

### vul\_files\_86 Scan Report

Project Name vul\_files\_86

Scan Start Thursday, January 9, 2025 2:46:01 PM

Preset Checkmarx Default
Scan Time 00h:24m:34s
Lines Of Code Scanned 292997
Files Scanned 109

Report Creation Time Thursday, January 9, 2025 3:15:27 PM

Online Results http://WIN-

PTJMSNK3USL/CxWebClient/ViewerMain.aspx?scanid=1050091&projectid=50080

Team CxServer
Checkmarx Version 8.7.0
Scan Type Full
Source Origin LocalPath

Density 7/1000000 (Vulnerabilities/LOC)

Visibility Public

### Filter Settings

**Severity** 

Included: High, Medium, Low, Information

Excluded: None

**Result State** 

Included: Confirmed, Not Exploitable, To Verify, Urgent, Proposed Not Exploitable

ΑII

Excluded: None

Assigned to

Included: All

**Categories** 

Included:

Uncategorized All
Custom All
PCI DSS v3.2 All
OWASP Top 10 2013 All
FISMA 2014 All
NIST SP 800-53 All
OWASP Top 10 2017 All

2016

OWASP Mobile Top 10

Excluded:

Uncategorized None
Custom None
PCI DSS v3.2 None
OWASP Top 10 2013 None
FISMA 2014 None



NIST SP 800-53 None

OWASP Top 10 2017 None

OWASP Mobile Top 10 None

2016

#### **Results Limit**

Results limit per query was set to 50

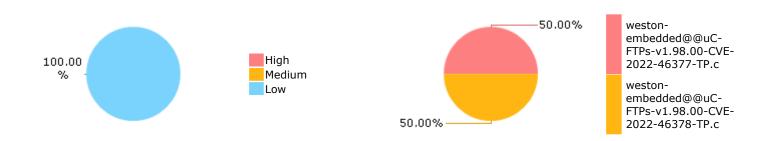
#### **Selected Queries**

Selected queries are listed in Result Summary

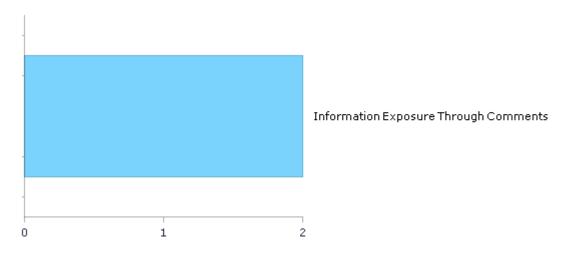


### **Result Summary**

#### Most Vulnerable Files



### Top 5 Vulnerabilities





# Scan Summary - OWASP Top 10 2017 Further details and elaboration about vulnerabilities and risks can be found at: OWASP Top 10 2017

Category	Threat Agent	Exploitability	Weakness Prevalence	Weakness Detectability	Technical Impact	Business Impact	Issues Found	Best Fix Locations
A1-Injection	App. Specific	EASY	COMMON	EASY	SEVERE	App. Specific	0	0
A2-Broken Authentication	App. Specific	EASY	COMMON	AVERAGE	SEVERE	App. Specific	0	0
A3-Sensitive Data Exposure	App. Specific	AVERAGE	WIDESPREAD	AVERAGE	SEVERE	App. Specific	0	0
A4-XML External Entities (XXE)	App. Specific	AVERAGE	COMMON	EASY	SEVERE	App. Specific	0	0
A5-Broken Access Control*	App. Specific	AVERAGE	COMMON	AVERAGE	SEVERE	App. Specific	0	0
A6-Security Misconfiguration	App. Specific	EASY	WIDESPREAD	EASY	MODERATE	App. Specific	0	0
A7-Cross-Site Scripting (XSS)	App. Specific	EASY	WIDESPREAD	EASY	MODERATE	App. Specific	0	0
A8-Insecure Deserialization	App. Specific	DIFFICULT	COMMON	AVERAGE	SEVERE	App. Specific	0	0
A9-Using Components with Known Vulnerabilities*	App. Specific	AVERAGE	WIDESPREAD	AVERAGE	MODERATE	App. Specific	0	0
A10-Insufficient Logging & Monitoring	App. Specific	AVERAGE	WIDESPREAD	DIFFICULT	MODERATE	App. Specific	0	0

<sup>\*</sup> Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.



# Scan Summary - OWASP Top 10 2013 Further details and elaboration about vulnerabilities and risks can be found at: OWASP Top 10 2013

Category	Threat Agent	Attack Vectors	Weakness Prevalence	Weakness Detectability	Technical Impact	Business Impact	Issues Found	Best Fix Locations
A1-Injection	EXTERNAL, INTERNAL, ADMIN USERS	EASY	COMMON	AVERAGE	SEVERE	ALL DATA	0	0
A2-Broken Authentication and Session Management	EXTERNAL, INTERNAL USERS	AVERAGE	WIDESPREAD	AVERAGE	SEVERE	AFFECTED DATA AND FUNCTIONS	0	0
A3-Cross-Site Scripting (XSS)	EXTERNAL, INTERNAL, ADMIN USERS	AVERAGE	VERY WIDESPREAD	EASY	MODERATE	AFFECTED DATA AND SYSTEM	0	0
A4-Insecure Direct Object References	SYSTEM USERS	EASY	COMMON	EASY	MODERATE	EXPOSED DATA	0	0
A5-Security Misconfiguration	EXTERNAL, INTERNAL, ADMIN USERS	EASY	COMMON	EASY	MODERATE	ALL DATA AND SYSTEM	0	0
A6-Sensitive Data Exposure	EXTERNAL, INTERNAL, ADMIN USERS, USERS BROWSERS	DIFFICULT	UNCOMMON	AVERAGE	SEVERE	EXPOSED DATA	0	0
A7-Missing Function Level Access Control*	EXTERNAL, INTERNAL USERS	EASY	COMMON	AVERAGE	MODERATE	EXPOSED DATA AND FUNCTIONS	0	0
A8-Cross-Site Request Forgery (CSRF)	USERS BROWSERS	AVERAGE	COMMON	EASY	MODERATE	AFFECTED DATA AND FUNCTIONS	0	0
A9-Using Components with Known Vulnerabilities*	EXTERNAL USERS, AUTOMATED TOOLS	AVERAGE	WIDESPREAD	DIFFICULT	MODERATE	AFFECTED DATA AND FUNCTIONS	0	0
A10-Unvalidated Redirects and Forwards	USERS BROWSERS	AVERAGE	WIDESPREAD	DIFFICULT	MODERATE	AFFECTED DATA AND FUNCTIONS	0	0

<sup>\*</sup> Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.



## Scan Summary - PCI DSS v3.2

Category	Issues Found	Best Fix Locations
PCI DSS (3.2) - 6.5.1 - Injection flaws - particularly SQL injection	0	0
PCI DSS (3.2) - 6.5.2 - Buffer overflows	0	0
PCI DSS (3.2) - 6.5.3 - Insecure cryptographic storage	0	0
PCI DSS (3.2) - 6.5.4 - Insecure communications	0	0
PCI DSS (3.2) - 6.5.5 - Improper error handling*	0	0
PCI DSS (3.2) - 6.5.7 - Cross-site scripting (XSS)	0	0
PCI DSS (3.2) - 6.5.8 - Improper access control	0	0
PCI DSS (3.2) - 6.5.9 - Cross-site request forgery	0	0
PCI DSS (3.2) - 6.5.10 - Broken authentication and session management	0	0

<sup>\*</sup> Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.



## Scan Summary - FISMA 2014

Category	Description	Issues Found	Best Fix Locations
Access Control	Organizations must limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems) and to the types of transactions and functions that authorized users are permitted to exercise.	0	0
Audit And Accountability*	Organizations must: (i) create, protect, and retain information system audit records to the extent needed to enable the monitoring, analysis, investigation, and reporting of unlawful, unauthorized, or inappropriate information system activity; and (ii) ensure that the actions of individual information system users can be uniquely traced to those users so they can be held accountable for their actions.	0	0
Configuration Management	Organizations must: (i) establish and maintain baseline configurations and inventories of organizational information systems (including hardware, software, firmware, and documentation) throughout the respective system development life cycles; and (ii) establish and enforce security configuration settings for information technology products employed in organizational information systems.	0	0
Identification And Authentication*	Organizations must identify information system users, processes acting on behalf of users, or devices and authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.	2	2
Media Protection	Organizations must: (i) protect information system media, both paper and digital; (ii) limit access to information on information system media to authorized users; and (iii) sanitize or destroy information system media before disposal or release for reuse.	0	0
System And Communications Protection	Organizations must: (i) monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems; and (ii) employ architectural designs, software development techniques, and systems engineering principles that promote effective information security within organizational information systems.	0	0
System And Information Integrity	Organizations must: (i) identify, report, and correct information and information system flaws in a timely manner; (ii) provide protection from malicious code at appropriate locations within organizational information systems; and (iii) monitor information system security alerts and advisories and take appropriate actions in response.	0	0

<sup>\*</sup> Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.



# Scan Summary - NIST SP 800-53

Category	Issues Found	Best Fix Locations
AC-12 Session Termination (P2)	0	0
AC-3 Access Enforcement (P1)	0	0
AC-4 Information Flow Enforcement (P1)	0	0
AC-6 Least Privilege (P1)	0	0
AU-9 Protection of Audit Information (P1)	0	0
CM-6 Configuration Settings (P2)	0	0
IA-5 Authenticator Management (P1)	0	0
IA-6 Authenticator Feedback (P2)	0	0
IA-8 Identification and Authentication (Non-Organizational Users) (P1)	0	0
SC-12 Cryptographic Key Establishment and Management (P1)	0	0
SC-13 Cryptographic Protection (P1)	0	0
SC-17 Public Key Infrastructure Certificates (P1)	0	0
SC-18 Mobile Code (P2)	0	0
SC-23 Session Authenticity (P1)*	0	0
SC-28 Protection of Information at Rest (P1)	2	2
SC-4 Information in Shared Resources (P1)	0	0
SC-5 Denial of Service Protection (P1)*	0	0
SC-8 Transmission Confidentiality and Integrity (P1)	0	0
SI-10 Information Input Validation (P1)*	0	0
SI-11 Error Handling (P2)*	0	0
SI-15 Information Output Filtering (P0)	0	0
SI-16 Memory Protection (P1)	0	0

<sup>\*</sup> Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.



## Scan Summary - OWASP Mobile Top 10 2016

Category	Description	Issues Found	Best Fix Locations
M1-Improper Platform Usage	This category covers misuse of a platform feature or failure to use platform security controls. It might include Android intents, platform permissions, misuse of TouchID, the Keychain, or some other security control that is part of the mobile operating system. There are several ways that mobile apps can experience this risk.	0	0
M2-Insecure Data Storage	This category covers insecure data storage and unintended data leakage.	0	0
M3-Insecure Communication	This category covers poor handshaking, incorrect SSL versions, weak negotiation, cleartext communication of sensitive assets, etc.	0	0
M4-Insecure Authentication	This category captures notions of authenticating the end user or bad session management. This can include: -Failing to identify the user at all when that should be required -Failure to maintain the user's identity when it is required -Weaknesses in session management	0	0
M5-Insufficient Cryptography	The code applies cryptography to a sensitive information asset. However, the cryptography is insufficient in some way. Note that anything and everything related to TLS or SSL goes in M3. Also, if the app fails to use cryptography at all when it should, that probably belongs in M2. This category is for issues where cryptography was attempted, but it wasnt done correctly.	0	0
M6-Insecure Authorization	This is a category to capture any failures in authorization (e.g., authorization decisions in the client side, forced browsing, etc.). It is distinct from authentication issues (e.g., device enrolment, user identification, etc.). If the app does not authenticate users at all in a situation where it should (e.g., granting anonymous access to some resource or service when authenticated and authorized access is required), then that is an authentication failure not an authorization failure.	0	0
M7-Client Code Quality	This category is the catch-all for code-level implementation problems in the mobile client. That's distinct from server-side coding mistakes. This would capture things like buffer overflows, format string vulnerabilities, and various other codelevel mistakes where the solution is to rewrite some code that's running on the mobile device.	0	0
M8-Code Tampering	This category covers binary patching, local resource modification, method hooking, method swizzling, and dynamic memory modification. Once the application is delivered to the mobile device, the code and data resources are resident there. An attacker can either directly modify the code, change the contents of memory dynamically, change or replace the system APIs that the application uses, or	0	0



	modify the application's data and resources. This can provide the attacker a direct method of subverting the intended use of the software for personal or monetary gain.		
M9-Reverse Engineering	This category includes analysis of the final core binary to determine its source code, libraries, algorithms, and other assets. Software such as IDA Pro, Hopper, otool, and other binary inspection tools give the attacker insight into the inner workings of the application. This may be used to exploit other nascent vulnerabilities in the application, as well as revealing information about back end servers, cryptographic constants and ciphers, and intellectual property.	0	0
M10-Extraneous Functionality	Often, developers include hidden backdoor functionality or other internal development security controls that are not intended to be released into a production environment. For example, a developer may accidentally include a password as a comment in a hybrid app. Another example includes disabling of 2-factor authentication during testing.	0	0



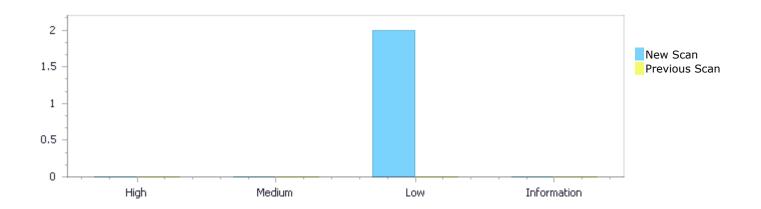
## Scan Summary - Custom

Category	Issues Found	Best Fix Locations
Must audit	0	0
Check	0	0
Optional	0	0



### Results Distribution By Status First scan of the project

	High	Medium	Low	Information	Total
New Issues	0	0	2	0	2
Recurrent Issues	0	0	0	0	0
Total	0	0	2	0	2
Fixed Issues	0	0	0	0	0



### Results Distribution By State

	High	Medium	Low	Information	Total
Confirmed	0	0	0	0	0
Not Exploitable	0	0	0	0	0
To Verify	0	0	2	0	2
Urgent	0	0	0	0	0
Proposed Not Exploitable	0	0	0	0	0
Total	0	0	2	0	2

### **Result Summary**

Vulnerability Type	Occurrences	Severity
Information Exposure Through Comments	2	Low



#### Scan Results Details

#### Information Exposure Through Comments

Query Path:

CPP\Cx\CPP Low Visibility\Information Exposure Through Comments Version:1

#### Categories

FISMA 2014: Identification And Authentication

NIST SP 800-53: SC-28 Protection of Information at Rest (P1)

#### Description

#### Information Exposure Through Comments\Path 1:

Severity Low
Result State To Verify
Online Results <a href="http://win-">http://win-</a>

PTJMSNK3USL/CxWebClient/ViewerMain.aspx?scanid=1050091&projectid=50

080&pathid=1

Status New

	Source	Destination
File	weston-embedded@@uC-FTPs-v1.98.00-CVE-2022-46377-TP.c	weston-embedded@@uC-FTPs-v1.98.00-CVE-2022-46377-TP.c
Line	1943	1943
Object	PWD:	PWD:

#### Code Snippet

File Name weston-embedded@@uC-FTPs-v1.98.00-CVE-2022-46377-TP.c

Method /\* PWD: Get present working directory. \*/

1943.

/\* PWD: Get present working directory.

Information Exposure Through Comments\Path 2:

Severity Low
Result State To Verify
Online Results <a href="http://win-">http://win-</a>

PTJMSNK3USL/CxWebClient/ViewerMain.aspx?scanid=1050091&projectid=50

\* /

080&pathid=2

Status New

	Source	Destination
File	weston-embedded@@uC-FTPs-v1.98.00-CVE-2022-46378-TP.c	weston-embedded@@uC-FTPs-v1.98.00-CVE-2022-46378-TP.c
Line	1943	1943
Object	PWD:	PWD:

#### Code Snippet



Status: Incomplete

File Name weston-embedded@@uC-FTPs-v1.98.00-CVE-2022-46378-TP.c

/\* PWD: Get present working directory. \*/

....
1943.
/\* PWD: Get present working directory. \*/

Information Leak Through Comments

Weakness ID: 615 (Weakness Variant)

**Description** 

#### **Description Summary**

While adding general comments is very useful, some programmers tend to leave important data, such as: filenames related to the web application, old links or links which were not meant to be browsed by users, old code fragments, etc.

#### **Extended Description**

An attacker who finds these comments can map the application's structure and files, expose hidden parts of the site, and study the fragments of code to reverse engineer the application, which may help develop further attacks against the site.

**Time of Introduction** 

#### Implementation

#### **Demonstrative Examples**

#### **Example 1**

The following comment, embedded in a JSP, will be displayed in the resulting HTML output.

(Bad Code)

Example Languages: HTML and JSP

<!-- FIXME: calling this with more than 30 args kills the JDBC server -->

#### **Observed Examples**

Reference	Description
CVE-2007-6197	Version numbers and internal hostnames leaked in HTML comments.
CVE-2007-4072	CMS places full pathname of server in HTML comment.
CVE-2009-2431	blog software leaks real username in HTML comment.

#### **Potential Mitigations**

Remove comments which have sensitive information about the design/implementation of the application. Some of the comments may be exposed to the user and affect the security posture of the application.

Relationships

Nature	Туре	ID	Name	View(s) this relationship pertains to
ChildOf	Weakness Variant	540	Information Leak Through Source Code	Development Concepts (primary)699 Research Concepts (primary)1000

#### **Content History**

Submissions				
<b>Submission Date</b>	Submitter	Organization	Source	
	Anonymous Tool Vendor (under NDA)		Externally Mined	
Modifications				
<b>Modification Date</b>	Modifier	Organization	Source	
2008-07-01	Sean Eidemiller	Cigital	External	



	added/updated demonstrative examples			
2008-07-01	Eric Dalci	Cigital	External	
	updated Potential Mitigations, Time of Introduction			
2008-09-08	CWE Content Team	MITRE	Internal	
updated Relationships, Taxonomy Mappings				
2008-10-14	CWE Content Team	MITRE	Internal	
	updated Description			
2009-03-10	CWE Content Team	MITRE	Internal	
	updated Demonstrative Exam	ples		
2009-07-27	CWE Content Team	MITRE	Internal	
	updated Observed Examples, Taxonomy Mappings			

BACK TO TOP



# Scanned Languages

Language	Hash Number	Change Date
CPP	4541647240435660	1/6/2025
Common	0105849645654507	1/6/2025