



# APPLICATION SECURITY REPORT

AIG Technologies, Inc.

Nov 27 2020 17:08 GMT+08:00 PHT

1280 - DM Web - CN

Static and SCA

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# EXECUTIVE SUMMARY



Application: 1280 - DM Web - CN

**POLICY NAME: AIG High + SCA**

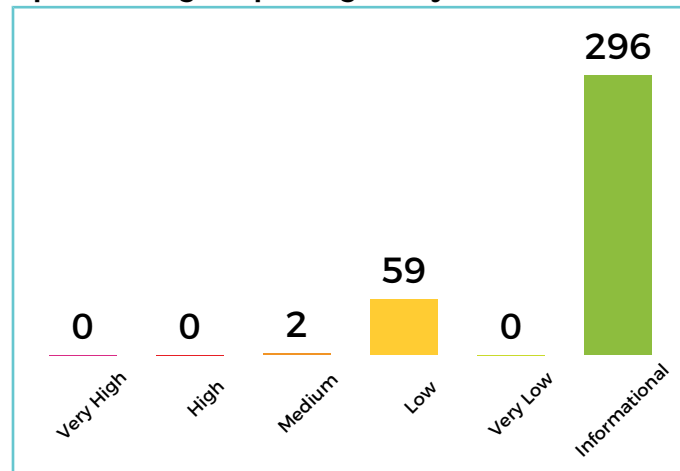
✗ Rules ✓ Scan Requirements ✗ Grace Period

OPEN FINDINGS: 367  
FINDINGS IMPACTING POLICY: 357

## Findings Violating Policy Rules

Remediation Status	Count
<b>Open</b>	<b>357</b>
Proposed Mitigations	0

## Open Findings Impacting Policy



## Top 5 CWEs Found

CWE ID	Issue
404	Improper Resource Shutdown or Release
382	J2EE Bad Practices: Use of System.exit()
597	Use of Wrong Operator in String Comparison
201	Insertion of Sensitive Information Into Sent Data
245	J2EE Bad Practices: Direct Management of Connections

## Scans Included in Application

<b>Static</b>	Score
27 Nov 2020 Static	<b>93</b>
Nov 27 2020 16:47 GMT+08:00 PHT	

## SCA Findings Summary

<b>7</b> Third-Party Components
✗ Components Impacting Policy: 1
✗ Vulnerabilities Impacting Policy: 1
High 1

## Third-Party Component License Risk

High	0
Medium	0
Low	4
Unassessable	0
<b>Total</b>	<b>4</b>

# POLICY EVALUATION

Policy Name	AIG High + SCA
Revision	2
Policy Status	Did Not Pass
Description	AIG high policy with SCA very high and high findings excluded

## REMEDIATION

Flaw Severity	Grace Period	Flaws Exceeding	Policy Status
Very High	0	0	Passed
High	0	0	Passed
Medium	0	2	Did not pass
Low	0	59	Did not pass
Very Low	0	0	Passed
Informational	0	296	Did not pass

## SCAN REQUIREMENTS

Scan Type	Frequency	Last performed	Policy Status
Any	Set by a Policy Rule	Nov 27 2020 11:47 GMT+08:00 PHT	Passed

## RULES

Rule Type	Requirement	Result	Policy Status
Standard	OWASP 2017	Flaws found: 1	Did not pass
Standard	2011 CWE/SANS Top 25	Flaws found: 2	Did not pass
Standard	PCI	Flaws found: 357	Did not pass
Max Severity	Medium	Flaws found: 2	Did not pass

## SOFTWARE COMPOSITION ANALYSIS RULES

Rule Type	Requirement	Result	Policy Status
Disallow Vulnerabilities by Severity	High and Above Not Allowed	1 Component	Did not pass

## SCORE

Rule Type	Grace Period	Flaws Exceeding	Policy Status
Meet Minimum Score	0	0	Passed

# POLICY EVALUATION

## CUSTOM SEVERITIES

CWE ID and Name	Veracode Severity	Custom Severity
80 Improper Neutralization of Script-Related HTML Tags in a Web Page (Basic XSS)	Medium	High
85 Doubled Character XSS Manipulations	Medium	High
87 Improper Neutralization of Alternate XSS Syntax	Medium	High

## POLICY STANDARDS

The table(s) below list the standards in your policy that the application failed to meet. Portions of the standard that had no findings have been suppressed for clarity.

### CERT

Section	Flaw Count
SEI CERT Oracle Secure Coding Standard for Java - Guidelines 02. Expressions (EXP) (Static)	17
SEI CERT Oracle Secure Coding Standard for Java - Guidelines 07. Exceptional Behavior (ERR) (Static)	41
SEI CERT Oracle Secure Coding Standard for Java - Guidelines 13. Input Output (FIO) (Static)	297

### OWASP 2017

Section	Flaw Count
OWASP Top Ten 2017 Category A3 - Sensitive Data Exposure (Static)	1

### 2011/CWE SANS TOP 25

Section	Flaw Count
Improper Limitation of a Pathname to a Restricted Directory ('Path Traversal') (Static)	1
Missing Encryption of Sensitive Data (Static)	1

# STATIC SCAN DETAILS

## Overview

### Application: 1280 - DM Web - CN

**OPEN FINDINGS: 367**  
**FINDINGS IMPACTING POLICY: 357**

POLICY NAME: AIG High + SCA

SCORE: 93

SCAN NAME: 27 Nov 2020 Static

SCAN DATE: Nov 27 2020 16:47 GMT+08:00 PHT

## Scope of Static Scan

Total Modules: **3** Scan Size: **12.0MB**

### INCLUDED IN SCAN

The following modules were identified as top-level modules, the binaries identified during prescan verification that have entry points for external data.

Module Name	Compiler	Operating Environment	Engine Version
Class files within DM.zip	JAVAC_8	Java J2SE 8	20201105210053
WebContent webapp within WebContent.war	JAVAC_1_4	Java J2SE 6	20201105210053
WebContent.war_htmljscode.veracodegen.htmla.jsa	JAVASCRIPT_5_1	JavaScript	20201105210053

# CHANGES FROM LAST SCAN

## Latest Scan

### Static Scan

Scan Name: 27 Nov 2020 Static

Completed: Nov 27 2020 16:47  
GMT+08:00 PHT

Score: 93

## Prior Scan

Scan Name: 19 Feb 2020 Static (3)  
Promoted

Completed: Feb 19 2020 14:33 GMT+08:00  
PHT

Score: 94

## Changes in Scope of Static Scan

### MODULES SELECTED IN SCAN

	Latest Scan	Prior Scan
<b>Module Name</b>	Class files within DM.zip* WebContent webapp within WebContent.war* WebContent.war_ htmljrcode.veracodegen.htmla.jsa*	dmweb.war dmweb.war_htmljrcode.veracodegen.htmla.jsa
<b>Total Modules Selected</b>	3	2
<b>Scan Size</b>	12.0MB	4.8MB

\*Not Included in prior scan

# FINDINGS AND RECOMMENDATIONS\*

\* The information in this section is filtered to include findings that impact policy and may not be representative of all findings.

## Findings Summary

### FINDINGS BY SEVERITY

	Static Scan	Software Composition Analysis (SCA)
Very High	0	0
High	0	1
Medium	2	0
Low	59	0
Very Low	0	0
Informational	296	0

#### MEDIUM

	Static Scan
Directory Traversal	1
Time and State	1
<b>Total</b>	<b>2</b>

#### LOW

	Static Scan
Code Quality	17
Cryptographic Issues	1
Time and State	41
<b>Total</b>	<b>59</b>

#### INFORMATIONAL

	Static Scan
Code Quality	296
<b>Total</b>	<b>296</b>

# FINDINGS AND RECOMMENDATIONS\*

\* The information in this section is filtered to include findings that impact policy and may not be representative of all findings.

## Flaw Category Details

### MEDIUM

#### Directory Traversal

**Description:** Allowing user input to control paths used in filesystem operations may enable an attacker to access or modify otherwise protected system resources that would normally be inaccessible to end users. In some cases, the user-provided input may be passed directly to the filesystem operation, or it may be concatenated to one or more fixed strings to construct a fully-qualified path.

When an application improperly cleanses special character sequences in user-supplied filenames, a path traversal (or directory traversal) vulnerability may occur. For example, an attacker could specify a filename such as "../../../etc/passwd", which resolves to a file outside of the intended directory that the attacker would not normally be authorized to view.

**Recommendation:** Assume all user-supplied input is malicious. Validate all user-supplied input to ensure that it conforms to the expected format, using centralized data validation routines when possible. When using black lists, be sure that the sanitizing routine performs a sufficient number of iterations to remove all instances of disallowed characters and ensure that the end result is not dangerous.

**Associated Findings:** CWE 73 (Flaw IDs: 399)

#### Time and State

**Description:** Time and State flaws are related to unexpected interactions between threads, processes, time, and information. These interactions happen through shared state: semaphores, variables, the filesystem, and basically anything that can store information. Vulnerabilities occur when there is a discrepancy between the programmer's assumption of how a program executes and what happens in reality. State issues result from improper management or invalid assumptions about system state, such as assuming mutable objects are immutable. Though these conditions are less commonly exploited by attackers, state issues can lead to unpredictable or undefined application behavior.



**Recommendation:** Limit the interleaving of operations on resources from multiple processes. Use locking mechanisms to protect resources effectively. Follow best practices with respect to mutable objects and internal references. Pay close attention to asynchronous actions in processes and make copious use of sanity checks in systems that may be subject to synchronization errors.

**Associated Findings:** CWE 377 (Flaw IDs: 148)

## LOW

### Code Quality

**Description:** Code quality issues stem from failure to follow good coding practices and can lead to unpredictable behavior. These may include but are not limited to:

- Neglecting to remove debug code or dead code
- Improper resource management, such as using a pointer after it has been freed
- Using the incorrect operator to compare objects
- Failing to follow an API or framework specification
- Using a language feature or API in an unintended manner

While code quality flaws are generally less severe than other categories and usually are not directly exploitable, they may serve as indicators that developers are not following practices that increase the reliability and security of an application. For an attacker, code quality issues may provide an opportunity to stress the application in unexpected ways.

**Recommendation:** The wide variance of code quality issues makes it impractical to generalize how these issues should be addressed. Refer to individual categories for specific recommendations.

**Associated Findings:** CWE 597 (Flaw IDs: 2, 3, 100, 101, 102, 392, 9, 46, 49, 22, 151, 57, 26, 411, 29, 61, 30)

### Cryptographic Issues

**Description:** Applications commonly use cryptography to implement authentication mechanisms and to ensure the confidentiality and integrity of sensitive data, both in transit and at rest. The proper and accurate implementation of cryptography is extremely critical to its efficacy. Configuration or coding mistakes as well as incorrect assumptions may negate a large degree of the protection it affords, leaving the crypto implementation vulnerable to attack.

Common cryptographic mistakes include, but are not limited to, selecting weak keys or weak cipher modes, unintentionally exposing sensitive cryptographic data, using predictable entropy sources, and mismanaging or hard-coding keys.

Developers often make the dangerous assumption that they can improve security by designing their own cryptographic algorithm; however, one of the basic tenets of cryptography is that any cipher whose effectiveness is reliant on the secrecy of the algorithm is fundamentally flawed.

**Recommendation:** Select the appropriate type of cryptography for the intended purpose. Avoid proprietary encryption algorithms as they typically rely on "security through obscurity" rather than sound mathematics. Select key sizes appropriate for the data being protected; for high assurance applications, 256-bit symmetric keys and 2048-bit asymmetric keys are sufficient. Follow best practices for key storage, and ensure that plaintext data and key material are not inadvertently exposed.

**Associated Findings:** CWE 614 (Flaw IDs: 39)

## Time and State

**Description:** Time and State flaws are related to unexpected interactions between threads, processes, time, and information. These interactions happen through shared state: semaphores, variables, the filesystem, and basically anything that can store information. Vulnerabilities occur when there is a discrepancy between the programmer's assumption of how a program executes and what happens in reality. State issues result from improper management or invalid assumptions about system state, such as assuming mutable objects are immutable. Though these conditions are less commonly exploited by attackers, state issues can lead to unpredictable or undefined application behavior.

**Recommendation:** Limit the interleaving of operations on resources from multiple processes. Use locking mechanisms to protect resources effectively. Follow best practices with respect to mutable objects and internal references. Pay close attention to asynchronous actions in processes and make copious use of sanity checks in systems that may be subject to synchronization errors.

**Associated Findings:** CWE 382 (Flaw IDs: 64, 1, 65, 66, 5, 7, 10, 11, 12, 13, 15, 17, 18, 20, 21, 25, 27, 31, 32, 34, 35, 36, 37, 38, 40, 42, 43, 45, 47, 48, 50, 51, 52, 53, 54, 55, 56, 58, 59, 62, 63)

## INFORMATIONAL

### Code Quality

**Description:** Code quality issues stem from failure to follow good coding practices and can lead to unpredictable behavior. These may include but are not limited to:

- Neglecting to remove debug code or dead code
- Improper resource management, such as using a pointer after it has been freed

- Using the incorrect operator to compare objects
- Failing to follow an API or framework specification
- Using a language feature or API in an unintended manner

While code quality flaws are generally less severe than other categories and usually are not directly exploitable, they may serve as indicators that developers are not following practices that increase the reliability and security of an application. For an attacker, code quality issues may provide an opportunity to stress the application in unexpected ways.

**Recommendation:** The wide variance of code quality issues makes it impractical to generalize how these issues should be addressed. Refer to individual categories for specific recommendations.

**Associated Findings:** CWE 404 (Flaw IDs: 28, 149, 150, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 393, 394, 395, 396, 397, 398, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447)

# FINDINGS AND RECOMMENDATIONS\*

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## Findings Details

MEDIUM

2 Findings

### CWE 73 External Control of File Name or Path

Flaw Category: Directory Traversal

Effort to Fix: 2 - Implementation error.


Fix is approx. 6-50 lines of code.

1 day to fix.

Description: This call contains a path manipulation flaw. The argument to the function is a filename constructed using untrusted input. If an attacker is allowed to specify all or part of the filename, it may be possible to gain unauthorized access to files on the server, including those outside the webroot, that would be normally be inaccessible to end users. The level of exposure depends on the effectiveness of input validation routines, if any.

Remediation: Validate all untrusted input to ensure that it conforms to the expected format, using centralized data validation routines when possible. When using black lists, be sure that the sanitizing routine performs a sufficient number of iterations to remove all instances of disallowed characters.

### Instances Found via Static Scan:

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 399	none	java.io.File.loperator_javanewinit	aiu.dmweb.utilities.SimpleLogFactory.getLog	Class files within DM.zip	aiu/dmweb/utilities/SimpleLogFactory.java 103	Nov 27 2020 11:47 GMT+08:00 PHT

**CWE 377 Insecure Temporary File**

Flaw Category: Time and State

Effort to Fix: 2 - Implementation error.


Fix is approx. 6-50 lines of code.

1 day to fix.

Description: Creating and using insecure temporary files can leave application and system data vulnerable to attack. In particular, file names created by the `tmpnam` family of functions can be easily guessed by an attacker. If an attacker can predict the filename and create a malicious collision, he may be able to manipulate the behavior of the application.

Remediation: Ensure that unpredictable names are used for temporary files and that files are created in a secure directory with appropriate permissions. Using `mkstemp()` is a reasonably safe way to create temporary files. It will attempt to create and open a unique file based on a filename template provided by the user, combined with a series of randomly generated characters. Note that `mkstemp()` is safe if only the descriptor is used and the returned filename is not used in a subsequent function call with extra privileges. Using `mkstemp()` does not completely eliminate race conditions but does provide better protection than other methods.

**Instances Found via Static Scan:**

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 148	none	java.io.File.createTempFile	fr.jayasoft.ivy.resolver.AbstractURLResolver....	WebContent.webapp within WebContent....	fr/jayasoft/ivy/resolver/AbstractURLResolver.java 185	Nov 27 2020 11:47 GMT+08:00 PHT

LOW

59 Findings

**CWE 382 J2EE Bad Practices: Use of System.exit()**

Flaw Category: Time and State

Effort to Fix: 1 - Trivial implementation error.

Fix is up to 5 lines of code.

One hour or less to fix.

Description: A web applications should not attempt to shut down its container. A call to System.exit() is probably part of leftover debug code or code imported from a non-J2EE application. Non-web applications may contain a main() method that calls System.exit(), but generally should not call it from other locations in the code.

Remediation: Ensure that System.exit() is never called by web applications.

## Instances Found via Static Scan:

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 1	none	exit	aiu.dmweb.document.DocumentReferen...	Class files withi n DM.zip	aiu/dmweb/docume nt/DocumentRefere nceData.java 299	Feb 22 2018 07:16 GMT+08:00 PHT
 5	none	exit	aiu.dmweb.pol icy.PolicySecur ityService.retri...	Class files withi n DM.zip	aiu/dmweb/policy/P olicySecurityService.j ava 194	Feb 22 2018 07:16 GMT+08:00 PHT
 7	none	exit	aiu.core.classb uilder.Generic ClassBuilder.c...	Class files withi n DM.zip	aiu/core/classbuilder /GenericClassBuilder. java 634	Feb 22 2018 07:16 GMT+08:00 PHT
 10	none	exit	aiu.core.classb uilder.ClassBuil der.createBea...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 867	Feb 22 2018 07:16 GMT+08:00 PHT
 11	none	exit	aiu.core.comp onent.Adminis trativeGUI\$2.a...	Class files withi n DM.zip	aiu/core/component /AdministrativeGUI.ja va 62	Feb 22 2018 07:16 GMT+08:00 PHT
 12	none	exit	aiu.core.classb uilder.ClassBuil der.createMgr...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 1360	Feb 22 2018 07:16 GMT+08:00 PHT
 13	none	exit	aiu.core.classb uilder.Generic ClassBuilder.c...	Class files withi n DM.zip	aiu/core/classbuilder /GenericClassBuilder. java 1074	Feb 22 2018 07:16 GMT+08:00 PHT
 15	none	exit	aiu.dmweb.ref erenceData.Cu rrencyRefere...	Class files withi n DM.zip	aiu/dmweb/referenc eData/CurrencyRefer enceData.java 128	Feb 22 2018 07:16 GMT+08:00 PHT
 17	none	exit	aiu.dmweb.bill ing.BillingRef erenceData.ret...	Class files withi n DM.zip	aiu/dmweb/billing/Bi llingReferenceData.j ava 236	Feb 22 2018 07:16 GMT+08:00 PHT
 18	none	exit	aiu.core.classb uilder.ClassBuil der.createMet...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 927	Feb 22 2018 07:16 GMT+08:00 PHT

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 20	none	exit	aiu.dmweb.billing.BillingReferenceData.ret...	Class files withi n DM.zip	aiu/dmweb/billing/Bi llingReferenceData.j ava 282	Feb 22 2018 07:16 GMT+08:00 PHT
 21	none	exit	aiu.core.classb uilder.ClassBuil der.createBea...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 867	Feb 22 2018 07:16 GMT+08:00 PHT
 25	none	exit	aiu.core.classb uilder.Generic ClassBuilder.c...	Class files withi n DM.zip	aiu/core/classbuilder /GenericClassBuilder. java 652	Feb 22 2018 07:16 GMT+08:00 PHT
 27	none	exit	aiu.dmweb.billing.BillingReferenceData.ret...	Class files withi n DM.zip	aiu/dmweb/billing/Bi llingReferenceData.j ava 590	Feb 22 2018 07:16 GMT+08:00 PHT
 31	none	exit	aiu.core.classb uilder.Generic ClassBuilder\$...	Class files withi n DM.zip	aiu/core/classbuilder /GenericClassBuilder. java 314	Feb 22 2018 07:16 GMT+08:00 PHT
 32	none	exit	aiu.core.classb uilder.Generic ClassBuilder.c...	Class files withi n DM.zip	aiu/core/classbuilder /GenericClassBuilder. java 1074	Feb 22 2018 07:16 GMT+08:00 PHT
 34	none	exit	aiu.dmweb.billing.BillingReferenceData.ret...	Class files withi n DM.zip	aiu/dmweb/billing/Bi llingReferenceData.j ava 461	Feb 22 2018 07:16 GMT+08:00 PHT
 35	none	exit	aiu.core.comp onent.Adminis trativeGUI\$3....	Class files withi n DM.zip	aiu/core/component /AdministrativeGUI.ja va 75	Feb 22 2018 07:16 GMT+08:00 PHT
 36	none	exit	aiu.core.classb uilder.ClassBuil der.createBea...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 663	Feb 22 2018 07:16 GMT+08:00 PHT
 37	none	exit	aiu.core.classb uilder.Generic ClassBuilder.c...	Class files withi n DM.zip	aiu/core/classbuilder /GenericClassBuilder. java 652	Feb 22 2018 07:16 GMT+08:00 PHT
 38	none	exit	aiu.dmweb.pla	Class files withi	aiu/dmweb/plan/Pla	Feb 22 2018



Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
			aiu.dmweb.pla n.PlanReferen ceData.retriev...	Class files withi n DM.zip	aiu/dmweb/plan/Pla nReferenceData.java 251	07:16 GMT+08:00 PHT
 40	none	exit	aiu.dmweb.pla n.PlanReferen ceData.retriev...	Class files withi n DM.zip	aiu/dmweb/plan/Pla nReferenceData.java 444	Feb 22 2018 07:16 GMT+08:00 PHT
 42	none	exit	aiu.dmweb.pol icy.PolicySecur ityService.retri...	Class files withi n DM.zip	aiu/dmweb/policy/P olicySecurityService.j ava 158	Feb 22 2018 07:16 GMT+08:00 PHT
 43	none	exit	aiu.core.classb uilder.ClassBuil der.createMgr...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 1360	Feb 22 2018 07:16 GMT+08:00 PHT
 45	none	exit	aiu.core.classb uilder.ClassBuil der.createMet...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 927	Feb 22 2018 07:16 GMT+08:00 PHT
 47	none	exit	aiu.dmweb.do cument.Docu mentReferen...	Class files withi n DM.zip	aiu/dmweb/docume nt/DocumentRefere nceData.java 221	Feb 22 2018 07:16 GMT+08:00 PHT
 48	none	exit	aiu.core.classb uilder.ClassBuil der.createMet...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 927	Feb 22 2018 07:16 GMT+08:00 PHT
 50	none	exit	aiu.dmweb.pla n.PlanReferen ceData.retriev...	Class files withi n DM.zip	aiu/dmweb/plan/Pla nReferenceData.java 296	Feb 22 2018 07:16 GMT+08:00 PHT
 51	none	exit	aiu.core.classb uilder.ClassBuil der.createMgr...	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java 1360	Feb 22 2018 07:16 GMT+08:00 PHT
 52	none	exit	aiu.core.classb uilder.Generic ClassBuilder.c...	Class files withi n DM.zip	aiu/core/classbuilder /GenericClassBuilder. java 652	Feb 22 2018 07:16 GMT+08:00 PHT
 53	none	exit	aiu.core.classb uilder.ClassBuil	Class files withi n DM.zip	aiu/core/classbuilder /ClassBuilder.java	Feb 22 2018 07:16

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
			aiu.core.classbuilder.ClassBuilder.createBea...		aiu/core/classbuilder/ClassBuilder.java 849	GMT+08:00 PHT
 54	none	exit	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 402	Feb 22 2018 07:16 GMT+08:00 PHT
 55	none	exit	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 656	Feb 22 2018 07:16 GMT+08:00 PHT
 56	none	exit	aiu.core.classbuilder.ClassBuilder\$8.window...	Class files within DM.zip	aiu/core/classbuilder/ClassBuilder.java 305	Feb 22 2018 07:16 GMT+08:00 PHT
 58	none	exit	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 361	Feb 22 2018 07:16 GMT+08:00 PHT
 59	none	exit	aiu.dmweb.referenceData.CountryReference...	Class files within DM.zip	aiu/dmweb/referenceData/CountryReferenceData.java 174	Feb 22 2018 07:16 GMT+08:00 PHT
 62	none	exit	aiu.dmweb.billing.BillingReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 367	Feb 22 2018 07:16 GMT+08:00 PHT
 63	none	exit	aiu.core.classbuilder.GenericClassBuilder.c...	Class files within DM.zip	aiu/core/classbuilder/GenericClassBuilder.java 348	Feb 22 2018 07:16 GMT+08:00 PHT
 64	none	exit	aiu.core.classbuilder.GenericClassBuilder.c...	Class files within DM.zip	aiu/core/classbuilder/GenericClassBuilder.java 1074	Feb 22 2018 07:16 GMT+08:00 PHT
 65	none	exit	aiu.core.classbuilder.ClassBuilder.createBea...	Class files within DM.zip	aiu/core/classbuilder/ClassBuilder.java 867	Feb 22 2018 07:16 GMT+08:00 PHT
 66	none	exit	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java	Feb 22 2018 07:16

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
			aiu.dmweb.pla n.PlanReferen ceData.retriev...		aiu/dmweb/plan/Pla nReferenceData.java 601	GMT+08:00 PHT

### CWE 597 Use of Wrong Operator in String Comparison

Flaw Category: Code Quality

Effort to Fix: 1 - Trivial implementation error.

Fix is up to 5 lines of code.






One hour or less to fix.

Description: Using '==' to compare two strings for equality or '!=' for inequality actually compares the object references rather than their values. It is unlikely that this reflects the intended application logic.

Remediation: Use the equals() method to compare strings, not the '==' or '!=' operator

## Instances Found via Static Scan:

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 2	none	span.neq	aiu.core.login.Login.startLoginHTML	Class files within DM.zip	aiu/core/login/Login.java 1570	Feb 22 2018 07:16 GMT+08:00 PHT
 3	none	span.equ	aiu.dmweb.utilities.DMUtilities.getDateFor...	Class files within DM.zip	aiu/dmweb/utilities/DMUtilities.java 616	Feb 22 2018 07:16 GMT+08:00 PHT
 9	none	span.equ	aiu.dmweb.dataServices.AssociatedDocument...	Class files within DM.zip	aiu/...aServices/AssociatedDocumentEntityManager.java 206	Feb 22 2018 07:16 GMT+08:00 PHT
 22	none	span.neq	aiu.dmweb.dataServices.AssociatedDocument...	Class files within DM.zip	aiu/...ataServices/AssociatedDocumentEntityManager.java 55	Feb 22 2018 07:16 GMT+08:00 PHT
 26	none	span.neq	aiu.core.util.ObjectStore.removeObject	Class files within DM.zip	aiu/core/util/ObjectStore.java 175	Feb 22 2018 07:16 GMT+08:00 PHT
 29	none	span.equ	aiu.dmweb.utilities.DMUtilities.isSubBranch...	Class files within DM.zip	aiu/dmweb/utilities/DMUtilities.java 575	Feb 22 2018 07:16 GMT+08:00 PHT
 30	none	span.neq	aiu.dmweb.utilities.DMUtilities.isRoundRul...	Class files within DM.zip	aiu/dmweb/utilities/DMUtilities.java 1522	Feb 22 2018 07:16 GMT+08:00 PHT
 46	none	span.equ	aiu.dmweb.policyHolder.PolicyHolder.setMi...	Class files within DM.zip	aiu/dmweb/policyHolder/PolicyHolder.java 295	Feb 22 2018 07:16 GMT+08:00 PHT
 49	none	span.neq	aiu.dmweb.login.Login.startLoginHTML	Class files within DM.zip	aiu/dmweb/login/Login.java 2292	Feb 22 2018 07:16 GMT+08:00 PHT
 57	none	span.equ	aiu.dmweb.utilities.DMUtilities.getShortDate	Class files within DM.zip	aiu/dmweb/utilities/DMUtilities.java 847	Feb 22 2018 07:16 GMT+08:00 PHT

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 61	none	span.neq	aiu.core.util.ObjectStore.retrieveObject	Class files within DM.zip	aiu/core/util/ObjectStore.java 221	Feb 22 2018 07:16 GMT+08:00 PHT
 100	none	span.neq	aiu.core.login.Login.startLoginTest	Class files within DM.zip	aiu/core/login/Login.java 1721	Aug 02 2019 05:41 GMT+08:00 PHT
 101	none	span.neq	aiu.dmweb.login.Login.startLoginTest	Class files within DM.zip	aiu/dmweb/login/Login.java 2444	Aug 02 2019 05:41 GMT+08:00 PHT
 102	none	span.neq	aiu.core.switchingservlet.SwitchingServlet....	Class files within DM.zip	aiu/core/switchingservlet/SwitchingServlet.java 1157	Aug 02 2019 05:41 GMT+08:00 PHT
 151	none	span.neq	aiu.dmweb.document.DocumentQueueC...	Class files within DM.zip	aiu/dmweb/document/DocumentQueueController.java 331	Nov 27 2020 11:47 GMT+08:00 PHT
 392	none	span.neq	aiu.dmweb.document.DocumentQueueC...	Class files within DM.zip	aiu/dmweb/document/DocumentQueueController.java 344	Nov 27 2020 11:47 GMT+08:00 PHT
 411	none	span.neq	aiu.dmweb.document.DocumentQueueC...	Class files within DM.zip	aiu/dmweb/document/DocumentQueueController.java 357	Nov 27 2020 11:47 GMT+08:00 PHT

**CWE 614 Sensitive Cookie in HTTPS Session Without 'Secure' Attribute**

Flaw Category: Cryptographic Issues

Effort to Fix: 1 - Trivial implementation error.


Fix is up to 5 lines of code.

One hour or less to fix.

Description: Setting the Secure attribute on an HTTP cookie instructs the web browser to send it only over a secure channel, such as a TLS connection. Issuing a cookie without the Secure attribute allows the browser to transmit it over unencrypted connections, which are susceptible to eavesdropping. It is particularly important to set the Secure attribute on any cookies containing sensitive data, such as authentication information (e.g. "remember me" style functionality).

Remediation: Set the Secure attribute for all cookies used by HTTPS sessions.

**Instances Found via Static Scan:**

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 39	none	javax.servlet.http .HttpServletRes ponse.addCoo...	aiu.dmweb.log in.DisplayScree nServlet.servi...	Class files withi n DM.zip	aiu/dmweb/login/Dis playScreenServlet.jav a 64	Feb 22 2018 07:16 GMT+08:00 PHT

## INFORMATIONAL

296 Findings

**CWE 404 Improper Resource Shutdown or Release**

Flaw Category: Code Quality

Effort to Fix: 2 - Implementation error.

Fix is approx. 6-50 lines of code.

1 day to fix.

Description: The application fails to release (or incorrectly releases) a system resource before it is made available for re-use. This condition often occurs with resources such as database connections or file handles. Most unreleased resource issues result in general software reliability problems, but if an attacker can intentionally trigger a resource leak, it may be possible to launch a denial of service attack by depleting the resource pool.

Remediation: When a resource is created or allocated, the developer is responsible for properly releasing the resource as well as accounting for all potential paths of expiration or invalidation. Ensure that all code paths properly release resources.



## Instances Found via Static Scan:

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 28	none	java.lang.ClassLoader.getResourceAsStream	aiu.core.component.ComponentControl.ct...	Class files withi n DM.zip	aiu/core/component /ComponentControl.j ava 47	Feb 22 2018 07:16 GMT+08:00 PHT
 149	none	java.sql.Statement.executeQuery	aiu.core.dbConnections.ConnectionPoolAu...	Class files withi n DM.zip	aiu/...e/dbConnections/ConnectionPoolAu toCommit.java 517	Nov 27 2020 11:47 GMT+08:00 PHT
 150	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BankBranchEntity...	Class files withi n DM.zip	aiu/dmweb/dataServ ices/BankBranchEnti tyManager.java 51	Nov 27 2020 11:47 GMT+08:00 PHT
 152	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.AssociatedDocum...	Class files withi n DM.zip	aiu/...aServices/Associ atedDocumentEntit yManager.java 428	Nov 27 2020 11:47 GMT+08:00 PHT
 153	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReinsuranceEntity...	Class files withi n DM.zip	aiu/dmweb/dataServ ices/ReinsuranceEnti tyMgr.java 285	Nov 27 2020 11:47 GMT+08:00 PHT
 154	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files withi n DM.zip	aiu/dmweb/dataServ ices/PlanEntityMana ger.java 75	Nov 27 2020 11:47 GMT+08:00 PHT
 155	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files withi n DM.zip	aiu/dmweb/dataServ ices/CampaignEntity Mgr.java 931	Nov 27 2020 11:47 GMT+08:00 PHT
 156	none	java.sql.Connection.createStatement	aiu.dmweb.plan.PlanReferenceData.retriev...	Class files withi n DM.zip	aiu/dmweb/plan/Pla nReferenceData.java 537	Nov 27 2020 11:47 GMT+08:00 PHT
 157	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CountryRulesEntity...	Class files withi n DM.zip	aiu/dmweb/dataServ ices/CountryRulesEn tityMgr.java 191	Nov 27 2020 11:47 GMT+08:00 PHT
 158	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files withi n DM.zip	aiu/dmweb/dataServ ices/CampaignEntity Mgr.java 1122	Nov 27 2020 11:47 GMT+08:00 PHT

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
 159	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReferenceDataBean...	Class files within DM.zip	aiu/...eb/dataServices/ReferenceDataBeanEntityMgr.java 532	Nov 27 2020 11:47 GMT+08:00 PHT
 160	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyHolderEntity...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyHolderEntityMgr.java 904	Nov 27 2020 11:47 GMT+08:00 PHT
 161	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.NotesEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/NotesEntityMgr.java 336	Nov 27 2020 11:47 GMT+08:00 PHT
 162	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 1467	Nov 27 2020 11:47 GMT+08:00 PHT
 163	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.CampaignRefEntity...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 656	Nov 27 2020 11:47 GMT+08:00 PHT
 164	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingEntityManager...	Class files within DM.zip	aiu/dmweb/dataServices/BillingEntityManager.java 316	Nov 27 2020 11:47 GMT+08:00 PHT
 165	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyHolderMiscE...	Class files within DM.zip	aiu/...web/dataServices/PolicyHolderMiscEntityMgr.java 580	Nov 27 2020 11:47 GMT+08:00 PHT
 166	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 1919	Nov 27 2020 11:47 GMT+08:00 PHT
 167	none	java.sql.DriverManager.getConnection	aiu.core.dbConnections.ConnectionPool.op...	Class files within DM.zip	aiu/core/dbConnections/ConnectionPool.java 319	Nov 27 2020 11:47 GMT+08:00 PHT
 168	none	java.sql.Connection.createStatement	aiu.dmweb.referenceData.CurrencyReferenc...	Class files within DM.zip	aiu/dmweb/referenceData/CurrencyReferenceData.java 111	Nov 27 2020 11:47 GMT+08:00 PHT
 169	none	java.sql.Connection	aiu.dmweb.dat	Class files withi	aiu/dmweb/dataServ	Nov 27 2020









Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 761	11:47 GMT+08:00 PHT
 170	none	java.sql.Statement.executeQuery	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 538	Nov 27 2020 11:47 GMT+08:00 PHT
 171	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.DocumentQueueEntity...	Class files within DM.zip	aiu/.../dataServices/DocumentQueueEntityManager.java 556	Nov 27 2020 11:47 GMT+08:00 PHT
 172	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 582	Nov 27 2020 11:47 GMT+08:00 PHT
 173	none	java.io.BufferedReader.readLine()	aiu.core.component.ApplicationHome.pro...	Class files within DM.zip	aiu/core/component/ApplicationHome.java 176	Nov 27 2020 11:47 GMT+08:00 PHT
 174	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReinsuranceEntity...	Class files within DM.zip	aiu/dmweb/dataServices/ReinsuranceEntityMgr.java 406	Nov 27 2020 11:47 GMT+08:00 PHT
 175	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ProductEntityMgr...	Class files within DM.zip	aiu/dmweb/dataServices/ProductEntityMgr.java 559	Nov 27 2020 11:47 GMT+08:00 PHT
 176	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntity...	Class files within DM.zip	aiu/...web/dataServices/BillingExpressEntityManager.java 141	Nov 27 2020 11:47 GMT+08:00 PHT
 177	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.PaymentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityManager.java 1621	Nov 27 2020 11:47 GMT+08:00 PHT
 178	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.de...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 900	Nov 27 2020 11:47 GMT+08:00 PHT
 179	none	java.sql.Statement.executeQuery	aiu.dmweb.billing.BillingReferenceData...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.j	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
			aiu.dmweb.billing.BillingReferenceData.ret...		aiu/dmweb/billing/BillingReferenceData.java 428	GMT+08:00 PHT
 180	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3851	Nov 27 2020 11:47 GMT+08:00 PHT
 181	none	java.sql.Connection.createStatement	aiu.dmweb.referenceData.CountryReferen...	Class files within DM.zip	aiu/dmweb/referenceData/CountryReferenceData.java 157	Nov 27 2020 11:47 GMT+08:00 PHT
 182	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.DocumentQueueE...	Class files within DM.zip	aiu/.../dataServices/DocumentQueueEntityManager.java 501	Nov 27 2020 11:47 GMT+08:00 PHT
 183	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 1995	Nov 27 2020 11:47 GMT+08:00 PHT
 184	none	java.sql.Connection.createStatement	aiu.dmweb.policy.PolicySecurityService.retri...	Class files within DM.zip	aiu/dmweb/policy/PolicySecurityService.java 128	Nov 27 2020 11:47 GMT+08:00 PHT
 185	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 630	Nov 27 2020 11:47 GMT+08:00 PHT
 186	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.TPAAgencyEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/TPAAgencyEntityMgr.java 317	Nov 27 2020 11:47 GMT+08:00 PHT
 187	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 469	Nov 27 2020 11:47 GMT+08:00 PHT
 188	none	java.sql.Connection.createStatement	aiu.core.util.DBUtilities.generateNumericID	Class files within DM.zip	aiu/core/util/DBUtilities.java 189	Nov 27 2020 11:47 GMT+08:00 PHT
 189	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Coun	Class files within DM.zip	aiu/dmweb/dataServices/CountrySecurity	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.CountrySecurityEnt...		aiu/dmweb/dataServices/CountrySecurityEntityMgr.java 293	GMT+08:00 PHT
 190	none	java.sql.DriverManager.getConnection	aiu.core.dbConnections.ConnectionPoolAu...	Class files within DM.zip	aiu/...e/dbConnections/ConnectionPoolAutoCommit.java 314	Nov 27 2020 11:47 GMT+08:00 PHT
 191	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReferenceDataEnti...	Class files within DM.zip	aiu/dmweb/dataServices/ReferenceDataEntityMgr.java 439	Nov 27 2020 11:47 GMT+08:00 PHT
 192	none	java.sql.Statement.executeQuery	aiu.dmweb.plan.PlanReferenceData.retriev...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 233	Nov 27 2020 11:47 GMT+08:00 PHT
 193	none	java.sql.Connection.createStatement	aiu.core.logging.ApplicationLog.writeToLog	Class files within DM.zip	aiu/core/logging/ApplicationLog.java 442	Nov 27 2020 11:47 GMT+08:00 PHT
 194	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 1931	Nov 27 2020 11:47 GMT+08:00 PHT
 195	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.PaymentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityManager.java 853	Nov 27 2020 11:47 GMT+08:00 PHT
 196	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ExclusionsEntityMg...	Class files within DM.zip	aiu/dmweb/dataServices/ExclusionsEntityMgr.java 230	Nov 27 2020 11:47 GMT+08:00 PHT
 197	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyHolderEntity...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyHolderEntityMgr.java 941	Nov 27 2020 11:47 GMT+08:00 PHT
 198	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CountryEntityMana...	Class files within DM.zip	aiu/dmweb/dataServices/CountryEntityManager.java 297	Nov 27 2020 11:47 GMT+08:00 PHT
 199	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Prod	Class files within DM.zip	aiu/dmweb/dataServices/ProductEntityM	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.ProductEntityMgr.i...		aiu/dmweb/dataServices/ProductEntityMgr.java 363	GMT+08:00 PHT
 200	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.CountryEntityMana...	Class files within DM.zip	aiu/dmweb/dataServices/CountryEntityManager.java 102	Nov 27 2020 11:47 GMT+08:00 PHT
 201	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.getReinstate...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2564	Nov 27 2020 11:47 GMT+08:00 PHT
 202	none	java.sql.Statement.executeQuery	aiu.dmweb.billing.BillingReferenceData.ret...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 329	Nov 27 2020 11:47 GMT+08:00 PHT
 203	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 779	Nov 27 2020 11:47 GMT+08:00 PHT
 204	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyIndexationE...	Class files within DM.zip	aiu/...web/dataServices/PolicyIndexationEntityMgr.java 346	Nov 27 2020 11:47 GMT+08:00 PHT
 205	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 178	Nov 27 2020 11:47 GMT+08:00 PHT
 206	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.getBranchCd...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2343	Nov 27 2020 11:47 GMT+08:00 PHT
 207	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.getCoverMast...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2508	Nov 27 2020 11:47 GMT+08:00 PHT
 208	none	java.io.BufferedReader.readLine	aiu.core.xml.XSLFactory.getXslSource	Class files within DM.zip	aiu/core/xml/XSLFactory.java 130	Nov 27 2020 11:47 GMT+08:00 PHT
 209	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.Pay	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntity	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
			aiu.dmweb.dataServices.PaymentEntityM...		aiu/dmweb/dataServices/PaymentEntityManager.java 751	GMT+08:00 PHT
 210	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 2423	Nov 27 2020 11:47 GMT+08:00 PHT
 211	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 797	Nov 27 2020 11:47 GMT+08:00 PHT
 212	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CreditCardCompa...	Class files within DM.zip	aiu/...taServices/CreditCardCompanyEntityManager.java 409	Nov 27 2020 11:47 GMT+08:00 PHT
 213	none	java.sql.Statement.executeQuery	aiu.dmweb.billing.BillingReferenceData.ret...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 573	Nov 27 2020 11:47 GMT+08:00 PHT
 214	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3817	Nov 27 2020 11:47 GMT+08:00 PHT
 215	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 490	Nov 27 2020 11:47 GMT+08:00 PHT
 216	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.getStandardT...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 1189	Nov 27 2020 11:47 GMT+08:00 PHT
 217	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...web/dataServices/BillingExpressEntityManager.java 414	Nov 27 2020 11:47 GMT+08:00 PHT
 218	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 2382	Nov 27 2020 11:47 GMT+08:00 PHT
 219	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CreditCardCompanyEn	Class files within DM.zip	aiu/...dataServices/CreditCardCompanyEn	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.CreditCardCompa...		aiu/...dataServices/CreditCardCompanyEntityManager.java 118	GMT+08:00 PHT
 220	none	java.sql.Statement.executeQuery	aiu.dmweb.utilities.QuickRef.getNextNum...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 752	Nov 27 2020 11:47 GMT+08:00 PHT
 221	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.releaseLocked...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 1299	Nov 27 2020 11:47 GMT+08:00 PHT
 222	none	java.sql.Statement.executeQuery	aiu.dmweb.policy.PolicySecurityService.retri...	Class files within DM.zip	aiu/dmweb/policy/PolicySecurityService.java 129	Nov 27 2020 11:47 GMT+08:00 PHT
 223	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignStatsEn...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignStatsEntityMgr.java 125	Nov 27 2020 11:47 GMT+08:00 PHT
 224	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 546	Nov 27 2020 11:47 GMT+08:00 PHT
 225	none	java.lang.ClassLoader.getResourceAsStream	aiu.dmweb.ui.UIMenu.acceptControl	Class files within DM.zip	aiu/dmweb/ui/UIMenu.java 347	Nov 27 2020 11:47 GMT+08:00 PHT
 226	none	java.io.BufferedWriter.newLine	aiu.core.classbuilder.ClassBuilder.createMgr...	Class files within DM.zip	aiu/core/classbuilder/ClassBuilder.java 961	Nov 27 2020 11:47 GMT+08:00 PHT
 227	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 228	Nov 27 2020 11:47 GMT+08:00 PHT
 228	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 258	Nov 27 2020 11:47 GMT+08:00 PHT
 229	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Prod...	Class files within DM.zip	aiu/dmweb/dataServices/ProductEntityM...	Nov 27 2020 11:47






Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.ProductEntityMgr...		aiu/dmweb/dataServices/ProductEntityMgr.java 174	GMT+08:00 PHT
 230	none	java.sql.Statement.executeQuery	aiu.core.util.DBUtilities.generateNumericID	Class files within DM.zip	aiu/core/util/DBUtilities.java 116	Nov 27 2020 11:47 GMT+08:00 PHT
 231	none	java.sql.Connection.createStatement	aiu.core.logging.LogFactory.truncateLog	Class files within DM.zip	aiu/core/logging/LogFactory.java 564	Nov 27 2020 11:47 GMT+08:00 PHT
 232	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.TPAAgencyEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/TPAAgencyEntityMgr.java 396	Nov 27 2020 11:47 GMT+08:00 PHT
 233	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.TapeEntityMgr.del...	Class files within DM.zip	aiu/dmweb/dataServices/TapeEntityMgr.java 231	Nov 27 2020 11:47 GMT+08:00 PHT
 234	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 583	Nov 27 2020 11:47 GMT+08:00 PHT
 235	none	java.sql.DriverManager.getConnection	aiu.core.logging.LogFactory.enableSystemL...	Class files within DM.zip	aiu/core/logging/LogFactory.java 162	Nov 27 2020 11:47 GMT+08:00 PHT
 236	none	java.sql.Connection.createStatement	aiu.core.dbConnections.AvailableConnectio...	Class files within DM.zip	aiu/core/dbConnections/AvailableConnections.java 190	Nov 27 2020 11:47 GMT+08:00 PHT
 237	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3885	Nov 27 2020 11:47 GMT+08:00 PHT
 238	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 843	Nov 27 2020 11:47 GMT+08:00 PHT
 239	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Polic	Class files within DM.zip	aiu/...web/dataServices/PolicyIndexationE	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyIndexationE...		aiu/...web/dataServices/PolicyIndexationEntityMgr.java 203	GMT+08:00 PHT
 240	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 1798	Nov 27 2020 11:47 GMT+08:00 PHT
 241	none	java.sql.Statement.executeQuery	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 277	Nov 27 2020 11:47 GMT+08:00 PHT
 242	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingEntityManag...	Class files within DM.zip	aiu/dmweb/dataServices/BillingEntityManager.java 624	Nov 27 2020 11:47 GMT+08:00 PHT
 243	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyProcessingE...	Class files within DM.zip	aiu/...eb/dataServices/PolicyProcessingEntityManager.java 54	Nov 27 2020 11:47 GMT+08:00 PHT
 244	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyIndexationE...	Class files within DM.zip	aiu/...web/dataServices/PolicyIndexationEntityMgr.java 376	Nov 27 2020 11:47 GMT+08:00 PHT
 245	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 1960	Nov 27 2020 11:47 GMT+08:00 PHT
 246	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 208	Nov 27 2020 11:47 GMT+08:00 PHT
 247	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.NotesEntityMgr.de...	Class files within DM.zip	aiu/dmweb/dataServices/NotesEntityMgr.java 264	Nov 27 2020 11:47 GMT+08:00 PHT
 248	none	java.sql.Connection.createStatement	aiu.dmweb.policy.PolicySecurityService.retri...	Class files within DM.zip	aiu/dmweb/policy/PolicySecurityService.java 174	Nov 27 2020 11:47 GMT+08:00 PHT
 249	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Cam	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntity	Nov 27 2020 11:47



Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...		aiu/dmweb/dataServices/CampaignEntityMgr.java 1404	GMT+08:00 PHT
 250	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.SystemNumberMa...	Class files within DM.zip	aiu/dmweb/dataServices/SystemNumberManager.java 151	Nov 27 2020 11:47 GMT+08:00 PHT
 251	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.AutorejectionEntity...	Class files within DM.zip	aiu/...eb/dataServices/AutorejectionEntityManager.java 136	Nov 27 2020 11:47 GMT+08:00 PHT
 252	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3613	Nov 27 2020 11:47 GMT+08:00 PHT
 253	none	java.sql.Statement.executeQuery	aiu.core.util.DBUtilities.generateNumericID	Class files within DM.zip	aiu/core/util/DBUtilities.java 201	Nov 27 2020 11:47 GMT+08:00 PHT
 254	none	java.sql.Statement.executeQuery	aiu.core.logging.ApplicationLog.writeToLog	Class files within DM.zip	aiu/core/logging/ApplicationLog.java 444	Nov 27 2020 11:47 GMT+08:00 PHT
 255	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 2088	Nov 27 2020 11:47 GMT+08:00 PHT
 256	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.DocumentQueueE...	Class files within DM.zip	aiu/.../dataServices/DocumentQueueEntityManager.java 624	Nov 27 2020 11:47 GMT+08:00 PHT
 257	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingEntityManag...	Class files within DM.zip	aiu/dmweb/dataServices/BillingEntityManager.java 285	Nov 27 2020 11:47 GMT+08:00 PHT
 258	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CountryRulesEntity...	Class files within DM.zip	aiu/dmweb/dataServices/CountryRulesEntityMgr.java 252	Nov 27 2020 11:47 GMT+08:00 PHT
 259	none	java.sql.Connection.createStatement	aiu.dmweb.billing.BillingRef...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.j	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.billing.BillingReferenceData.ret...		aiu/dmweb/billing/BillingReferenceData.java 261	GMT+08:00 PHT
 260	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyLettersEntity...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyLettersEntityMgr.java 249	Nov 27 2020 11:47 GMT+08:00 PHT
 261	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyHolderMiscE...	Class files within DM.zip	aiu/...web/dataServices/PolicyHolderMiscEntityMgr.java 270	Nov 27 2020 11:47 GMT+08:00 PHT
 262	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.IssuingBranchEnti...	Class files within DM.zip	aiu/...web/dataServices/IssuingBranchEntityManager.java 127	Nov 27 2020 11:47 GMT+08:00 PHT
 263	none	java.sql.Statement.executeQuery	aiu.dmweb.document.DocumentReferen...	Class files within DM.zip	aiu/dmweb/document/DocumentReferenceData.java 266	Nov 27 2020 11:47 GMT+08:00 PHT
 264	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PaymentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityManager.java 1620	Nov 27 2020 11:47 GMT+08:00 PHT
 265	none	java.sql.Connection.createStatement	aiu.dmweb.plan.PlanReferenceData.retriev...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 426	Nov 27 2020 11:47 GMT+08:00 PHT
 266	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntit...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 1254	Nov 27 2020 11:47 GMT+08:00 PHT
 267	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingPatternEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingPatternEntityManager.java 333	Nov 27 2020 11:47 GMT+08:00 PHT
 268	none	java.sql.Statement.executeQuery	aiu.dmweb.billing.BillingReferenceData.ret...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 402	Nov 27 2020 11:47 GMT+08:00 PHT
 269	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Plan	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityMana	Nov 27 2020 11:47


Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...		aiu/dmweb/dataServices/PlanEntityManager.java 732	GMT+08:00 PHT
 270	none	java.io.BufferedReader.readLine	aiu.core.component.ApplicationHome.pro...	Class files within DM.zip	aiu/core/component/ApplicationHome.java 573	Nov 27 2020 11:47 GMT+08:00 PHT
 271	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 1258	Nov 27 2020 11:47 GMT+08:00 PHT
 272	none	java.sql.Connection.createStatement	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 329	Nov 27 2020 11:47 GMT+08:00 PHT
 273	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ProductEntityMgr.i...	Class files within DM.zip	aiu/dmweb/dataServices/ProductEntityMgr.java 297	Nov 27 2020 11:47 GMT+08:00 PHT
 274	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ScheduleEntityMa...	Class files within DM.zip	aiu/dmweb/dataServices/ScheduleEntityManager.java 151	Nov 27 2020 11:47 GMT+08:00 PHT
 275	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 834	Nov 27 2020 11:47 GMT+08:00 PHT
 276	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.IssuingCompanyE...	Class files within DM.zip	aiu/...web/dataServices/IssuingCompanyEntityMgr.java 697	Nov 27 2020 11:47 GMT+08:00 PHT
 277	none	java.sql.Connection.createStatement	aiu.core.logging.LogFactory.writeToDB	Class files within DM.zip	aiu/core/logging/LogFactory.java 622	Nov 27 2020 11:47 GMT+08:00 PHT
 278	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReinsuranceEntity...	Class files within DM.zip	aiu/dmweb/dataServices/ReinsuranceEntityMgr.java 155	Nov 27 2020 11:47 GMT+08:00 PHT
 279	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2396	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.getCompany...			GMT+08:00 PHT
 280	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PaymentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityManager.java 2056	Nov 27 2020 11:47 GMT+08:00 PHT
 281	none	java.sql.Connection.createStatement	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 386	Nov 27 2020 11:47 GMT+08:00 PHT
 282	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingEntityManag...	Class files within DM.zip	aiu/dmweb/dataServices/BillingEntityManager.java 69	Nov 27 2020 11:47 GMT+08:00 PHT
 283	none	java.sql.Connection.createStatement	aiu.dmweb.billing.BillingReferenceData.ret...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 572	Nov 27 2020 11:47 GMT+08:00 PHT
 284	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.getCoverBran...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2452	Nov 27 2020 11:47 GMT+08:00 PHT
 285	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 290	Nov 27 2020 11:47 GMT+08:00 PHT
 286	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BankBranchEntity...	Class files within DM.zip	aiu/...web/dataServices/BankBranchEntityManager.java 259	Nov 27 2020 11:47 GMT+08:00 PHT
 287	none	java.sql.Statement.executeQuery	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 572	Nov 27 2020 11:47 GMT+08:00 PHT
 288	none	java.sql.Statement.executeQuery	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 427	Nov 27 2020 11:47 GMT+08:00 PHT
 289	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.Billin	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntity	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
			aiu.dmweb.dataServices.BillingExpressEntit...		aiu/...eb/dataServices/BillingExpressEntityManager.java 291	GMT+08:00 PHT
 290	none	java.sql.Statement.executeQuery	aiu.dmweb.referenceData.CountryReferen...	Class files within DM.zip	aiu/dmweb/referenceData/CountryReferenceData.java 158	Nov 27 2020 11:47 GMT+08:00 PHT
 291	none	java.sql.Connection.createStatement	aiu.core.util.DBUtilities.generateNumericID	Class files within DM.zip	aiu/core/util/DBUtilities.java 104	Nov 27 2020 11:47 GMT+08:00 PHT
 292	none	java.sql.Statement.executeQuery	aiu.dmweb.billing.BillingReferenceData.ret...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 262	Nov 27 2020 11:47 GMT+08:00 PHT
 293	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 1228	Nov 27 2020 11:47 GMT+08:00 PHT
 294	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 1646	Nov 27 2020 11:47 GMT+08:00 PHT
 295	none	java.sql.Statement.executeQuery	aiu.dmweb.utilities.QuickRef.getCoverMast...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2509	Nov 27 2020 11:47 GMT+08:00 PHT
 296	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.AssociatedDocum...	Class files within DM.zip	aiu/...aServices/AssociatedDocumentEntityManager.java 343	Nov 27 2020 11:47 GMT+08:00 PHT
 297	none	java.sql.Connection.createStatement	aiu.core.dbConnections.ConnectionPoolAu...	Class files within DM.zip	aiu/...e/dbConnections/ConnectionPoolAutoCommit.java 516	Nov 27 2020 11:47 GMT+08:00 PHT
 298	none	java.io.BufferedWriter.newLine	aiu.core.classbuilder.ClassBuilder.createBea...	Class files within DM.zip	aiu/core/classbuilder/ClassBuilder.java 658	Nov 27 2020 11:47 GMT+08:00 PHT
 299	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.TPAA	Class files within DM.zip	aiu/dmweb/dataServices/TPAAgencyEntit	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.TPAAgencyEntityM...		aiu/dmweb/dataServices/TPAAgencyEntityMgr.java 549	GMT+08:00 PHT
 300	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CountryEntityMana...	Class files within DM.zip	aiu/dmweb/dataServices/CountryEntityManager.java 101	Nov 27 2020 11:47 GMT+08:00 PHT
 301	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyIndexationE...	Class files within DM.zip	aiu/...web/dataServices/PolicyIndexationEntityMgr.java 306	Nov 27 2020 11:47 GMT+08:00 PHT
 302	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReceiptEntityMgr.i...	Class files within DM.zip	aiu/dmweb/dataServices/ReceiptEntityMgr.java 149	Nov 27 2020 11:47 GMT+08:00 PHT
 303	none	java.sql.Connection.createStatement	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 276	Nov 27 2020 11:47 GMT+08:00 PHT
 304	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingEntityManag...	Class files within DM.zip	aiu/dmweb/dataServices/BillingEntityManager.java 786	Nov 27 2020 11:47 GMT+08:00 PHT
 305	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntit...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 270	Nov 27 2020 11:47 GMT+08:00 PHT
 306	none	java.sql.Connection.createStatement	aiu.core.logging.LogFactory.writeToDB	Class files within DM.zip	aiu/core/logging/LogFactory.java 690	Nov 27 2020 11:47 GMT+08:00 PHT
 307	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.TPAAgencyEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/TPAAgencyEntityMgr.java 194	Nov 27 2020 11:47 GMT+08:00 PHT
 308	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 2204	Nov 27 2020 11:47 GMT+08:00 PHT
 309	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Billing	Class files within DM.zip	aiu/dmweb/dataServices/BillingEntityMan	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingEntityManag...		aiu/dmweb/dataServices/BillingEntityManager.java 96	GMT+08:00 PHT
 310	none	java.sql.Connection.createStatement	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 571	Nov 27 2020 11:47 GMT+08:00 PHT
 311	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3768	Nov 27 2020 11:47 GMT+08:00 PHT
 312	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3592	Nov 27 2020 11:47 GMT+08:00 PHT
 313	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ProspectEntityMg...	Class files within DM.zip	aiu/dmweb/dataServices/ProspectEntityMgr.java 275	Nov 27 2020 11:47 GMT+08:00 PHT
 314	none	java.sql.Statement.executeQuery	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 330	Nov 27 2020 11:47 GMT+08:00 PHT
 315	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyIndexationE...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyIndexationEntityMgr.java 229	Nov 27 2020 11:47 GMT+08:00 PHT
 316	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ScheduleEntityMa...	Class files within DM.zip	aiu/dmweb/dataServices/ScheduleEntityManager.java 785	Nov 27 2020 11:47 GMT+08:00 PHT
 317	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.NoteEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/NotesEntityMgr.java 302	Nov 27 2020 11:47 GMT+08:00 PHT
 318	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.DocumentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/DocumentEntityMgr.java 310	Nov 27 2020 11:47 GMT+08:00 PHT
 319	none	java.sql.Connection.createStatement	aiu.dmweb.document.Document	Class files within DM.zip	aiu/dmweb/document/DocumentRefere	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.document.DocumentReferen...		aiu/dmweb/document/DocumentReferenceData.java 265	GMT+08:00 PHT
 320	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.IssuingCompanyE...	Class files within DM.zip	aiu/...web/dataServices/IssuingCompanyEntityMgr.java 420	Nov 27 2020 11:47 GMT+08:00 PHT
 321	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.PolicyEntityMgr.ret...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 4524	Nov 27 2020 11:47 GMT+08:00 PHT
 322	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.getNextNum...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 739	Nov 27 2020 11:47 GMT+08:00 PHT
 323	none	java.sql.Statement.executeQuery	aiu.dmweb.countryspecific.SA.ZipLocalEnt...	Class files within DM.zip	aiu/...eb/countryspecific/SA/ZipLocalEntityManager.java 105	Nov 27 2020 11:47 GMT+08:00 PHT
 324	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyProcessingE...	Class files within DM.zip	aiu/.../dataServices/PolicyProcessingEntityManager.java 1153	Nov 27 2020 11:47 GMT+08:00 PHT
 325	none	java.sql.Connection.createStatement	aiu.core.dbConnections.ConnectionPool.tes...	Class files within DM.zip	aiu/core/dbConnections/ConnectionPool.java 556	Nov 27 2020 11:47 GMT+08:00 PHT
 326	none	java.sql.Statement.executeQuery	aiu.dmweb.policy.PolicySecurityService.retri...	Class files within DM.zip	aiu/dmweb/policy/PolicySecurityService.java 175	Nov 27 2020 11:47 GMT+08:00 PHT
 327	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.TapeEntityMgr.del...	Class files within DM.zip	aiu/dmweb/dataServices/TapeEntityMgr.java 215	Nov 27 2020 11:47 GMT+08:00 PHT
 328	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3515	Nov 27 2020 11:47 GMT+08:00 PHT
 329	none	java.sql.Statement.executeQuery	aiu.dmweb.utilities.QuickRef.	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2565	Nov 27 2020 11:47



Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
			aiu.dmweb.utilities.QuickRef.getReinstate...			GMT+08:00 PHT
 330	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 2288	Nov 27 2020 11:47 GMT+08:00 PHT
 331	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 606	Nov 27 2020 11:47 GMT+08:00 PHT
 332	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 253	Nov 27 2020 11:47 GMT+08:00 PHT
 333	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3599	Nov 27 2020 11:47 GMT+08:00 PHT
 334	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.PaymentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityManager.java 547	Nov 27 2020 11:47 GMT+08:00 PHT
 335	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 2072	Nov 27 2020 11:47 GMT+08:00 PHT
 336	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 290	Nov 27 2020 11:47 GMT+08:00 PHT
 337	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingOrgEntityMa...	Class files within DM.zip	aiu/dmweb/dataServices/BillingOrgEntityManager.java 107	Nov 27 2020 11:47 GMT+08:00 PHT
 338	none	java.sql.Connection.createStatement	aiu.core.dbConnections.TestBeanEntityMgr...	Class files within DM.zip	aiu/core/dbConnections/TestBeanEntityMgr.java 236	Nov 27 2020 11:47 GMT+08:00 PHT
 339	none	java.io.BufferedWriter.write	aiu.dmweb.document.Document	Class files within DM.zip	aiu/dmweb/document/DocumentRefere	Nov 27 2020 11:47









Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.io.BufferedWriter.writeOperator_javawinit	aiu.dmweb.document.DocumentReferen...		aiu/dmweb/document/DocumentReferenceData.java 403	GMT+08:00 PHT
 340	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingRunSummary...	Class files within DM.zip	aiu/...taServices/BillingRunSummaryEntityManager.java 382	Nov 27 2020 11:47 GMT+08:00 PHT
 341	none	java.sql.Connection.createStatement	aiu.core.entityManagement.GenericEntity...	Class files within DM.zip	aiu/core/entityManagement/GenericEntityMgr.java 167	Nov 27 2020 11:47 GMT+08:00 PHT
 342	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.TPAAgencyEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/TPAAgencyEntityMgr.java 174	Nov 27 2020 11:47 GMT+08:00 PHT
 343	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 2459	Nov 27 2020 11:47 GMT+08:00 PHT
 344	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3570	Nov 27 2020 11:47 GMT+08:00 PHT
 345	none	java.sql.Statement.executeQuery	aiu.dmweb.document.DocumentReferen...	Class files within DM.zip	aiu/dmweb/document/DocumentReferenceData.java 200	Nov 27 2020 11:47 GMT+08:00 PHT
 346	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 770	Nov 27 2020 11:47 GMT+08:00 PHT
 347	none	java.sql.Connection.createStatement	aiu.dmweb.billing.BillingReferenceData.ret...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 214	Nov 27 2020 11:47 GMT+08:00 PHT
 348	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PaymentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityManager.java 314	Nov 27 2020 11:47 GMT+08:00 PHT
 349	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 770	Nov 27 2020 11:47 GMT+08:00 PHT


Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...		aiu/dmweb/dataServices/CampaignEntityMgr.java 1259	GMT+08:00 PHT
 350	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.AssociatedDocum...	Class files within DM.zip	aiu/...aServices/AssociatedDocumentEntityManager.java 401	Nov 27 2020 11:47 GMT+08:00 PHT
 351	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3606	Nov 27 2020 11:47 GMT+08:00 PHT
 352	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CountrySecurityEnt...	Class files within DM.zip	aiu/dmweb/dataServices/CountrySecurityEntityMgr.java 211	Nov 27 2020 11:47 GMT+08:00 PHT
 353	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ProductEntityMgr...	Class files within DM.zip	aiu/dmweb/dataServices/ProductEntityMgr.java 504	Nov 27 2020 11:47 GMT+08:00 PHT
 354	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BankCompanyEnti...	Class files within DM.zip	aiu/...eb/dataServices/BankCompanyEntityManager.java 294	Nov 27 2020 11:47 GMT+08:00 PHT
 355	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ScheduleEntityMa...	Class files within DM.zip	aiu/dmweb/dataServices/ScheduleEntityManager.java 314	Nov 27 2020 11:47 GMT+08:00 PHT
 356	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 327	Nov 27 2020 11:47 GMT+08:00 PHT
 357	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 988	Nov 27 2020 11:47 GMT+08:00 PHT
 358	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntit...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 400	Nov 27 2020 11:47 GMT+08:00 PHT
 359	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Pay	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntity	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.PaymentEntityM...		aiu/dmweb/dataServices/PaymentEntityManager.java 664	GMT+08:00 PHT
 360	none	java.sql.Statement.executeQuery	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 644	Nov 27 2020 11:47 GMT+08:00 PHT
 361	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3580	Nov 27 2020 11:47 GMT+08:00 PHT
 362	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 1345	Nov 27 2020 11:47 GMT+08:00 PHT
 363	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyProcessingE...	Class files within DM.zip	aiu/.../dataServices/PolicyProcessingEntityManager.java 772	Nov 27 2020 11:47 GMT+08:00 PHT
 364	none	java.sql.Connection.createStatement	aiu.core.dbConnections.TestBeanEntityMgr...	Class files within DM.zip	aiu/core/dbConnections/TestBeanEntityMgr.java 341	Nov 27 2020 11:47 GMT+08:00 PHT
 365	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.getProcessSt...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 970	Nov 27 2020 11:47 GMT+08:00 PHT
 366	none	java.sql.Connection.createStatement	aiu.dmweb.utilities.QuickRef.checkLockedT...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 41	Nov 27 2020 11:47 GMT+08:00 PHT
 367	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BankBranchEntity...	Class files within DM.zip	aiu/...web/dataServices/BankBranchEntityManager.java 102	Nov 27 2020 11:47 GMT+08:00 PHT
 368	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReferenceDataBea...	Class files within DM.zip	aiu/...eb/dataServices/ReferenceDataBeanEntityMgr.java 179	Nov 27 2020 11:47 GMT+08:00 PHT
 369	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Billing...	Class files within DM.zip	aiu/dmweb/dataServices/BillingEntityMan	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingEntityManag...		aiu/dmweb/dataServices/BillingEntityManager.java 328	GMT+08:00 PHT
 370	none	java.sql.Statement.executeQuery	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 387	Nov 27 2020 11:47 GMT+08:00 PHT
 371	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 645	Nov 27 2020 11:47 GMT+08:00 PHT
 372	none	java.sql.Statement.executeQuery	aiu.core.dbConnections.AvailableConnectio...	Class files within DM.zip	aiu/core/dbConnections/AvailableConnections.java 191	Nov 27 2020 11:47 GMT+08:00 PHT
 373	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReceiptEntityMgr.u...	Class files within DM.zip	aiu/dmweb/dataServices/ReceiptEntityMgr.java 215	Nov 27 2020 11:47 GMT+08:00 PHT
 374	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.AssociatedDocum...	Class files within DM.zip	aiu/...aServices/AssociatedDocumentEntityManager.java 486	Nov 27 2020 11:47 GMT+08:00 PHT
 375	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyExpiryEntity...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyExpiryEntityManager.java 54	Nov 27 2020 11:47 GMT+08:00 PHT
 376	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntit...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 1214	Nov 27 2020 11:47 GMT+08:00 PHT
 377	none	java.sql.Statement.executeQuery	aiu.dmweb.utilities.QuickRef.getCompany...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2397	Nov 27 2020 11:47 GMT+08:00 PHT
 378	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyHolderMiscE...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyHolderMiscEntityMgr.java 461	Nov 27 2020 11:47 GMT+08:00 PHT
 379	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Cam	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntity	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...		aiu/dmweb/dataServices/CampaignEntityMgr.java 1468	GMT+08:00 PHT
 380	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReferenceDataBean...	Class files within DM.zip	aiu/...eb/dataServices/ReferenceDataBeanEntityMgr.java 558	Nov 27 2020 11:47 GMT+08:00 PHT
 381	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntity...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 182	Nov 27 2020 11:47 GMT+08:00 PHT
 382	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 373	Nov 27 2020 11:47 GMT+08:00 PHT
 383	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CountryEntityMana...	Class files within DM.zip	aiu/dmweb/dataServices/CountryEntityManager.java 240	Nov 27 2020 11:47 GMT+08:00 PHT
 384	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyHolderEntity...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyHolderEntityMgr.java 1101	Nov 27 2020 11:47 GMT+08:00 PHT
 385	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...eb/dataServices/BillingExpressEntityManager.java 273	Nov 27 2020 11:47 GMT+08:00 PHT
 386	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BankCompanyEnti...	Class files within DM.zip	aiu/...eb/dataServices/BankCompanyEntityManager.java 76	Nov 27 2020 11:47 GMT+08:00 PHT
 387	none	java.sql.Statement.executeQuery	aiu.dmweb.billing.BillingReferenceData.ret...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 215	Nov 27 2020 11:47 GMT+08:00 PHT
 388	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 987	Nov 27 2020 11:47 GMT+08:00 PHT
 389	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Billing...	Class files within DM.zip	aiu/...eb/dataServices/BillingPatternEntity...	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingPatternEntit...		aiu/...eb/dataServices/BillingPatternEntityManager.java 449	GMT+08:00 PHT
 390	none	java.sql.Statement.executeQuery	aiu.dmweb.utilities.QuickRef.getStandardT...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 1190	Nov 27 2020 11:47 GMT+08:00 PHT
 391	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingExpressEntit...	Class files within DM.zip	aiu/...web/dataServices/BillingExpressEntityManager.java 114	Nov 27 2020 11:47 GMT+08:00 PHT
 393	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 788	Nov 27 2020 11:47 GMT+08:00 PHT
 394	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PaymentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityManager.java 304	Nov 27 2020 11:47 GMT+08:00 PHT
 395	none	java.sql.Connection.createStatement	aiu.core.dbConnections.TestBeanEntityMgr...	Class files within DM.zip	aiu/core/dbConnections/TestBeanEntityMgr.java 194	Nov 27 2020 11:47 GMT+08:00 PHT
 396	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyIndexationE...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyIndexationEntityMgr.java 175	Nov 27 2020 11:47 GMT+08:00 PHT
 397	none	java.io.BufferedWriter.newLine	aiu.core.logging.ApplicationLog.ctor	Class files within DM.zip	aiu/core/logging/ApplicationLog.java 88	Nov 27 2020 11:47 GMT+08:00 PHT
 398	none	java.lang.ClassLoader.getResourceAsStream	aiu.core.xml.beans.Header.getCfgBC	Class files within DM.zip	aiu/core/xml/beans/Header.java 155	Nov 27 2020 11:47 GMT+08:00 PHT
 400	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ins...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 1299	Nov 27 2020 11:47 GMT+08:00 PHT
 401	none	java.sql.Connection.createStatement	aiu.dmweb.billing.BillingRef...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.j	Nov 27 2020 11:47






Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.billing.BillingReferenceData.retrieve...		aiu/dmweb/billing/BillingReferenceData.java 401	GMT+08:00 PHT
 402	none	java.sql.Statement.executeQuery	aiu.dmweb.utilities.QuickRef.getCoverBran...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2453	Nov 27 2020 11:47 GMT+08:00 PHT
 403	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PaymentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityManager.java 428	Nov 27 2020 11:47 GMT+08:00 PHT
 404	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyProcessingE...	Class files within DM.zip	aiu/.../dataServices/PolicyProcessingEntityManager.java 643	Nov 27 2020 11:47 GMT+08:00 PHT
 405	none	java.sql.Connection.createStatement	aiu.dmweb.billing.BillingReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 427	Nov 27 2020 11:47 GMT+08:00 PHT
 406	none	java.io.BufferedWriter.newLine	aiu.core.classbuilder.GenericClassBuilder.c...	Class files within DM.zip	aiu/core/classbuilder/ClassBuilder.java 343	Nov 27 2020 11:47 GMT+08:00 PHT
 407	none	java.io.BufferedWriter.newLine	aiu.core.classbuilder.ClassBuilder.createMet...	Class files within DM.zip	aiu/core/classbuilder/ClassBuilder.java 887	Nov 27 2020 11:47 GMT+08:00 PHT
 408	none	java.sql.Connection.createStatement	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 643	Nov 27 2020 11:47 GMT+08:00 PHT
 409	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 1182	Nov 27 2020 11:47 GMT+08:00 PHT
 410	none	java.sql.Connection.createStatement	aiu.dmweb.plan.PlanReferenceData.retrieve...	Class files within DM.zip	aiu/dmweb/plan/PlanReferenceData.java 232	Nov 27 2020 11:47 GMT+08:00 PHT
 412	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.j	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.j	Nov 27 2020 11:47



Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...		aiu/dmweb/dataServices/PolicyEntityMgr.java 3635	GMT+08:00 PHT
 413	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ExclusionsEntityMgr...	Class files within DM.zip	aiu/dmweb/dataServices/ExclusionsEntityMgr.java 207	Nov 27 2020 11:47 GMT+08:00 PHT
 414	none	java.sql.Connection.createStatement	aiu.core.entityManagement.GenericEntity...	Class files within DM.zip	aiu/core/entityManagement/GenericEntityMgr.java 211	Nov 27 2020 11:47 GMT+08:00 PHT
 415	none	java.io.BufferedWriter!operator _javanewinit	aiu.core.logging.ApplicationLog.fileSwitch	Class files within DM.zip	aiu/core/logging/ApplicationLog.java 228	Nov 27 2020 11:47 GMT+08:00 PHT
 416	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.BillingOrgEntityMa...	Class files within DM.zip	aiu/dmweb/dataServices/BillingOrgEntityManager.java 296	Nov 27 2020 11:47 GMT+08:00 PHT
 417	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignEntityMgr.java 1035	Nov 27 2020 11:47 GMT+08:00 PHT
 418	none	java.sql.Statement.executeQuery	aiu.core.dbConnections.ConnectionPool.tes...	Class files within DM.zip	aiu/core/dbConnections/ConnectionPool.java 557	Nov 27 2020 11:47 GMT+08:00 PHT
 419	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.ret...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 4523	Nov 27 2020 11:47 GMT+08:00 PHT
 420	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntit...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 655	Nov 27 2020 11:47 GMT+08:00 PHT
 421	none	java.io.BufferedWriter!operator _javanewinit	aiu.dmweb.utilities.DMUtilities.writeFile	Class files within DM.zip	aiu/dmweb/utilities/DMUtilities.java 1312	Nov 27 2020 11:47 GMT+08:00 PHT
 422	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Reins	Class files within DM.zip	aiu/dmweb/dataServices/ReinsuranceEnti	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReinsuranceEntity...		aiu/dmweb/dataServices/ReinsuranceEntityMgr.java 348	GMT+08:00 PHT
 423	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CountryEntityMana...	Class files within DM.zip	aiu/dmweb/dataServices/CountryEntityManager.java 1024	Nov 27 2020 11:47 GMT+08:00 PHT
 424	none	java.sql.Connection.createStatement	aiu.dmweb.billing.BillingReferenceData.ret...	Class files within DM.zip	aiu/dmweb/billing/BillingReferenceData.java 328	Nov 27 2020 11:47 GMT+08:00 PHT
 425	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.DocumentEntityM...	Class files within DM.zip	aiu/dmweb/dataServices/DocumentEntityMgr.java 595	Nov 27 2020 11:47 GMT+08:00 PHT
 426	none	java.io.BufferedWriter.writeOperator_javaneunit	aiu.core.classbuilder.GenericClassBuilder.c...	Class files within DM.zip	aiu/core/classbuilder/ClassBuilder.java 685	Nov 27 2020 11:47 GMT+08:00 PHT
 427	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ProductEntityMgr....	Class files within DM.zip	aiu/dmweb/dataServices/ProductEntityMgr.java 535	Nov 27 2020 11:47 GMT+08:00 PHT
 428	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyProcessingE...	Class files within DM.zip	aiu/.../dataServices/PolicyProcessingEntityManager.java 1121	Nov 27 2020 11:47 GMT+08:00 PHT
 429	none	java.sql.Statement.executeQuery	aiu.dmweb.utilities.QuickRef.getProcessSt...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 971	Nov 27 2020 11:47 GMT+08:00 PHT
 430	none	java.sql.Connection.createStatement	aiu.core.entityManagement.GenericEntity...	Class files within DM.zip	aiu/core/entityManagement/GenericEntityMgr.java 357	Nov 27 2020 11:47 GMT+08:00 PHT
 431	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.IssuingBranchEnti...	Class files within DM.zip	aiu/...eb/dataServices/IssuingBranchEntityManager.java 206	Nov 27 2020 11:47 GMT+08:00 PHT
 432	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.Polic	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.j	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.co...		aiu/dmweb/dataServices/PolicyEntityMgr.java 394	GMT+08:00 PHT
 433	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReferenceDataEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/ReferenceDataEntityMgr.java 233	Nov 27 2020 11:47 GMT+08:00 PHT
 434	none	java.sql.Statement.executeQuery	aiu.dmweb.referenceData.CurrencyReferenceData.java	Class files within DM.zip	aiu/dmweb/referenceData/CurrencyReferenceData.java 112	Nov 27 2020 11:47 GMT+08:00 PHT
 435	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 1122	Nov 27 2020 11:47 GMT+08:00 PHT
 436	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.DocumentQueueEntityMgr.co...	Class files within DM.zip	aiu/.../dataServices/DocumentQueueEntityMgr.java 651	Nov 27 2020 11:47 GMT+08:00 PHT
 437	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3452	Nov 27 2020 11:47 GMT+08:00 PHT
 438	none	java.sql.Statement.executeQuery	aiu.dmweb.dataServices.PaymentEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/PaymentEntityMgr.java 448	Nov 27 2020 11:47 GMT+08:00 PHT
 439	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ProductEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/ProductEntityMgr.java 251	Nov 27 2020 11:47 GMT+08:00 PHT
 440	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.CampaignRefEntityMgr.co...	Class files within DM.zip	aiu/dmweb/dataServices/CampaignRefEntityMgr.java 328	Nov 27 2020 11:47 GMT+08:00 PHT
 441	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyEntityMgr.up...	Class files within DM.zip	aiu/dmweb/dataServices/PolicyEntityMgr.java 3523	Nov 27 2020 11:47 GMT+08:00 PHT
 442	none	java.sql.Connection.createStatement	aiu.dmweb.document.DocumentRefere...	Class files within DM.zip	aiu/dmweb/document/DocumentRefere...	Nov 27 2020 11:47

Finding ID	Resolution Status	Attack Vector	Procedure	Module	Location	Fix By
		java.sql.Connection.createStatement	aiu.dmweb.document.DocumentReferen...		aiu/dmweb/document/DocumentReferenceData.java 199	GMT+08:00 PHT
 443	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PlanEntityManage...	Class files within DM.zip	aiu/dmweb/dataServices/PlanEntityManager.java 2441	Nov 27 2020 11:47 GMT+08:00 PHT
 444	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.ReferenceDataBea...	Class files within DM.zip	aiu/...eb/dataServices/ReferenceDataBeanEntityMgr.java 216	Nov 27 2020 11:47 GMT+08:00 PHT
 445	none	java.sql.Statement.executeQuery	aiu.dmweb.utilities.QuickRef.getBranchCd...	Class files within DM.zip	aiu/dmweb/utilities/QuickRef.java 2344	Nov 27 2020 11:47 GMT+08:00 PHT
 446	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.IssuingBranchEnti...	Class files within DM.zip	aiu/...eb/dataServices/IssuingBranchEntityManager.java 462	Nov 27 2020 11:47 GMT+08:00 PHT
 447	none	java.sql.Connection.createStatement	aiu.dmweb.dataServices.PolicyProcessingE...	Class files within DM.zip	aiu/.../dataServices/PolicyProcessingEntityManager.java 1550	Nov 27 2020 11:47 GMT+08:00 PHT

# FINDINGS AND RECOMMENDATIONS\*



## Detailed SCA Vulnerabilities by Component

\* The information in this section is filtered to include findings that impact policy and may not be representative of all findings.

### LOG4J-1.2.17.JAR

DM\_1606466113319\_zip/DM/WebContent.war#zip:WEB-INF/lib/log4j-1.2.17.jar


1 Vulnerability  
1 License

Fix for Policy	Description	Severity
	<b>CVE-2019-17571   Unknown</b> log4j-core is vulnerable to arbitrary code execution. Deserialization of untrusted data in `TcpSocketServer` and `UdpSocketServer` when listening for log data allows an attacker to execute arbitrary code via a malicious deserialization gadget.	High
License Risk	Identifier	License Name
 Low	Apache-2.0	Apache License 2.0

### COMMONS-CODEC-1.4.JAR

DM\_1606466113319\_zip/DM/WebContent.war#zip:WEB-INF/lib/commons-codec-1.4.jar


0 Vulnerabilities  
1 License

License Risk	Identifier	License Name
 Low	Apache-2.0	Apache License 2.0

### COMMONS-HTTPCLIENT-3.0.1.JAR

DM\_1606466113319\_zip/DM/WebContent.war#zip:WEB-INF/lib/ant-contrib-1.0b3-bin/lib/commons-httpclient-3.0.1.jar


0 Vulnerabilities  
1 License

License Risk	Identifier	License Name
 Low	Apache-2.0	Apache License 2.0

### COMMONS-LOGGING-1.0.4.JAR

DM\_1606466113319\_zip/DM/WebContent.war#zip:WEB-INF/lib/ant-contrib-1.0b3-bin/lib/commons-logging-1.0.4.jar

0 Vulnerabilities  
1 License

License Risk	Identifier	License Name
 Low	Apache-2.0	Apache License 2.0

# APPROVED MITIGATIONS

---

There is no data available for this section.

# PROPOSED MITIGATIONS

---

There is no data available for this section.

# REJECTED MITIGATIONS

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There is no data available for this section.



# VERACODE'S METHODOLOGY

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## ABOUT VERACODE'S METHODOLOGY

The Veracode Application Security Platform uses static analysis, software composition analysis, and dynamic analysis (for web applications) to identify software security findings in your applications. Using static and dynamic analysis as well as software composition analysis helps reduce false negatives and detect a broader range of security findings. Veracode Static Analysis models the application into an intermediate representation, which is then analyzed for security flaws using a set of automated security tests. Veracode Dynamic Analysis uses an automated penetration testing technique to detect security flaws at runtime. Veracode Software Composition Analysis (SCA) helps you build an inventory of your open-source components to identify vulnerabilities. Veracode leverages a continuous improvement process and rapid updates to its SaaS-based scanning technology to ensure the lowest false-positive rates in the industry. The end result is an accurate list of security findings for the classes of automated scans applied to the application.

## APPLICATION SECURITY POLICIES

The Veracode Platform allows an organization to define and enforce a uniform application security policy across all applications in its portfolio. The elements of an application security policy include the:

- Target Veracode Level (LV) for the application
- Types of flaws that should not be in the application (which may be defined by flaw severity, flaw category, CWE, or a common standard including OWASP, CWE/SANS Top 25, or PCI)
- Minimum Veracode security score
- Required scan types and frequencies
- Any customized rules around specifically blacklisted components or CVE severities
- Grace period within which any policy-relevant flaws should be fixed

### Policy Constraints

Policies have three main constraints that can be applied: rules, required scans, and remediation grace periods.

### Evaluating Applications Against a Policy

When an application is evaluated against a policy, it can receive one of four assessments:

Not assessed	The application has not yet had a scan published.
Passed	The application has passed all the aspects of the policy, including rules, required scans, and grace period.
Did not pass	The application has not completed all required scans, has not achieved the target Veracode Level, or has one or more policy relevant flaws that have exceeded the grace period to fix.
Conditional pass	The application has one or more policy relevant flaws that have not yet exceeded the grace period to fix.

## UNDERSTAND VERACODE LEVELS

The Veracode Level (VL) achieved by an application is determined by type of testing performed on the application, and the severity and types of static, dynamic, and manual flaws detected. A minimum security score (defined below) is also required for each level.

There are five Veracode Levels, denoted as VL1, VL2, VL3, VL4, and VL5. VL1 is the lowest level and is achieved by demonstrating that security testing, automated static or dynamic, is utilized during the SDLC. VL5 is the highest level and is achieved by performing automated and manual testing and removing all significant flaws. The Veracode Levels VL2, VL3, and VL4 provide a continuum of increasing software assurance between VL1 and VL5.

For IT staff operating applications, Veracode Levels can be used to set application security policies. For deployment scenarios of different business criticality, differing VLs should be made requirements. For example, the policy for applications that manage credit card transactions and, therefore, have PCI compliance requirements, should be VL5. A medium business criticality internal application could have a policy requiring VL3.

Software developers can decide which VL they want to achieve, based on the requirements of their customers. Developers of software that is mission critical to most of their customers will want to achieve VL5. Developers of general purpose business software may want to achieve VL3 or VL4. Once the software has achieved a Veracode Level, it can be communicated to customers through a Veracode report or through the Veracode Directory on the Veracode web site.

### Criteria for Achieving Veracode Levels

The following table defines the details for achieving each Veracode Level. The criteria for all columns: Flaw Severities Not Allowed, Flaw Categories not Allowed, Testing Required, and Minimum Score.

\*Dynamic is only an option for web applications.

Veracode Level	Flaw Severities Not Allowed	Testing Required*	Minimum Score
VL5	V.High, High, Medium	Static AND Manual	90
VL4	V.High, High, Medium	Static	80
VL3	V.High, High	Static	70
VL2	V.High	Static OR Dynamic OR Manual	60
VL1		Static OR Dynamic OR Manual	

When multiple testing techniques are used, it is likely that not all testing will be performed on the exact same build. If that is the case, the latest test results from a specific technique will be used to calculate the current Veracode Level. After six months, test results are deemed out of date and will no longer be used to calculate the current Veracode Level.

### BUSINESS CRITICALITY

The foundation of the Veracode rating system is the concept that more critical applications require higher security quality scores to be acceptable risks. Less business-critical applications can tolerate lower security quality. The business criticality is dictated by the typical deployed environment and the value of data used by the application. Factors that determine business criticality are: reputation damage, financial loss, operational risk, sensitive information disclosure, personal safety, and legal

violations.

US. Govt. OMB Memorandum M-04-04; NIST FIPS Pub. 199

Business Criticality	Description
Very High	Mission critical for business/safety of life and limb on the line
High	Exploitation causes serious brand damage and financial loss with long term business impact
Medium	Applications connected to the internet that process financial or private customer information
Low	Typically internal applications with non-critical business impact
Very Low	Applications with no material business impact

### Business Criticality Definitions

**Very High (BC5)** This criticality is typically an application where the safety of life or limb is dependent on the system. It is mission critical that the application maintain 100% availability for the long-term viability of the project or business. Examples are control software for industrial, transportation or medical equipment or critical business systems such as financial trading systems.

**High (BC4)** This criticality is typically an important multi-user business application reachable from the internet and it is critical that the application maintain high availability to accomplish its mission. Exploitation of high criticality applications cause serious brand damage, and business/ financial loss, and could lead to long-term business impact.

**Medium (BC3)** This criticality is typically a multi-user application connected to the internet or any system that processes financial or private customer information. Exploitation of medium-criticality applications typically result in material business impact resulting in some financial loss, brand damage or business liability. An example is a financial services company's internal 401K management system.

**Low (BC2)** This criticality is typically an internal-only application that requires low levels of application security such as authentication to protect access to non-critical business information and prevent IT disruptions. Exploitation of low criticality applications may lead to minor levels of inconvenience, distress, or IT disruption. An example internal system is a conference room reservation or business card order system.

**Very Low (BC1)** Applications that have no material business impact if its confidentiality, data integrity and availability are affected. Code security analysis is not required for applications at this business criticality, and security spending should be directed to other higher criticality applications.

## SCORING METHODOLOGY

The Veracode scoring system, Security Quality Score, is built on the foundation of two industry standards: the Common Weakness Enumeration (CWE) and Common Vulnerability Scoring System (CVSS v3.0). CWE provides the dictionary of security flaws and CVSS v3.0 provides the foundation for computing severity, based on the potential Confidentiality, Integrity, and Availability impact of a flaw, if exploited.

The Security Quality Score is a single score from 0 to 100, where 0 is the most insecure application and 100 is an application with no detectable security flaws. The score calculation includes non-linear factors

so that, for instance, a single Severity 5 flaw is weighted more heavily than five Severity 1 flaws. Thus, each additional flaw at a given severity contributes progressively less to the score.

Veracode assigns a severity level to each flaw type based on three foundational application security requirements: Confidentiality, Integrity, and Availability. Each of the severity levels reflects the potential business impact if a security breach occurs across one or more of these security dimensions.

### **Confidentiality Impact**

According to CVSS v3.0, this metric measures the impact on confidentiality if an exploit should occur using the vulnerability on the target system. At the weakness level, the scope of the Confidentiality in this model is within an application and is measured at three levels of impact: None, Partial, and Complete.

### **Integrity Impact**

This metric measures the potential impact on integrity of the application being analyzed. Integrity refers to the trustworthiness and guaranteed veracity of information within the application. Integrity measures are designed to protect data from unauthorized modification. When the integrity of a system is sound, it is fully protected from unauthorized modification of its contents.

### **Availability Impact**

This metric measures the potential impact on availability if a successful exploit of the vulnerability is performed on a target application. Availability refers to the accessibility of information resources. Almost exclusive to this domain are denial-of-service vulnerabilities. Attacks that compromise authentication and authorization for application access, application memory, and administrative privileges are examples of impact on the availability of an application.

## **SECURITY QUALITY SCORE CALCULATION**

The overall Security Quality Score is computed by aggregating impact levels of weaknesses from static, dynamic, and manual test results within an application and representing the score on a 100-point scale. This score does not predict vulnerability potential as much as it enumerates the security from those weaknesses and their impact levels within the application code.

The Raw Score formula puts weights on each static, dynamic, or manual flaw based on its impact level. These weights are exponential and determined by empirical analysis by Veracode's application security experts, with validation from industry experts. The score is normalized to a scale of 0 to 100, where a score of 100 is an application with 0 detected flaws using the analysis technique selected for the application's business criticality.

## **UNDERSTAND SEVERITY, EXPLOITABILITY, AND REMEDIATION EFFORT**

Severity and exploitability are two different measures of the seriousness of a flaw. Severity is defined in terms of the potential impact to confidentiality, integrity, and availability of the application as defined in the CVSS v3.0, and exploitability is defined in terms of the likelihood or ease with which a flaw can be exploited. A high-severity flaw with a high likelihood of being exploited by an attacker is potentially more dangerous than a high severity flaw with a low likelihood of being exploited.

Remediation effort, also called Complexity of Fix, is a measure of the likely effort required to fix a flaw. Together with severity, the remediation effort is used to give Fix First guidance to the developer.

## VERACODE SEVERITIES

Veracode severities are defined in the following table.

Severity	Description
Very High	The offending line or lines of code pose a very serious weakness and are easy targets for an attacker. The code should be modified immediately to avoid potential attacks.
High	The offending line or lines of code have significant weakness, and the code should be modified immediately to avoid potential attacks.
Medium	A weakness of average severity. These should be fixed in high assurance software. A fix for this weakness should be considered after fixing the very high and high severities for medium assurance software.
Low	This is a low-priority weakness that will have a small impact on the security of the software. Fixing should be considered for high-assurance software. Medium and low-assurance software can ignore these flaws.
Very Low	Minor problems that some high-assurance software may want to be aware of. These flaws can be safely ignored in medium and low-assurance software.
Informational	Issues that have no impact on the security quality of the application but which may be of interest to the reviewer.

### Informational Findings

Informational severity findings are items observed in the analysis of the application that have no impact on the security quality of the application but may be interesting to the reviewer for other reasons. These findings may include code quality issues, API usage, and other factors.

Informational severity findings have no impact on the security quality score of the application and are not included in the summary tables of flaws for the application.

## EXPLOITABILITY

Each flaw instance in a static scan may receive an exploitability rating. The rating is an indication of the intrinsic likelihood that the flaw may be exploited by an attacker. Veracode recommends that the exploitability rating be used to prioritize flaw remediation within a particular group of flaws with the same severity and difficulty of fix classification.

The possible exploitability ratings include:

Exploitability	Description
V. Unlikely	Very unlikely to be exploited
Unlikely	Unlikely to be exploited
Neutral	Neither likely nor unlikely to be exploited.
Likely	Likely to be exploited
V. Likely	Very likely to be exploited

Note: All reported flaws found via Veracode Dynamic Analysis are assumed to be exploitable because the dynamic scan actually executes the attack in question and verifies that it is valid.

## EFFORT/COMPLEXITY OF FIX

Each flaw instance receives an effort/complexity of fix rating based on the classification of the flaw. The effort/complexity of fix rating is given on a scale of 1 to 5, as follows:

Effort/Complexity of Fix	Description
5	Complex design error. Requires significant redesign.
4	Simple design error. Requires redesign and up to 5 days to fix.
3	Complex implementation error. Fix is approx. 51-500 lines of code. Up to 5 days to fix.
2	Implementation error. Fix is approx. 6-50 lines of code. 1 day to fix.
1	Trivial implementation error. Fix is up to 5 lines of code. One hour or less to fix.

Note: All reported flaws found via Veracode Dynamic Analysis are assumed to be exploitable because the dynamic scan actually executes the attack in question and verifies that it is valid.

## COMMON WEAKNESS ENUMERATION (CWE)

The Common Weakness Enumeration (CWE) is an industry-standard classification of types of software weaknesses or flaws, that can lead to security problems. CWE is widely used to provide a standard taxonomy of software errors. Every flaw in a Veracode report is classified according to a standard CWE identifier.

More guidance and background about the CWE is available at <http://cwe.mitre.org/data/index.html>.

## COMMON VULNERABILITIES AND EXPOSURES (CVE)

Common Vulnerabilities and Exposures (CVE) is a catalog of known security threats. CVE identifiers are unique identifiers for publicly known security vulnerabilities. CVEs are found in third-party components by Veracode Software Composition Analysis.

More guidance and background about CVE is available at <https://cve.mitre.org/about/>.

## ABOUT MANUAL ASSESSMENTS

All Veracode Manual Penetration Testing is performed according to industry-standard testing methodologies, where applicable. The following table describes what testing methodology is used by test type and vulnerability types for manual penetration tests.

Test Type	Methodology	Vulnerabilities
Web Application/API	OWASP Testing Guide	OWASP Top 10/SANS Top 25
Mobile Application	OWASP Mobile Security Testing Guide	OWASP Mobile Top 10
Desktop or Thick-Client Application	OWASP recommended testing guidance and best practices	Application Logic
		Code Injection
		Local Storage
		Binary Exploitation and Reverse Engineering
		Excessive Privileges
		Unencrypted Storage of Sensitive Information
		Unencrypted Transmission of Sensitive Information
		Weak Encryption Implementations

Test Type	Methodology	Vulnerabilities
		Weak Assembly Controls
		Weak GUI Controls
		Weak or Default Passwords
Internet of Things (IoT) and Embedded Systems	OWASP IoT Testing Guide and other industry best practices	OWASP IoT Top 10
Infrastructure and Operations (DevOps Penetration Testing)	PTES (Penetration Testing Execution Standard), NIST SP 800-115, PCI DSS 11.3 (for PCI engagements)	Can vary depending on scope and rules of engagement

For more information on Veracode Manual Penetration Testing, refer to the [Veracode Help Center](#).

## Time-Boxed Testing

Veracode's Time-Boxed Manual Penetration Testing service tests as much of the application as possible within the number of days purchased. Veracode's Penetration Tester's follows testing methodologies noted in the table above. Vulnerabilities from Veracode Static and/or Veracode Dynamic Analysis scans that have been previously reported in the Veracode Platform are leveraged during Manual Penetration Testing, if available to the Penetration Tester.

In cases where time is overly constrained Veracode focuses on providing the most value for the time allotted. For smaller applications, less time may be needed to cover a majority of vulnerabilities, while other larger applications may require additional time. For this reason, Veracode Penetration Testers may choose to tailor the methodology to focus on higher priority, business relevant flaws. For example, if a three-day penetration test is purchased for a 500+ page application with complex business logic, the tester may choose to focus more on finding representative examples of higher risk flaws such as injection, authentication, and authorization flaws. In contrast, if this were a 10-day engagement, the tester would be able to cover the entire methodology in more adequate depth.

## Traditional Scoped Manual Penetration Testing

For customers who have purchased MPT, which is scoped through a scoping questionnaire and scoping call, Veracode performs testing according to the scoped number of days using information provided from the customer from the scoping questionnaire and scoping call.

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