rm.Cx2 掃描報告

專案名稱	rm.Cx2
掃描開始	2024年7月12日 上午 09:41:47
預設集合	OWASP TOP 10 - 2021 - ExcludeNodeJS
掃描時間	00h:00m:40s
被掃描的程式行數	749
被掃描的檔案數	8
報告建立時間	2024年7月12日 上午 09:43:04
線上結果	https://checkmarx.gss.com.tw/CxWebClient/ViewerMain.aspx?scanid=1330412&projectid=8520
Checkmarx版本	9.5.5.1007 HF14
掃描類別	完整的
來源	LocalPath
漏洞密度	0/100 (漏洞/LOC)
掃描注釋	
可見性	公開

過濾器設置

嚴重程度：

包含在內: 高風險, 中風險, 低風險, 資訊

排除在外: 無

結果狀態：

包含在內: 校驗, 不可利用, 確認, 緊急, 推薦不可用

排除在外: 無

被分配給

包含在內: 全部

類別

包含在內:

未分類	全部
Custom	全部
PCI DSS v3.2.1	全部
OWASP Top 10 2013	全部
FISMA 2014	全部
NIST SP 800-53	全部
OWASP Top 10 2017	全部
OWASP Mobile Top 10 2016	全部
OWASP Top 10 API	全部
ASD STIG 4.10	全部
OWASP Top 10 2010	全部
OWASP Top 10 2021	全部
CWE top 25	全部

MOIS(KISA) Secure Coding 2021	全部
OWASP ASVS	全部
SANS top 25	全部
ASA Mobile Premium	全部
ASA Premium	全部
ASD STIG 5.2	全部
Top Tier	全部

排除在外:

未分類	無
Custom	無
PCI DSS v3.2.1	無
OWASP Top 10 2013	無
FISMA 2014	無
NIST SP 800-53	無
OWASP Top 10 2017	無
OWASP Mobile Top 10 2016	無
OWASP Top 10 API	無
ASD STIG 4.10	無
OWASP Top 10 2010	無
OWASP Top 10 2021	無
CWE top 25	無
MOIS(KISA) Secure Coding 2021	無
OWASP ASVS	無
SANS top 25	無
ASA Mobile Premium	無
ASA Premium	無
ASD STIG 5.2	無
Top Tier	無

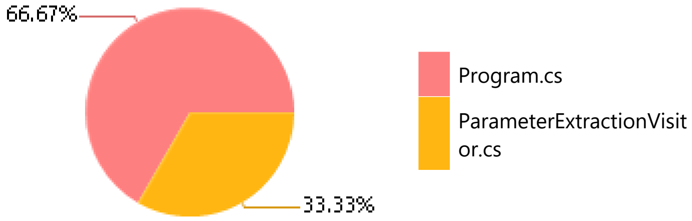
結果限制

未定義限值

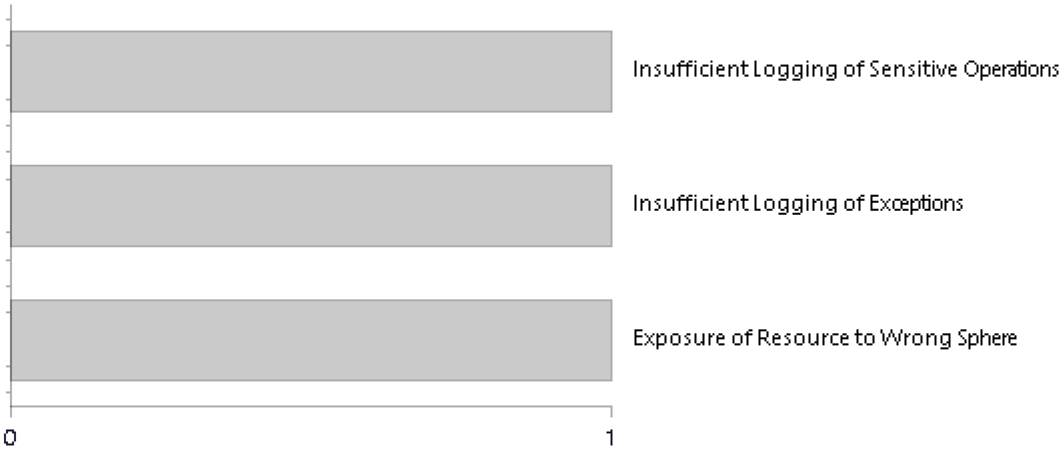
選中的問詢

選中的問詢列出在 掃描結果摘要

最容易受攻擊的檔案



數量最多的前5類漏洞



掃描總結 - OWASP Top 10 2017

有關可見性和風險的詳細資訊及闡述參見： 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	1	1
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

* 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - OWASP Top 10 2021

Category	Issues Found	Best Fix Locations
A1-Broken Access Control*	0	0
A2-Cryptographic Failures*	0	0
A3-Injection*	0	0
A4-Insecure Design*	1	1
A5-Security Misconfiguration*	0	0
A6-Vulnerable and Outdated Components	0	0
A7-Identification and Authentication Failures*	0	0
A8-Software and Data Integrity Failures*	0	0
A9-Security Logging and Monitoring Failures	2	2
A10-Server-Side Request Forgery	0	0

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掃描總結 - OWASP Top 10 2013

有關可見性和風險的詳細資訊及闡述參見： 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	1	1
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

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掃描總結 - PCI DSS v3.2.1

Category	Issues Found	Best Fix Locations
PCI DSS (3.2.1) - 6.5.1 - Injection flaws - particularly SQL injection	0	0
PCI DSS (3.2.1) - 6.5.2 - Buffer overflows*	0	0
PCI DSS (3.2.1) - 6.5.3 - Insecure cryptographic storage*	0	0
PCI DSS (3.2.1) - 6.5.4 - Insecure communications*	0	0
PCI DSS (3.2.1) - 6.5.5 - Improper error handling*	0	0
PCI DSS (3.2.1) - 6.5.7 - Cross-site scripting (XSS)*	0	0
PCI DSS (3.2.1) - 6.5.8 - Improper access control*	1	1
PCI DSS (3.2.1) - 6.5.9 - Cross-site request forgery	0	0
PCI DSS (3.2.1) - 6.5.10 - Broken authentication and session management*	0	0

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - 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.	0	0
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

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掃描總結 - 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)*****	0	0
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

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - 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 code-level 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

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - OWASP Top 10 API

Category	Issues Found	Best Fix Locations
API1-Broken Object Level Authorization	0	0
API2-Broken Authentication	0	0
API3-Excessive Data Exposure	0	0
API4-Lack of Resources and Rate Limiting	0	0
API5-Broken Function Level Authorization	0	0
API6-Mass Assignment	0	0
API7-Security Misconfiguration	0	0
API8-Injection	0	0
API9-Improper Assets Management	0	0
API10-Insufficient Logging and Monitoring	0	0

掃描總結 - Custom

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

掃描總結 - ASD STIG 4.10

Category	Issues Found	Best Fix Locations
APSC-DV-000640 - CAT II The application must provide audit record generation capability for the renewal of session IDs.	0	0
APSC-DV-000650 - CAT II The application must not write sensitive data into the application logs.	0	0
APSC-DV-000660 - CAT II The application must provide audit record generation capability for session timeouts.	0	0
APSC-DV-000670 - CAT II The application must record a time stamp indicating when the event occurred.	0	0
APSC-DV-000680 - CAT II The application must provide audit record generation capability for HTTP headers including User-Agent, Referer, GET, and POST.	0	0
APSC-DV-000690 - CAT II The application must provide audit record generation capability for connecting system IP addresses.	0	0
APSC-DV-000700 - CAT II The application must record the username or user ID of the user associated with the event.	0	0
APSC-DV-000710 - CAT II The application must generate audit records when successful/unsuccessful attempts to grant privileges occur.	0	0
APSC-DV-000720 - CAT II The application must generate audit records when successful/unsuccessful attempts to access security objects occur.	0	0
APSC-DV-000730 - CAT II The application must generate audit records when successful/unsuccessful attempts to access security levels occur.	0	0
APSC-DV-000740 - CAT II The application must generate audit records when successful/unsuccessful attempts to access categories of information (e.g., classification levels) occur.	0	0
APSC-DV-000750 - CAT II The application must generate audit records when successful/unsuccessful attempts to modify privileges occur.	0	0
APSC-DV-000760 - CAT II The application must generate audit records when successful/unsuccessful attempts to modify security objects occur.	0	0
APSC-DV-000770 - CAT II The application must generate audit records when successful/unsuccessful attempts to modify security levels occur.	0	0
APSC-DV-000780 - CAT II The application must generate audit records when successful/unsuccessful attempts to modify categories of information (e.g., classification levels) occur.	0	0
APSC-DV-000790 - CAT II The application must generate audit records when successful/unsuccessful attempts to delete privileges occur.	0	0
APSC-DV-000800 - CAT II The application must generate audit records when successful/unsuccessful attempts to delete security levels occur.	0	0
APSC-DV-000810 - CAT II The application must generate audit records when successful/unsuccessful attempts to delete application database security objects occur.	0	0
APSC-DV-000820 - CAT II The application must generate audit records when successful/unsuccessful attempts to delete categories of information (e.g., classification levels) occur.	0	0
APSC-DV-000830 - CAT II The application must generate audit records when successful/unsuccessful logon attempts occur.	0	0
APSC-DV-000840 - CAT II The application must generate audit records for privileged activities or other system-level access.	0	0
APSC-DV-000850 - CAT II The application must generate audit records showing starting and ending time for user access to the system.	0	0
APSC-DV-000860 - CAT II The application must generate audit records when successful/unsuccessful accesses to objects occur.	0	0

APSC-DV-000870 - CAT II The application must generate audit records for all direct access to the information system.	0	0
APSC-DV-000880 - CAT II The application must generate audit records for all account creations, modifications, disabling, and termination events.	0	0
APSC-DV-000910 - CAT II The application must initiate session auditing upon startup.	0	0
APSC-DV-000940 - CAT II The application must log application shutdown events.	0	0
APSC-DV-000950 - CAT II The application must log destination IP addresses.	0	0
APSC-DV-000960 - CAT II The application must log user actions involving access to data.	0	0
APSC-DV-000970 - CAT II The application must log user actions involving changes to data.	0	0
APSC-DV-000980 - CAT II The application must produce audit records containing information to establish when (date and time) the events occurred.	0	0
APSC-DV-000990 - CAT II The application must produce audit records containing enough information to establish which component, feature or function of the application triggered the audit event.	0	0
APSC-DV-001000 - CAT II When using centralized logging; the application must include a unique identifier in order to distinguish itself from other application logs.	0	0
APSC-DV-001010 - CAT II The application must produce audit records that contain information to establish the outcome of the events.	0	0
APSC-DV-001020 - CAT II The application must generate audit records containing information that establishes the identity of any individual or process associated with the event.	0	0
APSC-DV-001030 - CAT II The application must generate audit records containing the full-text recording of privileged commands or the individual identities of group account users.	0	0
APSC-DV-001040 - CAT II The application must implement transaction recovery logs when transaction based.	0	0
APSC-DV-001050 - CAT II The application must provide centralized management and configuration of the content to be captured in audit records generated by all application components.	0	0
APSC-DV-001070 - CAT II The application must off-load audit records onto a different system or media than the system being audited.	0	0
APSC-DV-001080 - CAT II The application must be configured to write application logs to a centralized log repository.	0	0
APSC-DV-001090 - CAT II The application must provide an immediate warning to the SA and ISSO (at a minimum) when allocated audit record storage volume reaches 75% of repository maximum audit record storage capacity.	0	0
APSC-DV-001100 - CAT II Applications categorized as having a moderate or high impact must provide an immediate real-time alert to the SA and ISSO (at a minimum) for all audit failure events.	0	0
APSC-DV-001110 - CAT II The application must alert the ISSO and SA (at a minimum) in the event of an audit processing failure.	0	0
APSC-DV-001120 - CAT II The application must shut down by default upon audit failure (unless availability is an overriding concern).	0	0
APSC-DV-001130 - CAT II The application must provide the capability to centrally review and analyze audit records from multiple components within the system.	0	0
APSC-DV-001140 - CAT II The application must provide the capability to filter audit records for events of interest based upon organization-defined criteria.	0	0
APSC-DV-001150 - CAT II The application must provide an audit reduction capability that supports on-demand reporting requirements.	0	0
APSC-DV-001160 - CAT II The application must provide an audit reduction capability that supports on-demand audit review and analysis.	0	0
APSC-DV-001170 - CAT II The application must provide an audit reduction capability that supports after-the-fact investigations of security incidents.	0	0
APSC-DV-001180 - CAT II The application must provide a report generation capability that supports on-demand audit review and analysis.	0	0

APSC-DV-001190 - CAT II The application must provide a report generation capability that supports on-demand reporting requirements.	0	0
APSC-DV-001200 - CAT II The application must provide a report generation capability that supports after-the-fact investigations of security incidents.	0	0
APSC-DV-001210 - CAT II The application must provide an audit reduction capability that does not alter original content or time ordering of audit records.	0	0
APSC-DV-001220 - CAT II The application must provide a report generation capability that does not alter original content or time ordering of audit records.	0	0
APSC-DV-001250 - CAT II The applications must use internal system clocks to generate time stamps for audit records.	0	0
APSC-DV-001260 - CAT II The application must record time stamps for audit records that can be mapped to Coordinated Universal Time (UTC) or Greenwich Mean Time (GMT).	0	0
APSC-DV-001270 - CAT II The application must record time stamps for audit records that meet a granularity of one second for a minimum degree of precision.	0	0
APSC-DV-001280 - CAT II The application must protect audit information from any type of unauthorized read access.	0	0
APSC-DV-001290 - CAT II The application must protect audit information from unauthorized modification.	0	0
APSC-DV-001300 - CAT II The application must protect audit information from unauthorized deletion.	0	0
APSC-DV-001310 - CAT II The application must protect audit tools from unauthorized access.	0	0
APSC-DV-001320 - CAT II The application must protect audit tools from unauthorized modification.	0	0
APSC-DV-001330 - CAT II The application must protect audit tools from unauthorized deletion.	0	0
APSC-DV-001340 - CAT II The application must back up audit records at least every seven days onto a different system or system component than the system or component being audited.	0	0
APSC-DV-001570 - CAT II The application must electronically verify Personal Identity Verification (PIV) credentials.	0	0
APSC-DV-001350 - CAT II The application must use cryptographic mechanisms to protect the integrity of audit information.	0	0
APSC-DV-001360 - CAT II Application audit tools must be cryptographically hashed.	0	0
APSC-DV-001370 - CAT II The integrity of the audit tools must be validated by checking the files for changes in the cryptographic hash value.	0	0
APSC-DV-001390 - CAT II The application must prohibit user installation of software without explicit privileged status.	0	0
APSC-DV-001410 - CAT II The application must enforce access restrictions associated with changes to application configuration.	0	0
APSC-DV-001420 - CAT II The application must audit who makes configuration changes to the application.	0	0
APSC-DV-001430 - CAT II The application must have the capability to prevent the installation of patches, service packs, or application components without verification the software component has been digitally signed using a certificate that is recognized and approved by the orga	0	0
APSC-DV-001440 - CAT II The applications must limit privileges to change the software resident within software libraries.	0	0
APSC-DV-001460 - CAT II An application vulnerability assessment must be conducted.	0	0
APSC-DV-001480 - CAT II The application must prevent program execution in accordance with organization-defined policies regarding software program usage and restrictions, and/or rules authorizing the terms and conditions of software program usage.	0	0
APSC-DV-001490 - CAT II The application must employ a deny-all, permit-by-exception (whitelist) policy to allow the execution of authorized software programs.	0	0
APSC-DV-001500 - CAT II The application must be configured to disable non-essential capabilities.	0	0
APSC-DV-001510 - CAT II The application must be configured to use only functions, ports, and protocols permitted to it in the PPSM CAL.	0	0

APSC-DV-001520 - CAT II The application must require users to reauthenticate when organization-defined circumstances or situations require reauthentication.	0	0
APSC-DV-001530 - CAT II The application must require devices to reauthenticate when organization-defined circumstances or situations requiring reauthentication.	0	0
APSC-DV-001540 - CAT I The application must uniquely identify and authenticate organizational users (or processes acting on behalf of organizational users).	0	0
APSC-DV-001550 - CAT II The application must use multifactor (Alt. Token) authentication for network access to privileged accounts.	0	0
APSC-DV-001560 - CAT II The application must accept Personal Identity Verification (PIV) credentials.	0	0
APSC-DV-001580 - CAT II The application must use multifactor (e.g., CAC, Alt. Token) authentication for network access to non-privileged accounts.	0	0
APSC-DV-001590 - CAT II The application must use multifactor (Alt. Token) authentication for local access to privileged accounts.	0	0
APSC-DV-001600 - CAT II The application must use multifactor (e.g., CAC, Alt. Token) authentication for local access to non-privileged accounts.	0	0
APSC-DV-001610 - CAT II The application must ensure users are authenticated with an individual authenticator prior to using a group authenticator.	0	0
APSC-DV-001620 - CAT II The application must implement replay-resistant authentication mechanisms for network access to privileged accounts.	0	0
APSC-DV-001630 - CAT II The application must implement replay-resistant authentication mechanisms for network access to non-privileged accounts.	0	0
APSC-DV-001640 - CAT II The application must utilize mutual authentication when endpoint device non-repudiation protections are required by DoD policy or by the data owner.	0	0
APSC-DV-001650 - CAT II The application must authenticate all network connected endpoint devices before establishing any connection.	0	0
APSC-DV-001660 - CAT II Service-Oriented Applications handling non-releasable data must authenticate endpoint devices via mutual SSL/TLS.	0	0
APSC-DV-001670 - CAT II The application must disable device identifiers after 35 days of inactivity unless a cryptographic certificate is used for authentication.	0	0
APSC-DV-001680 - CAT I The application must enforce a minimum 15-character password length.	0	0
APSC-DV-001690 - CAT II The application must enforce password complexity by requiring that at least one upper-case character be used.	0	0
APSC-DV-001700 - CAT II The application must enforce password complexity by requiring that at least one lower-case character be used.	0	0
APSC-DV-001710 - CAT II The application must enforce password complexity by requiring that at least one numeric character be used.	0	0
APSC-DV-001720 - CAT II The application must enforce password complexity by requiring that at least one special character be used.	0	0
APSC-DV-001730 - CAT II The application must require the change of at least 8 of the total number of characters when passwords are changed.	0	0
APSC-DV-001740 - CAT I The application must only store cryptographic representations of passwords.	0	0
APSC-DV-001850 - CAT I The application must not display passwords/PINs as clear text.	0	0
APSC-DV-001750 - CAT I The application must transmit only cryptographically-protected passwords.	0	0
APSC-DV-001760 - CAT II The application must enforce 24 hours/1 day as the minimum password lifetime.	0	0
APSC-DV-001770 - CAT II The application must enforce a 60-day maximum password lifetime restriction.	0	0
APSC-DV-001780 - CAT II The application must prohibit password reuse for a minimum of five generations.	0	0
APSC-DV-001790 - CAT II The application must allow the use of a temporary password for system logons with an immediate change to a permanent password.	0	0

APSC-DV-001795 - CAT II The application password must not be changeable by users other than the administrator or the user with which the password is associated.	0	0
APSC-DV-001800 - CAT II The application must terminate existing user sessions upon account deletion.	0	0
APSC-DV-001820 - CAT I The application, when using PKI-based authentication, must enforce authorized access to the corresponding private key.	0	0
APSC-DV-001830 - CAT II The application must map the authenticated identity to the individual user or group account for PKI-based authentication.	0	0
APSC-DV-001870 - CAT II The application must uniquely identify and authenticate non-organizational users (or processes acting on behalf of non-organizational users).	0	0
APSC-DV-001810 - CAT I The application, when utilizing PKI-based authentication, must validate certificates by constructing a certification path (which includes status information) to an accepted trust anchor.	0	0
APSC-DV-001840 - CAT II The application, for PKI-based authentication, must implement a local cache of revocation data to support path discovery and validation in case of the inability to access revocation information via the network.	0	0
APSC-DV-001860 - CAT II The application must use mechanisms meeting the requirements of applicable federal laws, Executive Orders, directives, policies, regulations, standards, and guidance for authentication to a cryptographic module.	0	0
APSC-DV-001880 - CAT II The application must accept Personal Identity Verification (PIV) credentials from other federal agencies.	0	0
APSC-DV-001890 - CAT II The application must electronically verify Personal Identity Verification (PIV) credentials from other federal agencies.	0	0
APSC-DV-002050 - CAT II Applications making SAML assertions must use FIPS-approved random numbers in the generation of SessionIndex in the SAML element AuthnStatement.	0	0
APSC-DV-001900 - CAT II The application must accept FICAM-approved third-party credentials.	0	0
APSC-DV-001910 - CAT II The application must conform to FICAM-issued profiles.	0	0
APSC-DV-001930 - CAT II Applications used for non-local maintenance sessions must audit non-local maintenance and diagnostic sessions for organization-defined auditable events.	0	0
APSC-DV-000310 - CAT III The application must have a process, feature or function that prevents removal or disabling of emergency accounts.	0	0
APSC-DV-001940 - CAT II Applications used for non-local maintenance sessions must implement cryptographic mechanisms to protect the integrity of non-local maintenance and diagnostic communications.	0	0
APSC-DV-001950 - CAT II Applications used for non-local maintenance sessions must implement cryptographic mechanisms to protect the confidentiality of non-local maintenance and diagnostic communications.	0	0
APSC-DV-001960 - CAT II Applications used for non-local maintenance sessions must verify remote disconnection at the termination of non-local maintenance and diagnostic sessions.	0	0
APSC-DV-001970 - CAT II The application must employ strong authenticators in the establishment of non-local maintenance and diagnostic sessions.	0	0
APSC-DV-001980 - CAT II The application must terminate all sessions and network connections when non-local maintenance is completed.	0	0
APSC-DV-001995 - CAT II The application must not be vulnerable to race conditions.	0	0
APSC-DV-002000 - CAT II The application must terminate all network connections associated with a communications session at the end of the session.	0	0
APSC-DV-002010 - CAT II The application must implement NSA-approved cryptography to protect classified information in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, and standards.	0	0
APSC-DV-002020 - CAT II The application must utilize FIPS-validated cryptographic modules when signing application components.	0	0
APSC-DV-002030 - CAT II The application must utilize FIPS-validated cryptographic modules when generating cryptographic hashes.	0	0

APSC-DV-002040 - CAT II The application must utilize FIPS-validated cryptographic modules when protecting unclassified information that requires cryptographic protection.	0	0
APSC-DV-002150 - CAT II The application user interface must be either physically or logically separated from data storage and management interfaces.	0	0
APSC-DV-002210 - CAT II The application must set the HTTPOnly flag on session cookies.	0	0
APSC-DV-002220 - CAT II The application must set the secure flag on session cookies.	0	0
APSC-DV-002230 - CAT I The application must not expose session IDs.	0	0
APSC-DV-002240 - CAT I The application must destroy the session ID value and/or cookie on logoff or browser close.	0	0
APSC-DV-002250 - CAT II Applications must use system-generated session identifiers that protect against session fixation.	0	0
APSC-DV-002260 - CAT II Applications must validate session identifiers.	0	0
APSC-DV-002270 - CAT II Applications must not use URL embedded session IDs.	0	0
APSC-DV-002280 - CAT II The application must not re-use or recycle session IDs.	0	0
APSC-DV-002290 - CAT II The application must use the Federal Information Processing Standard (FIPS) 140-2-validated cryptographic modules and random number generator if the application implements encryption, key exchange, digital signature, and hash functionality.	0	0
APSC-DV-002300 - CAT II The application must only allow the use of DoD-approved certificate authorities for verification of the establishment of protected sessions.	0	0
APSC-DV-002310 - CAT I The application must fail to a secure state if system initialization fails, shutdown fails, or aborts fail.	0	0
APSC-DV-002320 - CAT II In the event of a system failure, applications must preserve any information necessary to determine cause of failure and any information necessary to return to operations with least disruption to mission processes.	0	0
APSC-DV-002330 - CAT II The application must protect the confidentiality and integrity of stored information when required by DoD policy or the information owner.	0	0
APSC-DV-002340 - CAT II The application must implement approved cryptographic mechanisms to prevent unauthorized modification of organization-defined information at rest on organization-defined information system components.	0	0
APSC-DV-002350 - CAT II The application must use appropriate cryptography in order to protect stored DoD information when required by the information owner or DoD policy.	0	0
APSC-DV-002360 - CAT II The application must isolate security functions from non-security functions.	0	0
APSC-DV-002370 - CAT II The application must maintain a separate execution domain for each executing process.	0	0
APSC-DV-002380 - CAT II Applications must prevent unauthorized and unintended information transfer via shared system resources.	0	0
APSC-DV-002390 - CAT II XML-based applications must mitigate DoS attacks by using XML filters, parser options, or gateways.	0	0
APSC-DV-002400 - CAT II The application must restrict the ability to launch Denial of Service (DoS) attacks against itself or other information systems.	0	0
APSC-DV-002410 - CAT II The web service design must include redundancy mechanisms when used with high-availability systems.	0	0
APSC-DV-002420 - CAT II An XML firewall function must be deployed to protect web services when exposed to untrusted networks.	0	0
APSC-DV-002610 - CAT II The application must remove organization-defined software components after updated versions have been installed.	0	0
APSC-DV-002440 - CAT I The application must protect the confidentiality and integrity of transmitted information.	0	0
APSC-DV-002450 - CAT II The application must implement cryptographic mechanisms to prevent unauthorized disclosure of information and/or detect changes to information during transmission unless otherwise protected by alternative physical safeguards, such as, at a minimum, a Prot	0	0

APSC-DV-002460 - CAT II The application must maintain the confidentiality and integrity of information during preparation for transmission.	0	0
APSC-DV-002470 - CAT II The application must maintain the confidentiality and integrity of information during reception.	0	0
APSC-DV-002480 - CAT II The application must not disclose unnecessary information to users.	0	0
APSC-DV-002485 - CAT I The application must not store sensitive information in hidden fields.	0	0
APSC-DV-002490 - CAT I The application must protect from Cross-Site Scripting (XSS) vulnerabilities.	0	0
APSC-DV-002500 - CAT II The application must protect from Cross-Site Request Forgery (CSRF) vulnerabilities.	0	0
APSC-DV-002510 - CAT I The application must protect from command injection.	0	0
APSC-DV-002520 - CAT II The application must protect from canonical representation vulnerabilities.	0	0
APSC-DV-002530 - CAT II The application must validate all input.	0	0
APSC-DV-002540 - CAT I The application must not be vulnerable to SQL Injection.	0	0
APSC-DV-002550 - CAT I The application must not be vulnerable to XML-oriented attacks.	0	0
APSC-DV-002560 - CAT I The application must not be subject to input handling vulnerabilities.	0	0
APSC-DV-002570 - CAT II The application must generate error messages that provide information necessary for corrective actions without revealing information that could be exploited by adversaries.	0	0
APSC-DV-002580 - CAT II The application must reveal error messages only to the ISSO, ISSM, or SA.	0	0
APSC-DV-002590 - CAT I The application must not be vulnerable to overflow attacks.	0	0
APSC-DV-002630 - CAT II Security-relevant software updates and patches must be kept up to date.	0	0
APSC-DV-002760 - CAT II The application performing organization-defined security functions must verify correct operation of security functions.	0	0
APSC-DV-002900 - CAT II The ISSO must ensure application audit trails are retained for at least 1 year for applications without SAMI data, and 5 years for applications including SAMI data.	0	0
APSC-DV-002770 - CAT II The application must perform verification of the correct operation of security functions: upon system startup and/or restart; upon command by a user with privileged access; and/or every 30 days.	0	0
APSC-DV-002780 - CAT III The application must notify the ISSO and ISSM of failed security verification tests.	0	0
APSC-DV-002870 - CAT II Unsigned Category 1A mobile code must not be used in the application in accordance with DoD policy.	0	0
APSC-DV-002880 - CAT II The ISSO must ensure an account management process is implemented, verifying only authorized users can gain access to the application, and individual accounts designated as inactive, suspended, or terminated are promptly removed.	0	0
APSC-DV-002890 - CAT I Application web servers must be on a separate network segment from the application and database servers if it is a tiered application operating in the DoD DMZ.	0	0
APSC-DV-002910 - CAT II The ISSO must review audit trails periodically based on system documentation recommendations or immediately upon system security events.	0	0
APSC-DV-002920 - CAT II The ISSO must report all suspected violations of IA policies in accordance with DoD information system IA procedures.	0	0
APSC-DV-002930 - CAT II The ISSO must ensure active vulnerability testing is performed.	0	0
APSC-DV-002980 - CAT II New IP addresses, data services, and associated ports used by the application must be submitted to the appropriate approving authority for the organization, which in turn will be submitted through the DoD Ports, Protocols, and Services Management (DoD PPS	0	0
APSC-DV-002950 - CAT II Execution flow diagrams and design documents must be created to show how deadlock and recursion issues in web services are being mitigated.	0	0
APSC-DV-002960 - CAT II The designer must ensure the application does not store configuration and control files in the same directory as user data.	0	0
APSC-DV-002970 - CAT II The ISSO must ensure if a DoD STIG or NSA guide is not available, a third-party	0	0

product will be configured by following available guidance.		
APSC-DV-002990 - CAT II The application must be registered with the DoD Ports and Protocols Database.	0	0
APSC-DV-002990 - CAT II The application must be registered with the DoD Ports and Protocols Database.	0	0
APSC-DV-002995 - CAT II The Configuration Management (CM) repository must be properly patched and STIG compliant.	0	0
APSC-DV-003000 - CAT II Access privileges to the Configuration Management (CM) repository must be reviewed every three months.	0	0
APSC-DV-003010 - CAT II A Software Configuration Management (SCM) plan describing the configuration control and change management process of application objects developed by the organization and the roles and responsibilities of the organization must be created and maintained.	0	0
APSC-DV-003020 - CAT II A Configuration Control Board (CCB) that meets at least every release cycle, for managing the Configuration Management (CM) process must be established.	0	0
APSC-DV-003030 - CAT II The application services and interfaces must be compatible with and ready for IPv6 networks.	0	0
APSC-DV-003040 - CAT II The application must not be hosted on a general purpose machine if the application is designated as critical or high availability by the ISSO.	0	0
APSC-DV-003050 - CAT II A disaster recovery/continuity plan must exist in accordance with DoD policy based on the applications availability requirements.	0	0
APSC-DV-003060 - CAT II Recovery procedures and technical system features must exist so recovery is performed in a secure and verifiable manner. The ISSO will document circumstances inhibiting a trusted recovery.	0	0
APSC-DV-003070 - CAT II Data backup must be performed at required intervals in accordance with DoD policy.	0	0
APSC-DV-003080 - CAT II Back-up copies of the application software or source code must be stored in a fire-rated container or stored separately (offsite).	0	0
APSC-DV-003090 - CAT II Procedures must be in place to assure the appropriate physical and technical protection of the backup and restoration of the application.	0	0
APSC-DV-003100 - CAT II The application must use encryption to implement key exchange and authenticate endpoints prior to establishing a communication channel for key exchange.	0	0
APSC-DV-003110 - CAT I The application must not contain embedded authentication data.	0	0
APSC-DV-003120 - CAT I The application must have the capability to mark sensitive/classified output when required.	0	0
APSC-DV-003130 - CAT III Prior to each release of the application, updates to system, or applying patches; tests plans and procedures must be created and executed.	0	0
APSC-DV-003150 - CAT II At least one tester must be designated to test for security flaws in addition to functional testing.	0	0
APSC-DV-003140 - CAT II Application files must be cryptographically hashed prior to deploying to DoD operational networks.	0	0
APSC-DV-003160 - CAT III Test procedures must be created and at least annually executed to ensure system initialization, shutdown, and aborts are configured to verify the system remains in a secure state.	0	0
APSC-DV-003170 - CAT II An application code review must be performed on the application.	0	0
APSC-DV-003180 - CAT III Code coverage statistics must be maintained for each release of the application.	0	0
APSC-DV-003190 - CAT II Flaws found during a code review must be tracked in a defect tracking system.	0	0
APSC-DV-003200 - CAT II The changes to the application must be assessed for IA and accreditation impact prior to implementation.	0	0
APSC-DV-003210 - CAT II Security flaws must be fixed or addressed in the project plan.	0	0
APSC-DV-003215 - CAT III The application development team must follow a set of coding standards.	0	0
APSC-DV-003220 - CAT III The designer must create and update the Design Document for each release of the application.	0	0

APSC-DV-003230 - CAT II Threat models must be documented and reviewed for each application release and updated as required by design and functionality changes or when new threats are discovered.	0	0
APSC-DV-003235 - CAT II The application must not be subject to error handling vulnerabilities.	0	0
APSC-DV-003250 - CAT I The application must be decommissioned when maintenance or support is no longer available.	0	0
APSC-DV-003236 - CAT II The application development team must provide an application incident response plan.	0	0
APSC-DV-003240 - CAT I All products must be supported by the vendor or the development team.	0	0
APSC-DV-003260 - CAT III Procedures must be in place to notify users when an application is decommissioned.	0	0
APSC-DV-003270 - CAT II Unnecessary built-in application accounts must be disabled.	0	0
APSC-DV-003280 - CAT I Default passwords must be changed.	0	0
APSC-DV-003330 - CAT II The system must alert an administrator when low resource conditions are encountered.	0	0
APSC-DV-003285 - CAT II An Application Configuration Guide must be created and included with the application.	0	0
APSC-DV-003290 - CAT II If the application contains classified data, a Security Classification Guide must exist containing data elements and their classification.	0	0
APSC-DV-003300 - CAT II The designer must ensure uncategorized or emerging mobile code is not used in applications.	0	0
APSC-DV-003310 - CAT II Production database exports must have database administration credentials and sensitive data removed before releasing the export.	0	0
APSC-DV-003320 - CAT II Protections against DoS attacks must be implemented.	0	0
APSC-DV-003340 - CAT III At least one application administrator must be registered to receive update notifications, or security alerts, when automated alerts are available.	0	0
APSC-DV-003360 - CAT III The application must generate audit records when concurrent logons from different workstations occur.	0	0
APSC-DV-003345 - CAT III The application must provide notifications or alerts when product update and security related patches are available.	0	0
APSC-DV-003350 - CAT II Connections between the DoD enclave and the Internet or other public or commercial wide area networks must require a DMZ.	0	0
APSC-DV-003400 - CAT II The Program Manager must verify all levels of program management, designers, developers, and testers receive annual security training pertaining to their job function.	0	0
APSC-DV-000010 - CAT II The application must provide a capability to limit the number of logon sessions per user.	0	0
APSC-DV-000060 - CAT II The application must clear temporary storage and cookies when the session is terminated.	0	0
APSC-DV-000070 - CAT II The application must automatically terminate the non-privileged user session and log off non-privileged users after a 15 minute idle time period has elapsed.	0	0
APSC-DV-000080 - CAT II The application must automatically terminate the admin user session and log off admin users after a 10 minute idle time period is exceeded.	0	0
APSC-DV-000090 - CAT II Applications requiring user access authentication must provide a logoff capability for user initiated communication session.	0	0
APSC-DV-000100 - CAT III The application must display an explicit logoff message to users indicating the reliable termination of authenticated communications sessions.	0	0
APSC-DV-000110 - CAT II The application must associate organization-defined types of security attributes having organization-defined security attribute values with information in storage.	0	0
APSC-DV-000120 - CAT II The application must associate organization-defined types of security attributes having organization-defined security attribute values with information in process.	0	0
APSC-DV-000130 - CAT II The application must associate organization-defined types of security attributes	0	0

having organization-defined security attribute values with information in transmission.		
APSC-DV-000160 - CAT II The application must implement DoD-approved encryption to protect the confidentiality of remote access sessions.	0	0
APSC-DV-000170 - CAT II The application must implement cryptographic mechanisms to protect the integrity of remote access sessions.	0	0
APSC-DV-000190 - CAT I Messages protected with WS_Security must use time stamps with creation and expiration times.	0	0
APSC-DV-000180 - CAT II Applications with SOAP messages requiring integrity must include the following message elements:-Message ID-Service Request-Timestamp-SAML Assertion (optionally included in messages) and all elements of the message must be digitally signed.	0	0
APSC-DV-000200 - CAT I Validity periods must be verified on all application messages using WS-Security or SAML assertions.	0	0
APSC-DV-000210 - CAT II The application must ensure each unique asserting party provides unique assertion ID references for each SAML assertion.	0	0
APSC-DV-000220 - CAT II The application must ensure encrypted assertions, or equivalent confidentiality protections are used when assertion data is passed through an intermediary, and confidentiality of the assertion data is required when passing through the intermediary.	0	0
APSC-DV-000230 - CAT I The application must use the NotOnOrAfter condition when using the SubjectConfirmation element in a SAML assertion.	0	0
APSC-DV-000240 - CAT I The application must use both the NotBefore and NotOnOrAfter elements or OneTimeUse element when using the Conditions element in a SAML assertion.	0	0
APSC-DV-000250 - CAT II The application must ensure if a OneTimeUse element is used in an assertion, there is only one of the same used in the Conditions element portion of an assertion.	0	0
APSC-DV-000260 - CAT II The application must ensure messages are encrypted when the SessionIndex is tied to privacy data.	0	0
APSC-DV-000290 - CAT II Shared/group account credentials must be terminated when members leave the group.	0	0
APSC-DV-000280 - CAT II The application must provide automated mechanisms for supporting account management functions.	0	0
APSC-DV-000300 - CAT II The application must automatically remove or disable temporary user accounts 72 hours after account creation.	0	0
APSC-DV-000320 - CAT III The application must automatically disable accounts after a 35 day period of account inactivity.	0	0
APSC-DV-000330 - CAT II Unnecessary application accounts must be disabled, or deleted.	0	0
APSC-DV-000420 - CAT II The application must automatically audit account enabling actions.	0	0
APSC-DV-000340 - CAT II The application must automatically audit account creation.	0	0
APSC-DV-000350 - CAT II The application must automatically audit account modification.	0	0
APSC-DV-000360 - CAT II The application must automatically audit account disabling actions.	0	0
APSC-DV-000370 - CAT II The application must automatically audit account removal actions.	0	0
APSC-DV-000380 - CAT III The application must notify System Administrators and Information System Security Officers when accounts are created.	0	0
APSC-DV-000390 - CAT III The application must notify System Administrators and Information System Security Officers when accounts are modified.	0	0
APSC-DV-000400 - CAT III The application must notify System Administrators and Information System Security Officers of account disabling actions.	0	0
APSC-DV-000410 - CAT III The application must notify System Administrators and Information System Security Officers of account removal actions.	0	0
APSC-DV-000430 - CAT III The application must notify System Administrators and Information System Security Officers of account enabling actions.	0	0
APSC-DV-000440 - CAT II Application data protection requirements must be identified and documented.	0	0

APSC-DV-000520 - CAT II The application must audit the execution of privileged functions.	0	0
APSC-DV-000450 - CAT II The application must utilize organization-defined data mining detection techniques for organization-defined data storage objects to adequately detect data mining attempts.	0	0
APSC-DV-000460 - CAT I The application must enforce approved authorizations for logical access to information and system resources in accordance with applicable access control policies.	0	0
APSC-DV-000470 - CAT II The application must enforce organization-defined discretionary access control policies over defined subjects and objects.	0	0
APSC-DV-000480 - CAT II The application must enforce approved authorizations for controlling the flow of information within the system based on organization-defined information flow control policies.	0	0
APSC-DV-000490 - CAT II The application must enforce approved authorizations for controlling the flow of information between interconnected systems based on organization-defined information flow control policies.	0	0
APSC-DV-000500 - CAT II The application must prevent non-privileged users from executing privileged functions to include disabling, circumventing, or altering implemented security safeguards/countermeasures.	0	0
APSC-DV-000510 - CAT I The application must execute without excessive account permissions.	0	0
APSC-DV-000530 - CAT I The application must enforce the limit of three consecutive invalid logon attempts by a user during a 15 minute time period.	0	0
APSC-DV-000560 - CAT III The application must retain the Standard Mandatory DoD Notice and Consent Banner on the screen until users acknowledge the usage conditions and take explicit actions to log on for further access.	0	0
APSC-DV-000540 - CAT II The application administrator must follow an approved process to unlock locked user accounts.	0	0
APSC-DV-000550 - CAT III The application must display the Standard Mandatory DoD Notice and Consent Banner before granting access to the application.	0	0
APSC-DV-000570 - CAT III The publicly accessible application must display the Standard Mandatory DoD Notice and Consent Banner before granting access to the application.	0	0
APSC-DV-000580 - CAT III The application must display the time and date of the users last successful logon.	0	0
APSC-DV-000630 - CAT II The application must provide audit record generation capability for the destruction of session IDs.	0	0
APSC-DV-000590 - CAT II The application must protect against an individual (or process acting on behalf of an individual) falsely denying having performed organization-defined actions to be covered by non-repudiation.	0	0
APSC-DV-000600 - CAT II For applications providing audit record aggregation, the application must compile audit records from organization-defined information system components into a system-wide audit trail that is time-correlated with an organization-defined level of tolerance	0	0
APSC-DV-000610 - CAT II The application must provide the capability for organization-identified individuals or roles to change the auditing to be performed on all application components, based on all selectable event criteria within organization-defined time thresholds.	0	0
APSC-DV-000620 - CAT II The application must provide audit record generation capability for the creation of session IDs.	0	0

掃描總結 - ASD STIG 5.2

Category	Issues Found	Best Fix Locations
APSC-DV-000640 - CAT II The application must provide audit record generation capability for the renewal of session IDs.	0	0
APSC-DV-000650 - CAT II The application must not write sensitive data into the application logs.	0	0
APSC-DV-000660 - CAT II The application must provide audit record generation capability for session timeouts.	0	0
APSC-DV-000670 - CAT II The application must record a time stamp indicating when the event occurred.	0	0
APSC-DV-000680 - CAT II The application must provide audit record generation capability for HTTP headers including User-Agent, Referer, GET, and POST.	0	0
APSC-DV-000690 - CAT II The application must provide audit record generation capability for connecting system IP addresses.	0	0
APSC-DV-000700 - CAT II The application must record the username or user ID of the user associated with the event.	0	0
APSC-DV-000710 - CAT II The application must generate audit records when successful/unsuccessful attempts to grant privileges occur.	0	0
APSC-DV-000720 - CAT II The application must generate audit records when successful/unsuccessful attempts to access security objects occur.	0	0
APSC-DV-000730 - CAT II The application must generate audit records when successful/unsuccessful attempts to access security levels occur.	0	0
APSC-DV-000740 - CAT II The application must generate audit records when successful/unsuccessful attempts to access categories of information (e.g., classification levels) occur.	0	0
APSC-DV-000750 - CAT II The application must generate audit records when successful/unsuccessful attempts to modify privileges occur.	0	0
APSC-DV-000760 - CAT II The application must generate audit records when successful/unsuccessful attempts to modify security objects occur.	0	0
APSC-DV-000770 - CAT II The application must generate audit records when successful/unsuccessful attempts to modify security levels occur.	0	0
APSC-DV-000780 - CAT II The application must generate audit records when successful/unsuccessful attempts to modify categories of information (e.g., classification levels) occur.	0	0
APSC-DV-000790 - CAT II The application must generate audit records when successful/unsuccessful attempts to delete privileges occur.	0	0
APSC-DV-000800 - CAT II The application must generate audit records when successful/unsuccessful attempts to delete security levels occur.	0	0
APSC-DV-000810 - CAT II The application must generate audit records when successful/unsuccessful attempts to delete application database security objects occur.	0	0
APSC-DV-000820 - CAT II The application must generate audit records when successful/unsuccessful attempts to delete categories of information (e.g., classification levels) occur.	0	0
APSC-DV-000830 - CAT II The application must generate audit records when successful/unsuccessful logon attempts occur.	0	0
APSC-DV-000840 - CAT II The application must generate audit records for privileged activities or other system-level access.	0	0
APSC-DV-000850 - CAT II The application must generate audit records showing starting and ending time for user access to the system.	0	0
APSC-DV-000860 - CAT II The application must generate audit records when successful/unsuccessful accesses to objects occur.	0	0

APSC-DV-000870 - CAT II The application must generate audit records for all direct access to the information system.	0	0
APSC-DV-000880 - CAT II The application must generate audit records for all account creations, modifications, disabling, and termination events.	0	0
APSC-DV-000910 - CAT II The application must initiate session auditing upon startup.	0	0
APSC-DV-000940 - CAT II The application must log application shutdown events.	0	0
APSC-DV-000950 - CAT II The application must log destination IP addresses.	0	0
APSC-DV-000960 - CAT II The application must log user actions involving access to data.	0	0
APSC-DV-000970 - CAT II The application must log user actions involving changes to data.	0	0
APSC-DV-000980 - CAT II The application must produce audit records containing information to establish when (date and time) the events occurred.	0	0
APSC-DV-000990 - CAT II The application must produce audit records containing enough information to establish which component, feature or function of the application triggered the audit event.	0	0
APSC-DV-001000 - CAT II When using centralized logging; the application must include a unique identifier in order to distinguish itself from other application logs.	0	0
APSC-DV-001010 - CAT II The application must produce audit records that contain information to establish the outcome of the events.	0	0
APSC-DV-001020 - CAT II The application must generate audit records containing information that establishes the identity of any individual or process associated with the event.	0	0
APSC-DV-001030 - CAT II The application must generate audit records containing the full-text recording of privileged commands or the individual identities of group account users.	0	0
APSC-DV-001040 - CAT II The application must implement transaction recovery logs when transaction based.	0	0
APSC-DV-001050 - CAT II The application must provide centralized management and configuration of the content to be captured in audit records generated by all application components.	0	0
APSC-DV-001070 - CAT II The application must off-load audit records onto a different system or media than the system being audited.	0	0
APSC-DV-001080 - CAT II The application must be configured to write application logs to a centralized log repository.	0	0
APSC-DV-001090 - CAT II The application must provide an immediate warning to the SA and ISSO (at a minimum) when allocated audit record storage volume reaches 75% of repository maximum audit record storage capacity.	0	0
APSC-DV-001100 - CAT II Applications categorized as having a moderate or high impact must provide an immediate real-time alert to the SA and ISSO (at a minimum) for all audit failure events.	0	0
APSC-DV-001110 - CAT II The application must alert the ISSO and SA (at a minimum) in the event of an audit processing failure.	0	0
APSC-DV-001120 - CAT II The application must shut down by default upon audit failure (unless availability is an overriding concern).	0	0
APSC-DV-001130 - CAT II The application must provide the capability to centrally review and analyze audit records from multiple components within the system.	0	0
APSC-DV-001140 - CAT II The application must provide the capability to filter audit records for events of interest based upon organization-defined criteria.	0	0
APSC-DV-001150 - CAT II The application must provide an audit reduction capability that supports on-demand reporting requirements.	0	0
APSC-DV-001160 - CAT II The application must provide an audit reduction capability that supports on-demand audit review and analysis.	0	0
APSC-DV-001170 - CAT II The application must provide an audit reduction capability that supports after-the-fact investigations of security incidents.	0	0
APSC-DV-001180 - CAT II The application must provide a report generation capability that supports on-demand audit review and analysis.	0	0

APSC-DV-001190 - CAT II The application must provide a report generation capability that supports on-demand reporting requirements.	0	0
APSC-DV-001200 - CAT II The application must provide a report generation capability that supports after-the-fact investigations of security incidents.	0	0
APSC-DV-001210 - CAT II The application must provide an audit reduction capability that does not alter original content or time ordering of audit records.	0	0
APSC-DV-001220 - CAT II The application must provide a report generation capability that does not alter original content or time ordering of audit records.	0	0
APSC-DV-001250 - CAT II The applications must use internal system clocks to generate time stamps for audit records.	0	0
APSC-DV-001260 - CAT II The application must record time stamps for audit records that can be mapped to Coordinated Universal Time (UTC) or Greenwich Mean Time (GMT).	0	0
APSC-DV-001270 - CAT II The application must record time stamps for audit records that meet a granularity of one second for a minimum degree of precision.	0	0
APSC-DV-001280 - CAT II The application must protect audit information from any type of unauthorized read access.	0	0
APSC-DV-001290 - CAT II The application must protect audit information from unauthorized modification.	0	0
APSC-DV-001300 - CAT II The application must protect audit information from unauthorized deletion.	0	0
APSC-DV-001310 - CAT II The application must protect audit tools from unauthorized access.	0	0
APSC-DV-001320 - CAT II The application must protect audit tools from unauthorized modification.	0	0
APSC-DV-001330 - CAT II The application must protect audit tools from unauthorized deletion.	0	0
APSC-DV-001340 - CAT II The application must back up audit records at least every seven days onto a different system or system component than the system or component being audited.	0	0
APSC-DV-001570 - CAT II The application must electronically verify Personal Identity Verification (PIV) credentials.	0	0
APSC-DV-001350 - CAT II The application must use cryptographic mechanisms to protect the integrity of audit information.	0	0
APSC-DV-001360 - CAT II Application audit tools must be cryptographically hashed.	0	0
APSC-DV-001370 - CAT II The integrity of the audit tools must be validated by checking the files for changes in the cryptographic hash value.	0	0
APSC-DV-001390 - CAT II The application must prohibit user installation of software without explicit privileged status.	0	0
APSC-DV-001410 - CAT II The application must enforce access restrictions associated with changes to application configuration.	0	0
APSC-DV-001420 - CAT II The application must audit who makes configuration changes to the application.	0	0
APSC-DV-001430 - CAT II The application must have the capability to prevent the installation of patches, service packs, or application components without verification the software component has been digitally signed using a certificate that is recognized and approved by the orga	0	0
APSC-DV-001440 - CAT II The applications must limit privileges to change the software resident within software libraries.	0	0
APSC-DV-001460 - CAT II An application vulnerability assessment must be conducted.	0	0
APSC-DV-001480 - CAT II The application must prevent program execution in accordance with organization-defined policies regarding software program usage and restrictions, and/or rules authorizing the terms and conditions of software program usage.	0	0
APSC-DV-001490 - CAT II The application must employ a deny-all, permit-by-exception (whitelist) policy to allow the execution of authorized software programs.	0	0
APSC-DV-001500 - CAT II The application must be configured to disable non-essential capabilities.	0	0
APSC-DV-001510 - CAT II The application must be configured to use only functions, ports, and protocols permitted to it in the PPSM CAL.	0	0

APSC-DV-001520 - CAT II The application must require users to reauthenticate when organization-defined circumstances or situations require reauthentication.	0	0
APSC-DV-001530 - CAT II The application must require devices to reauthenticate when organization-defined circumstances or situations requiring reauthentication.	0	0
APSC-DV-001540 - CAT I The application must uniquely identify and authenticate organizational users (or processes acting on behalf of organizational users).	0	0
APSC-DV-001550 - CAT II The application must use multifactor (Alt. Token) authentication for network access to privileged accounts.	0	0
APSC-DV-001560 - CAT II The application must accept Personal Identity Verification (PIV) credentials.	0	0
APSC-DV-001580 - CAT II The application must use multifactor (e.g., CAC, Alt. Token) authentication for network access to non-privileged accounts.	0	0
APSC-DV-001590 - CAT II The application must use multifactor (Alt. Token) authentication for local access to privileged accounts.	0	0
APSC-DV-001600 - CAT II The application must use multifactor (e.g., CAC, Alt. Token) authentication for local access to non-privileged accounts.	0	0
APSC-DV-001610 - CAT II The application must ensure users are authenticated with an individual authenticator prior to using a group authenticator.	0	0
APSC-DV-001620 - CAT II The application must implement replay-resistant authentication mechanisms for network access to privileged accounts.	0	0
APSC-DV-001630 - CAT II The application must implement replay-resistant authentication mechanisms for network access to non-privileged accounts.	0	0
APSC-DV-001640 - CAT II The application must utilize mutual authentication when endpoint device non-repudiation protections are required by DoD policy or by the data owner.	0	0
APSC-DV-001650 - CAT II The application must authenticate all network connected endpoint devices before establishing any connection.	0	0
APSC-DV-001660 - CAT II Service-Oriented Applications handling non-releasable data must authenticate endpoint devices via mutual SSL/TLS.	0	0
APSC-DV-001670 - CAT II The application must disable device identifiers after 35 days of inactivity unless a cryptographic certificate is used for authentication.	0	0
APSC-DV-001680 - CAT I The application must enforce a minimum 15-character password length.	0	0
APSC-DV-001690 - CAT II The application must enforce password complexity by requiring that at least one upper-case character be used.	0	0
APSC-DV-001700 - CAT II The application must enforce password complexity by requiring that at least one lower-case character be used.	0	0
APSC-DV-001710 - CAT II The application must enforce password complexity by requiring that at least one numeric character be used.	0	0
APSC-DV-001720 - CAT II The application must enforce password complexity by requiring that at least one special character be used.	0	0
APSC-DV-001730 - CAT II The application must require the change of at least 8 of the total number of characters when passwords are changed.	0	0
APSC-DV-001740 - CAT I The application must only store cryptographic representations of passwords.*	0	0
APSC-DV-001850 - CAT I The application must not display passwords/PINs as clear text.	0	0
APSC-DV-001750 - CAT I The application must transmit only cryptographically-protected passwords.	0	0
APSC-DV-001760 - CAT II The application must enforce 24 hours/1 day as the minimum password lifetime.	0	0
APSC-DV-001770 - CAT II The application must enforce a 60-day maximum password lifetime restriction.	0	0
APSC-DV-001780 - CAT II The application must prohibit password reuse for a minimum of five generations.	0	0
APSC-DV-001790 - CAT II The application must allow the use of a temporary password for system logons with an immediate change to a permanent password.	0	0

APSC-DV-001795 - CAT II The application password must not be changeable by users other than the administrator or the user with which the password is associated.	0	0
APSC-DV-001800 - CAT II The application must terminate existing user sessions upon account deletion.	0	0
APSC-DV-001820 - CAT I The application, when using PKI-based authentication, must enforce authorized access to the corresponding private key.	0	0
APSC-DV-001830 - CAT II The application must map the authenticated identity to the individual user or group account for PKI-based authentication.	0	0
APSC-DV-001870 - CAT II The application must uniquely identify and authenticate non-organizational users (or processes acting on behalf of non-organizational users).	0	0
APSC-DV-001810 - CAT I The application, when utilizing PKI-based authentication, must validate certificates by constructing a certification path (which includes status information) to an accepted trust anchor.	0	0
APSC-DV-001840 - CAT II The application, for PKI-based authentication, must implement a local cache of revocation data to support path discovery and validation in case of the inability to access revocation information via the network.	0	0
APSC-DV-001860 - CAT II The application must use mechanisms meeting the requirements of applicable federal laws, Executive Orders, directives, policies, regulations, standards, and guidance for authentication to a cryptographic module.	0	0
APSC-DV-001880 - CAT II The application must accept Personal Identity Verification (PIV) credentials from other federal agencies.	0	0
APSC-DV-001890 - CAT II The application must electronically verify Personal Identity Verification (PIV) credentials from other federal agencies.	0	0
APSC-DV-002050 - CAT II Applications making SAML assertions must use FIPS-approved random numbers in the generation of SessionIndex in the SAML element AuthnStatement.	0	0
APSC-DV-001900 - CAT II The application must accept FICAM-approved third-party credentials.	0	0
APSC-DV-001910 - CAT II The application must conform to FICAM-issued profiles.	0	0
APSC-DV-001930 - CAT II Applications used for non-local maintenance sessions must audit non-local maintenance and diagnostic sessions for organization-defined auditable events.	0	0
APSC-DV-000310 - CAT III The application must have a process, feature or function that prevents removal or disabling of emergency accounts.	0	0
APSC-DV-001940 - CAT II Applications used for non-local maintenance sessions must implement cryptographic mechanisms to protect the integrity of non-local maintenance and diagnostic communications.	0	0
APSC-DV-001950 - CAT II Applications used for non-local maintenance sessions must implement cryptographic mechanisms to protect the confidentiality of non-local maintenance and diagnostic communications.	0	0
APSC-DV-001960 - CAT II Applications used for non-local maintenance sessions must verify remote disconnection at the termination of non-local maintenance and diagnostic sessions.	0	0
APSC-DV-001970 - CAT II The application must employ strong authenticators in the establishment of non-local maintenance and diagnostic sessions.	0	0
APSC-DV-001980 - CAT II The application must terminate all sessions and network connections when non-local maintenance is completed.	0	0
APSC-DV-001995 - CAT II The application must not be vulnerable to race conditions.	0	0
APSC-DV-002000 - CAT II The application must terminate all network connections associated with a communications session at the end of the session.	0	0
APSC-DV-002010 - CAT II The application must implement NSA-approved cryptography to protect classified information in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, and standards.	0	0
APSC-DV-002020 - CAT II The application must utilize FIPS-validated cryptographic modules when signing application components.	0	0
APSC-DV-002030 - CAT II The application must utilize FIPS-validated cryptographic modules when generating cryptographic hashes.	0	0

APSC-DV-002040 - CAT II The application must utilize FIPS-validated cryptographic modules when protecting unclassified information that requires cryptographic protection.	0	0
APSC-DV-002150 - CAT II The application user interface must be either physically or logically separated from data storage and management interfaces.	0	0
APSC-DV-002210 - CAT II The application must set the HTTPOnly flag on session cookies.*	0	0
APSC-DV-002220 - CAT II The application must set the secure flag on session cookies.	0	0
APSC-DV-002230 - CAT I The application must not expose session IDs.	0	0
APSC-DV-002240 - CAT I The application must destroy the session ID value and/or cookie on logoff or browser close.	0	0
APSC-DV-002250 - CAT II Applications must use system-generated session identifiers that protect against session fixation.	0	0
APSC-DV-002260 - CAT II Applications must validate session identifiers.*	0	0
APSC-DV-002270 - CAT II Applications must not use URL embedded session IDs.	0	0
APSC-DV-002280 - CAT II The application must not re-use or recycle session IDs.	0	0
APSC-DV-002290 - CAT II The application must use the Federal Information Processing Standard (FIPS) 140-2-validated cryptographic modules and random number generator if the application implements encryption, key exchange, digital signature, and hash functionality.	0	0
APSC-DV-002300 - CAT II The application must only allow the use of DoD-approved certificate authorities for verification of the establishment of protected sessions.*	0	0
APSC-DV-002310 - CAT I The application must fail to a secure state if system initialization fails, shutdown fails, or aborts fail.	0	0
APSC-DV-002320 - CAT II In the event of a system failure, applications must preserve any information necessary to determine cause of failure and any information necessary to return to operations with least disruption to mission processes.	0	0
APSC-DV-002330 - CAT II The application must protect the confidentiality and integrity of stored information when required by DoD policy or the information owner.	0	0
APSC-DV-002340 - CAT II The application must implement approved cryptographic mechanisms to prevent unauthorized modification of organization-defined information at rest on organization-defined information system components.	0	0
APSC-DV-002350 - CAT II The application must use appropriate cryptography in order to protect stored DoD information when required by the information owner or DoD policy.	0	0
APSC-DV-002360 - CAT II The application must isolate security functions from non-security functions.	0	0
APSC-DV-002370 - CAT II The application must maintain a separate execution domain for each executing process.	0	0
APSC-DV-002380 - CAT II Applications must prevent unauthorized and unintended information transfer via shared system resources.	0	0
APSC-DV-002390 - CAT II XML-based applications must mitigate DoS attacks by using XML filters, parser options, or gateways.	0	0
APSC-DV-002400 - CAT II The application must restrict the ability to launch Denial of Service (DoS) attacks against itself or other information systems.*	0	0
APSC-DV-002410 - CAT II The web service design must include redundancy mechanisms when used with high-availability systems.	0	0
APSC-DV-002420 - CAT II An XML firewall function must be deployed to protect web services when exposed to untrusted networks.	0	0
APSC-DV-002610 - CAT II The application must remove organization-defined software components after updated versions have been installed.	0	0
APSC-DV-002440 - CAT I The application must protect the confidentiality and integrity of transmitted information.	0	0
APSC-DV-002450 - CAT II The application must implement cryptographic mechanisms to prevent unauthorized disclosure of information and/or detect changes to information during transmission unless otherwise protected by alternative physical safeguards, such as, at a minimum, a Prot	0	0

APSC-DV-002460 - CAT II The application must maintain the confidentiality and integrity of information during preparation for transmission.*	0	0
APSC-DV-002470 - CAT II The application must maintain the confidentiality and integrity of information during reception.	0	0
APSC-DV-002480 - CAT II The application must not disclose unnecessary information to users.	0	0
APSC-DV-002485 - CAT I The application must not store sensitive information in hidden fields.	0	0
APSC-DV-002490 - CAT I The application must protect from Cross-Site Scripting (XSS) vulnerabilities.*	0	0
APSC-DV-002500 - CAT II The application must protect from Cross-Site Request Forgery (CSRF) vulnerabilities.	0	0
APSC-DV-002510 - CAT I The application must protect from command injection.	0	0
APSC-DV-002520 - CAT II The application must protect from canonical representation vulnerabilities.	0	0
APSC-DV-002530 - CAT II The application must validate all input.	0	0
APSC-DV-002540 - CAT I The application must not be vulnerable to SQL Injection.	0	0
APSC-DV-002550 - CAT I The application must not be vulnerable to XML-oriented attacks.	0	0
APSC-DV-002560 - CAT I The application must not be subject to input handling vulnerabilities.*	0	0
APSC-DV-002570 - CAT II The application must generate error messages that provide information necessary for corrective actions without revealing information that could be exploited by adversaries.	0	0
APSC-DV-002580 - CAT II The application must reveal error messages only to the ISSO, ISSM, or SA.*	0	0
APSC-DV-002590 - CAT I The application must not be vulnerable to overflow attacks.*	0	0
APSC-DV-002630 - CAT II Security-relevant software updates and patches must be kept up to date.	0	0
APSC-DV-002760 - CAT II The application performing organization-defined security functions must verify correct operation of security functions.	0	0
APSC-DV-002900 - CAT II The ISSO must ensure application audit trails are retained for at least 1 year for applications without SAMI data, and 5 years for applications including SAMI data.	0	0
APSC-DV-002770 - CAT II The application must perform verification of the correct operation of security functions: upon system startup and/or restart; upon command by a user with privileged access; and/or every 30 days.	0	0
APSC-DV-002780 - CAT III The application must notify the ISSO and ISSM of failed security verification tests.	0	0
APSC-DV-002870 - CAT II Unsigned Category 1A mobile code must not be used in the application in accordance with DoD policy.	0	0
APSC-DV-002880 - CAT II The ISSO must ensure an account management process is implemented, verifying only authorized users can gain access to the application, and individual accounts designated as inactive, suspended, or terminated are promptly removed.	0	0
APSC-DV-002890 - CAT I Application web servers must be on a separate network segment from the application and database servers if it is a tiered application operating in the DoD DMZ.	0	0
APSC-DV-002910 - CAT II The ISSO must review audit trails periodically based on system documentation recommendations or immediately upon system security events.	0	0
APSC-DV-002920 - CAT II The ISSO must report all suspected violations of IA policies in accordance with DoD information system IA procedures.	0	0
APSC-DV-002930 - CAT II The ISSO must ensure active vulnerability testing is performed.	0	0
APSC-DV-002980 - CAT II New IP addresses, data services, and associated ports used by the application must be submitted to the appropriate approving authority for the organization, which in turn will be submitted through the DoD Ports, Protocols, and Services Management (DoD PPS	0	0
APSC-DV-002950 - CAT II Execution flow diagrams and design documents must be created to show how deadlock and recursion issues in web services are being mitigated.	0	0
APSC-DV-002960 - CAT II The designer must ensure the application does not store configuration and control files in the same directory as user data.	0	0
APSC-DV-002970 - CAT II The ISSO must ensure if a DoD STIG or NSA guide is not available, a third-party	0	0

product will be configured by following available guidance.		
APSC-DV-002990 - CAT II The application must be registered with the DoD Ports and Protocols Database.	0	0
APSC-DV-002995 - CAT II The Configuration Management (CM) repository must be properly patched and STIG compliant.	0	0
APSC-DV-003000 - CAT II Access privileges to the Configuration Management (CM) repository must be reviewed every three months.	0	0
APSC-DV-003010 - CAT II A Software Configuration Management (SCM) plan describing the configuration control and change management process of application objects developed by the organization and the roles and responsibilities of the organization must be created and maintained.	0	0
APSC-DV-003020 - CAT II A Configuration Control Board (CCB) that meets at least every release cycle, for managing the Configuration Management (CM) process must be established.	0	0
APSC-DV-003030 - CAT II The application services and interfaces must be compatible with and ready for IPv6 networks.	0	0
APSC-DV-003040 - CAT II The application must not be hosted on a general purpose machine if the application is designated as critical or high availability by the ISSO.	0	0
APSC-DV-003050 - CAT II A disaster recovery/continuity plan must exist in accordance with DoD policy based on the applications availability requirements.	0	0
APSC-DV-003060 - CAT II Recovery procedures and technical system features must exist so recovery is performed in a secure and verifiable manner. The ISSO will document circumstances inhibiting a trusted recovery.	0	0
APSC-DV-003070 - CAT II Data backup must be performed at required intervals in accordance with DoD policy.	0	0
APSC-DV-003080 - CAT II Back-up copies of the application software or source code must be stored in a fire-rated container or stored separately (offsite).	0	0
APSC-DV-003090 - CAT II Procedures must be in place to assure the appropriate physical and technical protection of the backup and restoration of the application.	0	0
APSC-DV-003100 - CAT II The application must use encryption to implement key exchange and authenticate endpoints prior to establishing a communication channel for key exchange.	0	0
APSC-DV-003110 - CAT I The application must not contain embedded authentication data.	0	0
APSC-DV-003120 - CAT I The application must have the capability to mark sensitive/classified output when required.	0	0
APSC-DV-003130 - CAT III Prior to each release of the application, updates to system, or applying patches; tests plans and procedures must be created and executed.	0	0
APSC-DV-003150 - CAT II At least one tester must be designated to test for security flaws in addition to functional testing.	0	0
APSC-DV-003140 - CAT II Application files must be cryptographically hashed prior to deploying to DoD operational networks.	0	0
APSC-DV-003160 - CAT III Test procedures must be created and at least annually executed to ensure system initialization, shutdown, and aborts are configured to verify the system remains in a secure state.	0	0
APSC-DV-003170 - CAT II An application code review must be performed on the application.	0	0
APSC-DV-003180 - CAT III Code coverage statistics must be maintained for each release of the application.	0	0
APSC-DV-003190 - CAT II Flaws found during a code review must be tracked in a defect tracking system.	0	0
APSC-DV-003200 - CAT II The changes to the application must be assessed for IA and accreditation impact prior to implementation.	0	0
APSC-DV-003210 - CAT II Security flaws must be fixed or addressed in the project plan.	0	0
APSC-DV-003215 - CAT III The application development team must follow a set of coding standards.	0	0
APSC-DV-003220 - CAT III The designer must create and update the Design Document for each release of the application.	0	0
APSC-DV-003230 - CAT II Threat models must be documented and reviewed for each application release	0	0

and updated as required by design and functionality changes or when new threats are discovered.		
APSC-DV-003235 - CAT II The application must not be subject to error handling vulnerabilities.*	0	0
APSC-DV-003250 - CAT I The application must be decommissioned when maintenance or support is no longer available.	0	0
APSC-DV-003236 - CAT II The application development team must provide an application incident response plan.	0	0
APSC-DV-003240 - CAT I All products must be supported by the vendor or the development team.	0	0
APSC-DV-003260 - CAT III Procedures must be in place to notify users when an application is decommissioned.	0	0
APSC-DV-003270 - CAT II Unnecessary built-in application accounts must be disabled.	0	0
APSC-DV-003280 - CAT I Default passwords must be changed.	0	0
APSC-DV-003330 - CAT II The system must alert an administrator when low resource conditions are encountered.	0	0
APSC-DV-003285 - CAT II An Application Configuration Guide must be created and included with the application.	0	0
APSC-DV-003290 - CAT II If the application contains classified data, a Security Classification Guide must exist containing data elements and their classification.	0	0
APSC-DV-003300 - CAT II The designer must ensure uncategorized or emerging mobile code is not used in applications.	0	0
APSC-DV-003310 - CAT II Production database exports must have database administration credentials and sensitive data removed before releasing the export.	0	0
APSC-DV-003320 - CAT II Protections against DoS attacks must be implemented.	0	0
APSC-DV-003340 - CAT III At least one application administrator must be registered to receive update notifications, or security alerts, when automated alerts are available.	0	0
APSC-DV-003360 - CAT III The application must generate audit records when concurrent logons from different workstations occur.	0	0
APSC-DV-003345 - CAT III The application must provide notifications or alerts when product update and security related patches are available.	0	0
APSC-DV-003350 - CAT II Connections between the DoD enclave and the Internet or other public or commercial wide area networks must require a DMZ.	0	0
APSC-DV-003400 - CAT II The Program Manager must verify all levels of program management, designers, developers, and testers receive annual security training pertaining to their job function.	0	0
APSC-DV-000010 - CAT II The application must provide a capability to limit the number of logon sessions per user.	0	0
APSC-DV-000060 - CAT II The application must clear temporary storage and cookies when the session is terminated.	0	0
APSC-DV-000070 - CAT II The application must automatically terminate the non-privileged user session and log off non-privileged users after a 15 minute idle time period has elapsed.	0	0
APSC-DV-000080 - CAT II The application must automatically terminate the admin user session and log off admin users after a 10 minute idle time period is exceeded.	0	0
APSC-DV-000090 - CAT II Applications requiring user access authentication must provide a logoff capability for user initiated communication session.	0	0
APSC-DV-000100 - CAT III The application must display an explicit logoff message to users indicating the reliable termination of authenticated communications sessions.	0	0
APSC-DV-000110 - CAT II The application must associate organization-defined types of security attributes having organization-defined security attribute values with information in storage.	0	0
APSC-DV-000120 - CAT II The application must associate organization-defined types of security attributes having organization-defined security attribute values with information in process.	0	0
APSC-DV-000130 - CAT II The application must associate organization-defined types of security attributes having organization-defined security attribute values with information in transmission.	0	0

APSC-DV-000160 - CAT II The application must implement DoD-approved encryption to protect the confidentiality of remote access sessions.	0	0
APSC-DV-000170 - CAT II The application must implement cryptographic mechanisms to protect the integrity of remote access sessions.	0	0
APSC-DV-000190 - CAT I Messages protected with WS_Security must use time stamps with creation and expiration times.	0	0
APSC-DV-000180 - CAT II Applications with SOAP messages requiring integrity must include the following message elements:-Message ID-Service Request-Timestamp-SAML Assertion (optionally included in messages) and all elements of the message must be digitally signed.	0	0
APSC-DV-000200 - CAT I Validity periods must be verified on all application messages using WS-Security or SAML assertions.	0	0
APSC-DV-000210 - CAT II The application must ensure each unique asserting party provides unique assertion ID references for each SAML assertion.	0	0
APSC-DV-000220 - CAT II The application must ensure encrypted assertions, or equivalent confidentiality protections are used when assertion data is passed through an intermediary, and confidentiality of the assertion data is required when passing through the intermediary.	0	0
APSC-DV-000230 - CAT I The application must use the NotOnOrAfter condition when using the SubjectConfirmation element in a SAML assertion.	0	0
APSC-DV-000240 - CAT I The application must use both the NotBefore and NotOnOrAfter elements or OneTimeUse element when using the Conditions element in a SAML assertion.	0	0
APSC-DV-000250 - CAT II The application must ensure if a OneTimeUse element is used in an assertion, there is only one of the same used in the Conditions element portion of an assertion.	0	0
APSC-DV-000260 - CAT II The application must ensure messages are encrypted when the SessionIndex is tied to privacy data.	0	0
APSC-DV-000290 - CAT II Shared/group account credentials must be terminated when members leave the group.	0	0
APSC-DV-000280 - CAT II The application must provide automated mechanisms for supporting account management functions.	0	0
APSC-DV-000300 - CAT II The application must automatically remove or disable temporary user accounts 72 hours after account creation.	0	0
APSC-DV-000320 - CAT III The application must automatically disable accounts after a 35 day period of account inactivity.	0	0
APSC-DV-000330 - CAT II Unnecessary application accounts must be disabled, or deleted.	0	0
APSC-DV-000420 - CAT II The application must automatically audit account enabling actions.	0	0
APSC-DV-000340 - CAT II The application must automatically audit account creation.	0	0
APSC-DV-000350 - CAT II The application must automatically audit account modification.	0	0
APSC-DV-000360 - CAT II The application must automatically audit account disabling actions.	0	0
APSC-DV-000370 - CAT II The application must automatically audit account removal actions.	0	0
APSC-DV-000380 - CAT III The application must notify System Administrators and Information System Security Officers when accounts are created.	0	0
APSC-DV-000390 - CAT III The application must notify System Administrators and Information System Security Officers when accounts are modified.	0	0
APSC-DV-000400 - CAT III The application must notify System Administrators and Information System Security Officers of account disabling actions.	0	0
APSC-DV-000410 - CAT III The application must notify System Administrators and Information System Security Officers of account removal actions.	0	0
APSC-DV-000430 - CAT III The application must notify System Administrators and Information System Security Officers of account enabling actions.	0	0
APSC-DV-000440 - CAT II Application data protection requirements must be identified and documented.	0	0
APSC-DV-000520 - CAT II The application must audit the execution of privileged functions.	0	0

APSC-DV-000450 - CAT II The application must utilize organization-defined data mining detection techniques for organization-defined data storage objects to adequately detect data mining attempts.	0	0
APSC-DV-000460 - CAT I The application must enforce approved authorizations for logical access to information and system resources in accordance with applicable access control policies.	0	0
APSC-DV-000470 - CAT II The application must enforce organization-defined discretionary access control policies over defined subjects and objects.	0	0
APSC-DV-000480 - CAT II The application must enforce approved authorizations for controlling the flow of information within the system based on organization-defined information flow control policies.	0	0
APSC-DV-000490 - CAT II The application must enforce approved authorizations for controlling the flow of information between interconnected systems based on organization-defined information flow control policies.	0	0
APSC-DV-000500 - CAT II The application must prevent non-privileged users from executing privileged functions to include disabling, circumventing, or altering implemented security safeguards/countermeasures.	0	0
APSC-DV-000510 - CAT I The application must execute without excessive account permissions.	0	0
APSC-DV-000530 - CAT I The application must enforce the limit of three consecutive invalid logon attempts by a user during a 15 minute time period.	0	0
APSC-DV-000560 - CAT III The application must retain the Standard Mandatory DoD Notice and Consent Banner on the screen until users acknowledge the usage conditions and take explicit actions to log on for further access.	0	0
APSC-DV-000540 - CAT II The application administrator must follow an approved process to unlock locked user accounts.	0	0
APSC-DV-000550 - CAT III The application must display the Standard Mandatory DoD Notice and Consent Banner before granting access to the application.	0	0
APSC-DV-000570 - CAT III The publicly accessible application must display the Standard Mandatory DoD Notice and Consent Banner before granting access to the application.	0	0
APSC-DV-000580 - CAT III The application must display the time and date of the users last successful logon.	0	0
APSC-DV-000630 - CAT II The application must provide audit record generation capability for the destruction of session IDs.	0	0
APSC-DV-000590 - CAT II The application must protect against an individual (or process acting on behalf of an individual) falsely denying having performed organization-defined actions to be covered by non-repudiation.	0	0
APSC-DV-000600 - CAT II For applications providing audit record aggregation, the application must compile audit records from organization-defined information system components into a system-wide audit trail that is time-correlated with an organization-defined level of tolerance	0	0
APSC-DV-000610 - CAT II The application must provide the capability for organization-identified individuals or roles to change the auditing to be performed on all application components, based on all selectable event criteria within organization-defined time thresholds.	0	0
APSC-DV-000620 - CAT II The application must provide audit record generation capability for the creation of session IDs.	0	0

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - OWASP Top 10 2010

Category	Issues Found	Best Fix Locations
A1-Injection	0	0
A2-Cross-Site Scripting (XSS)	0	0
A3-Broken Authentication and Session Management*	0	0
A4-Insecure Direct Object References	0	0
A5-Cross-Site Request Forgery (CSRF)	0	0
A6-Security Misconfiguration	0	0
A7-Insecure Cryptographic Storage	0	0
A8-Failure to Restrict URL Access	0	0
A9-Insufficient Transport Layer Protection	0	0
A10-Unvalidated Redirects and Forwards	0	0

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - MOIS(KISA) Secure Coding 2021

Category	Issues Found	Best Fix Locations
MOIS(KISA) API misuse*	0	0
MOIS(KISA) Code error*	0	0
MOIS(KISA) Encapsulation*	0	0
MOIS(KISA) Error processing*	0	0
MOIS(KISA) Security Functions*	0	0
MOIS(KISA) Time and status*	0	0
MOIS(KISA) Verification and representation of input data*	0	0

* 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - SANS top 25

Category	Issues Found	Best Fix Locations
SANS top 25*	0	0

* 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - CWE top 25

Category	Issues Found	Best Fix Locations
CWE top 25*	0	0

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - Top Tier

Category	Issues Found	Best Fix Locations
Top Tier*	0	0

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - OWASP ASVS

Category	Issues Found	Best Fix Locations
V01 Architecture, Design and Threat Modeling*	0	0
V02 Authentication*	0	0
V03 Session Management*	0	0
V04 Access Control	0	0
V05 Validation, Sanitization and Encoding*	0	0
V06 Stored Cryptography*	0	0
V07 Error Handling and Logging	2	2
V08 Data Protection*	0	0
V09 Communication*	0	0
V10 Malicious Code*	0	0
V11 Business Logic*	0	0
V12 Files and Resources	0	0
V13 API and Web Service	0	0
V14 Configuration*	0	0

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - ASA Mobile Premium

Category	Issues Found	Best Fix Locations
ASA Mobile Premium*	0	0

* 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描總結 - ASA Premium

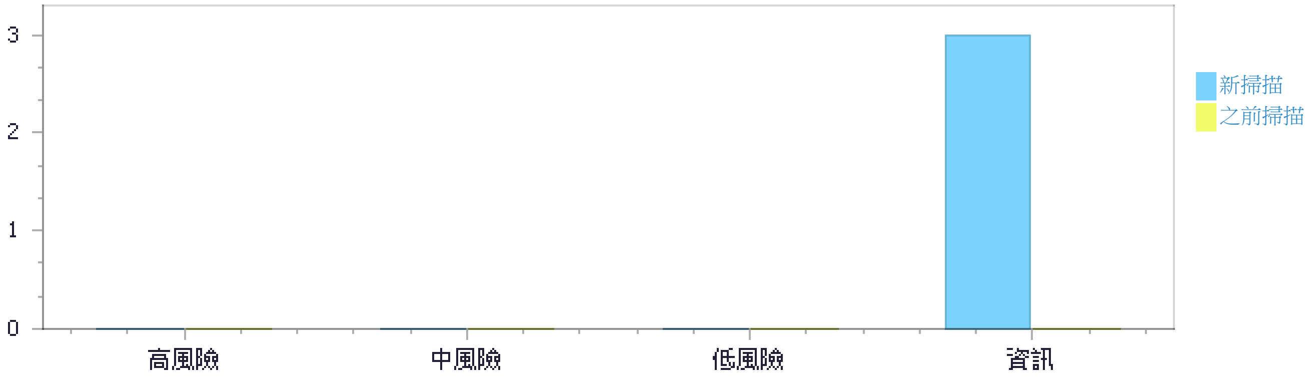
Category	Issues Found	Best Fix Locations
ASA Premium*****	0	0

***** 專案掃描結果不包括所有相關的查詢。應該變更預設和/或篩選器以包括所有相關的標準查詢。

掃描結果分佈 專案的首次掃描

	高風險	中風險	低風險	資訊	總共
新問題	0	0	0	3	3
反覆出現的問題	0	0	0	0	0
總共	0	0	0	3	3

已修復的問題	0	0	0	0	0



掃描結果分佈

	高風險	中風險	低風險	資訊	總共
校驗	0	0	0	3	3
不可利用	0	0	0	0	0
確認	0	0	0	0	0
緊急	0	0	0	0	0
推薦不可用	0	0	0	0	0
總共	0	0	0	3	3

掃描結果摘要

漏洞類別	事件	嚴重程度：
Exposure of Resource to Wrong Sphere	1	資訊
Insufficient Logging of Exceptions	1	資訊
Insufficient Logging of Sensitive Operations	1	資訊

已掃描的檔案

檔案名稱	檔案大小 KB	檢驗和
.ActiveScans/1330412	0	e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855
.SourceControl/0000000008_0-1146696378_00-486659196	0	e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855
LICENSE	2	6b35203c4a2cc2ba7f4ecb3f791c9a6b575820cb1b223eb95cf0b2ccc82a371b
MolecularWeightCalculator.Console/Program.cs	3	d9d3be61f2add83ec8e536c7457e52cdcae8d982c7f978c3e1b52bde4020574f
MolecularWeightCalculator.Tests/ExpressionParametersTest.cs	4	feeb0749cf8863dbd64eb2cbd0616b80e79ce1320d1f56db6fcece2d6d1cc848
MolecularWeightCalculator.Tests/GlobalUsings.cs	1	e8de9b91579ba661cbfebd3912328c2dc917d2a519cc565b717446c7f39e6d33
MolecularWeightCalculator.Tests/MolecularExpressionCalculateTest.cs	4	8e1e11a265418315e2a3552ee23e5f5cb04874e77df835d9b7799b11407e3a25
MolecularWeightCalculator.Tests/MolecularExpressionFilterCalculateTest.cs	4	4c771e1933a49b4e32835ceb9859c3155bfc6f89f1446932f6300fc3ce615e76
MolecularWeightCalculator/MolecularMath.cs	11	64540d117cc005d51002ed040218d069ead5230b8c85460809b24e8d8e05ab76
MolecularWeightCalculator/ParameterExtractionVisitor.cs	2	220cfef1907d429084a9d9880f2f74e4d08a46322134f09eede7af405b6fa0af

已掃描的查詢

查詢名稱	找到的問題
Blind SQL Injections	0
Buffer Overflow	0
CGI XSS	0
Client Side Only Validation	0
Code Injection	0
Command Argument Injection	0
Command Injection	0
Connection String Injection	0
Cookie Injection	0
CookieLess Authentication	0
CookieLess Session State	0
CSRF	0
CustomError	0
Dangerous File Upload	0
Data Filter Injection	0
DB Parameter Tampering	0
DebugEnabled	0
Deserialization of Untrusted Data	0
Deserialization of Untrusted Data MSMQ	0

Directory Browse	0
DoS by Sleep	0
Dynamic SQL Queries	0
Elmah Enabled	0
Excessive Data Exposure	0
Exposure of Resource to Wrong Sphere	0
Hardcoded Absolute Path	0
Hardcoded Connection String	0
Hardcoded password in Connection String	0
HardcodedCredentials	0
Heap Inspection	0
Heuristic 2nd Order SQL Injection	0
Heuristic CSRF	0
Heuristic DB Parameter Tampering	0
Heuristic Parameter Tampering	0
Heuristic SQL Injection	0
Heuristic Stored XSS	0
HTTP Response Splitting	0
HttpOnlyCookies	0
HttpOnlyCookies In Config	0
Impersonation Issue	0
Improper Encoding Of Output	0
Improper Exception Handling	0
Improper Locking	0
Improper Restriction of XXE Ref	0
Improper Session Management	0
Inappropriate Encoding for Output Context	0
Information Exposure Through an Error Message	0
Information Exposure via Headers	0
Information Leak Through Persistent Cookies	0
Insecure Cookie	0
Insufficient Connection String Encryption	0
Insufficient Logging of Database Actions	0
Insufficient Logging of Exceptions	0
Insufficient Logging of Sensitive Operations	0
Insufficiently Protected Credentials	0
JavaScript Hijacking	0
JWT Excessive Expiration Time	0
JWT Lack Of Expiration Time	0
JWT No Expiration Time Validation	0
JWT No Signature Verification	0
JWT Sensitive Information Exposure	0
JWT Use Of Hardcoded Secret	0
LDAP Injection	0
Leaving Temporary Files	0
Log Forging	0
Missing Column Encryption	0
Missing Content Security Policy	0

Missing Function Level Authorization	0
Missing HSTS Header	0
Missing Object Level Authorization	0
Missing X Frame Options	0
MVC View Injection	0
No Request Validation	0
NonUniqueFormName	0
Open Redirect	0
Overly Permissive Cross Origin Resource Sharing Policy	0
Pages Without Global Error Handler	0
Parameter Tampering	0
Password In Comment	0
Password in Configuration File	0
Path Traversal	0
Permissive Content Security Policy	0
Persistent Connection String	0
Potential ReDoS	0
Potential ReDoS By Injection	0
Potential ReDoS In Code	0
Potential ReDoS In Static Field	0
Privacy Violation	0
Race Condition within a Thread	0
ReDoS By Regex Injection	0
ReDoS In Code	0
ReDoS In Validation	0
Reflected XSS All Clients	0
Reflected XSS Specific Clients	0
RequireSSL	0
Resource Injection	0
Second Order SQL Injection	0
Session Clearing Problems	0
Session Fixation	0
Session Poisoning	0
SlidingExpiration	0
SQL Injection	0
SQL Injection Evasion Attack	0
Stored Code Injection	0
Stored Command Argument Injection	0
Stored Command Injection	0
Stored LDAP Injection	0
Stored Path Traversal	0
Stored XPath Injection	0
Stored XSS	0
TraceEnabled	0
Trust Boundary Violation in Session Variables	0
Unencrypted Web Config File	0
Unsafe Object Binding	0
Unsafe Reflection	0

Use Of Broken Or Risky Cryptographic Algorithm	0
Use of Cryptographically Weak PRNG	0
Use of Hard coded Cryptographic Key	0
Use Of Hardcoded Password	0
Use of Insufficiently Random Values	0
Use of RSA Algorithm without OAEP	0
UTF7 XSS	0
Visible Pointers	0
XPath Injection	0
XSS Evasion Attack	0

掃描結果詳細資料

Insufficient Logging of Exceptions

查詢路徑:
CSharp\Cx\CSharp Best Coding Practice\Insufficient Logging of Exceptions 版本:1

類別

OWASP Top 10 2021: A9-Security Logging and Monitoring Failures
OWASP ASVS: V07 Error Handling and Logging

描述

Insufficient Logging of Exceptions\路徑 1:

嚴重程度：	資訊
結果狀態：	校驗
線上結果	https://checkmarx.gss.com.tw/CxWebClient/ViewerMain.aspx?scanid=1330412&projectid=8520&pathid=1
結果評論	
狀態	新的
Detection Date	7/12/2024 9:42:26 AM

	來源	目的地
檔案	MolecularWeightCalculator.Console/Program.cs	MolecularWeightCalculator.Console/Program.cs
行	81	81
物件	catch	catch

代碼片斷
檔案名稱　MolecularWeightCalculator.Console/Program.cs
方法　void DisplayExpressionInfo(string expression, string filterMoleculars="")

```
....
81.   catch (Exception ex)
```

Insufficient Logging of Sensitive Operations

查詢路徑:
CSharp\Cx\CSharp Best Coding Practice\Insufficient Logging of Sensitive Operations 版本:2

類別

OWASP Top 10 2021: A9-Security Logging and Monitoring Failures
OWASP ASVS: V07 Error Handling and Logging

描述

Insufficient Logging of Sensitive Operations\路徑 1:

嚴重程度：	資訊
結果狀態：	校驗
線上結果	https://checkmarx.gss.com.tw/CxWebClient/ViewerMain.aspx?scanid=1330412&projectid

	=8520&pathid=2
結果評論	
狀態	新的
Detection Date	7/12/2024 9:42:27 AM

In line 1, the sensitive operation LogInformation is not properly logged and, therefore, important execution details may be omitted.

	來源	目的地
檔案	MolecularWeightCalculator.Console/Program.cs	MolecularWeightCalculator.Console/Program.cs
行	20	20
物件	LogInformation	LogInformation

代碼片斷	
檔案名稱	MolecularWeightCalculator.Console/Program.cs
方法	

```
....
20.   logger.LogInformation("Start App");
```

Exposure of Resource to Wrong Sphere

查詢路徑:

CSharp\Cx\CSharp Best Coding Practice\Exposure of Resource to Wrong Sphere 版本:2

類別

PCI DSS v3.2.1: PCI DSS (3.2.1) - 6.5.8 - Improper access control
OWASP Top 10 2013: A7-Missing Function Level Access Control
OWASP Top 10 2017: A5-Broken Access Control
OWASP Top 10 2021: A4-Insecure Design

描述

Exposure of Resource to Wrong Sphere\路徑 1:

嚴重程度：	資訊
結果狀態：	校驗
線上結果	https://checkmarx.gss.com.tw/CxWebClient/ViewerMain.aspx?scanid=1330412&projectid=8520&pathid=3
結果評論	
狀態	新的
Detection Date	7/12/2024 9:42:27 AM

The application exposes a public field, Parameters, in MolecularWeightCalculator/ParameterExtractionVisitor.cs line 10.

	來源	目的地
檔案	MolecularWeightCalculator/ParameterExtractionVisitor.cs	MolecularWeightCalculator/ParameterExtractionVisitor.cs
行	10	10

物件	Parameters	Parameters

代碼片斷

檔案名稱	MolecularWeightCalculator/ParameterExtractionVisitor.cs
方法	public HashSet<string> Parameters = new HashSet<string>();

```
....
10.  public HashSet<string> Parameters = new HashSet<string>();
```

Insufficient Logging

Weakness ID: 778 *(Weakness Base)* **Status:** Draft

Description

Description Summary

When a security-critical event occurs, the software either does not record the event or omits important details about the event when logging it.

Extended Description

When security-critical events are not logged properly, such as a failed login attempt, this can make malicious behavior more difficult to detect and may hinder forensic analysis after an attack succeeds.

Time of Introduction

- Operation

Applicable Platforms

Languages

Language-independent

Common Consequences

Scope	Effect
Accountability	If security critical information is not recorded, there will be no trail for forensic analysis and discovering the cause of problems or the source of attacks may become more difficult or impossible.

Likelihood of Exploit

Medium

Demonstrative Examples

Example 1

The example below shows a configuration for the service security audit feature in the Windows Communication Foundation (WCF).

(Bad Code)

Example Language: **XML**

```
<system.serviceModel>
<behaviors>
<serviceBehaviors>
<behavior name="NewBehavior">
<serviceSecurityAudit auditLogLocation="Default"
suppressAuditFailure="false"
serviceAuthorizationAuditLevel="None"
messageAuthenticationAuditLevel="None" />
...
</system.serviceModel>
```

The previous configuration file has effectively disabled the recording of security-critical events, which would force the administrator to look to other sources during debug or recovery efforts.

Logging failed authentication attempts can warn administrators of potential brute force attacks. Similarly, logging successful authentication events can provide a useful audit trail when a legitimate account is compromised. The following configuration shows appropriate settings, assuming that the site does not have excessive traffic, which could fill the logs if there are a large number of success or failure events (CWE-779).

(Good Code)

Example Language: **XML**

```xml
<system.serviceModel>
<behaviors>
<serviceBehaviors>
<behavior name="NewBehavior">
<serviceSecurityAudit auditLogLocation="Default"
suppressAuditFailure="false"
serviceAuthorizationAuditLevel="SuccessAndFailure"
messageAuthenticationAuditLevel="SuccessAndFailure" />
...
</system.serviceModel>
```

Observed Examples

Reference	Description
CVE-2008-4315	server does not log failed authentication attempts, making it easier for attackers to perform brute force password guessing without being detected
CVE-2008-1203	admin interface does not log failed authentication attempts, making it easier for attackers to perform brute force password guessing without being detected
CVE-2007-3730	default configuration for POP server does not log source IP or username for login attempts
CVE-2007-1225	proxy does not log requests without "http://" in the URL, allowing web surfers to access restricted web content without detection
CVE-2003-1566	web server does not log requests for a non-standard request type

Potential Mitigations

Phase: Architecture and Design

Use a centralized logging mechanism that supports multiple levels of detail. Ensure that all security-related successes and failures can be logged.

Phase: Operation

Be sure to set the level of logging appropriately in a production environment. Sufficient data should be logged to enable system administrators to detect attacks, diagnose errors, and recover from attacks. At the same time, logging too much data (CWE-779) can cause the same problems.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Weakness Base	223	Omission of Security-relevant Information	**Development Concepts (primary)699** **Research Concepts (primary)1000**
ChildOf	Category	254	Security Features	Development Concepts699
ChildOf	Weakness Class	693	Protection Mechanism Failure	Research Concepts1000

Content History

Submissions

Submission Date	Submitter	Organization	Source
2009-07-02			Internal CWE Team

Contributions

Contribution Date	Contributor	Organization	Source
2009-07-02		Fortify Software	Content
	Provided code example and additional information for description and consequences.		

BACK TO TOP

Insufficient Logging of Sensitive Operations

風險

可能發生什麼問題

If sensitive operations executions is not recorded, there will be no trail for forensic analysis and discovering the cause of possible associated problems or the source of attacks may become more difficult or impossible.

原因

如何發生

The execution of sensitive operations is not logged.

一般建議

如何避免

Use a logging mechanism that supports multiple levels of detail. Be sure to set the level of logging appropriately in a production environment. Sufficient data should be logged to enable system administrators to detect attacks, diagnose errors, and recover from attacks.

程式碼範例

CSharp

Insufficient Logging of a HttpDelete action

```
[HttpDelete]
[Route("/movie/{id}")]
public ActionResult HandleMovies(int id)
{
    doSomthing();
}
```

Insufficient Logging of Sensitive Operation

```
public void DoSomethingWith1(int id)
{
    var msg = DatabaseInstance.Delete(id);
}
```

Sensitive Operation Logged

```
[HttpPost]
[Route("/login")]
public ActionResult handler1_v2()
{
    doThings();
    logger.Info( "Login of user occurred");
}
```

Sensitive Operation Logged (case2)

```
public void DoSomethingWith2(int id)
{
    var msg = DatabaseInstance.Delete(id);
    logger.Info( "Delete of something occurred");
}
```

Exposure of Resource to Wrong Sphere

風險

可能發生什麼問題

如果沒有嚴謹的規劃變數存取權限，不小心將class的內部變數設為public，則該變數可能被預期之外的方式修改，並允許此class的外部使用者為該變數設定任意或不被允許的值。 若class或其他使用者嘗試修改該變數的值，可能使程式異常。根據此變數的使用方式，甚至能衍生出其他漏洞。

原因

如何發生

應用程式中的一個class將其屬性(property)宣告為public，而沒有對其限制存取權限。或者是忘了對public變數加上不可從外部修改的保護。

一般建議

如何避免

- 避免將內部變數和特定實現宣告為public。
- 若要公開，建議將變數設定為屬性(property)，並根據需求在程式碼中進行資料驗證和控制。
- 當需要將變數宣告為public，可以加上 `final` 修飾字將值限制為唯讀。

程式碼範例

Java

Exposing Public Field

```
public class MyProduct {
    // This value can be modified by any external code
    public float price;

    public MyProduct()  {
        this.price = ReadPriceFromDB("MyProduct");
    }
}
```

Exposing Read-Only Field

```
public class MyProduct {
    // This value can be read by external code,
    //   but can only be modified by the constructor
    public final float price;

    public MyProduct()  {
        this.price = ReadPriceFromDB("MyProduct");
    }
}
```

Wrapping with Properties

```
public class MyProduct {
    // This value can only be accessed by the class itself
    private float price;

    // External code can only read the value by calling the accessor property
    public float getPrice() {
        return price;
    }

    public MyProduct()  {
        this.price = ReadPriceFromDB("MyProduct");
    }
}
```

檢測的語言

語言	**HASH值**	變更的日期
CSharp	3678778361231379	2024/2/1
Common	1330881790325397	2024/2/1