



# **Security Findings of Project** "DESCTSNoPadding"

Analys	sis Date:	2020-03-07	03:34:25

# **Analyzed Workspace:**

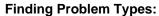
Packages:	1	Total LOC:	41
Classes:	1	No. of Bytecode Instructions:	175

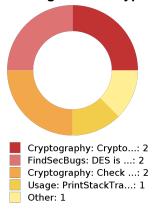
# **Computed Call Graph:**

Classes not in Call Graph: Methods not in Call Graph: 0 0

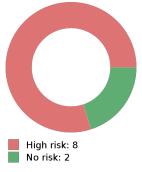
## **Findings in List:**

All Findings: 10 **Problematic Findings:** 8

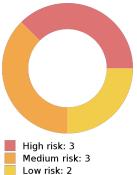




# **Finding Classifications:**



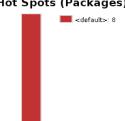
### **Finding Ratings:**



#### **OWASP Top 10 2017**



#### Hot Spots (Packages)



#### Hot Spots (Classes)





Finding ID: 6 Problem Type: Cryptography: Check that only allowed crypto

algorithms are used (Protocol Check Findings)

Classification: Warning Date: 2020-03-07 03:34:25 - new

Rating: 5.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):18

Tags: no tags assigned
Comment: no comment

**Description:** An identified location for problem type 'Cryptography: Check that only allowed crypto algorithms are

used'.

The protocol check detected something wrong when encountering symbol

'AnyAlgorithm\_KeyGeneratorGetInstance'.

Violated protocol: Check Allowed Cryptography Algorithms

Protocol description:

Allow only a given set of cryptography algorithm names where algorithm names are expected.

The algorithm names are configured via constant value constraint variables.

Names to be checked against can be found here: https://docs.oracle.com/javase/8/docs/technotes/

guides/security/StandardNames.html

Matching pattern in protocol check kind 'AnyAlgorithm\_KeyGeneratorGetInstance':

static javax.crypto.KeyGenerator javax.crypto.KeyGenerator.getInstance(java.lang.String, \*\*\*)

Finding ID: 7 Problem Type: Cryptography: Check that only allowed crypto

algorithms are used (Protocol Check Findings)

Classification: Warning Date: 2020-03-07 03:34:25 - new

Rating: 5.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):27

Tags: no tags assigned
Comment: no comment

**Description:** An identified location for problem type 'Cryptography: Check that only allowed crypto algorithms are

used'.

The protocol check detected something wrong when encountering symbol

'AnyAlgorithm\_CipherConstruction':

Only AES is allowed as algorithm for encryption or decryption.

Violated protocol: Check Allowed Cryptography Algorithms

Protocol description:

Allow only a given set of cryptography algorithm names where algorithm names are expected.

The algorithm names are configured via constant value constraint variables.

Names to be checked against can be found here: https://docs.oracle.com/javase/8/docs/technotes/

guides/security/StandardNames.html

Matching pattern in protocol check kind 'AnyAlgorithm\_CipherConstruction': static javax.crypto.Cipher javax.crypto.Cipher.getInstance(java.lang.String, \*\*\*)

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Finding ID: 4 Problem Type: Cryptography: Cryptographic Algorithms Used in Project

(Special Code)

Classification: Information Date: 2020-03-07 03:34:25 - new

Rating: 0.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):18

Tags:no tags assignedComment:no comment

**Description:** An identified location for problem type 'Cryptography: Cryptographic Algorithms Used in Project'.

Declared in: javax.crypto.KeyGenerator

Matching pattern in special code kind 'Cryptography: Cryptographic Algorithms Used in Project':

static javax.crypto.\*\* javax.crypto.\*\*.getInstance(java.lang.String)

Finding ID: 5 Problem Type: Cryptography: Cryptographic Algorithms Used in Project

(Special Code)

Classification: Information Date: 2020-03-07 03:34:25 - new

Rating: 0.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):27

Tags:no tags assignedComment:no comment

**Description:** An identified location for problem type 'Cryptography: Cryptographic Algorithms Used in Project'.

Declared in: javax.crypto.Cipher

Matching pattern in special code kind 'Cryptography: Cryptographic Algorithms Used in Project':

static javax.crypto.\*\* javax.crypto.\*\*.getInstance(java.lang.String)

Finding ID: 1 Problem Type: Cryptography: Cryptographic Algorithms w/o Specified

Crypto-Provider (Special Code)

Classification: Warning Date: 2020-03-07 03:34:25 - new

Rating: 1.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):18

Tags: no tags assigned
Comment: no comment

Description: An identified location for problem type 'Cryptography: Cryptographic Algorithms w/o Specified Crypto-

Provider'.

Declared in: javax.crypto.KeyGenerator

Matching pattern in special code kind 'Cryptography: Cryptographic Algorithms w/o Specified Crypto-

Provider':

static javax.crypto.\*\* javax.crypto.\*\*.getInstance(java.lang.String)

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Finding ID: 2 Problem Type: Cryptography: Cryptographic Algorithms w/o Specified

Crypto-Provider (Special Code)

Classification: Warning Date: 2020-03-07 03:34:25 - new

Rating: 1.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):27

Tags: no tags assigned
Comment: no comment

Description: An identified location for problem type 'Cryptography: Cryptographic Algorithms w/o Specified Crypto-

Provider'.

Declared in: javax.crypto.Cipher

Matching pattern in special code kind 'Cryptography: Cryptographic Algorithms w/o Specified Crypto-

Provider':

static javax.crypto.\*\* javax.crypto.\*\*.getInstance(java.lang.String)

Finding ID: 9 Problem Type: FindSecBugs: DES is insecure (SpotBugs Security

Issues)

Classification: Warning Date: 2020-03-07 03:34:25 - new

Rating: 8.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):18

Tags: no tags assigned
Comment: no comment

**Description:** A finding identified by the external 'SpotBugs' plugin:

DES should be replaced with AES

- In method SymmetricEnc\_DESCTSNoPadding.main(String[])

- Sink method javax/crypto/KeyGenerator.getInstance(Ljava/lang/String;)Ljavax/crypto/KeyGenerator;

- Sink parameter 0

Finding ID: 10 Problem Type: FindSecBugs: DES is insecure (SpotBugs Security

Issues)

Classification: Warning Date: 2020-03-07 03:34:25 - new

Rating: 8.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):27

Tags: no tags assigned
Comment: no comment

**Description:** A finding identified by the external 'SpotBugs' plugin:

DES should be replaced with AES

- In method SymmetricEnc DESCTSNoPadding.main(String[])

- Sink method javax/crypto/Cipher.getInstance(Ljava/lang/String;)Ljavax/crypto/Cipher;

- Sink parameter 0

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Finding ID: 3 Problem Type: Usage: PrintStackTrace (Special Code)

Classification: Warning Date: 2020-03-07 03:34:25 - new

Rating: 5.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):38

Tags: no tags assigned
Comment: no comment

**Description:** An identified location for problem type 'Usage: PrintStackTrace'.

Declared in: java.security.GeneralSecurityException

Matching pattern in special code kind 'Usage: PrintStackTrace':

public void java.lang.Throwable.printStackTrace()

Finding ID: 8 Problem Type: FindSecBugs: Cipher with no integrity (SpotBugs

Security Issues)

Classification: Warning Date: 2020-03-07 03:34:25 - new

Rating: 8.00 Reviewed State: Not Reviewed

Location: SymmetricEnc\_DESCTSNoPadding.java (<Source Code>):27

Tags: no tags assigned
Comment: no comment

**Description:** A finding identified by the external 'SpotBugs' plugin:

The cipher does not provide data integrity

- In method SymmetricEnc\_DESCTSNoPadding.main(String[])

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