nondeterministic-beam-0f873360

Current Risk Summary report

Thu May 08 2025 19:57:05 GMT+0000 (Coordinated Universal Time)

Project description: *No description*

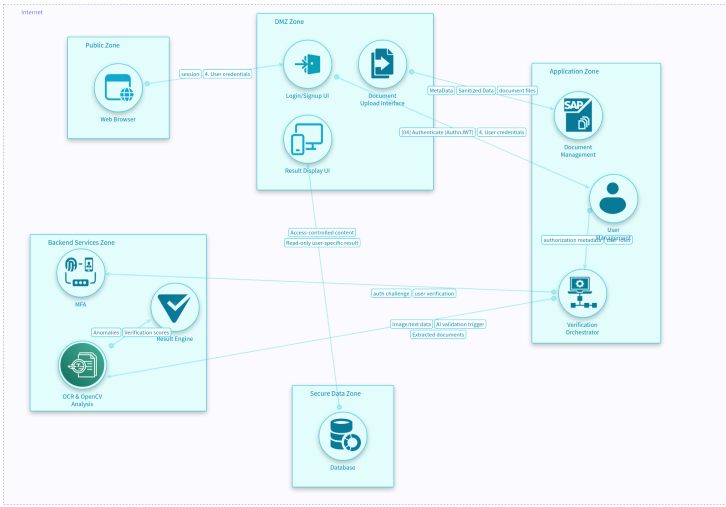
Filtered by: *No filters*

Unique ID: ce6fd27c-e6ef-4ec2-9754-585ce376843b

Owner: Noor-ul-ain Islam

Workflow state: Draft

Tags: *No tags*



Content menu

Current Risk summary

Inherent risk description: The Inherent Risk before countermeasures were applied.
- **Risk Rating:** 69% High

The Current Risk description (the risk we are at now): The Current Risk is based on the current implementation status of the countermeasures and test results.
- **Risk Rating:** 69% High

Projected Risk description: The Projected Risk is the level of risk that would be reached should the required countermeasures be implemented.
- **Risk Rating:** 69% High

Components

- Application Zone
- Backend Services Zone
- Database
- DMZ Zone
- Document Management
- Document Upload Interface
- Login/Signup UI
- MFA
- OCR & OpenCV Analysis
- Public Zone
- Result Display UI
- Result Engine
- Secure Data Zone
- User Management
- Verification Orchestrator
- Web Browser

Accepted Risks

No data

Current Risks

Component: Application Zone

Use case: Denial of Service

CRT1. Threat name: Attackers conduct a Denial of Service Attack
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR1. Countermeasure name:** Implement Comprehensive Resource Management and Protection Mechanisms
  - **Status:** RECOMMENDED

Use case: Information Disclosure

CRT2. Threat name: Attackers exploit misconfiguration
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR2. Countermeasure name:** Regular Configuration and Security Reviews
  - **Status:** RECOMMENDED

CRT3. Threat name: Attackers take advantage of insecure communication channels
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR3. Countermeasure name:** Implement Comprehensive Data Protection Measures
  - **Status:** RECOMMENDED

Use case: Elevation of Privilege

CRT4. Threat name: Attackers gain elevated privileges
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR4. Countermeasure name:** Regular Patch Management and Vulnerability Assessment
  - **Status:** RECOMMENDED

Use case: Spoofing

CRT5. Threat name: Attackers gain Unauthorized access by Identity Spoofing
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR5. Countermeasure name:** Enforce Multi-Factor Authentication
  - **Status:** RECOMMENDED

Use case: Tampering

CRT6. Threat name: Attackers perform Unauthorized Data Modification
- **Inherent risk:** Medium
- **Current risk:** Medium
- **Projected risk:** Medium
- **State:** Expose
- **CR6. Countermeasure name:** Implement Data Integrity Checks
  - **Status:** RECOMMENDED

Use case: Repudiation

CRT7. Threat name: Lack of evidences of misuse due to insufficient Auditing and Logging
- **Inherent risk:** Medium
- **Current risk:** Medium
- **Projected risk:** Medium
- **State:** Expose
- **CR7. Countermeasure name:** Implement Comprehensive Logging and Auditing

- **Status:** RECOMMENDED

Component: Backend Services Zone

Use case: General

CRT8. Threat name: Back-end servers used as a means to attack a vehicle or extract data
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR8. Countermeasure name:** Prevent unauthorized access through system design
  - **Status:** RECOMMENDED
- **CR9. Countermeasure name:** Minimize unauthorized access
  - **Status:** RECOMMENDED
- **CR10. Countermeasure name:** Minimize the risk of insider attack
  - **Status:** RECOMMENDED

CRT9. Threat name: Services from back-end server being disrupted affecting the operation of a vehicle
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR11. Countermeasure name:** Prepare recovery measures in case of system outage
  - **Status:** RECOMMENDED

CRT10. Threat name: Vehicle related data held on back-end servers being lost or compromised
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR12. Countermeasure name:** Minimize risks associated with cloud computing
  - **Status:** RECOMMENDED
- **CR13. Countermeasure name:** Prevent data breaches
  - **Status:** RECOMMENDED

Component: Database

Use case: Tampering

CRT11. Threat name: Attacker exploit misconfiguration and/or vulnerable third-party plugins
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR14. Countermeasure name:** Implement regular review and updates for system configuration and dependencies
  - **Status:** RECOMMENDED

CRT12. Threat name: Attackers inject malicious content, e.g., SQLi
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR15. Countermeasure name:** Implement proper input validation
  - **Status:** RECOMMENDED
- **CR16. Countermeasure name:** Use prepared statements and parameterized queries
  - **Status:** RECOMMENDED

Use case: Elevation of Privilege

CRT13. Threat name: Attackers gain unauthorized access or elevated privileges
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR17. Countermeasure name:** Create a workflow for a comprehensive security framework for your database management system
  - **Status:** RECOMMENDED

Use case: Information Disclosure

CRT14. Threat name: Attackers gather useful information from inadequate error handling
- **Inherent risk:** High
- **Current risk:** High

- **Projected risk:** High
- **State:** Expose
- **CR18. Countermeasure name:** Implement secure error handling
  - **Status:** RECOMMENDED

CRT15. Threat name: Attackers take advantage of insecure communication channels or inadequate data encryption practices
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR19. Countermeasure name:** Enforce TLS for all Communications
  - **Status:** RECOMMENDED
- **CR20. Countermeasure name:** Implement strong encryption mechanisms and practices
  - **Status:** RECOMMENDED

Use case: Denial of Service

CRT16. Threat name: Denial of service via resource exhaustion
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR21. Countermeasure name:** Implement rate and resource limiting
  - **Status:** RECOMMENDED

Use case: Repudiation

CRT17. Threat name: Lack of evidences of misuse due to insufficient auditing and logging or poor log protection
- **Inherent risk:** Medium
- **Current risk:** Medium
- **Projected risk:** Medium
- **State:** Expose
- **CR22. Countermeasure name:** Implement review, monitoring, and logging mechanisms
  - **Status:** RECOMMENDED

Component: DMZ Zone

Use case: Elevation of Privilege

CRT18. Threat name: Attackers access the system taking advantage of broken authentication
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR23. Countermeasure name:** Implement server-side access control checks
  - **Status:** RECOMMENDED

CRT19. Threat name: Attackers exploit flaws in access control systems
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR24. Countermeasure name:** Implement secure session management
  - **Status:** RECOMMENDED
- **CR25. Countermeasure name:** Implement Multi-Factor Authentication (MFA)
  - **Status:** RECOMMENDED

Use case: Tampering

CRT20. Threat name: Attackers capitalize on security misconfigurations
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR26. Countermeasure name:** Conduct regular security audits and reviews
  - **Status:** RECOMMENDED

Use case: Information Disclosure

CRT21. Threat name: Attackers get access to sensitive data
- **Inherent risk:** Critical
- **Current risk:** Critical

- **Projected risk:** Critical
- **State:** Expose
- **CR27. Countermeasure name:** Use encryption to protect sensitive data
  - **Status:** RECOMMENDED

Component: Document Management

Use case: Information Disclosure

CRT22. Threat name: Attackers could gain access to sensitive data through a man in the middle attack
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR28. Countermeasure name:** Enable mTLS authentication for Document Management Service
  - **Status:** RECOMMENDED

CRT23. Threat name: Sensitive data is compromised through unauthorized access to data
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR29. Countermeasure name:** Use encryption for Document Management Service
  - **Status:** RECOMMENDED

Component: Document Upload Interface

Use case: Elevation of Privilege

CRT24. Threat name: An attacker bypasses authentication to download sensitive documents
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR30. Countermeasure name:** Implement multi-factor authentication (MFA) for document download access
  - **Status:** RECOMMENDED

Use case: Information Disclosure

CRT25. Threat name: An attacker exploits an insecure file storage path to download unauthorized files
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR31. Countermeasure name:** Validate and sanitize all file paths to prevent unauthorized access
  - **Status:** RECOMMENDED

CRT26. Threat name: Sensitive files are served without encryption, allowing data interception
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR32. Countermeasure name:** Enforce HTTPS and encrypt documents during transit
  - **Status:** RECOMMENDED

Use case: Denial of Service

CRT27. Threat name: An attacker performs a denial-of-service (DoS) attack on the document download service
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR33. Countermeasure name:** Implement rate limiting and request throttling for the download service
  - **Status:** RECOMMENDED

Use case: Repudiation

CRT28. Threat name: Log tampering allows attackers to cover their tracks after unauthorized downloads
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose

- **CR34. Countermeasure name:** Implement immutable logging and ensure logs are securely stored
  - **Status:** RECOMMENDED

Component: Login/Signup UI

Use case: Elevation of Privilege

CRT29. Threat name: Attackers access the system taking advantage of broken authentication
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR35. Countermeasure name:** Implement server-side access control checks
  - **Status:** RECOMMENDED

CRT30. Threat name: Attackers exploit flaws in access control systems
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR36. Countermeasure name:** Implement secure session management
  - **Status:** RECOMMENDED
- **CR37. Countermeasure name:** Implement Multi-Factor Authentication (MFA)
  - **Status:** RECOMMENDED

Use case: Tampering

CRT31. Threat name: Attackers capitalize on security misconfigurations
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR38. Countermeasure name:** Conduct regular security audits and reviews
  - **Status:** RECOMMENDED

Use case: Information Disclosure

CRT32. Threat name: Attackers get access to sensitive data
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR39. Countermeasure name:** Use encryption to protect sensitive data
  - **Status:** RECOMMENDED

Component: MFA

Use case: Spoofing

CRT33. Threat name: An attacker gains access through compromised MFA methods
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR40. Countermeasure name:** Enhanced MFA resilience
  - **Status:** RECOMMENDED

CRT34. Threat name: MFA bypass due to inadequate fallback mechanisms
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR41. Countermeasure name:** Secure MFA fallbacks
  - **Status:** RECOMMENDED

CRT35. Threat name: Unauthorized access through social engineering
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR42. Countermeasure name:** User training and awareness programs
  - **Status:** RECOMMENDED

Use case: Denial of Service

CRT36. Threat name: Denial of service on MFA systems
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR43. Countermeasure name:** Rate limiting and throttling for MFA
  - **Status:** RECOMMENDED

Use case: Elevation of Privilege

CRT37. Threat name: Session hijacking despite MFA implementation
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR44. Countermeasure name:** Session security enhancement
  - **Status:** RECOMMENDED

Component: OCR & OpenCV Analysis

Use case: Information Disclosure

CRT38. Threat name: Exposure of personally identifiable information (PII)
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR45. Countermeasure name:** Redact PII from documents processed by AWS Textract
  - **Status:** RECOMMENDED

CRT39. Threat name: Exposure of sensitive data post-processing
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR46. Countermeasure name:** Apply metadata tags to classify sensitive data extracted by AWS Textract
  - **Status:** RECOMMENDED

CRT40. Threat name: Non-compliance with data residency requirements
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR47. Countermeasure name:** Limit document processing to specific AWS Regions for compliance
  - **Status:** RECOMMENDED

Component: Public Zone

Use case: Spoofing

CRT41. Threat name: Attackers conduct phishing attacks through deceptive websites
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR48. Countermeasure name:** Deploy anti-phishing protection
  - **Status:** RECOMMENDED
- **CR49. Countermeasure name:** Activate URL filtering mechanisms
  - **Status:** RECOMMENDED

CRT42. Threat name: Attackers intercept browser communications through man-in-the-middle (MitM) attacks
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR50. Countermeasure name:** Enforce strict certificate validation
  - **Status:** RECOMMENDED
- **CR51. Countermeasure name:** Utilize encrypted communication tools
  - **Status:** RECOMMENDED

Use case: Tampering

CRT43. Threat name: Attackers distribute malware through compromised browser extensions

- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR52. Countermeasure name:** Manage browser extensions securely
  - **Status:** RECOMMENDED
- **CR53. Countermeasure name:** Implement extension whitelisting policies
  - **Status:** RECOMMENDED

Use case: Elevation of Privilege

CRT44. Threat name: Attackers exploit browser vulnerabilities to execute malicious code

- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR54. Countermeasure name:** Configure automatic browser updates
  - **Status:** RECOMMENDED
- **CR55. Countermeasure name:** Apply security hardening measures
  - **Status:** RECOMMENDED

Use case: Information Disclosure

CRT45. Threat name: Attackers inject malicious scripts via cross-site scripting (XSS)

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR56. Countermeasure name:** Activate built-in browser security filters
  - **Status:** RECOMMENDED
- **CR57. Countermeasure name:** Implement client-side script blockers
  - **Status:** RECOMMENDED

Component: Result Display UI

Use case: Spoofing

CRT46. Threat name: Attackers can deceive users into clicking on hidden elements

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR58. Countermeasure name:** Employ frame-busting scripts, set X-Frame-Options header, and enforce Content Security Policy
  - **Status:** RECOMMENDED

Use case: Tampering

CRT47. Threat name: Attackers can exploit vulnerabilities in third-party dependencies leading to security breaches

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR59. Countermeasure name:** Regularly update dependencies, use dependency scanning tools, and follow best practices for secure coding
  - **Status:** RECOMMENDED

CRT48. Threat name: Attackers can inject malicious scripts into web pages viewed by other users

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR60. Countermeasure name:** Implement input validation, output encoding, and enforce Content Security Policy (CSP)
  - **Status:** RECOMMENDED

Use case: Elevation of Privilege

CRT49. Threat name: Attackers may exploit weaknesses in authentication and authorization mechanisms

- **Inherent risk:** High
- **Current risk:** High

- **Projected risk:** High
- **State:** Expose
- **CR61. Countermeasure name:** Implement strong authentication mechanisms and follow the least privilege principle
  - **Status:** RECOMMENDED

Component: Result Engine

Use case: Tampering

CRT50. Threat name: Attackers bypass the validation process
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR62. Countermeasure name:** Harden the input validation mechanisms, setup, and pipeline
  - **Status:** RECOMMENDED

CRT51. Threat name: Attackers inject malicious content, e.g., SQL injection
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR63. Countermeasure name:** Proper use of sanitization and validation mechanisms
  - **Status:** RECOMMENDED

Use case: Denial of Service

CRT52. Threat name: Attackers exploit performance bottlenecks or vulnerable validation processing functionality
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR64. Countermeasure name:** Optimize validation steps
  - **Status:** RECOMMENDED

Component: Secure Data Zone

Use case: Information Disclosure

CRT53. Threat name: An attacker exploits weak access controls to retrieve sensitive secrets
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR65. Countermeasure name:** Implement strict access control policies
  - **Status:** RECOMMENDED

CRT54. Threat name: Compromised systems reuse leaked or old secrets
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR66. Countermeasure name:** Implement automatic secret rotation
  - **Status:** RECOMMENDED

CRT55. Threat name: Overly permissive secrets sharing between services leads to data leakage
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR67. Countermeasure name:** Restrict secret sharing based on least privilege
  - **Status:** RECOMMENDED

CRT56. Threat name: Secrets are stored without encryption, leading to potential exposure
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR68. Countermeasure name:** Enforce encryption of secrets at rest and in transit
  - **Status:** RECOMMENDED

Use case: Elevation of Privilege

CRT57. Threat name: Attackers exploit vulnerabilities in the Secrets Manager API
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR69. Countermeasure name:** Secure the API with strong authentication and input validation
  - **Status:** RECOMMENDED

Component: User Management

Use case: Elevation of Privilege

CRT58. Threat name: Attackers gain elevated privilege
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR70. Countermeasure name:** Enforce Anti-CSRF Measures
  - **Status:** RECOMMENDED
- **CR71. Countermeasure name:** Implement Robust Access Control Mechanisms
  - **Status:** RECOMMENDED

CRT59. Threat name: Attackers use improper Security Configuration for malicious activities
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR72. Countermeasure name:** Regular Configuration and Vulnerability Assessment
  - **Status:** RECOMMENDED
- **CR73. Countermeasure name:** Use of Secure Defaults and Hardening Guides
  - **Status:** RECOMMENDED
- **CR74. Countermeasure name:** Automated Configuration Management Tools
  - **Status:** RECOMMENDED

Use case: Information Disclosure

CRT60. Threat name: Attackers obtain unauthorized access
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR75. Countermeasure name:** Secure Session Management Practices
  - **Status:** RECOMMENDED
- **CR76. Countermeasure name:** Implement Multi-Factor Authentication (MFA)
  - **Status:** RECOMMENDED

CRT61. Threat name: Attackers take advantage of poor protected data and insecure communications
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR77. Countermeasure name:** Implement Comprehensive Encryption Strategies
  - **Status:** RECOMMENDED
- **CR78. Countermeasure name:** Proactive Risk Assessments for Data Protection
  - **Status:** RECOMMENDED
- **CR79. Countermeasure name:** Data Handling Best Practices
  - **Status:** RECOMMENDED

CRT62. Threat name: Information Disclosure through Improper Handling of User Data and Error Messages
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR80. Countermeasure name:** Implement Custom Error Handling and Generic Messaging
  - **Status:** RECOMMENDED

Use case: Tampering

CRT63. Threat name: Injection Attacks
- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR81. Countermeasure name:** Implement Prepared Statements and Parameterized Queries

- **Status:** RECOMMENDED
- **CR82. Countermeasure name:** Implement Content Security Policy (CSP)
  - **Status:** RECOMMENDED
- **CR83. Countermeasure name:** Comprehensive Input Validation and Sanitization
  - **Status:** RECOMMENDED

Use case: Denial of Service

CRT64. Threat name: Resource Exhaustion through Account Enumeration Attacks

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR84. Countermeasure name:** Implement Rate Limiting and Captcha
  - **Status:** RECOMMENDED

Use case: Repudiation

CRT65. Threat name: Unnoticed misbehaviour due to Insufficient Logging and Monitoring

- **Inherent risk:** Medium
- **Current risk:** Medium
- **Projected risk:** Medium
- **State:** Expose
- **CR85. Countermeasure name:** Implement Comprehensive Logging and Monitoring
  - **Status:** RECOMMENDED

Component: Verification Orchestrator

Use case: Denial of Service

CRT66. Threat name: Attackers conduct a Denial of Service Attack

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR86. Countermeasure name:** Implement Comprehensive Resource Management and Protection Mechanisms
  - **Status:** RECOMMENDED

Use case: Information Disclosure

CRT67. Threat name: Attackers exploit misconfiguration

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR87. Countermeasure name:** Regular Configuration and Security Reviews
  - **Status:** RECOMMENDED

CRT68. Threat name: Attackers take advantage of insecure communication channels

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR88. Countermeasure name:** Implement Comprehensive Data Protection Measures
  - **Status:** RECOMMENDED

Use case: Elevation of Privilege

CRT69. Threat name: Attackers gain elevated privileges

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR89. Countermeasure name:** Regular Patch Management and Vulnerability Assessment
  - **Status:** RECOMMENDED

Use case: Spoofing

CRT70. Threat name: Attackers gain Unauthorized access by Identity Spoofing

- **Inherent risk:** High

- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR90. Countermeasure name:** Enforce Multi-Factor Authentication
  - **Status:** RECOMMENDED

Use case: Tampering

CRT71. Threat name: Attackers perform Unauthorized Data Modification
- **Inherent risk:** Medium
- **Current risk:** Medium
- **Projected risk:** Medium
- **State:** Expose
- **CR91. Countermeasure name:** Implement Data Integrity Checks
  - **Status:** RECOMMENDED

Use case: Repudiation

CRT72. Threat name: Lack of evidences of misuse due to insufficient Auditing and Logging
- **Inherent risk:** Medium
- **Current risk:** Medium
- **Projected risk:** Medium
- **State:** Expose
- **CR92. Countermeasure name:** Implement Comprehensive Logging and Auditing
  - **Status:** RECOMMENDED

Component: Web Browser

Use case: Spoofing

CRT73. Threat name: Attackers conduct phishing attacks through deceptive websites
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR93. Countermeasure name:** Deploy anti-phishing protection
  - **Status:** RECOMMENDED
- **CR94. Countermeasure name:** Activate URL filtering mechanisms
  - **Status:** RECOMMENDED

CRT74. Threat name: Attackers intercept browser communications through man-in-the-middle (MitM) attacks
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR95. Countermeasure name:** Enforce strict certificate validation
  - **Status:** RECOMMENDED
- **CR96. Countermeasure name:** Utilize encrypted communication tools
  - **Status:** RECOMMENDED

Use case: Tampering

CRT75. Threat name: Attackers distribute malware through compromised browser extensions
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR97. Countermeasure name:** Manage browser extensions securely
  - **Status:** RECOMMENDED
- **CR98. Countermeasure name:** Implement extension whitelisting policies
  - **Status:** RECOMMENDED

Use case: Elevation of Privilege

CRT76. Threat name: Attackers exploit browser vulnerabilities to execute malicious code
- **Inherent risk:** Critical
- **Current risk:** Critical
- **Projected risk:** Critical
- **State:** Expose
- **CR99. Countermeasure name:** Apply security hardening measures
  - **Status:** RECOMMENDED
- **CR100. Countermeasure name:** Configure automatic browser updates

- **Status:** RECOMMENDED

Use case: Information Disclosure

CRT77. Threat name: Attackers inject malicious scripts via cross-site scripting (XSS)

- **Inherent risk:** High
- **Current risk:** High
- **Projected risk:** High
- **State:** Expose
- **CR101. Countermeasure name:** Activate built-in browser security filters
  - **Status:** RECOMMENDED
- **CR102. Countermeasure name:** Implement client-side script blockers
  - **Status:** RECOMMENDED

End of Current Risk Report