

## Security Findings of Project "AESPCBCPKCS5Padding"

**Analysis Date:** 2020-03-07 03:17:27

### Analyzed Workspace:

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

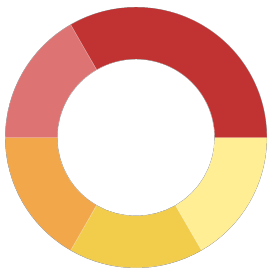
### Computed Call Graph:

Classes not in Call Graph:	0	Methods not in Call Graph:	0
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### Findings in List:

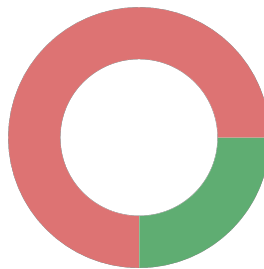
All Findings:	8	Problematic Findings:	6
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#### Finding Problem Types:



- Cryptography: Crypto...: 2
- Cryptography: AES En...: 1
- Cryptography: Check ...: 1
- Usage: PrintStackTra...: 1
- Other: 1

#### Finding Classifications:



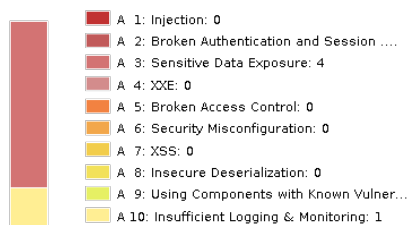
- High risk: 6
- No risk: 2

#### Finding Ratings:

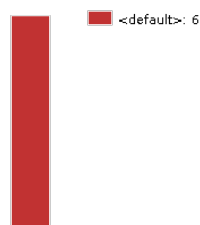


- High risk: 1
- Medium risk: 3
- Low risk: 2

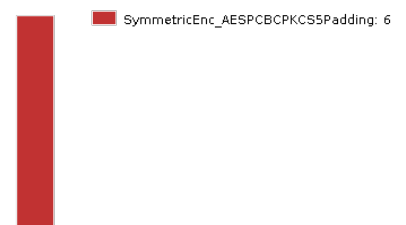
#### OWASP Top 10 2017



#### Hot Spots (Packages)



#### Hot Spots (Classes)



## Findings List

<b>Finding ID:</b>	7	<b>Problem Type:</b>	Cryptography: AES Encryption (Protocol Check Findings)
<b>Classification:</b>	Warning	<b>Date:</b>	2020-03-07 03:17:27 - new
<b>Rating:</b>	5.00	<b>Reviewed State:</b>	Not Reviewed
<b>Location:</b>	SymmetricEnc_AESPCBCPKCS5Padding.java (<Source Code>):29		
<b>Tags:</b>	no tags assigned		
<b>Comment:</b>	no comment		
<b>Description:</b>	<p>An identified location for problem type 'Cryptography: AES Encryption'. The protocol check detected something wrong when encountering symbol 'CipherInitializationForEncryption_IVMissing': An initialization vector should be used when encrypting.</p> <p>Violated protocol: Creation of an AES Cipher for Encryption Protocol description: Creation of a cipher for AES consists of creating an uninitialized cipher, and then initializing it properly.</p> <p>Matching pattern in protocol check kind 'CipherInitializationForEncryption_IVMissing': void javax.crypto.Cipher.init(int, java.security.Key)</p>		

<b>Finding ID:</b>	6	<b>Problem Type:</b>	Cryptography: Check that only allowed crypto algorithms are used (Protocol Check Findings)
<b>Classification:</b>	Warning	<b>Date:</b>	2020-03-07 03:17:27 - new
<b>Rating:</b>	5.00	<b>Reviewed State:</b>	Not Reviewed
<b>Location:</b>	SymmetricEnc_AESPCBCPKCS5Padding.java (<Source Code>):27		
<b>Tags:</b>	no tags assigned		
<b>Comment:</b>	no comment		
<b>Description:</b>	<p>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.</p> <p>Violated protocol: Check Allowed Cryptography Algorithms Protocol description: Allow only a given set of cryptography algorithm names where algorithm names are expected.</p> <p>The algorithm names are configured via constant value constraint variables.</p> <p>Names to be checked against can be found here: <a href="https://docs.oracle.com/javase/8/docs/technotes/guides/security/StandardNames.html">https://docs.oracle.com/javase/8/docs/technotes/guides/security/StandardNames.html</a></p> <p>Matching pattern in protocol check kind 'AnyAlgorithm_CipherConstruction': static javax.crypto.Cipher javax.crypto.Cipher.getInstance(java.lang.String, ***)</p>		

### Findings List

<b>Finding ID:</b>	4	<b>Problem Type:</b>	Cryptography: Cryptographic Algorithms Used in Project (Special Code)
<b>Classification:</b>	Information	<b>Date:</b>	2020-03-07 03:17:27 - new
<b>Rating:</b>	0.00	<b>Reviewed State:</b>	Not Reviewed
<b>Location:</b>	SymmetricEnc_AESPCBCPKCS5Padding.java (<Source Code>):18		
<b>Tags:</b>	no tags assigned		
<b>Comment:</b>	no comment		
<b>Description:</b>	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)		

<b>Finding ID:</b>	5	<b>Problem Type:</b>	Cryptography: Cryptographic Algorithms Used in Project (Special Code)
<b>Classification:</b>	Information	<b>Date:</b>	2020-03-07 03:17:27 - new
<b>Rating:</b>	0.00	<b>Reviewed State:</b>	Not Reviewed
<b>Location:</b>	SymmetricEnc_AESPCBCPKCS5Padding.java (<Source Code>):27		
<b>Tags:</b>	no tags assigned		
<b>Comment:</b>	no comment		
<b>Description:</b>	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)		

<b>Finding ID:</b>	1	<b>Problem Type:</b>	Cryptography: Cryptographic Algorithms w/o Specified Crypto-Provider (Special Code)
<b>Classification:</b>	Warning	<b>Date:</b>	2020-03-07 03:17:27 - new
<b>Rating:</b>	1.00	<b>Reviewed State:</b>	Not Reviewed
<b>Location:</b>	SymmetricEnc_AESPCBCPKCS5Padding.java (<Source Code>):18		
<b>Tags:</b>	no tags assigned		
<b>Comment:</b>	no comment		
<b>Description:</b>	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)		

## Findings List

<b>Finding ID:</b>	<b>2</b>	<b>Problem Type:</b>	Cryptography: Cryptographic Algorithms w/o Specified Crypto-Provider (Special Code)
<b>Classification:</b>	Warning	<b>Date:</b>	2020-03-07 03:17:27 - new
<b>Rating:</b>	1.00	<b>Reviewed State:</b>	Not Reviewed
<b>Location:</b>	SymmetricEnc_AESPCBCPKCS5Padding.java (<Source Code>):27		
<b>Tags:</b>	no tags assigned		
<b>Comment:</b>	<i>no comment</i>		
<b>Description:</b>	<p>An identified location for problem type 'Cryptography: Cryptographic Algorithms w/o Specified Crypto-Provider'.</p> <p>Declared in: javax.crypto.Cipher</p> <p>Matching pattern in special code kind 'Cryptography: Cryptographic Algorithms w/o Specified Crypto-Provider':</p> <pre>static javax.crypto.** javax.crypto.**.getInstance(java.lang.String)</pre>		

<b>Finding ID:</b>	<b>3</b>	<b>Problem Type:</b>	Usage: PrintStackTrace (Special Code)
<b>Classification:</b>	Warning	<b>Date:</b>	2020-03-07 03:17:27 - new
<b>Rating:</b>	5.00	<b>Reviewed State:</b>	Not Reviewed
<b>Location:</b>	SymmetricEnc_AESPCBCPKCS5Padding.java (<Source Code>):38		
<b>Tags:</b>	no tags assigned		
<b>Comment:</b>	<i>no comment</i>		
<b>Description:</b>	<p>An identified location for problem type 'Usage: PrintStackTrace'.</p> <p>Declared in: java.security.GeneralSecurityException</p> <p>Matching pattern in special code kind 'Usage: PrintStackTrace':</p> <pre>public void java.lang.Throwable.printStackTrace()</pre>		

<b>Finding ID:</b>	<b>8</b>	<b>Problem Type:</b>	FindSecBugs: Cipher with no integrity (SpotBugs Security Issues)
<b>Classification:</b>	Warning	<b>Date:</b>	2020-03-07 03:17:27 - new
<b>Rating:</b>	8.00	<b>Reviewed State:</b>	Not Reviewed
<b>Location:</b>	SymmetricEnc_AESPCBCPKCS5Padding.java (<Source Code>):27		
<b>Tags:</b>	no tags assigned		
<b>Comment:</b>	<i>no comment</i>		
<b>Description:</b>	<p>A finding identified by the external 'SpotBugs' plugin:</p> <p>The cipher does not provide data integrity</p> <p>- In method SymmetricEnc_AESPCBCPKCS5Padding.main(String[])</p>		