongitude()), null);

450

451 return new Envelope(MathUtils.min(ul.x, ur.x, lr.x, ll.x),



Poor Style: Value Never Read

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/
android/plugins/support/OSMDroidTileContainer2.java, line 536 (Poor Style: Value

Low

Never Read) Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: specLevels **Enclosing Method:** isCompatible()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:536

Taint Flags:

533 return false:

534

535 // check compatibility of tiling

536 TileMatrix.ZoomLevel[] specLevels = spec.getZoomLevel();

537 final int limit = zoomLevels.length-1;

538 for(int i = 0; i < specLevels.length; i++) {

539 // check for out of bounds level

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/OSMDroidTileContainer2.java, line 461 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lowerRight **Enclosing Method:** createLevelO()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:461

Taint Flags:

458

459 private static TileMatrix.ZoomLevel createLevel0(Projection proj, int gridCols, int gridRows) {

460 PointD upperLeft = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMinLongitude()), null);

461 PointD lowerRight = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMaxLongitude()), null);

462

463 // XXX - better resolution for 4326???

464



Poor Style: Value Never Read

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/
android/plugins/support/OSMDroidTileContainer2.java, line 449 (Poor Style: Value
Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: 11

Enclosing Method: getMatrixBounds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:449

Taint Flags:

446 PointD ul = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMinLongitude()), null);
 447 PointD ur = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMaxLongitude()), null);

448 PointD lr = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMaxLongitude()), null);

449 PointD ll = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMinLongitude()), null);

450

451 return new Envelope(MathUtils.min(ul.x, ur.x, lr.x, ll.x),

452 MathUtils.min(ul.y, ur.y, lr.y, ll.y),

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/OSMDroidTileContainer2.java, line 446 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: ul

Enclosing Method: getMatrixBounds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:446

Taint Flags:

444

445 private static Envelope getMatrixBounds(Projection proj) {

446 PointD ul = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMinLongitude()), null);

447 PointD ur = proj.forward(new GeoPoint(proj.getMaxLatitude(), proj.getMaxLongitude()), null);

448 PointD lr = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMaxLongitude()), null);

449 PointD ll = proj.forward(new GeoPoint(proj.getMinLatitude(), proj.getMinLongitude()), null);



Poor Style: Value Never Read

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/
android/plugins/support/OSMDroidTileContainer2.java, line 319 (Poor Style: Value
Never Read)

Low

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: stmt Enclosing Method: setTile()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:319

Taint Flags:

316
317 StatementIface stmt;
318
319 stmt = null;
320 try {
321 if(update) {
322 if(stmts.updateTile == null)

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/OSMDroidTileContainer2.java, line 348 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: stmt **Enclosing Method:** setTile()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

OSMDroidTileContainer2.java:348

Taint Flags:

```
345 }
346
347 if(this.hasAtakMetadata) {
348 stmt = null;
349 try {
350 if(update) {
351 if(stmts.updateExpiration == null)
```



Low

Package: com.atakmap.android.plugins.support

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/TileCompositor.java, line 37 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: zoomLevelIdx

Enclosing Method: selectCompositeZoomLevel()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/support/

TileCompositor.java:37

Taint Flags:

34 for(int i = levels.length-1; $i \ge 0$; i--) {

35 // we are going to bias towards lower resolution to maximize throughput; assignment

36 // could occur after the comparison to bias towards the higher resolution level

37 zoomLevelIdx = i;

38

39 // next zoom level is lower res than data, done

40 if(gsd <= levels[i].resolution)

Package: com.atakmap.android.plugins.videomosaic

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/MosaicDataProvider.java, line 189 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: rgb

Enclosing Method: dispatchVideoFrameNoSync()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

MosaicDataProvider.java:189

Taint Flags:

186 MetadataItemIDs.METADATA_ITEMID_CORNER_LONGITUDE_POINT_4);

187

188 // copy the video frame

189 NativeIntArray rgb = (NativeIntArray) this.frameConverter

190 .getOutputArray();

191 if (this.converterStride == this.frameWidth) {

192 System.arraycopy(rgb.intArray, rgb.offset + this.converterOffset,



Poor Style: Value Never Read

Package: com.atakmap.android.plugins.videomosaic

sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/
android/plugins/videomosaic/VideoMosaicComponent.java, line 47 (Poor Style: Value
Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: airOverlays Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/videomosaic/app/src/main/java/com/atakmap/android/plugins/videomosaic/

VideoMosaicComponent.java:47

Taint Flags:

44 public void onCreate(Context context, Intent intent, MapView view) {

45 GLLayerFactory.register(GLMosaickingTileLayer.SPI);

46

47 MapOverlayParent airOverlays = new MapOverlayParent2(view,

48 "airoverlays",

49 "Air Overlays",

50 null.

Package: com.atakmap.android.sampledetailtester

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentDetailHandler.java, line 79 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: subject Enclosing Method: parsePeriod()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:79

Taint Flags:

76 String room = periodDetail.getAttribute("room");

77

78 double grade = Double.parseDouble(periodDetail.getAttribute("grade"));

79 String subject = periodDetail.getAttribute("subject");

80

81 // note V2 of the period contains absences

82 if (periodDetail.getAttribute("absences") != null) {



Poor Style: Value Never Read Low Package: com.atakmap.android.sampledetailtester sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/

atakmap/android/sampledetailtester/StudentDetailHandler.java, line 25 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: grade

Enclosing Method: toItemMetadata()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:25

Taint Flags:

22

- **23** String firstname = detail.getAttribute("firstname");
- **24** String surname = detail.getAttribute("surname");
- **25** int grade = Integer.parseInt(detail.getAttribute("grade"));

26

- **27** CotDetail classes = detail.getChild("classes");
- 28 for (int i = 0; i < classes.childCount(); ++i) {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/StudentDetailHandler, java, line 78 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: grade Enclosing Method: parsePeriod()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:78

Taint Flags:

75 String teacher = periodDetail.getAttribute("teacher");

76 String room = periodDetail.getAttribute("room");

77

78 double grade = Double.parseDouble(periodDetail.getAttribute("grade"));

79 String subject = periodDetail.getAttribute("subject");

81 // note V2 of the period contains absences



Poor Style: Value Never Read

Package: com.atakmap.android.sampledetailtester

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/
atakmap/android/sampledetailtester/StudentDetailHandler.java, line 23 (Poor Style:
Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: firstname **Enclosing Method:** toItemMetadata()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:23

Taint Flags:

20 Log.d(TAG, "detail received: " + detail + " in: "
21 + event);
22
23 String firstname = detail.getAttribute("firstname");
24 String surname = detail.getAttribute("surname");
25 int grade = Integer.parseInt(detail.getAttribute("grade"));
26

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentDetailHandler.java, line 83 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: absences Enclosing Method: parsePeriod()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:83

Taint Flags:

80	
81 // note V2 of the period contains absences	
82 if (periodDetail.getAttribute("absences") != null) {	
83 int absences = Integer.parseInt(periodDetail.getAttribute("absences"));	
84 }	
85 }	
86	



Poor Style: Value Never Read

Low

Package: com.atakmap.android.sampledetailtester

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentDetailHandler.java, line 74 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: period **Enclosing Method:** parsePeriod()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:74

Taint Flags:

71 }

72

73 private void parsePeriod(CotDetail periodDetail) {

74 int period = Integer.parseInt(periodDetail.getAttribute("number"));

75 String teacher = periodDetail.getAttribute("teacher");

76 String room = periodDetail.getAttribute("room");

77

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentDetailHandler.java, line 76 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: room **Enclosing Method:** parsePeriod()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:76

Taint Flags:

73 private void parsePeriod(CotDetail periodDetail) {

 $\textbf{74} \ \ int\ period = Integer.parseInt(periodDetail.getAttribute("number"));}$

75 String teacher = periodDetail.getAttribute("teacher");

76 String room = periodDetail.getAttribute("room");

77

78 double grade = Double.parseDouble(periodDetail.getAttribute("grade"));

79 String subject = periodDetail.getAttribute("subject");



Poor Style: Value Never Read Low Package: com.atakmap.android.sampledetailtester sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/

atakmap/android/sampledetailtester/StudentDetailHandler, java, line 24 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: surname **Enclosing Method:** toItemMetadata()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:24

Taint Flags:

21 + event):

22

23 String firstname = detail.getAttribute("firstname");

24 String surname = detail.getAttribute("surname");

25 int grade = Integer.parseInt(detail.getAttribute("grade"));

26

27 CotDetail classes = detail.getChild("classes");

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/StudentDetailHandler.java, line 75 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: teacher Enclosing Method: parsePeriod()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentDetailHandler.java:75

Taint Flags:

72

73 private void parsePeriod(CotDetail periodDetail) {

74 int period = Integer.parseInt(periodDetail.getAttribute("number"));

75 String teacher = periodDetail.getAttribute("teacher");

76 String room = periodDetail.getAttribute("room");

77

78 double grade = Double.parseDouble(periodDetail.getAttribute("grade"));



Low

Package: com.atakmap.android.sampledetailtester.proto

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/proto/Student.java, line 171 (Poor Style: Value Never Low Read)

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: period

Enclosing Method: ensurePeriodIsMutable()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

proto/Student.java:171

Taint Flags:

```
168 }
169 private void ensurePeriodIsMutable() {
170 if (!period_.isModifiable()) {
171 period_ =
172 com.google.protobuf.GeneratedMessageLite.mutableCopy(period_);
173 }
174 }
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/proto/Student.java, line 17 (Poor Style: Value Never Read)

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: period_ Enclosing Method: Student()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

proto/Student.java:17

Taint Flags:

```
14 private Student() {
15 firstname_ = "";
16 surname_ = "";
17 period_ = emptyProtobufList();
18 }
19 private int bitField0_;
20 public static final int FIRSTNAME_FIELD_NUMBER = 1;
```



Low

Package: com.atakmap.android.sampledetailtester.proto

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/proto/Student.java, line 245 (Poor Style: Value Never Low Read)

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: period_ Enclosing Method: clearPeriod()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

proto/Student.java:245

Taint Flags:

242 * <code>repeated .com.atakmap.android.sampledetailtester.proto.Period period = 4;</code>

243 */

244 private void clearPeriod() {

245 period_ = emptyProtobufList();

246 }

247 /**

248 *<code>repeated .com.atakmap.android.sampledetailtester.proto.Period period = 4;</code>

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/proto/Student.java, line 294 (Poor Style: Value Never Low Read)

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: memoizedSerializedSize

Enclosing Method: getSerializedSize()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

proto/Student.java:294

Taint Flags:

291 .computeMessageSize(4, period_.get(i));

292 }

293 size += unknownFields.getSerializedSize();

294 memoizedSerializedSize = size;

295 return size;

296 }

297



Low

Package: com.atakmap.android.sampledetailtester.proto

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/proto/Student.java, line 622 (Poor Style: Value Never Low Read)

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: period_

Enclosing Method: dynamicMethod()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

proto/Student.java:622

Taint Flags:

619 !other.surname_.isEmpty(), other.surname_);

620 grade_ = visitor.visitInt(grade_ != 0, grade_,

621 other.grade_!= 0, other.grade_);

622 period_= visitor.visitList(period_, other.period_);

623 if (visitor == com.google.protobuf.GeneratedMessageLite.MergeFromVisitor

624 .INSTANCE) {

625 bitField0_ |= other.bitField0_;

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/proto/Period.java, line 225 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality Scan Engine: SCA (Structural)

Sink Details

Sink: VariableAccess: memoizedSerializedSize

Enclosing Method: getSerializedSize()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

proto/Period.java:225

Taint Flags:

222 .computeStringSize(5, getRoom());

223 }

224 size += unknownFields.getSerializedSize();

225 memoizedSerializedSize = size;

226 return size;

227 }

228



Low

Package: com.atakmap.android.selfmarkerdata

sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/SelfMarkerDataMapComponent.java, line 74 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: v **Enclosing Method:** onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/selfmarkerdata/app/src/main/java/com/atakmap/android/selfmarkerdata/

SelfMarkerDataMapComponent.java:74

Taint Flags:

71 this.view = view;

72

73 //View v = PluginLayoutInflater.inflate(pluginContext, R.layout.main_layout, null)

74 View v = LayoutInflater.from(pluginContext)

75 .inflate(R.layout.main_layout, null);

76

77 /**

Package: com.atakmap.android.sms.service

sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/SmsReceiver.java, line 37 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: smsMessageStr Enclosing Method: onReceive()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/

SmsReceiver.java:37

Taint Flags:

34

35 if (intentExtras != null) {

36 Object[] sms = (Object[]) intentExtras.get(SMS_BUNDLE);

37 String smsMessageStr = "";

38 for (int i = 0; i < sms.length; ++i) {

39 String format = intentExtras.getString("format");

40 SmsMessage smsMessage = SmsMessage.createFromPdu((byte[]) sms[i], format);



Low

Package: com.atakmap.android.windprovider

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/WindDatasetProvider.java, line 76 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: queryParam **Enclosing Method:** subscribe()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

WindDatasetProvider.java:76

Taint Flags:

73 public void subscribe(final String tag, final List<DatasetQueryParam> query, final DatasetProviderCallback datasetProviderCallback) {

74 GeoPoint gp = null;

75 int offset = -1;

76 for (DatasetQueryParam queryParam : query) {

77 if (queryParam.key.equals("requested_location")) {

78 if (queryParam.value instanceof GeoPoint)

79 gp = (GeoPoint) queryParam.value;

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java, line 230 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: phase

 ${\bf Enclosing\ Method:}\ createAnimatedPathEffect()$

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java:230

Taint Flags:

227 }
228
229 private android.graphics.PathEffect createAnimatedPathEffect() {
230 float phase = (System.currentTimeMillis() % 1000) / 50f;
231 return new android.graphics.DashPathEffect(new float[]{20, 10}, phase);
232 }
233

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java, line 297 (Poor Style: Value Never Read)

Low

Issue Details



Poor Style: Value Never Read

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java, line 297 (Poor Style:
Value Never Read)

Low

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: archive **Enclosing Method:** onItemClick()

File: app/src/main/java/com/skyfi/atak/plugin/ArchivesBrowser.java:297

Taint Flags:

294

295 @Override

296 public void onItemClick(View view, int position) {

297 Archive archive = archives.get(position);

298

299 new AlertDialog.Builder(MapView.getMapView().getContext())

300 .setTitle(context.getString(R.string.place_order))

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 401 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: west

Enclosing Method: createAOIAroundPoint()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:401

Taint Flags:

398 double north = centerPoint.getLatitude() + latOffset;

399 double south = centerPoint.getLatitude() - latOffset;400 double east = centerPoint.getLongitude() + lonOffset;

401 double west = centerPoint.getLongitude() - lonOffset;

402

403 // Create polygon coordinates

404 ArrayList<Coordinate> coordinates = new ArrayList<>();

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 134 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)



Low

Package: com.skyfi.atak.plugin

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 134 (Poor Style: Value Never Read)

Low

Sink Details

Sink: VariableAccess: expectedCacheSize **Enclosing Method:** testMemoryCacheSize()

File: app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java:134

Taint Flags:

131 public void testMemoryCacheSize() {

132 // Test that memory cache is properly sized

133 int maxMemory = (int) (Runtime.getRuntime().maxMemory() / 1024);

134 int expectedCacheSize = maxMemory / 8; // Should use 1/8 of available memory

135

136 // This would require accessing private fields, so we just verify behavior

137 assertTrue("Cache should be initialized", true);

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 827 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: apiStatus

Enclosing Method: updateDashboardMetrics()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:827

Taint Flags:

824 TextView satelliteCount = mainView.findViewById(R.id.satellite_count);

825 TextView coveragePercent = mainView.findViewById(R.id.coverage_percent);

826 TextView activeOrders = mainView.findViewById(R.id.active_orders);

827 TextView apiStatus = mainView.findViewById(R.id.api_status);

828

829 // Check API connection status

 $\textbf{830} \hspace{0.1cm} \textbf{apiClient.ping().enqueue(new Callback < com.skyfi.atak.plugin.skyfiapi.Pong > ()} \hspace{0.1cm} \{$

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 451 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lon **Enclosing Method:** squareWkt()



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 451 (Poor Style: Value Never Read)

Low

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:451

Taint Flags:

448 private String squareWkt(double diameter) {

449 try {

450 double lat = MapView.getMapView().getSelfMarker().getPoint().getLatitude();

451 double lon = MapView.getMapView().getSelfMarker().getPoint().getLongitude();

452

453 // Convert to meters

454 diameter = diameter * 1000;

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 417 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: aoiId

Enclosing Method: onShapeComplete()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:417

Taint Flags:

414 AOIManager aoiManager = new AOIManager(pluginContext);

415 String aoiName = "AOI_" + System.currentTimeMillis();

416 AOIManager.AOI aoi = aoiManager.createAOI(aoiName, points, areaSqKm, "default");

417 String aoiId = aoi.id;

418

419 // Show success and offer to create order

420 new AlertDialog.Builder(MapView.getMapView().getContext())

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 47 (Poor Style: Value Never Read)

Lov

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lonInput Enclosing Method: show()

File: app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java:47

Taint Flags:

44



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 47 (Poor Style: Value Never Read)

Low

- **45** RadioGroup formatGroup = dialogView.findViewById(R.id.coordinate_format_group);
- **46** EditText latInput = dialogView.findViewById(R.id.latitude_input);
- **47** EditText lonInput = dialogView.findViewById(R.id.longitude_input);
- **48** EditText mgrsInput = dialogView.findViewById(R.id.mgrs_input);
- **49** TextView currentLocationText = dialogView.findViewById(R.id.current_location_text);

50

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 939 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: centroid

Enclosing Method: extractCenterFromAOI()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:939

Taint Flags:

936 try {

937 WKTReader reader = new WKTReader();

938 Geometry geometry = reader.read(aoi);

939 Coordinate centroid = geometry.getCentroid().getCoordinate();

940 return new double[]{centroid.y, centroid.x}; // lat, lon

941 } catch (Exception e) {

942 Log.e(LOGTAG, "Error extracting center from AOI", e);

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 399 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: south

Enclosing Method: createAOIAroundPoint()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:399

Taint Flags:

396 double lonOffset = radiusMeters / (111000.0 * Math.cos(Math.toRadians(centerPoint.getLatitude())));

397

398 double north = centerPoint.getLatitude() + latOffset;

399 double south = centerPoint.getLatitude() - latOffset;



Poor Style: Value Never Read Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 399 (Poor Style: Value Never Read) Low 400 double east = centerPoint.getLongitude() + lonOffset; 401 double west = centerPoint.getLongitude() - lonOffset; 402

app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java, line 211 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lon

Enclosing Method: extractCenterFromFootprint()

File: app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java:211

Taint Flags:

```
208 String[] parts = footprint.split("[,\\s]+");
209 if (parts.length >= 2) {
210 double lat = Double.parseDouble(parts[0]);
211 double lon = Double.parseDouble(parts[1]);
212 return new GeoPoint(lat, lon);
213 }
214 } catch (Exception e) {
```

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 46 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: latInput Enclosing Method: show()

File: app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java:46

Taint Flags:

- 43 View dialogView = LayoutInflater.from(context).inflate(R.layout.coordinate_input_dialog, null);
- 44
- **45** RadioGroup formatGroup = dialogView.findViewById(R.id.coordinate_format_group);
- **46** EditText latInput = dialogView.findViewById(R.id.latitude_input);
- **47** EditText lonInput = dialogView.findViewById(R.id.longitude_input);
- **48** EditText mgrsInput = dialogView.findViewById(R.id.mgrs_input);
- $\textbf{49} \ \ TextView\ currentLocationText = dialogView.findViewById(R.id.current_location_text);}$



Low

Package: com.skyfi.atak.plugin

app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java, line 88 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: bitmap

Enclosing Method: testGetBitmapFromDiskCache()

File: app/src/test/java/com/skyfi/atak/plugin/ImageCacheManagerTest.java:88

Taint Flags:

85 String key = "disk-cache-test";

86

87 // Try to get bitmap from disk cache (will return null in test environment)

88 Bitmap bitmap = cacheManager.getBitmapFromDiskCache(key);

89

90 // In real implementation, this would return the cached bitmap

91 // In test, we just verify no exceptions are thrown

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 398 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: north

Enclosing Method: createAOIAroundPoint()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:398

Taint Flags:

395 double latOffset = radiusMeters / 111000.0; // Approximate meters per degree latitude

396 double lonOffset = radiusMeters / (111000.0 * Math.cos(Math.toRadians(centerPoint.getLatitude())));

397

398 double north = centerPoint.getLatitude() + latOffset;

399 double south = centerPoint.getLatitude() - latOffset;

400 double east = centerPoint.getLongitude() + lonOffset;

401 double west = centerPoint.getLongitude() - lonOffset;

app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java, line 122 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)



Poor Style: Value Never Read Low
Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java, line 122 (Poor Style: Value Never Read)

Low

Sink Details

Sink: VariableAccess: xy

Enclosing Method: drawTaskedArea()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java:122

Taint Flags:

119 boolean first = true;
120
121 for (GeoPoint point : area.points) {
122 PointF xy = mapView.forward(point);
123 if (first) {
124 path.moveTo(xy.x, xy.y);

app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java, line 146 (Poor Style: Value Never Read)

Low

Issue Details

125 first = false;

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: xy

Enclosing Method: drawTaskedArea()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java:146

Taint Flags:

143 // Draw status label at centroid

144 GeoPoint centroid = calculateCentroid(area.points);

145 if (centroid != null) {

146 PointF xy = mapView.forward(centroid);

147

148 // Draw background for text

149 String label = String.format("%.1f km² - %s", area.areaKm2, area.status);

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 826 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: activeOrders

 $\label{lem:enclosing Method: policy of the Dashboard Metrics ()} Enclosing Method: update Dashboard Metrics ()$



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 826 (Poor Style: Value Never Read)

Low

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:826 **Taint Flags:**

- **823** private void updateDashboardMetrics() {
- **824** TextView satelliteCount = mainView.findViewById(R.id.satellite_count);
- **825** TextView coveragePercent = mainView.findViewById(R.id.coverage_percent);
- **826** TextView activeOrders = mainView.findViewById(R.id.active_orders);
- **827** TextView apiStatus = mainView.findViewById(R.id.api_status);

828

829 // Check API connection status

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 882 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: p2

Enclosing Method: calculatePolygonArea()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:882

Taint Flags:

```
879 for (int i = 0; i < coordinates.length-1; i++) {
880 Coordinate p1, p2;
881 p1 = coordinates[i];
882 p2 = coordinates[i + 1];
883 area += Math.toRadians(p2.x - p1.x) * (2 + Math.sin(Math.toRadians(p1.y)) + Math.sin(Math.toRadians(p2.y)));
884 }</pre>
```

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 49 (Poor Style: Value Never Read)

Lov

Issue Details

885

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: currentLocationText

Enclosing Method: show()

File: app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java:49

Taint Flags:

46 EditText latInput = dialogView.findViewById(R.id.latitude_input);



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 49 (Poor Style: Value Never Read)

Low

- **47** EditText lonInput = dialogView.findViewById(R.id.longitude_input);
- **48** EditText mgrsInput = dialogView.findViewById(R.id.mgrs_input);
- **49** TextView currentLocationText = dialogView.findViewById(R.id.current_location_text);

50

- 51 // Set up format switching
- **52** formatGroup.setOnCheckedChangeListener((group, checkedId) -> {

app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java, line 76 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: testLon

Enclosing Method: testMGRSRoundTrip()

File: app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java:76

Taint Flags:

- 73 public void testMGRSRoundTrip() {
- 74 // Test known coordinate conversions
- **75** double testLat = 39.7392;
- **76** double testLon = -104.9903;
- 77 GeoPoint originalPoint = new GeoPoint(testLat, testLon);

78

79 try {

app/src/test/java/com/skyfi/atak/plugin/MapOverlayTest.java, line 37 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: overlayId

Enclosing Method: testOverlayCreation()

File: app/src/test/java/com/skyfi/atak/plugin/MapOverlayTest.java:37

Taint Flags:

- **34** @Test
- 35 public void testOverlayCreation() {
- 36 // Test that overlays can be created and added to the map
- **37** String overlayId = "test-overlay-123";



Low

Package: com.skyfi.atak.plugin

app/src/test/java/com/skyfi/atak/plugin/MapOverlayTest.java, line 37 (Poor Style: Value Never Read)

Low

38 GeoPoint center = new GeoPoint(40.7128, -74.0060); // NYC coordinates

39

40 // Verify overlay can be created without exceptions

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 824 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: satelliteCount

Enclosing Method: updateDashboardMetrics()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:824

Taint Flags:

821 }

822

823 private void updateDashboardMetrics() {

824 TextView satelliteCount = mainView.findViewById(R.id.satellite_count);

825 TextView coveragePercent = mainView.findViewById(R.id.coverage_percent);

826 TextView activeOrders = mainView.findViewById(R.id.active_orders);

827 TextView apiStatus = mainView.findViewById(R.id.api_status);

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 1125 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: deltaLon

Enclosing Method: createSquareAround()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:1125

Taint Flags:

1122 double metersPerDegreeLon = 111412.84 * Math.cos(Math.toRadians(lat));

1123

1124 double deltaLat = radiusMeters / metersPerDegreeLat;

1125 double deltaLon = radiusMeters / metersPerDegreeLon;

1126

1127 // Create square corners

1128 points.add(new com.atakmap.coremap.maps.coords.GeoPoint(lat - deltaLat, lon - deltaLon)); // SW



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 1124 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: deltaLat

Enclosing Method: createSquareAround()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:1124

Taint Flags:

1121 double metersPerDegreeLat = 111132.92 - 559.82 * Math.cos(2 * Math.toRadians(lat));

1122 double metersPerDegreeLon = 111412.84 * Math.cos(Math.toRadians(lat));

1123

1124 double deltaLat = radiusMeters / metersPerDegreeLat;

1125 double deltaLon = radiusMeters / metersPerDegreeLon;

1126

1127 // Create square corners

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 400 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: east

Enclosing Method: createAOIAroundPoint()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:400

Taint Flags:

397

398 double north = centerPoint.getLatitude() + latOffset;

399 double south = centerPoint.getLatitude() - latOffset;

400 double east = centerPoint.getLongitude() + lonOffset;

401 double west = centerPoint.getLongitude() - lonOffset;

402

403 // Create polygon coordinates

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 48 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java, line 48 (Poor Style: Value Never Read)

Low

Sink Details

Sink: VariableAccess: mgrsInput **Enclosing Method:** show()

File: app/src/main/java/com/skyfi/atak/plugin/CoordinateInputDialog.java:48

Taint Flags:

- **45** RadioGroup formatGroup = dialogView.findViewById(R.id.coordinate_format_group);
- **46** EditText latInput = dialogView.findViewById(R.id.latitude_input);
- **47** EditText lonInput = dialogView.findViewById(R.id.longitude_input);
- **48** EditText mgrsInput = dialogView.findViewById(R.id.mgrs_input);
- **49** TextView currentLocationText = dialogView.findViewById(R.id.current_location_text);

50

51 // Set up format switching

app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java, line 174 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: xy

Enclosing Method: drawCurrentPolygon()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java:174

Taint Flags:

171 boolean first = true;

172

173 for (GeoPoint point : currentPolygon) {

174 PointF xy = mapView.forward(point);

175 if (first) {

176 path.moveTo(xy.x, xy.y);

177 first = false;

app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java, line 205 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: xy

 $\label{lem:condition} \textbf{Enclosing Method:} \ drawCurrentPolygon()$



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java, line 205 (Poor Style: Value Never Read)

Low

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java:205

Taint Flags:

- **202** double area = calculatePolygonArea(currentPolygon);
- **203** GeoPoint centroid = calculateCentroid(currentPolygon);
- 204 if (centroid != null) {
- **205** PointF xy = mapView.forward(centroid);
- **206** String areaText = String.format("%.2f km²", area);
- **207** float textWidth = areaPaint.measureText(areaText);
- 208 canvas.drawText(areaText, xy.x textWidth/2, xy.y, areaPaint);

app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java, line 219 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: xy

Enclosing Method: drawCurrentPolygon()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiMapOverlay.java:219

Taint Flags:

216 vertexPaint.setAntiAlias(true);

217

218 for (int i = 0; i < currentPolygon.length; <math>i++) {

219 PointF xy = mapView.forward(currentPolygon[i]);

220 canvas.drawCircle(xy.x, xy.y, 8f, vertexPaint);

221

222 // Draw vertex number

app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java, line 210 (Poor Style: Value Never Read)

Lov

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lat

Enclosing Method: extractCenterFromFootprint()

File: app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java:210

Taint Flags:

207 // This is a basic implementation that might need refinement



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/AORFilterManager.java, line 210 (Poor Style: Value Never Read)

Low

208 String[] parts = footprint.split("[,\\s]+");
209 if (parts.length >= 2) {
210 double lat = Double.parseDouble(parts[0]);
211 double lon = Double.parseDouble(parts[1]);
212 return new GeoPoint(lat, lon);
213 }

app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java, line 75 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: testLat

Enclosing Method: testMGRSRoundTrip()

File: app/src/test/java/com/skyfi/atak/plugin/CoordinateInputDialogTest.java:75

Taint Flags:

72 @Test

73 public void testMGRSRoundTrip() {

74 // Test known coordinate conversions

75 double testLat = 39.7392;

76 double testLon = -104.9903;

77 GeoPoint originalPoint = new GeoPoint(testLat, testLon);

78

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 437 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lon

Enclosing Method: extractCenterFromArchive()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:437

Taint Flags:

434 // Get the centroid of the geometry

435 org.locationtech.jts.geom.Point centroid = geometry.getCentroid();

436 double lat = centroid.getY();

437 double lon = centroid.getX();



Poor Style: Value Never Read

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 437 (Poor Style: Value Never Read)

Low

438

439 return new GeoPoint(lat, lon);
440

app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java, line 436 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: lat

Enclosing Method: extractCenterFromArchive()

File: app/src/main/java/com/skyfi/atak/plugin/ImageryPreviewManager.java:436

Taint Flags:

433

434 // Get the centroid of the geometry

435 org.locationtech.jts.geom.Point centroid = geometry.getCentroid();

436 double lat = centroid.getY();

437 double lon = centroid.getX();

438

439 return new GeoPoint(lat, lon);

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 825 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: coveragePercent **Enclosing Method:** updateDashboardMetrics()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:825

Taint Flags:

822

823 private void updateDashboardMetrics() {

824 TextView satelliteCount = mainView.findViewById(R.id.satellite_count);

825 TextView coveragePercent = mainView.findViewById(R.id.coverage_percent);

826 TextView activeOrders = mainView.findViewById(R.id.active_orders);

827 TextView apiStatus = mainView.findViewById(R.id.api_status);

828



Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java, line 881 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: p1

Enclosing Method: calculatePolygonArea()

File: app/src/main/java/com/skyfi/atak/plugin/TaskingOrderFragment.java:881

Taint Flags:

```
878 if (coordinates.length > 2) {
879 for (int i = 0; i < coordinates.length-1; i++) {
880 Coordinate p1, p2;
881 p1 = coordinates[i];
882 p2 = coordinates[i + 1];
883 area += Math.toRadians(p2.x - p1.x) * (2 + Math.sin(Math.toRadians(p1.y)) + Math.sin(Math.toRadians(p2.y)));
884 }</pre>
```

app/src/main/java/com/skyfi/atak/plugin/ArchiveListAdapter.java, line 62 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)

Sink Details

Sink: VariableAccess: holder **Enclosing Method:** getView()

File: app/src/main/java/com/skyfi/atak/plugin/ArchiveListAdapter.java:62

Taint Flags:

- **59** holder.linearLayout = convertView.findViewById(R.id.linear_layout);
- **60** convertView.setTag(holder);
- **61** } else {
- **62** holder = (ViewHolder) convertView.getTag();

63 }

64

65 // TODO: Bind data to views when properly implemented

app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 1118 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality **Scan Engine:** SCA (Structural)



Poor Style: Value Never Read	Low
Package: com.skyfi.atak.plugin	
app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java, line 1118 (Poor Style: Value Never Read)	Low

Sink Details

Sink: VariableAccess: lon

 ${\bf Enclosing\ Method:}\ create Square Around()$

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPlugin.java:1118

Taint Flags:

1115 1116 // Calculate corner points 1117 double lat = center.getLatitude(); 1118 double lon = center.getLongitude(); 1119 1120 // Approximate degrees per meter 1121 double metersPerDegreeLat = 111132.92 - 559.82 * Math.cos(2 * Math.toRadians(lat));



Portability Flaw: Locale Dependent Comparison (3 issues)

Abstract

Unexpected portability problems can be found when the locale is not specified.

Explanation

When comparing data that may be locale-dependent, an appropriate locale should be specified. **Example 1:** The following example tries to perform validation to determine if user input includes a

Recommendation

To prevent this from occurring, always make sure to either specify the default locale, or specify the locale with APIs that accept them such as toUpperCase(). **Example 2:** The following specifies the locale manually as an argument to toUpperCase().

```
import java.util.Locale;
...
public String tagProcessor(String tag){
  if (tag.toUpperCase(Locale.ENGLISH).equals("SCRIPT")){
    return null;
  }
  //does not contain SCRIPT tag, keep processing input
  ...
}
```

Example 3: The following uses the function <code>java.lang.String.equalsIgnoreCase()</code> API to prevent this issue.

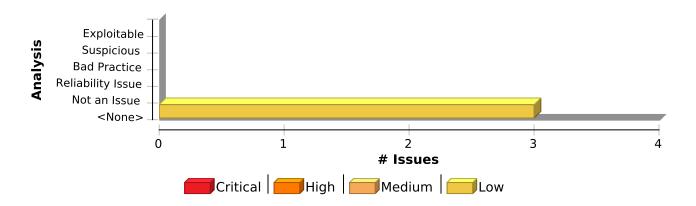
```
public String tagProcessor(String tag){
  if (tag.equalsIgnoreCase("SCRIPT")){
    return null;
  }
  //does not contain SCRIPT tag, keep processing input
  ...
}
```

This prevents the problem because equalsIgnoreCase() changes case similar to

Character.toLowerCase() and Character.toUpperCase(). This involves creating temporary canonical forms of both strings using information from the UnicodeData file that is part of the Unicode Character Database maintained by the Unicode Consortium, and even though this may render them unreadable if they were to be read out, it makes comparison possible without being dependent upon locale.

Issue Summary





Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Portability Flaw: Locale Dependent Comparison	3	0	0	3
Total	3	0	0	3

Portability Flaw: Locale Dependent Comparison Package: com.skyfi.atak.plugin app/src/main/java/com/skyfi/atak/plugin/SatelliteFeasibilityCalculator.java, line 74 (Portability Flaw: Locale Dependent Comparison) Low

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: sensorType.toUpperCase().equals(...): Comparison without checking locale

Enclosing Method: calculateSensorPasses()

File: app/src/main/java/com/skyfi/atak/plugin/SatelliteFeasibilityCalculator.java:74

Taint Flags:

71 double latitudeFactor = calculateLatitudeFactor(latitude);

72

73 switch (sensorType.toUpperCase()) {

74 case "ASAP":

75 // ASAP typically uses multiple constellation types for fastest response

76 // Higher pass frequency due to multiple satellite types

77 return (int) Math.round(daysDuration * 4.5 * latitudeFactor);

app/src/main/java/com/skyfi/atak/plugin/SatelliteFeasibilityCalculator.java, line 152 (Portability Flaw: Locale Dependent Comparison)

Low

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

 $\textbf{Sink:} \ sensor Type.to Upper Case (). equals (...): Comparison \ without \ checking \ locale$



Portability Flaw: Locale Dependent Comparison

Low

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/SatelliteFeasibilityCalculator.java, line 152 (Portability Flaw: Locale Dependent Comparison)

Low

Enclosing Method: determineFeasibilityLevel()

File: app/src/main/java/com/skyfi/atak/plugin/SatelliteFeasibilityCalculator.java:152

Taint Flags:

149 double excellentThreshold, goodThreshold, fairThreshold;

150

151 switch (sensorType.toUpperCase()) {

152 case "ASAP":

153 excellentThreshold = 4.0;

154 goodThreshold = 2.5;

155 fairThreshold = 1.5;

app/src/main/java/com/skyfi/atak/plugin/SkyFiPolygonStyle.java, line 83 (Portability Flaw: Locale Dependent Comparison)

Low

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: status.toLowerCase().equals(...): Comparison without checking locale

Enclosing Method: applyTaskedStyle()

File: app/src/main/java/com/skyfi/atak/plugin/SkyFiPolygonStyle.java:83

Taint Flags:

80 int fillColor;

81

82 switch (status.toLowerCase()) {

83 case "pending":

84 strokeColor = SKYFI WARNING;

85 fillColor = adjustAlpha(SKYFI_WARNING, TASKED_FILL_ALPHA);

86 break;



Race Condition: Format Flaw (1 issue)

Abstract

The methods parse() and format() in java.text.Format contain a design flaw that can cause one user to see another user's data.

Explanation

The methods parse() and format() in java.text.Format contains a race condition that can cause one user to see another user's data. **Example 1:** The following code shows how this design flaw can manifest itself. public class Common {

```
private static SimpleDateFormat dateFormat;
...

public String format(Date date) {
    return dateFormat.format(date);
}
...

final OtherClass dateFormatAccess=new OtherClass();
...

public void function_running_in_thread1(){
    System.out.println("Time in thread 1 should be 12/31/69 4:00 PM,
found: "+ dateFormatAccess.format(new Date(0)));
}

public void function_running_in_thread2(){
    System.out.println("Time in thread 2 should be around 12/29/09 6:26
AM, found: "+ dateFormatAccess.format(new Date(System.currentTimeMillis())));
}
```

While this code will behave correctly in a single-user environment, if two threads run it at the same time they could produce the following output: Time in thread 1 should be 12/31/69 4:00 PM, found: 12/31/69 4:00 PM Time in thread 2 should be around 12/29/09 6:26 AM, found: 12/31/69 4:00 PM In this case, the date from the first thread is shown in the output from the second thread due a race condition in the implementation of format().

Recommendation

Use synchronization to protect against race conditions whenever parse() and format() in class java.text.Format. Example 2: The following code shows two ways that the code from Example 1 can be corrected using synchronization constructs. public class Common {

```
private static SimpleDateFormat dateFormat;
...

public synchronized String format1(Date date) {
    return dateFormat.format(date);
}

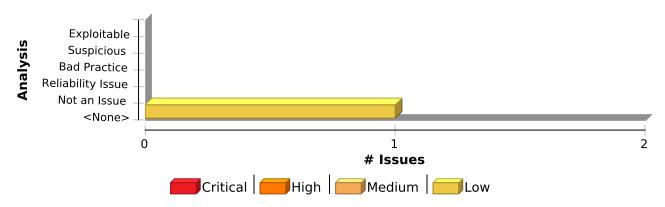
public String format2(Date date) {
    synchronized(dateFormat)
    {
}
```



```
return dateFormat.format(date);
}
}
```

Alternatively, use org.apache.commons.lang.time.FastDateFormat class, which is a thread-safe version of java.text.SimpleDateFormat.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Race Condition: Format Flaw	1	0	0	1
Total	1	0	0	1

Race Condition: Format Flaw	Low
Package: com.skyfi.atak.plugin	
app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java, line 75 (Race Condition: Format Flaw)	Low

Issue Details

Kingdom: Time and State **Scan Engine:** SCA (Structural)

Sink Details

Sink: FunctionCall: format

Enclosing Method: onBindViewHolder()

File: app/src/main/java/com/skyfi/atak/plugin/PreviewThumbnailAdapter.java:75

Taint Flags:

```
72 // Set date text
73 try {
74 if (archive.getCaptureTimestamp() != null) {
75 holder.dateText.setText(dateFormat.format(archive.getCaptureTimestamp()));
76 } else {
77 holder.dateText.setText("N/A");
78 }
```



Redundant Null Check (3 issues)

Abstract

The program can dereference a null-pointer, thereby causing a null-pointer exception.

Explanation

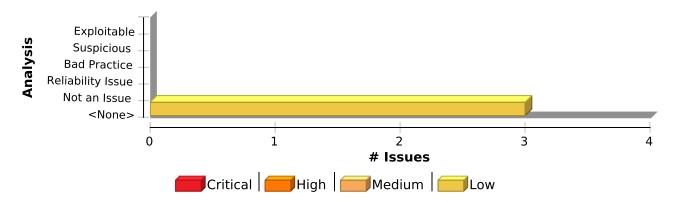
Null-pointer exceptions usually occur when one or more of the programmer's assumptions is violated. Specifically, dereference-after-check errors occur when a program makes an explicit check for null, but proceeds to dereference the object when it is known to be null. Errors of this type are often the result of a typo or programmer oversight. Most null-pointer issues result in general software reliability problems, but if attackers can intentionally cause the program to dereference a null-pointer, they can use the resulting exception to mount a denial of service attack or to cause the application to reveal debugging information that will be valuable in planning subsequent attacks. **Example 1:** In the following code, the programmer confirms that the variable foo is null and subsequently dereferences it erroneously. If foo is null when it is checked in the if statement, then a null dereference will occur, thereby causing a null-pointer exception.

```
if (foo == null) {
    foo.setBar(val);
    ...
}
```

Recommendation

Implement careful checks before dereferencing objects that might be null. When possible, abstract null checks into wrappers around code that manipulates resources to ensure that they are applied in all cases and to minimize the places where mistakes can occur.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Redundant Null Check	3	0	0	3
Total	3	0	0	3



Redundant Null Check

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 315 (Redundant Null Check)

Low

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: Dereferenced : socket **Enclosing Method:** send()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:315

Taint Flags:

```
312 }
313 }
314 try {
315 socket.close();
316 } catch (Exception e) {
317 }
318
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 297 (Redundant Null Check)

Low

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: Dereferenced : socket **Enclosing Method:** send()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:297

Taint Flags:

```
294 try {
295 socket = SocketFactory.getSocketFactory().createMulticastSocket(
296 outputPort); // status
297 socket.setTimeToLive(ttl);
298 } catch (IOException e) {
299 Log.e(TAG,"error",e);
300 }
```



Redundant Null Check

Package: com.atakmap.android.windprovider.importwind

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/
android/windprovider/importwind/OnlineWindImport.java, line 232 (Redundant Null
Check)

Low

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: Dereferenced: data

Enclosing Method: parseWinds()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:232

Taint Flags:

229 List<WindInfo> windInfo;

230 try {

231 windInfo = parser.parse(new ByteArrayInputStream(

232 data.getBytes(FileSystemUtils.UTF8_CHARSET)));

233 Collections.sort(windInfo);

234 windReceiver.receivedWindFromServer(windInfo);

235 } catch (Exception e) {



System Information Leak (8 issues)

Abstract

Revealing system data or debugging information helps an adversary learn about the system and form a plan of attack.

Explanation

An information leak occurs when system data or debug information leaves the program through an output stream or logging function. **Example 1:** The following code writes an exception to the standard error stream:

```
try {
     ...
} catch (Exception e) {
     e.printStackTrace();
}
```

Depending on the system configuration, this information can be dumped to a console, written to a log file, or exposed to a remote user. For example, with scripting mechanisms it is trivial to redirect output information from "Standard error" or "Standard output" into a file or another program. Alternatively, the system that the program runs on could have a remote logging mechanism such as a "syslog" server that sends the logs to a remote device. During development, you have no way of knowing where this information might end up being displayed. In some cases, the error message provides the attacker with the precise type of attack to which the system is vulnerable. For example, a database error message can reveal that the application is vulnerable to a SQL injection attack. Other error messages can reveal more oblique clues about the system. In Example 1, the leaked information could imply information about the type of operating system, the applications installed on the system, and the amount of care that the administrators have put into configuring the program. Here is another scenario, specific to the mobile world. Most mobile devices now implement a Near-Field Communication (NFC) protocol for quickly sharing information between devices using radio communication. It works by bringing devices to close proximity or simply having them touch each other. Even though the communication range of NFC is limited to just a few centimeters, eavesdropping, data modification and various other types of attacks are possible, since NFC alone does not ensure secure communication. **Example 2:** The Android platform provides support for NFC. The following code creates a message that gets pushed to the other device within the range.

NFC Data Exchange Format (NDEF) message contains typed data, a URI, or a custom application payload. If the message contains information about the application, such as its name, MIME type, or device software version, this information could be leaked to an eavesdropper. In Example 2, Fortify Static Code Analyzer reports a System Information Leak vulnerability on the return statement.

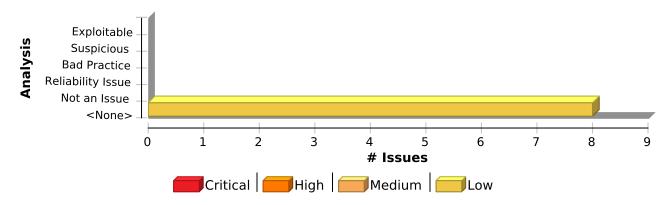
Recommendation

Write error messages with security in mind. In production environments, turn off detailed error information in favor of



brief messages. Restrict the generation and storage of detailed output that can help administrators and programmers diagnose problems. Debug traces can sometimes appear in non-obvious places (embedded in comments in the HTML for an error page, for example). Even brief error messages that do not reveal stack traces or database dumps can potentially aid an attacker. For example, an "Access Denied" message can reveal that a file or user exists on the system. If you are concerned about leaking system data via NFC on an Android device, you could do one of the following three things. Do not include system data in the messages pushed to other devices in range, encrypt the payload of the message, or establish a secure communication channel at a higher layer.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
System Information Leak	8	0	0	8
Total	8	0	0	8

System Information Leak	Low
Package: com.atakmap.android.commout	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 240 (System Information Leak)	Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:240

Taint Flags:

237 socket = null;
238 } catch (Exception e2) {
239 Log.d(TAG, "exception occured for udp receive: " + e2);
240 e2.printStackTrace();
241
242 // general error
243 try {



System Information Leak

Package: com.atakmap.android.commout

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/
atakmap/android/commout/CommoutMapComponent.java, line 240 (System Information Leak)

sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/CommoutMapComponent.java, line 230 (System Information Leak)

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/commout-simplesocket/app/src/main/java/com/atakmap/android/commout/

CommoutMapComponent.java:230

Taint Flags:

227 } catch (IOException e1) {

228 Log.d(TAG, "ioexception occured for udp receieve: " + e1);

229

230 e1.printStackTrace();

231 // receive error

232 try {

233 Thread.sleep(retryTimeout);

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/DSMElevationData.java, line 136 (System Information Leak)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: getElevation()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMElevationData.java:136

Taint Flags:

133 }

134 } catch (Throwable t) {

135 Arrays.fill(elevations, Double.NaN);

136 t.printStackTrace();

137 } finally {



System Information Leak Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/DSMElevationData.java, line 136 (System Information Leak)

Low

138 if (chunk != null) 139 chunk.dispose();

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore,java, line 269 (System **Information Leak**)

Low

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace() **Enclosing Method:** run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:269

Taint Flags:

266 try {

267 loadFromDisk(zoom, column, row);

268 } catch (Throwable t) {

269 t.printStackTrace();

270 } finally {

271 queuedFiles.remove(k);

272 }

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/HelloWorldRobot.java, line 66 (System Information Leak)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace() **Enclosing Method:** sleep()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/android/helloworld/

HelloWorldRobot.java:66

Taint Flags:

63 try {

64 Thread.sleep(millis);

65 } catch (InterruptedException e) {



System Information Leak

Low

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/androidTest/java/com/atakmap/ android/helloworld/HelloWorldRobot.java, line 66 (System Information Leak)

```
66 e.printStackTrace();
67 }
68 }
69
```

Package: com.atakmap.android.radialmenudemo

sdk/ATAK-CIV-5.4.0.18-SDK/samples/radialmenudemo/app/src/main/java/com/atakmap/ android/radialmenudemo/WidgetIconView.java, line 62 (System Information Leak)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: onFinishInflate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/radialmenudemo/app/src/main/java/com/atakmap/android/radialmenudemo/

WidgetIconView.java:62

Taint Flags:

```
59 try {
60 assets = assetManager.list("icons");
61 } catch (IOException e) {
62 e.printStackTrace();
63 }
64
65 resources = new ArrayList<String>(Arrays.asList(assets));
```

sdk/ATAK-CIV-5.4.0.18-SDK/samples/radialmenudemo/app/src/main/java/com/atakmap/ android/radialmenudemo/AssetSpinnerView.java, line 63 (System Information Leak)

Issue Details

Kingdom: Encapsulation Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: onFinishInflate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/radialmenudemo/app/src/main/java/com/atakmap/android/radialmenudemo/

AssetSpinnerView.java:63

Taint Flags:

```
60 try {
61 assets = assetManager.list(path);
62 } catch (IOException e) {
```



System Information Leak	Low
Package: com.atakmap.android.radialmenudemo	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/radialmenudemo/app/src/main/java/com/atakmap/android/radialmenudemo/AssetSpinnerView.java, line 63 (System Information Leak)	Low
63 e.printStackTrace();	
64 }	
65	
66 resources = new ArrayList <string>();</string>	

Package: com.atakmap.android.sms.service

sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/SmsManagerService.java, line 47 (System Information Leak)

Low

Issue Details

Kingdom: Encapsulation **Scan Engine:** SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: onCreate()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/smsservice/app/src/main/java/com/atakmap/android/sms/service/

SmsManagerService.java:47

Taint Flags:

```
44 try {
45 startActivity(i);
46 } catch (Exception e) {
47 e.printStackTrace();
48 }
49 }
50 }
```



Unchecked Return Value (10 issues)

Abstract

Ignoring a method's return value can cause the program to overlook unexpected states and conditions.

Explanation

It is not uncommon for Java programmers to misunderstand read() and related methods that are part of many java.io classes. Most errors and unusual events in Java result in an exception being thrown. (This is one of the advantages that Java has over languages like C: Exceptions make it easier for programmers to think about what can go wrong.) But the stream and reader classes do not consider it unusual or exceptional if only a small amount of data becomes available. These classes simply add the small amount of data to the return buffer, and set the return value to the number of bytes or characters read. There is no guarantee that the amount of data returned is equal to the amount of data requested. This behavior makes it important for programmers to examine the return value from read() and other IO methods to ensure that they receive the amount of data they expect. **Example 1:** The following code loops through a set of users, reading a private data file for each user. The programmer assumes that the files are always exactly 1 kilobyte in size and therefore ignores the return value from read(). If an attacker can create a smaller file, the program will recycle the remainder of the data from the previous user and handle it as though it belongs to the attacker.

```
FileInputStream fis;
byte[] byteArray = new byte[1024];
for (Iterator i=users.iterator(); i.hasNext();) {
    String userName = (String) i.next();
    String pFileName = PFILE_ROOT + "/" + userName;
    FileInputStream fis = new FileInputStream(pFileName);
    fis.read(byteArray); // the file is always 1k bytes
    fis.close();
    processPFile(userName, byteArray);
}
```

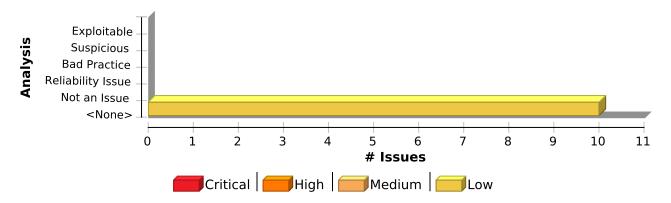
Recommendation

```
FileInputStream fis;
byte[] byteArray = new byte[1024];
for (Iterator i=users.iterator(); i.hasNext();) {
   String userName = (String) i.next();
   String pFileName = PFILE_ROOT + "/" + userName;
   fis = new FileInputStream(pFileName);
   int bRead = 0;
   while (bRead < 1024) {
      int rd = fis.read(byteArray, bRead, 1024 - bRead);
      if (rd == -1) {
        throw new IOException("file is unusually small");
      }
      bRead += rd;
   }
   // could add check to see if file is too large here
   fis.close();
   processPFile(userName, byteArray);
}</pre>
```

Note: Because the fix for this problem is relatively complicated, you might be tempted to use a simpler approach, such as checking the size of the file before you begin reading. Such an approach would render the application vulnerable to a file system race condition, whereby an attacker could replace a well-formed file with a malicious file between the file size check and the call to read data from the file.



Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Unchecked Return Value	10	0	0	10
Total	10	0	0	10

Unchecked Return Value	Low
Package: .com.skyfi.atak.plugin	
app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 160 (Unchecked	Low

Return Value) Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: delete()

Enclosing Method: run()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:160

Taint Flags:

```
157 File[] files = diskCacheDir.listFiles();
158 if (files != null) {
159 for (File file : files) {
160 file.delete();
161 }
162 }
163 });
```

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/ImportDSMSort.java, line 80 (Unchecked Return Value)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)



Unchecked Return Value Low

Package: com.atakmap.android.elevation.dsm

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/ImportDSMSort.java, line 80 (Unchecked Return Value)

Low

Sink Details

Sink: mkdirs()

Enclosing Method: isDSM()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

ImportDSMSort.java:80

Taint Flags:

77 try {

78 // use the GDAL dataset handler to the parsing

79 workingDir = FileSystemUtils.getItem("Databases/dsm.data/" + UUID.randomUUID().toString());

80 workingDir.mkdirs();

81 Set<DatasetDescriptor> descs = GdalLayerInfo.INSTANCE

82 .create(new DatasetDescriptorSpiArgs(file, workingDir));

83 if (descs == null || descs.isEmpty())

sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/ android/elevation/dsm/DSMManager.java, line 121 (Unchecked Return Value)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: mkdirs()

Enclosing Method: parse()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/dsmmanager/app/src/main/java/com/atakmap/android/elevation/dsm/

DSMManager.java:121

Taint Flags:

118 try {

119 // use the GDAL dataset handler to the parsing

120 workingDir = FileSystemUtils.getItem("Databases/dsm.data/" + UUID.randomUUID().toString());

121 workingDir.mkdirs();

122 Set<DatasetDescriptor> descs = GdalLayerInfo.INSTANCE

123 .create(new DatasetDescriptorSpiArgs(file, workingDir));

124 if (descs == null || descs.isEmpty())

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore.java, line 56 (Unchecked Return Low Value)

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)



Unchecked Return Value Low

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore, java, line 56 (Unchecked Return Low Value)

Sink Details

Sink: mkdirs()

Enclosing Method: OSMBuildingDataStore()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:56

Taint Flags:

53 this.cacheDir = cacheDir:

54 this.serverUrl = serverUrl;

55

56 this.cacheDir.mkdirs();

57

58 this.fileCacheWorker = Executors.newFixedThreadPool(3);

59 this.downloadWorker = Executors.newFixedThreadPool(3);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore.java, line 238 (Unchecked Return Value)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: mkdirs()

Enclosing Method: download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:238

Taint Flags:

235 private void download(final int zoom, final int column, final int row,

236 boolean prefetchOnly) throws Exception {

237 final File cacheFile = getCacheFile(this.cacheDir, zoom, column, row);

238 cacheFile.getParentFile().mkdirs();

239

240 final double sLat = OSMUtils.mapnikTileLat(zoom, row + 1);

241 final double wLng = OSMUtils.mapnikTileLng(zoom, column);

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 2165 (Unchecked Return Value)

Low

Issue Details

Kingdom: API Abuse



Unchecked Return Value

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/
android/helloworld/HelloWorldDropDownReceiver.java, line 2165 (Unchecked Return

Scan Engine: SCA (Semantic)

Sink Details

Value)

Sink: mkdir()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:2165

Taint Flags:

2162 final String contents = "{\"helloWorldSample\" : \"Sample File\" }";

2163 File testFile = FileSystemUtils.getItem(HelloImportResolver.TOOL_NAME

2164 + File.separator + "sample1.hwi");

2165 testFile.getParentFile().mkdir();

2166

2167 try (OutputStream os = IOProviderFactory.getOutputStream(testFile)) {

2168 try (InputStream is = new ByteArrayInputStream(contents.getBytes())) {

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 3520 (Unchecked Return Value)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: mkdir()

Enclosing Method: addTemporaryOverlay()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:3520

Taint Flags:

3517 int srid = 3857;

3518 // for a temporary overlay, suggest a temporary directory managed by the plugin that is deleted appropriately

3519 File cacheDir = FileSystemUtils.getItem("tools/helloworld/.cache");

3520 cacheDir.mkdir();

3521

3522 try {

3523 // create the layer based on the configuration

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1943 (Unchecked Return Value)

Low

Issue Details



Unchecked Return Value

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldDropDownReceiver.java, line 1943 (Unchecked Return Value)

Low

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: mkdir()

Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1943

Taint Flags:

1940 @Override

1941 public void onClick(View v) {

1942 File f = FileSystemUtils.getItem("tools/helloworld/logo.png");

1943 f.getParentFile().mkdir();

1944 FileOutputStream fos = null;

1945 try {

1946 fos = new FileOutputStream(f);

Package: com.atakmap.android.importexportexample

sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/importexportexample/ExFmtExporter.java, line 71 (Unchecked Return Value)

Lov

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: mkdir()

Enclosing Method: getFile()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/importexportexample/app/src/main/java/com/atakmap/android/

importexportexample/ExFmtExporter.java:71

Taint Flags:

68 // in the storage root

69 File exportDir = new File(Environment.getExternalStorageDirectory(), "exfmt_exports");

70 if(!exportDir.exists())

71 exportDir.mkdir();

72

73 // create the absolute path to the export file

74 return new File(



Unchecked Return Value

Package: com.skyfi.atak.plugin

app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 57 (Unchecked Return Value)

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: mkdirs()

Enclosing Method: ImageCacheManager()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:57

Taint Flags:

54 // Initialize disk cache directory
55 diskCacheDir = new File(context.getCacheDir(), CACHE_DIR);
56 if (!diskCacheDir.exists()) {

57 diskCacheDir.mkdirs();

58 } 59

60 // Clean up old cache files



Unreleased Resource: Streams (11 issues)

Abstract

The program can potentially fail to release a system resource.

Explanation

The program can potentially fail to release a system resource. Resource leaks have at least two common causes: -Error conditions and other exceptional circumstances. - Confusion over which part of the program is responsible for releasing the resource. Most unreleased resource issues result in general software reliability problems. However, if an attacker can intentionally trigger a resource leak, the attacker may be able to launch a denial of service attack by depleting the resource pool. Example 1: The following method never closes the file handle it opens. The finalize() method for FileInputStream eventually calls close(), but there is no guarantee as to how long it will take before the finalize() method will be invoked. In a busy environment, this can result in the JVM using up all of its file handles.

```
private void processFile(String fName) throws FileNotFoundException,
IOException {
  FileInputStream fis = new FileInputStream(fName);
  byte[] byteArray = new byte[BLOCK SIZE];
  while ((sz = fis.read(byteArray)) != -1) {
    processBytes(byteArray, sz);
}
```

Recommendation

Use try-with-resources statements to ensure that any resource that implements the AutoCloseable interface is automatically closed at the end of the try block. Example 2: The following code uses try-with-resources statements to safely manage FileInputStream objects.

```
private void processFile(String fName) throws FileNotFoundException,
IOException {
  try (FileInputStream fis = new FileInputStream(fName)) {
    int sz;
    byte[] byteArray = new byte[BLOCK_SIZE];
    while ((sz = fis.read(byteArray)) != -1) {
      processBytes(byteArray, sz);
  }
Example 3: For Kotlin, use the extension function Closeable.use() instead:
  val fis = FileInputStream(fName)
  fis.use {
    . . .
```

If try-with-resources statements cannot be used, make sure to release the resources in a finally block. Example 4: The following code properly closes the FileInputStream object in a finally block.

```
public void processFile(String fName) throws FileNotFoundException,
IOException {
 FileInputStream fis;
  try {
    fis = new FileInputStream(fName);
    int sz;
   byte[] byteArray = new byte[BLOCK_SIZE];
```



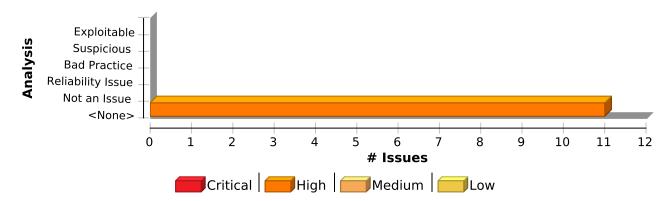
```
while ((sz = fis.read(byteArray)) != -1) {
    processBytes(byteArray, sz);
}

finally {
    if (fis != null) {
        safeClose(fis);
    }
}

public static void safeClose(FileInputStream fis) {
    if (fis != null) {
        try {
            fis.close();
        } catch (IOException e) {
            log(e);
        }
    }
}
```

This solution uses a helper function to log the exceptions that might occur when trying to close the statement. Presumably this helper function will be reused whenever a statement needs to be closed. Also, the processFile method does not initialize the fis object to null. Instead, it checks to ensure that fis is not null before calling safeClose(). Without the null check, the Java compiler reports that fis might not be initialized. This choice takes advantage of Java's ability to detect uninitialized variables. If fis is initialized to null in a more complex method, cases in which fis is used without being initialized will not be detected by the compiler.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Unreleased Resource: Streams	11	0	0	11
Total	11	0	0	11

Unreleased Resource: Streams

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/
android/hellobuildings/datastore/OSMBuildingDataStore.java, line 250 (Unreleased Resource: Streams)

Issue Details



Unreleased Resource: Streams

High

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/
android/hellobuildings/datastore/OSMBuildingDataStore.java, line 250 (Unreleased

High

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Resource: Streams)

Sink: new FileOutputStream(...) **Enclosing Method:** download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:250

Taint Flags:

247 OSMParser.getOsmURI(this.serverUrl, sLat, wLng, nLat, eLng));

248 FileSystemUtils.copyStream(url.openStream(),

249 true,

250 new FileOutputStream(cacheFile),

251 true);

252 long e = System.currentTimeMillis();

253

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingClient.java, line 415 (Unreleased Resource: High Streams)

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: new FileOutputStream(...) **Enclosing Method:** download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingClient.java:415

Taint Flags:

412 OSMParser.getOsmURI(serverUrl, sLat, wLng, nLat, eLng));

 ${\bf 413}\ \ File System Utils.copy Stream (url.open Stream (),$

414 true,

415 new FileOutputStream(cacheFile),

416 true);

417 e = System.currentTimeMillis();

418



Unreleased Resource: Streams

High

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloWorld/HelloWorldDropDownReceiver.java, line 1888 (Unreleased Resource: Streams)

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: fos = new FileOutputStream(...) Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1888

Taint Flags:

1885 } **1886** FileOutputStream fos = null; 1887 try { **1888** fos = new FileOutputStream(f); 1889 if (FileSystemUtils.assetExists(pluginContext, 1890 "logo.png")) { 1891 FileSystemUtils.copyFromAssets(pluginContext,

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/ android/helloworld/HelloWorldDropDownReceiver.java, line 1946 (Unreleased Resource: High Streams)

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: fos = new FileOutputStream(...) Enclosing Method: onClick()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldDropDownReceiver.java:1946

Taint Flags:

1943 f.getParentFile().mkdir(); **1944** FileOutputStream fos = null; 1945 try {

1946 fos = new FileOutputStream(f);

1947 if (FileSystemUtils.assetExists(pluginContext,

1948 "logo.png")) {

1949 FileSystemUtils.copyFromAssets(pluginContext,



Unreleased Resource: Streams

High

Package: com.atakmap.android.windprovider.importwind

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/OnlineWindImport.java, line 114 (Unreleased

High

Resource: Streams)

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: in = new BufferedInputStream(urlConnection.getInputStream())

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:114

Taint Flags:

111 try {

112 URL url = new URL(urlString);

113 urlConnection = (HttpURLConnection) url.openConnection();

114 InputStream in = new BufferedInputStream(urlConnection.getInputStream());

115 byte[] array = read(in);

116 try {

117 array = decompress(array);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/ImportWindFile.java, line 71 (Unreleased Resource: Streams)

High

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: ?.parse(new java.io.FileInputStream())

Enclosing Method: parseFile()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/ImportWindFile.java:71

Taint Flags:

68 } else {

69 WindFileParser wfParser = new WindFileParser(con, "Generic Format");

70 wfParser.setLocationElevation(groundPoint);

71 windInfo = wfParser.parse(new FileInputStream(windFile));

72 }

73

74 return !windInfo.isEmpty();



Unreleased Resource: Streams

High

Package: com.atakmap.android.windprovider.importwind

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/
android/windprovider/importwind/ImportWindFile.java, line 63 (Unreleased Resource: High

Issue Details

Streams)

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: new FileInputStream(...)
Enclosing Method: parseFile()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/ImportWindFile.java:63

Taint Flags:

60 // <altitude, Pair<velocity, direction>

61 List<WindInfo> windInfo;

62 if (fileExt.equalsIgnoreCase(".cns")) {

63 windInfo = new CNSParser(con).parse(new FileInputStream(windFile));

64 } else if (MeteodroneParser.isSupported(windFile, fileExt)) {

65 MeteodroneParser wfParser = new MeteodroneParser(con);

66 wfParser.setGroundElevation(groundPoint);

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/OnlineWindImport.java, line 169 (Unreleased Resource: Streams)

High

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: is = getInputStream()

Enclosing Method: getWindDataStandard()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/OnlineWindImport.java:169

Taint Flags:

166

167 conn.connect();

168

169 InputStream is = conn.getInputStream();

170

171 try {

172 byte[] array = read(is);



Unreleased Resource: Streams

High

Package: com.atakmap.android.windprovider.importwind

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/ImportWindFile.java, line 67 (Unreleased Resource: Streams)

High

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: ?.parse(new java.io.FileInputStream())

Enclosing Method: parseFile()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/ImportWindFile.java:67

Taint Flags:

64 } else if (MeteodroneParser.isSupported(windFile, fileExt)) {

65 MeteodroneParser wfParser = new MeteodroneParser(con);

66 wfParser.setGroundElevation(groundPoint);

67 windInfo = wfParser.parse(new FileInputStream(windFile));

68 } else {

69 WindFileParser wfParser = new WindFileParser(con, "Generic Format");

70 wfParser.setLocationElevation(groundPoint);

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/importwind/parsers/MeteodroneParser.java, line 228 (Unreleased Resource: Streams)

High

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: isr = new InputStreamReader(fos, ...)

Enclosing Method: isSupported()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:228

Taint Flags:

225 try {

226 FileInputStream fos = new FileInputStream(file);

227

228 isr = new InputStreamReader(fos, FileSystemUtils.UTF8_CHARSET);

229 reader = new BufferedReader(isr);

230

231 String line = reader.readLine();



Unreleased Resource: Streams

Package: com.atakmap.android.windprovider.importwind.parsers

sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/
android/windprovider/importwind/parsers/MeteodroneParser.java, line 229 (Unreleased Resource: Streams)

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Control Flow)

Sink Details

Sink: reader = new BufferedReader(isr) **Enclosing Method:** isSupported()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/windprovider/app/src/main/java/com/atakmap/android/windprovider/

importwind/parsers/MeteodroneParser.java:229

Taint Flags:

226 FileInputStream fos = new FileInputStream(file);
227
228 isr = new InputStreamReader(fos, FileSystemUtils.UTF8_CHARSET);
229 reader = new BufferedReader(isr);
230
231 String line = reader.readLine();
232



Unsafe JNI (1 issue)

Abstract

Improper use of the Java Native Interface (JNI) can render Java applications vulnerable to security flaws in other languages.

Explanation

Unsafe JNI errors occur when a Java application uses JNI to call code written in another programming language. **Example 1:** The following Java code defines a class named Echo. The class declares one native method that uses C to echo commands entered on the console back to the user.

```
class Echo {
    public native void runEcho();
    static {
        System.loadLibrary("echo");
    public static void main(String[] args) {
        new Echo().runEcho();
The following C code defines the native method implemented in the Echo class:
#include <jni.h>
#include "Echo.h" //the java class from <code>Example 1</code> compiled with
#include <stdio.h>
JNIEXPORT void JNICALL
Java_Echo_runEcho(JNIEnv *env, jobject obj)
{
    char buf[64];
    gets(buf);
    printf(buf);
```

Because the example is implemented in Java, it may appear that it is immune to memory issues like buffer overflow vulnerabilities. Although Java does do a good job of making memory operations safe, this protection does not extend to vulnerabilities occurring in source code written in other languages that are accessed using the Java Native Interface. Despite the memory protections offered in Java, the C code in this example is vulnerable to a buffer overflow because it makes use of gets (), which does not perform any bounds checking on its input. The Sun Java(TM) Tutorial provides the following description of JNI [1]: The JNI framework lets your native method utilize Java objects in the same way that Java code uses these objects. A native method can create Java objects, including arrays and strings, and then inspect and use these objects to perform its tasks. A native method can also inspect and use objects created by Java application code. A native method can even update Java objects that it created or that were passed to it, and these updated objects are available to the Java application. Thus, both the native language side and the Java side of an application can create, update, and access Java objects and then share these objects between them. The vulnerability in Example 1 could easily be detected through a source code audit of the native method implementation. This may not be practical or possible depending on the availability of the C source code and the way the project is built, but in many cases it may suffice. However, the ability to share objects between Java and native methods expands the potential risk to much more insidious cases where improper data handling in Java may lead to unexpected vulnerabilities in native code or unsafe operations in native code corrupt data structures in Java. Vulnerabilities in native code accessed through a Java application are typically exploited in the same manner as they are in applications written in the native language. The only challenge to such an attack is for the attacker to identify that the Java application uses native code to perform certain operations. This can be accomplished in a variety of ways, including identifying specific behaviors

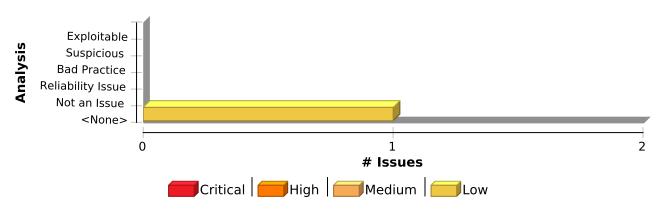


that are often implemented with native code or by exploiting a system information leak in the Java application that exposes its use of JNI [2].

Recommendation

Audit all source code comprising a given application, including native methods implemented in other languages. During audits, ensure that differences in bounds checking and other behavior between Java and native code are accounted for and handled correctly. In particular, verify that shared objects are handled correctly at all stages: before they are passed to native code, while they are manipulated by native code, and after they are returned to the Java application.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Unsafe JNI	1	0	0	1
Total	1	0	0	1

Unsafe JNI	Low
Package: com.atakmap.android.hellojni.plugin	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellojni/app/src/main/java/com/atakmap/android/hellojni/plugin/HelloJNITool.java, line 39 (Unsafe JNI)	Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: myNativeMethod

Enclosing Method: run()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellojni/app/src/main/java/com/atakmap/android/hellojni/plugin/

HelloJNITool.java:39

Taint Flags:

36 mv.post(new Runnable() {	
37 @Override	
38 public void run() {	
39 Toast.makeText(mv.getContext(), "Message from JNI: " + myNativeMethod(),	
40 Toast.LENGTH_LONG).show();	



Unsafe JNI	Low
Package: com.atakmap.android.hellojni.plugin	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellojni/app/src/main/java/com/atakmap/android/hellojni/plugin/HelloJNITool.java, line 39 (Unsafe JNI)	Low
41 }	
42 });	



Weak Cryptographic Hash (1 issue)

Abstract

Weak cryptographic hashes cannot guarantee data integrity and should not be used in security-critical contexts.

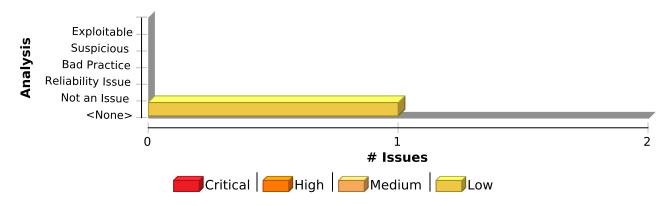
Explanation

MD2, MD4, MD5, RIPEMD-160, and SHA-1 are popular cryptographic hash algorithms often used to verify the integrity of messages and other data. However, as recent cryptanalysis research has revealed fundamental weaknesses in these algorithms, they should no longer be used within security-critical contexts. Effective techniques for breaking MD and RIPEMD hashes are widely available, so those algorithms should not be relied upon for security. In the case of SHA-1, current techniques still require a significant amount of computational power and are more difficult to implement. However, attackers have found the Achilles' heel for the algorithm, and techniques for breaking it will likely lead to the discovery of even faster attacks.

Recommendation

Discontinue the use of MD2, MD4, MD5, RIPEMD-160, and SHA-1 for data-verification in security-critical contexts. Currently, SHA-224, SHA-256, SHA-384, SHA-512, and SHA-3 are good alternatives. However, these variants of the Secure Hash Algorithm have not been scrutinized as closely as SHA-1, so be mindful of future research that might impact the security of these algorithms.

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Weak Cryptographic Hash	1	0	0	1
Total	1	0	0	1

Weak Cryptographic Hash	Low
Package: com.skyfi.atak.plugin	
app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 179 (Weak Cryptographic Hash)	Low
T D ()	

Issue Details

Kingdom: Security Features **Scan Engine:** SCA (Semantic)



Weak Cryptographic Hash	Low
Package: com.skyfi.atak.plugin	
app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java, line 179 (Weak Cryptographic Hash)	Low

Sink Details

Sink: getInstance()

Enclosing Method: generateKey()

File: app/src/main/java/com/skyfi/atak/plugin/ImageCacheManager.java:179

Taint Flags:

176
177 private String generateKey(String url) {
178 try {
179 MessageDigest digest = MessageDigest.getInstance("MD5");
180 digest.update(url.getBytes());
181 byte[] bytes = digest.digest();
182 StringBuilder sb = new StringBuilder();



XML Entity Expansion Injection (6 issues)

Abstract

Using XML parsers that are not configured to prevent or limit Document Type Definition (DTD) entity resolution can expose the parser to an XML Entity Expansion injection

Explanation

XML Entity Expansion injection also known as XML Bombs are Denial Of Service (DoS) attacks that benefit from valid and well-formed XML blocks that expand exponentially until they exhaust the server allocated resources. XML allows to define custom entities which act as string substitution macros. By nesting recurrent entity resolutions, an attacker may easily crash the server resources. The following XML document shows an example of an XML Bomb. <?xml version="1.0"?>

This test could crash the server by expanding the small XML document into more than 3GB in memory.

Recommendation

Always configure an XML parser securely so that it does not allow document type definition (DTD) custom entities as part of an incoming XML document. To avoid XML Entity Expansion injection the "secure-processing" property should be set for an XML factory, parser or reader:

```
factory.setFeature("http://javax.xml.XMLConstants/feature/secure-processing",
true);
```

In JAXP 1.3 and earlier versions, when the secure processing feature is on, default limitations are set for DOM and SAX parsers. These limits are:

```
entityExpansionLimit = 64,000
elementAttributeLimit = 10,000
```

Since JAXP 1.4, the secure processing feature is turned on by default. In addition to the preceding limits, a new maxOccur limit is added to the validating parser. The limit is:

```
maxOccur = 5,000
```

If inline DOCTYPE declaration is not needed, it can be completely disabled with the following property: factory.setFeature("http://apache.org/xml/features/disallow-doctype-decl", true);

To protect a TransformerFactory, the following feature should be set:

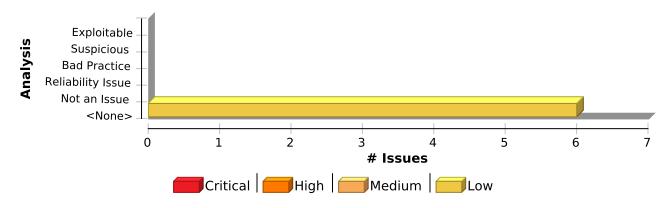
```
TransformerFactory transFact = TransformerFactory.newInstance();
  transFact.setFeature(XMLConstants.FEATURE_SECURE_PROCESSING, true);
  Transformer trans = transFact.newTransformer(xsltSource);
  trans.transform(xmlSource, result);
Alternatively, it is possible to use a securely configured XMLReader to set the transformation sources:
    XMLReader reader = XMLReaderFactory.createXMLReader();
    reader.setFeature("http://apache.org/xml/features/disallow-doctype-decl",
```

Source xmlSource = new SAXSource(reader, new InputSource(new FileInputStream(xmlFile)));



```
Source xsltSource = new SAXSource(reader, new InputSource(new FileInputStream(xsltFile)));
Result result = new StreamResult(System.out);
TransformerFactory transFact = TransformerFactory.newInstance();
Transformer trans = transFact.newTransformer(xsltSource);
trans.transform(xmlSource, result);
```

Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
XML Entity Expansion Injection	6	0	0	6
Total	6	0	0	6

XML Entity Expansion Injection	Low
Package: com.atakmap.android.hellobuildings.datastore	
sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingClient.java, line 430 (XML Entity	Low
Expansion Injection)	Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: saxParser.parse(...): XML document parsed allowing external entity resolution

Enclosing Method: download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/datastore/OSMBuildingClient.java:430

Taint Flags:

- 427 NodeList nl = new NodeList();
 428 final BuildingList bl = new BuildingList();
 429 final ParserHandler userhandler = new ParserHandler(nl, bl);
 430 saxParser.parse(cacheFile, userhandler);
 431 e = System.currentTimeMillis();
 432
- 433 Log.d(TAG, "Parsed building tile" + nLat + "," + wLng + "" + sLat



XML Entity Expansion Injection Low Package: com.atakmap.android.hellobuildings.datastore sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/

android/hellobuildings/datastore/OSMBuildingClient.java, line 430 (XML Entity **Expansion Injection**)

Low

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore.java, line 187 (XML Entity **Expansion Injection**)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: saxParser.parse(...): XML document parsed allowing external entity resolution

Enclosing Method: loadFromDisk()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:187

Taint Flags:

184 NodeList nl = new NodeList();

185 final BuildingList bl = new BuildingList();

186 final ParserHandler userhandler = new ParserHandler(nl, bl);

187 saxParser.parse(cacheFile, userhandler);

188 long e = System.currentTimeMillis();

189

190 Log.d(TAG, "Loaded building tile from file cache " + column + "," + row

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/OSMParser, java, line 71 (XML Entity Expansion Injection)

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: saxParser.parse(...): XML document parsed allowing external entity resolution

Enclosing Method: main()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/ OSMParser.java:71

Taint Flags:

68 NodeList nl = new NodeList();

69 BuildingList bl = new BuildingList();

70 ParserHandler userhandler = new ParserHandler(nl, bl);

71 saxParser.parse(inputFile, userhandler);

72



XML Entity Expansion Injection

Low

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/OSMParser.java, line 71 (XML Entity Expansion Injection)

Low

73 //System.out.println("Size: "+ nl.size());

74

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldMapComponent.java, line 701 (XML Entity Expansion Injection)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: factory.newTransformer(): XML document parsed allowing external entity resolution

Enclosing Method: BuildExternalMunitionsQuery()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldMapComponent.java:701

Taint Flags:

698 doc.appendChild(rootEl);

699

700 TransformerFactory factory = TransformerFactory.newInstance();

701 Transformer transformer = factory.newTransformer();

702

703 DOMSource domSource = new DOMSource(doc.getDocumentElement());

704 OutputStream output = new ByteArrayOutputStream();

Package: com.atakmap.android.sampledetailtester

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentMapComponent.java, line 54 (XML Entity Expansion Injection)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: db.parse(...): XML document parsed allowing external entity resolution

Enclosing Method: encode()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentMapComponent.java:54

Taint Flags:

51 try {

52 DocumentBuilderFactory dbf = DocumentBuilderFactory.newInstance();



XML Entity Expansion Injection Package: com.atakmap.android.sampledetailtester sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/StudentMapComponent.java, line 54 (XML Entity Expansion Injection) 53 DocumentBuilder db = dbf.newDocumentBuilder(); 54 Document doc = db.parse(new StringBufferInputStream(xml));

55 Element studentElement = doc.getDocumentElement();

56

57 if (!studentElement.getTagName().equals("student"))

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentMapComponent.java, line 118 (XML Entity Expansion Injection)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: tf.newTransformer(): XML document parsed allowing external entity resolution

Enclosing Method: decode()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

Student Map Component. java: 118

Taint Flags:

115 }

116

 ${\bf 117} \ \ Transformer Factory\ tf = Transformer Factory.new Instance();$

118 Transformer t = tf.newTransformer();

119 DOMSource dom = new DOMSource(doc);

120 StringWriter swriter = new StringWriter();

121 StreamResult sr = new StreamResult(swriter);



XML External Entity Injection (6 issues)

Abstract

Using XML parsers that are not configured to prevent or limit external entities resolution can expose the parser to an XML External Entities attack

Explanation

XML External Entities attacks benefit from an XML feature to build documents dynamically at the time of processing. An XML entity allows inclusion of data dynamically from a given resource. External entities allow an XML document to include data from an external URI. Unless configured to do otherwise, external entities force the XML parser to access the resource specified by the URI, e.g., a file on the local machine or on a remote system. This behavior exposes the application to XML External Entity (XXE) attacks, which can be used to perform denial of service of the local system, gain unauthorized access to files on the local machine, scan remote machines, and perform denial of service of remote systems. The following XML document shows an example of an XXE attack.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE foo [
  <!ELEMENT foo ANY >
  <!ENTITY xxe SYSTEM "file:///dev/random" >]><foo>&xxe;</foo>
```

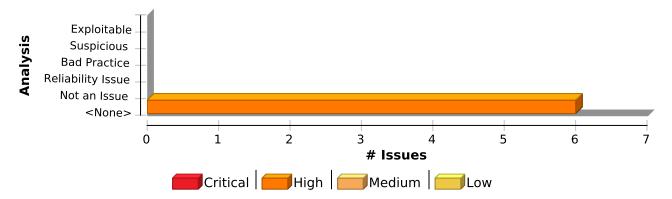
This example could crash the server (on a UNIX system), if the XML parser attempts to substitute the entity with the contents of the /dev/random file.

Recommendation

```
Always configure an XML parser securely so that it does not allow external entities as part of an incoming XML
document. To avoid XXE injections the following properties should be set for an XML factory, parser or reader:
factory.setFeature("http://xml.org/sax/features/external-general-entities",
false);
factory.setFeature("http://xml.org/sax/features/external-parameter-entities",
false);
If inline DOCTYPE declaration is not needed, it can be completely disabled with the following property:
factory.setFeature("http://apache.org/xml/features/disallow-doctype-decl",
true);
To protect a TransformerFactory, the following attribute should be set:
  TransformerFactory transFact = TransformerFactory.newInstance();
  transFact.setAttribute(XMLConstants.ACCESS EXTERNAL DTD, "");
  Transformer trans = transFact.newTransformer(xsltSource);
  trans.transform(xmlSource, result);
Alternatively, it is possible to use a securely configured XMLReader to set the transformation sources:
  XMLReader reader = XMLReaderFactory.createXMLReader();
  reader.setFeature("http://xml.org/sax/features/external-general-entities",
false);
  reader.setFeature("http://xml.org/sax/features/external-parameter-entities",
false);
  Source xmlSource = new SAXSource(reader, new InputSource(new
FileInputStream(xmlFile)));
  Source xsltSource = new SAXSource(reader, new InputSource(new
FileInputStream(xsltFile)));
  Result result = new StreamResult(System.out);
  TransformerFactory transFact = TransformerFactory.newInstance();
  Transformer trans = transFact.newTransformer(xsltSource);
  trans.transform(xmlSource, result);
```



Issue Summary



Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
XML External Entity Injection	6	0	0	6
Total	6	0	0	6

XML External Entity Injection

High

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingDataStore.java, line 187 (XML External **Entity Injection**)

High

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: saxParser.parse(...): XML document parsed allowing external entity resolution

Enclosing Method: loadFromDisk()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingDataStore.java:187

Taint Flags:

184 NodeList nl = new NodeList();

185 final BuildingList bl = new BuildingList();

186 final ParserHandler userhandler = new ParserHandler(nl, bl);

187 saxParser.parse(cacheFile, userhandler);

188 long e = System.currentTimeMillis();

189

190 Log.d(TAG, "Loaded building tile from file cache " + column + "," + row

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingClient.java, line 430 (XML External Entity High Injection)

Issue Details

Kingdom: Input Validation and Representation



XML External Entity Injection

High

Package: com.atakmap.android.hellobuildings.datastore

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/datastore/OSMBuildingClient.java, line 430 (XML External Entity High Injection)

Scan Engine: SCA (Control Flow)

Sink Details

Sink: saxParser.parse(...): XML document parsed allowing external entity resolution

Enclosing Method: download()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/

datastore/OSMBuildingClient.java:430

Taint Flags:

427 NodeList nl = new NodeList();

428 final BuildingList bl = new BuildingList();

429 final ParserHandler userhandler = new ParserHandler(nl, bl);

430 saxParser.parse(cacheFile, userhandler);

431 e = System.currentTimeMillis();

432

433 Log.d(TAG, "Parsed building tile " + nLat + "," + wLng + " " + sLat

Package: com.atakmap.android.hellobuildings.parser

sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/ android/hellobuildings/parser/OSMParser.java, line 71 (XML External Entity Injection)

High

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: saxParser.parse(...): XML document parsed allowing external entity resolution

Enclosing Method: main()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/hellobuildings/app/src/main/java/com/atakmap/android/hellobuildings/parser/

OSMParser.java:71

Taint Flags:

68 NodeList nl = new NodeList();

69 BuildingList bl = new BuildingList();

70 ParserHandler userhandler = new ParserHandler(nl, bl);

71 saxParser.parse(inputFile, userhandler);

72

73 //System.out.println("Size: "+ nl.size());

74



XML External Entity Injection

High

Package: com.atakmap.android.helloworld

sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/HelloWorldMapComponent.java, line 701 (XML External Entity Injection)

High

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: factory.newTransformer(): XML document parsed allowing external entity resolution

Enclosing Method: BuildExternalMunitionsQuery()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/helloworld/app/src/main/java/com/atakmap/android/helloworld/

HelloWorldMapComponent.java:701

Taint Flags:

698 doc.appendChild(rootEl);

699

700 TransformerFactory factory = TransformerFactory.newInstance();

701 Transformer transformer = factory.newTransformer();

702

703 DOMSource domSource = new DOMSource(doc.getDocumentElement());

704 OutputStream output = new ByteArrayOutputStream();

Package: com.atakmap.android.sampledetailtester

sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/StudentMapComponent.java, line 118 (XML External Entity Injection)

High

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: tf.newTransformer(): XML document parsed allowing external entity resolution

Enclosing Method: decode()

 $\textbf{File:} \ sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/app/src/main/java/com/atakmap/a$

StudentMapComponent.java:118

Taint Flags:

115 }

116

117 TransformerFactory tf = TransformerFactory.newInstance();

118 Transformer t = tf.newTransformer();

119 DOMSource dom = new DOMSource(doc);

120 StringWriter swriter = new StringWriter();

121 StreamResult sr = new StreamResult(swriter);



XML External Entity Injection Package: com.atakmap.android.sampledetailtester sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/ atakmap/android/sampledetailtester/StudentMapComponent.java, line 54 (XML External Entity Injection) High

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Control Flow)

Sink Details

Sink: db.parse(...): XML document parsed allowing external entity resolution

Enclosing Method: encode()

File: sdk/ATAK-CIV-5.4.0.18-SDK/samples/sampledetailtester/app/src/main/java/com/atakmap/android/sampledetailtester/

StudentMapComponent.java:54

Taint Flags:

51 try {

- **52** DocumentBuilderFactory dbf = DocumentBuilderFactory.newInstance();
- **53** DocumentBuilder db = dbf.newDocumentBuilder();
- **54** Document doc = db.parse(new StringBufferInputStream(xml));
- **55** Element studentElement = doc.getDocumentElement();

56

57 if (!studentElement.getTagName().equals("student"))



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