

Module Six Assignment:
Modifying Vulnerability Reporting

Elizabeth Marticello

Southern New Hampshire University

CS 305-11883-M01 Software Security 2025 C-4

Professor Albanie Bolton

Due Date: August 10th, 2025

Static Testing

Dependency Check Before Configuration

8/17/25, 8:12 PM

Dependency-Check Report



DEPENDENCY-CHECK

Dependency-Check is an open source tool performing a best effort analysis of 3rd party dependencies; false positives and false negatives may exist in the analysis performed by the tool. Use of the tool and the reporting provided constitutes acceptance for use in an AS IS condition, and there are NO warranties, implied or otherwise, with regard to the analysis or its use. Any use of the tool and the reporting provided is at the user's risk. In no event shall the copyright holder or OWASP be held liable for any damages whatsoever arising out of or in connection with the use of this tool, the analysis performed, or the resulting report.

[How to read the report](#) | [Suppressing false positives](#) | [Getting Help: github issues](#)

⌚ Sponsor

Project: rest-service

com.snhu:rest-service:0.0.1-SNAPSHOT

Scan Information ([show all](#)):

- dependency-check version: 12.1.0
- Report Generated On: Sun, 17 Aug 2025 18:07:27 -0400
- Dependencies Scanned: 48 (26 unique)
- Vulnerable Dependencies: 2
- Vulnerabilities Found: 6
- Vulnerabilities Suppressed: 0
- ...

Summary

Display: [Showing Vulnerable Dependencies \(click to show all\)](#)

Dependency	Vulnerability IDs	Package	Highest Severity	CVE Count	Confidence
bcprov-jdk15on-1.70.jar	cpe:2.3:a:bouncycastle:bouncy-castle-crypto-package:1.70:***** cpe:2.3:a:bouncycastle:bouncy_castle_crypto_package:1.70:***** cpe:2.3:a:bouncycastle:bouncy_castle_for_java:1.70:***** cpe:2.3:a:bouncycastle:legion-of-the-bouncy-castle-java-cryptography-api:1.70:***** cpe:2.3:a:bouncycastle:the_bouncy_castle_crypto_package_for_java:1.70:*****	pkg:maven/org.bouncycastle/bcprov-jdk15on@1.70	HIGH	5	Highest
spring-core-6.2.9.jar	cpe:2.3:a:pivotal_software:spring_framework:6.2.9:***** cpe:2.3:a:springsource:spring_framework:6.2.9:***** cpe:2.3:a:vmware:spring_framework:6.2.9:*****	pkg:maven/org.springframework/spring-core@6.2.9	HIGH	1	Highest

Dependencies (vulnerable)

bcprov-jdk15on-1.70.jar

Description:
The Bouncy Castle Crypto package is a Java implementation of cryptographic algorithms. This jar contains JCE provider and lightweight API for the Bouncy Castle Cryptography APIs for JDK 1.5 and up.

License:
Bouncy Castle Licence: <https://www.bouncycastle.org/licence.html>

File Path: C:\Users\leemar\IdeaProjects\rest-service\target\dependency-check-report.html
MD5: 1809d0449a374279c01dd3be26cd92
SHA1: 4636a0d01f74acf28082fb62b317f1080118371
SHA256: 8f3c20e3e2d565d26f33e8d4857a37d0d768ac39b62a7026496fcab1bdac30d4
Referenced In Project/Scope: rest-service:compile
Included by: pkg:maven/com.snhu:rest-service@0.0.1-SNAPSHOT

Evidence

Identifiers

- [pkg:maven/org.bouncycastle/bcprov-jdk15on@1.70](#) (Confidence: High)
- cpe:2.3:a:bouncycastle:bouncy-castle-crypto-package:1.70:***** (Confidence: Low) [suppress](#)
- cpe:2.3:a:bouncycastle:bouncy_castle_crypto_package:1.70:***** (Confidence: Low) [suppress](#)
- [cpe:2.3:a:bouncycastle:bouncy_castle_for_java:1.70:*****](#) (Confidence: Highest) [suppress](#)
- cpe:2.3:a:bouncycastle:legion-of-the-bouncy-castle-java-cryptography-api:1.70:***** (Confidence: Low) [suppress](#)
- cpe:2.3:a:bouncycastle:the_bouncy_castle_crypto_package_for_java:1.70:***** (Confidence: Low) [suppress](#)

Published Vulnerabilities

file:///C:/Users/eemar/eclipse-workspace/rest-service/target/dependency-check-report.html

1/3

[CVE-2024-34447 \(OSSINDEX\)](#)

bouncycastle - Improper Validation of Certificate with Host Mismatch

The software communicates with a host that provides a certificate, but the software does not properly ensure that the certificate is actually associated with that host.

CWE-297 Improper Validation of Certificate with Host Mismatch

CVSSv3:

- Base Score: HIGH (7.69999809265137)
- Vector: CVSS:3.1/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:H/A:L

References:

- OSSINDEX - [\[CVE-2024-34447\] CWE-297: Improper Validation of Certificate with Host Mismatch](#)
- OSSIndex - <https://www.bouncycastle.org/releasenotes.html#~:text=CVE%2D2024%2D301XX%20%2D%20When%20endpoint%20identification%20is%20enabled%20in%20the%20BCJSS>

Vulnerable Software & Versions (OSSINDEX):

- cpe:2.3:a:org.bouncycastle:bcprov-jdk15on:1.70.*.*.*.*

[CVE-2024-29857 \(OSSINDEX\)](#)

An issue was discovered in ECCurve.java and ECCurve.cs in Bouncy Castle Java (BC Java) before 1.78, BC Java LTS before 2.73.6, BC-FJA before 1.0.2.5, and BC C# .Net before 2.3.1. Importing an EC certificate with crafted F2m parameters can lead to excessive CPU consumption during the evaluation of the curve parameters.

CWE-125 Out-of-bounds Read

CVSSv3:

- Base Score: HIGH (7.5)
- Vector: CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H

References:

- OSSINDEX - [\[CVE-2024-29857\] CWE-125: Out-of-bounds Read](#)
- OSSIndex - <http://web.nvd.nist.gov/view/vuln/detail?vulnid=CVE-2024-29857>
- OSSIndex - <https://github.com/advisories/GHSA-8xfc-gm6g-yqpv>
- OSSIndex - https://www.bouncycastle.org/releasenotes.html#~:text=the%20following%20CVFs%3A-_CVE%2D2024%2D29857_-%2D%20Importing%20an%20EC

Vulnerable Software & Versions (OSSINDEX):

- cpe:2.3:a:org.bouncycastle:bcprov-jdk15on:1.70.*.*.*.*

[CVE-2024-30171 \(OSSINDEX\)](#)

An issue was discovered in Bouncy Castle Java TLS API and JSSE Provider before 1.78. Timing-based leakage may occur in RSA based handshakes because of exception processing.

CWE-203 Observable Discrepancy

CVSSv3:

- Base Score: MEDIUM (5.90000095367432)
- Vector: CVSS:3.1/AV:N/AC:H/PR:N/UI:N/S:U/C:N/I:N/A:N

References:

- OSSINDEX - [\[CVE-2024-30171\] CWE-203: Information Exposure Through Discrepancy](#)
- OSSIndex - <http://web.nvd.nist.gov/view/vuln/detail?vulnid=CVE-2024-30171>
- OSSIndex - <https://github.com/advisories/GHSA-v435-xc8x-wvr9>
- OSSIndex - <https://github.com/bcgit/bc-java/issues/1528>
- OSSIndex - https://www.bouncycastle.org/releasenotes.html#~:text=during%20parameter%20evaluation_-_CVE%2D2024%2D30171_-%2D%20Possible%20Timing%20based

Vulnerable Software & Versions (OSSINDEX):

- cpe:2.3:a:org.bouncycastle:bcprov-jdk15on:1.70.*.*.*.*

[CVE-2023-33202 \(OSSINDEX\)](#)

Bouncy Castle for Java before 1.73 contains a potential Denial of Service (DoS) issue within the Bouncy Castle org.bouncycastle.openssl.PEMParser class. This class parses OpenSSL PEM encoded streams containing X.509 certificates, PKCS8 encoded keys, and PKCS7 objects. Parsing a file that has crafted ASN.1 data through the PEMParser causes an OutOfMemoryError, which can enable a denial of service attack. (For users of the FIPS Java API: BC-FJA 1.0.2.3 and earlier are affected; BC-FJA 1.0.2.4 is fixed.)

CWE-400 Uncontrolled Resource Consumption

CVSSv3:

- Base Score: MEDIUM (5.5)
- Vector: CVSS:3.1/AV:L/AC:L/PR:N/UI:R/S:U/C:N/I:N/A:H:E:1.8/RC:R/M:AV:A

References:

- OSSINDEX - [\[CVE-2023-33202\] CWE-400: Uncontrolled Resource Consumption \("Resource Exhaustion"\)](#)
- OSSIndex - <http://web.nvd.nist.gov/view/vuln/detail?vulnid=CVE-2023-33202>
- OSSIndex - <https://github.com/bcgit/bc-java/wiki/CVE-2023-33202>
- af854a3a-2127-422b-91ae-364da2661108 - [EXPLOIT THIRD PARTY ADVISORY](#)
- af854a3a-2127-422b-91ae-364da2661108 - [PRODUCT](#)
- af854a3a-2127-422b-91ae-364da2661108 - [THIRD PARTY ADVISORY](#)
- cve@mitre.org - [EXPLOIT THIRD PARTY ADVISORY](#)
- cve@mitre.org - [PRODUCT](#)
- cve@mitre.org - [THIRD PARTY ADVISORY](#)

Vulnerable Software & Versions: ([show all](#))

- [cpe:2.3:a:bouncycastle:bouncy_castle_for_java:**.*.*.*.* versions up to \(excluding\) 1.73](#)
- ...

8/17/25, 8:12 PM

Dependency-Check Report

[CVE-2023-33201 \(OSSINDEX\)](#)

Bouncy Castle For Java before 1.74 is affected by an LDAP injection vulnerability. The vulnerability only affects applications that use an LDAP CertStore from Bouncy Castle to validate X.509 certificates. During the certificate validation process, Bouncy Castle inserts the certificate's Subject Name into an LDAP search filter without any escaping, which leads to an LDAP injection vulnerability.

CWE-295 Improper Certificate Validation

CVSSv3:

- Base Score: MEDIUM (5.300000190734863)
- Vector: CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:N/A:N

References:

- OSSINDEX - [\[CVE-2023-33201\] CWE-295_ Improper Certificate Validation](#)
- OSSIndex - <http://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2023-33201>
- OSSIndex - <https://github.com/bcgit/bc-java/wiki/CVE-2023-33201>

Vulnerable Software & Versions (OSSINDEX):

- cpe:2.3:a:org.bouncycastle:bcprov-jdk15on:1.70.*.*.*.*

spring-core-6.2.9.jar

Description:

Spring Core

License:

Apache License, Version 2.0: <https://www.apache.org/licenses/LICENSE-2.0>

File Path: C:\Users\leemar\m2\repository\org\springframework\spring-core\6.2.9\spring-core-6.2.9.jar

MD5: f2761310e5c822d3f9a63e83f890e594

SHA1: 91f5fd4cc7f0bf2d7d7b2a5f51b0193ec22c8c12

SHA256: 9fa0622ba738c9b46f484cdde35c4a97a2a65b1da4426dad0d707d0a8aa3d90

Referenced In Project/Scope: rest-service:compile

Included by: pkg:maven/org.springframework.boot/spring-boot-starter-test@3.5.4

Evidence

Identifiers

- [pkg:maven/org.springframework:spring-core@6.2.9](#) (Confidence:High)
- [cpe:2.3:a:pivotal_software:spring_framework:6.2.9.*.*.*.*](#) (Confidence:Highest)
- [cpe:2.3:a:springsource:spring_framework:6.2.9.*.*.*.*](#) (Confidence:Highest)
- [cpe:2.3:a:vmware:spring_framework:6.2.9.*.*.*.*](#) (Confidence:Highest)

Published Vulnerabilities

[CVE-2025-41242 \(OSSINDEX\)](#)

Spring - Path Traversal

CWE-22 Improper Limitation of a Pathname to a Restricted Directory ('Path Traversal')

CVSSv2:

- Base Score: HIGH (8.199999809265137)
- Vector: CVSS:4.0/AV:N/AC:L/AT:P/PR:N/UI:N/VC:H/V:N/V:A/N/SC:N/SI:N/SA:N

References:

- OSSINDEX - [\[CVE-2025-41242\] CWE-22_ Improper Limitation of a Pathname to a Restricted Directory \('Path Traversal'\)](#)
- OSSIndex - <http://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2025-41242>
- OSSIndex - <https://spring.io/security/cve-2025-41242>

Vulnerable Software & Versions (OSSINDEX):

- cpe:2.3:a:org.springframework:spring-core:6.2.9.*.*.*.*

This report contains data retrieved from the [National Vulnerability Database](#).
This report may contain data retrieved from the [CISA Known Exploited Vulnerability Catalog](#).
This report may contain data retrieved from the [Github Advisory Database \(via NPM Audit API\)](#).
This report may contain data retrieved from [RetireJS](#).
This report may contain data retrieved from the [Sonatype OSS Index](#).

Dependency Check After Configuration

8/17/25, 8:13 PM Dependency-Check Report



DEPENDENCY-CHECK

Dependency-Check is an open source tool performing a best effort analysis of 3rd party dependencies; false positives and false negatives may exist in the analysis performed by the tool. Use of the tool and the reporting provided constitutes acceptance for use in an AS IS condition, and there are NO warranties, implied or otherwise, with regard to the analysis or its use. Any use of the tool and the reporting provided is at the user's risk. In no event shall the copyright holder or OWASP be held liable for any damages whatsoever arising out of or in connection with the use of this tool, the analysis performed, or the resulting report.

[How to read the report](#) | [Suppressing false positives](#) | [Getting Help: github issues](#)

🕒 Sponsor

Project: rest-service

com.snhu:rest-service:0.0.1-SNAPSHOT

Scan Information ([show all](#)):

- dependency-check version: 12.1.0
- Report Generated On: Sun, 17 Aug 2025 19:42:34 -0400
- Dependencies Scanned: 48 (25 unique)
- Vulnerable Dependencies: 1
- Vulnerabilities Found: 1
- Vulnerabilities Suppressed: 5 ([show](#))
- ...

Summary

Display: [Showing Vulnerable Dependencies \(click to show all\)](#)

Dependency	Vulnerability IDs	Package	Highest Severity	CVE Count	Confidence
bcprov-jdk15on-1.70.jar	cpe:2.3:a:bouncycastle:bouncy-castle-crypto-package:1.70:***** cpe:2.3:a:bouncycastle:bouncy_castle_crypto_package:1.70:***** cpe:2.3:a:bouncycastle:bouncy_castle_for_java:1.70:***** cpe:2.3:a:bouncycastle:legion-of-the-bouncy-castle-java-cryptography-api:1.70:***** cpe:2.3:a:bouncycastle:the_bouncy_castle_crypto_package_for_java:1.70:*****	pkg:maven/org.bouncycastle/bcprov-jdk15on@1.70	HIGH	1	Highest

Dependencies (vulnerable)

bcprov-jdk15on-1.70.jar

Description:
The Bouncy Castle Crypto package is a Java implementation of cryptographic algorithms. This jar contains JCE provider and lightweight API for the Bouncy Castle Cryptography APIs for JDK 1.5 and up.

License:
Bouncy Castle Licence: <https://www.bouncycastle.org/licence.html>

File Path: C:\Users\leemar.m2\repository\org\bouncycastle\bcprov-jdk15on\1.70\bcprov-jdk15on-1.70.jar
MD5: 1809d0449a6374279e01fd3be26cd92
SHA1: 4636a0d01f74acaf28082b62b317f1080118371
SHA256: f33c203e2d565d26f33e8d4857a37dd07fbac39b62a7026496fcab1bdac30d4
Referenced in Project/Scope: rest-service:compile
Included by: pkg:maven/com.snhu:rest-service@0.0.1-SNAPSHOT

Evidence

Identifiers

- [pkg:maven/org.bouncycastle/bcprov-jdk15on@1.70](#) (Confidence:High)
- cpe:2.3:a:bouncycastle:bouncy-castle-crypto-package:1.70:***** (Confidence:Low) [suppress](#)
- cpe:2.3:a:bouncycastle:bouncy_castle_crypto_package:1.70:***** (Confidence:Low) [suppress](#)
- [cpe:2.3:a:bouncycastle:bouncy_castle_for_java:1.70:*****](#) (Confidence:Highest) [suppress](#)
- cpe:2.3:a:bouncycastle:legion-of-the-bouncy-castle-java-cryptography-api:1.70:***** (Confidence:Low) [suppress](#)
- cpe:2.3:a:bouncycastle:the_bouncy_castle_crypto_package_for_java:1.70:***** (Confidence:Low) [suppress](#)

Published Vulnerabilities

[CVE-2024-34447 \(OSSINDEX\)](#) [suppress](#)

bouncycastle - Improper Validation of Certificate with Host Mismatch

The software communicates with a host that provides a certificate, but the software does not properly ensure that the certificate is actually associated with that host.

file:///C:/Users/eemar/eclipse-workspace/rest-service/target/dependency-check-report.html

8/17/25, 8:13 PM

Dependency-Check Report

CWE-297 Improper Validation of Certificate with Host Mismatch

CVSSv3:

- Base Score: HIGH (7.699999809265137)
- Vector: CVSS:3.1/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:H/A:L

References:

- OSSINDEX - [\[CVE-2024-34447\] CWE-297: Improper Validation of Certificate with Host Mismatch](#)
- OSSIndex - <https://www.bouncycastle.org/releasenotes.html#~text= CVE%2D2024%2D301XX%20%2D%20When%20endpoint%20identification%20is%20enabled%20in%20the%20BCJSS>

Vulnerable Software & Versions (OSSINDEX):

- cpe:2.3:a:org.bouncycastle:bcprov-jdk15on:1.70:***:***:*

Suppressed Vulnerabilities

This report contains data retrieved from the [National Vulnerability Database](#).

This report may contain data retrieved from the [CISA Known Exploited Vulnerability Catalog](#).

This report may contain data retrieved from the [Github Advisory Database \(via NPM Audit API\)](#).

This report may contain data retrieved from [RetireJS](#).

This report may contain data retrieved from the [Sonatype OSS Index](#).