Sparrow Analysis Report





Summary

Project Name	Demo Project
Analysis ID	467
Analysis Type	File
Started at	2025-02-09 11:49:00
Ended at	2025-02-09 12:33:40
Analyzing Time	44 m 39 s
Total Issues	424



■ Risk Level and Issues

Critical	High	Medium	Low	Trivial
2	227	113	70	12



■ Reference and Issues

Reference Name	Total Issues
.NET framework design guideline	0
CWE 658 4.14	0
CWE 658 4.7	0
CWE 659 4.14	0
CWE 659 4.7	0
CWE 660 4.14	0
CWE 660 4.7	0
Code conventions for the Java Programming Language(Oracle)	0
JavaScript 시큐어코딩 가이드 2022	57
MISRA-C 2004	0
MISRA-C 2012	0
MISRA-C 2012 Amendment 2	0
MISRA-C 2012 Amendment 3	0
MISRA-C++ 2008	0
OWASP 2017	0
OWASP 2021	0
Python 시큐어코딩 가이드 2022	0
Rust ANSSI guide v1.0	0
무기체계 소프트웨어 보안약점 점검 목록	0
방위사업청 코딩규칙	0
소프트웨어 보안약점 진단가이드 2021	42
주요정보통신기반시설 취약점 분석·평가 기준	0

.NET framework design guideline

Reference Chapter	Issues
System.Xml 사용법	0
구조체 디자인	0
네임스페이스의 이름	0
리소스 이름 지정	0
매개변수 이름 지정	0
멤버 오버로드	0
보호된 멤버	0



봉인	0
예외 throw	0
예외 및 성능	0
인터페이스 디자인	0
일반 명명 규칙	0
컬렉션	0
클래스와 구조체 간의 선택	0
표준 예외 형식 사용	0

• CWE 658 4.14

Reference Chapter	Issues
119 - Improper Restriction of Operations within the Bounds of a Memory Buffer	0
120 - Buffer Copy without Checking Size of Input ('Classic Buffer Overflow')	0
121 - Stack-based Buffer Overflow	0
122 - Heap-based Buffer Overflow	0
123 - Write-what-where Condition	0
124 - Buffer Underwrite ('Buffer Underflow')	0
125 - Out-of-bounds Read	0
126 - Buffer Over-read	0
127 - Buffer Under-read	0
128 - Wrap-around Error	0
129 - Improper Validation of Array Index	0
131 - Incorrect Calculation of Buffer Size	0
1325 - Improperly Controlled Sequential Memory Allocation	0
1335 - Incorrect Bitwise Shift of Integer	0
134 - Use of Externally-Controlled Format String	0
1341 - Multiple Releases of Same Resource or Handle	0
135 - Incorrect Calculation of Multi-Byte String Length	0
14 - Compiler Removal of Code to Clear Buffers	0
170 - Improper Null Termination	0
188 - Reliance on Data/Memory Layout	0
191 - Integer Underflow (Wrap or Wraparound)	0
192 - Integer Coercion Error	0
194 - Unexpected Sign Extension	0
195 - Signed to Unsigned Conversion Error	0



196 - Unsigned to Signed Conversion Error	0
197 - Numeric Truncation Error	0
242 - Use of Inherently Dangerous Function	0
243 - Creation of chroot Jail Without Changing Working Directory	0
244 - Improper Clearing of Heap Memory Before Release ('Heap Inspection')	0
362 - Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition')	0
364 - Signal Handler Race Condition	0
366 - Race Condition within a Thread	0
375 - Returning a Mutable Object to an Untrusted Caller	0
401 - Missing Release of Memory after Effective Lifetime	0
415 - Double Free	0
416 - Use After Free	0
457 - Use of Uninitialized Variable	0
462 - Duplicate Key in Associative List (Alist)	0
463 - Deletion of Data Structure Sentinel	0
464 - Addition of Data Structure Sentinel	0
467 - Use of sizeof() on a Pointer Type	0
468 - Incorrect Pointer Scaling	0
469 - Use of Pointer Subtraction to Determine Size	0
476 - NULL Pointer Dereference	0
478 - Missing Default Case in Multiple Condition Expression	0
479 - Signal Handler Use of a Non-reentrant Function	0
480 - Use of Incorrect Operator	0
481 - Assigning instead of Comparing	0
482 - Comparing instead of Assigning	0
483 - Incorrect Block Delimitation	0
484 - Omitted Break Statement in Switch	0
558 - Use of getlogin() in Multithreaded Application	0
560 - Use of umask() with chmod-style Argument	0
562 - Return of Stack Variable Address	0
587 - Assignment of a Fixed Address to a Pointer	0
676 - Use of Potentially Dangerous Function	0
685 - Function Call With Incorrect Number of Arguments	0
690 - Unchecked Return Value to NULL Pointer Dereference	0
704 - Incorrect Type Conversion or Cast	0



733 - Compiler Optimization Removal or Modification of Security-critical Code	0
762 - Mismatched Memory Management Routines	0
783 - Operator Precedence Logic Error	0
785 - Use of Path Manipulation Function without Maximum-sized Buffer	0
787 - Out-of-bounds Write	0
789 - Memory Allocation with Excessive Size Value	0
805 - Buffer Access with Incorrect Length Value	0
806 - Buffer Access Using Size of Source Buffer	0
839 - Numeric Range Comparison Without Minimum Check	0
843 - Access of Resource Using Incompatible Type ('Type Confusion')	0
910 - Use of Expired File Descriptor	0

• CWE 658 4.7

Issues
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Heap-based Buffer Overflow - (122)	0
Improper Cleanup on Thrown Exception - (460)	0
Improper Clearing of Heap Memory Before Release ('Heap Inspection') - (244)	0
Improper Handling of Length Parameter Inconsistency - (130)	0
Improper Null Termination - (170)	0
Improper Restriction of Operations within the Bounds of a Memory Buffer - (119)	0
Improper Update of Reference Count - (911)	0
Improper Validation of Array Index - (129)	0
Incorrect Block Delimitation - (483)	0
Incorrect Calculation of Buffer Size - (131)	0
Incorrect Calculation of Multi-Byte String Length - (135)	0
Incorrect Pointer Scaling - (468)	0
Incorrect Type Conversion or Cast - (704)	0
Integer Coercion Error - (192)	0
Integer Underflow (Wrap or Wraparound) - (191)	0
Mismatched Memory Management Routines - (762)	0
Missing Default Case in Switch Statement - (478)	0
NULL Pointer Dereference - (476)	0
Numeric Range Comparison Without Minimum Check - (839)	0
Numeric Truncation Error - (197)	0
Omitted Break Statement in Switch - (484)	0
Operator Precedence Logic Error - (783)	0
Out-of-bounds Read - (125)	0
Out-of-bounds Write - (787)	0
Race Condition within a Thread - (366)	0
Reliance on Data/Memory Layout - (188)	0
Return of Pointer Value Outside of Expected Range - (466)	0
Return of Stack Variable Address - (562)	0
Signal Handler Race Condition - (364)	0
Signal Handler Use of a Non-reentrant Function - (479)	0
Signed to Unsigned Conversion Error - (195)	0
Stack-based Buffer Overflow - (121)	0
Unexpected Sign Extension - (194)	0
Unsigned to Signed Conversion Error - (196)	0
Use After Free - (416)	0
Use of Expired File Descriptor - (910)	0



Use of Externally-Controlled Format String - (134)	0
Use of Incorrect Operator - (480)	0
Use of Inherently Dangerous Function - (242)	0
Use of Pointer Subtraction to Determine Size - (469)	0
Use of Potentially Dangerous Function - (676)	0
Use of Uninitialized Variable - (457)	0
Use of getlogin() in Multithreaded Application - (558)	0
Use of sizeof() on a Pointer Type - (467)	0
Use of umask() with chmod-style Argument - (560)	0
Wrap-around Error - (128)	0
Write-what-where Condition - (123)	0

• CWE 659 4.14

Reference Chapter	Issues
119 - Improper Restriction of Operations within the Bounds of a Memory Buffer	0
120 - Buffer Copy without Checking Size of Input ('Classic Buffer Overflow')	0
121 - Stack-based Buffer Overflow	0
122 - Heap-based Buffer Overflow	0
123 - Write-what-where Condition	0
124 - Buffer Underwrite ('Buffer Underflow')	0
125 - Out-of-bounds Read	0
126 - Buffer Over-read	0
127 - Buffer Under-read	0
128 - Wrap-around Error	0
129 - Improper Validation of Array Index	0
130 - Improper Handling of Length Parameter Inconsistency	0
131 - Incorrect Calculation of Buffer Size	0
1325 - Improperly Controlled Sequential Memory Allocation	0
1335 - Incorrect Bitwise Shift of Integer	0
134 - Use of Externally-Controlled Format String	0
1341 - Multiple Releases of Same Resource or Handle	0
135 - Incorrect Calculation of Multi-Byte String Length	0
14 - Compiler Removal of Code to Clear Buffers	0
170 - Improper Null Termination	0
188 - Reliance on Data/Memory Layout	0



191 - Integer Underflow (Wrap or Wraparound)	0
192 - Integer Coercion Error	0
194 - Unexpected Sign Extension	0
195 - Signed to Unsigned Conversion Error	0
196 - Unsigned to Signed Conversion Error	0
197 - Numeric Truncation Error	0
242 - Use of Inherently Dangerous Function	0
243 - Creation of chroot Jail Without Changing Working Directory	0
244 - Improper Clearing of Heap Memory Before Release ('Heap Inspection')	0
248 - Uncaught Exception	0
362 - Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition')	0
364 - Signal Handler Race Condition	0
366 - Race Condition within a Thread	0
374 - Passing Mutable Objects to an Untrusted Method	0
375 - Returning a Mutable Object to an Untrusted Caller	0
396 - Declaration of Catch for Generic Exception	0
397 - Declaration of Throws for Generic Exception	0
401 - Missing Release of Memory after Effective Lifetime	0
415 - Double Free	0
416 - Use After Free	0
457 - Use of Uninitialized Variable	0
462 - Duplicate Key in Associative List (Alist)	0
463 - Deletion of Data Structure Sentinel	0
464 - Addition of Data Structure Sentinel	0
467 - Use of sizeof() on a Pointer Type	0
468 - Incorrect Pointer Scaling	0
469 - Use of Pointer Subtraction to Determine Size	0
476 - NULL Pointer Dereference	0
478 - Missing Default Case in Multiple Condition Expression	0
479 - Signal Handler Use of a Non-reentrant Function	0
480 - Use of Incorrect Operator	0
481 - Assigning instead of Comparing	0
482 - Comparing instead of Assigning	0
483 - Incorrect Block Delimitation	0
484 - Omitted Break Statement in Switch	0



493 - Critical Public Variable Without Final Modifier	0
495 - Private Data Structure Returned From A Public Method	0
496 - Public Data Assigned to Private Array-Typed Field	0
498 - Cloneable Class Containing Sensitive Information	0
500 - Public Static Field Not Marked Final	0
543 - Use of Singleton Pattern Without Synchronization in a Multithreaded Cor	ntext 0
558 - Use of getlogin() in Multithreaded Application	0
562 - Return of Stack Variable Address	0
587 - Assignment of a Fixed Address to a Pointer	0
676 - Use of Potentially Dangerous Function	0
690 - Unchecked Return Value to NULL Pointer Dereference	0
704 - Incorrect Type Conversion or Cast	0
733 - Compiler Optimization Removal or Modification of Security-critical Code	0
762 - Mismatched Memory Management Routines	0
766 - Critical Data Element Declared Public	0
767 - Access to Critical Private Variable via Public Method	0
783 - Operator Precedence Logic Error	0
785 - Use of Path Manipulation Function without Maximum-sized Buffer	0
787 - Out-of-bounds Write	0
789 - Memory Allocation with Excessive Size Value	0
805 - Buffer Access with Incorrect Length Value	0
806 - Buffer Access Using Size of Source Buffer	0
839 - Numeric Range Comparison Without Minimum Check	0
843 - Access of Resource Using Incompatible Type ('Type Confusion')	0
910 - Use of Expired File Descriptor	0

• CWE 659 4.7

Reference Chapter	Issues
Access of Resource Using Incompatible Type ('Type Confusion') - (843)	0
Access to Critical Private Variable via Public Method - (767)	0
Addition of Data Structure Sentinel - (464)	0
Assigning instead of Comparing - (481)	0
Assignment of a Fixed Address to a Pointer - (587)	0
Buffer Access Using Size of Source Buffer - (806)	0
Buffer Access with Incorrect Length Value - (805)	0



Buffer Copy without Checking Size of Input ('Classic Buffer Overflow') - (120)	0
Buffer Over-read - (126)	0
Buffer Under-read - (127)	0
Buffer Underwrite ('Buffer Underflow') - (124)	0
Comparing instead of Assigning - (482)	0
Compiler Optimization Removal or Modification of Security-critical Code - (733)	0
Compiler Removal of Code to Clear Buffers - (14)	0
Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition') - (362)	0
Creation of chroot Jail Without Changing Working Directory - (243)	0
Critical Public Variable Without Final Modifier - (493)	0
Declaration of Catch for Generic Exception - (396)	0
Declaration of Throws for Generic Exception - (397)	0
Deletion of Data Structure Sentinel - (463)	0
Double Free - (415)	0
Duplicate Key in Associative List (Alist) - (462)	0
Heap-based Buffer Overflow - (122)	0
Improper Cleanup on Thrown Exception - (460)	0
Improper Clearing of Heap Memory Before Release ('Heap Inspection') - (244)	0
Improper Handling of Length Parameter Inconsistency - (130)	0
Improper Null Termination - (170)	0
Improper Restriction of Operations within the Bounds of a Memory Buffer - (119)	0
Improper Update of Reference Count - (911)	0
Improper Validation of Array Index - (129)	0
Incorrect Block Delimitation - (483)	0
Incorrect Calculation of Buffer Size - (131)	0
Incorrect Calculation of Multi-Byte String Length - (135)	0
Incorrect Pointer Scaling - (468)	0
Incorrect Type Conversion or Cast - (704)	0
Integer Coercion Error - (192)	0
Integer Underflow (Wrap or Wraparound) - (191)	0
Mismatched Memory Management Routines - (762)	0
Missing Default Case in Switch Statement - (478)	0
NULL Pointer Dereference - (476)	0
Numeric Range Comparison Without Minimum Check - (839)	0
Numeric Truncation Error - (197)	0



Omitted Break Statement in Switch - (484)	0
Operator Precedence Logic Error - (783)	0
Out-of-bounds Read - (125)	0
Out-of-bounds Write - (787)	0
Passing Mutable Objects to an Untrusted Method - (374)	0
Public Data Assigned to Private Array-Typed Field - (496)	0
Race Condition within a Thread - (366)	0
Reliance on Data/Memory Layout - (188)	0
Return of Pointer Value Outside of Expected Range - (466)	0
Return of Stack Variable Address - (562)	0
Returning a Mutable Object to an Untrusted Caller - (375)	0
Signal Handler Race Condition - (364)	0
Signal Handler Use of a Non-reentrant Function - (479)	0
Signed to Unsigned Conversion Error - (195)	0
Stack-based Buffer Overflow - (121)	0
Uncaught Exception - (248)	0
Unexpected Sign Extension - (194)	0
Unsigned to Signed Conversion Error - (196)	0
Use After Free - (416)	0
Use of Expired File Descriptor - (910)	0
Use of Externally-Controlled Format String - (134)	0
Use of Incorrect Operator - (480)	0
Use of Inherently Dangerous Function - (242)	0
Use of Pointer Subtraction to Determine Size - (469)	0
Use of Potentially Dangerous Function - (676)	0
Use of Uninitialized Variable - (457)	0
Use of getlogin() in Multithreaded Application - (558)	0
Use of sizeof() on a Pointer Type - (467)	0
Wrap-around Error - (128)	0
Write-what-where Condition - (123)	0

• CWE 660 4.14

Reference Chapter	Issues
102 - Struts: Duplicate Validation Forms	0
103 - Struts: Incomplete validate() Method Definition	0



104 - Struts: Form Bean Does Not Extend Validation Class	0
106 - Struts: Plug-in Framework not in Use	0
109 - Struts: Validator Turned Off	0
110 - Struts: Validator Without Form Field	0
111 - Direct Use of Unsafe JNI	0
1235 - Incorrect Use of Autoboxing and Unboxing for Performance Critical	0
Operations	U
1335 - Incorrect Bitwise Shift of Integer	0
1336 - Improper Neutralization of Special Elements Used in a Template Engine	0
1341 - Multiple Releases of Same Resource or Handle	0
191 - Integer Underflow (Wrap or Wraparound)	0
192 - Integer Coercion Error	0
197 - Numeric Truncation Error	0
209 - Generation of Error Message Containing Sensitive Information	0
245 - J2EE Bad Practices: Direct Management of Connections	0
246 - J2EE Bad Practices: Direct Use of Sockets	0
248 - Uncaught Exception	0
362 - Concurrent Execution using Shared Resource with Improper Synchronization	0
('Race Condition')	U
366 - Race Condition within a Thread	0
374 - Passing Mutable Objects to an Untrusted Method	0
375 - Returning a Mutable Object to an Untrusted Caller	0
382 - J2EE Bad Practices: Use of System.exit()	0
383 - J2EE Bad Practices: Direct Use of Threads	0
396 - Declaration of Catch for Generic Exception	0
397 - Declaration of Throws for Generic Exception	0
460 - Improper Cleanup on Thrown Exception	0
470 - Use of Externally-Controlled Input to Select Classes or Code ('Unsafe	0
Reflection')	
476 - NULL Pointer Dereference	0
478 - Missing Default Case in Multiple Condition Expression	0
481 - Assigning instead of Comparing	0
484 - Omitted Break Statement in Switch	0
486 - Comparison of Classes by Name	0
487 - Reliance on Package-level Scope	0
491 - Public cloneable() Method Without Final ('Object Hijack')	0



492 - Use of Inner Class Containing Sensitive Data	0
493 - Critical Public Variable Without Final Modifier	0
495 - Private Data Structure Returned From A Public Method	0
496 - Public Data Assigned to Private Array-Typed Field	0
498 - Cloneable Class Containing Sensitive Information	0
500 - Public Static Field Not Marked Final	0
502 - Deserialization of Untrusted Data	0
537 - Java Runtime Error Message Containing Sensitive Information	0
567 - Unsynchronized Access to Shared Data in a Multithreaded Context	0
568 - finalize() Method Without super.finalize()	0
572 - Call to Thread run() instead of start()	0
574 - EJB Bad Practices: Use of Synchronization Primitives	0
575 - EJB Bad Practices: Use of AWT Swing	0
576 - EJB Bad Practices: Use of Java I/O	0
577 - EJB Bad Practices: Use of Sockets	0
578 - EJB Bad Practices: Use of Class Loader	0
579 - J2EE Bad Practices: Non-serializable Object Stored in Session	0
580 - clone() Method Without super.clone()	0
581 - Object Model Violation: Just One of Equals and Hashcode Defined	0
582 - Array Declared Public, Final, and Static	0
583 - finalize() Method Declared Public	0
594 - J2EE Framework: Saving Unserializable Objects to Disk	0
595 - Comparison of Object References Instead of Object Contents	0
607 - Public Static Final Field References Mutable Object	0
608 - Struts: Non-private Field in ActionForm Class	0
609 - Double-Checked Locking	0
7 - J2EE Misconfiguration: Missing Custom Error Page	0
766 - Critical Data Element Declared Public	0
917 - Improper Neutralization of Special Elements used in an Expression Language	0
Statement ('Expression Language Injection')	U
95 - Improper Neutralization of Directives in Dynamically Evaluated Code ('Eval Injection')	0

CWE 660 4.7

Reference Chapter Iss	sues
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Array Declared Public, Final, and Static - (582)	0
Assigning instead of Comparing - (481)	0
Call to Thread run() instead of start() - (572)	0
Cloneable Class Containing Sensitive Information - (498)	0
Comparison of Classes by Name - (486)	0
Comparison of Object References Instead of Object Contents - (595)	0
Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition') - (362)	0
Critical Public Variable Without Final Modifier - (493)	0
Declaration of Catch for Generic Exception - (396)	0
Declaration of Throws for Generic Exception - (397)	0
Deserialization of Untrusted Data - (502)	0
Direct Use of Unsafe JNI - (111)	0
Double-Checked Locking - (609)	0
EJB Bad Practices: Use of AWT Swing - (575)	0
EJB Bad Practices: Use of Java I/O - (576)	0
EJB Bad Practices: Use of Sockets - (577)	0
Finalize() Method Without super.finalize() - (568)	0
Improper Cleanup on Thrown Exception - (460)	0
Improper Neutralization of Directives in Dynamically Evaluated Code ('Eval Injection') - (95)	0
J2EE Bad Practices: Direct Management of Connections - (245)	0
J2EE Bad Practices: Direct Use of Sockets - (246)	0
J2EE Bad Practices: Direct Use of Threads - (383)	0
J2EE Bad Practices: Use of System.exit() - (382)	0
NULL Pointer Dereference - (476)	0
Numeric Truncation Error - (197)	0
Object Model Violation: Just One of Equals and Hashcode Defined - (581)	0
Omitted Break Statement in Switch - (484)	0
Passing Mutable Objects to an Untrusted Method - (374)	0
Public Data Assigned to Private Array-Typed Field - (496)	0
Public Static Field Not Marked Final - (500)	0
Public Static Final Field References Mutable Object - (607)	0
Reliance on Package-level Scope - (487)	0
Returning a Mutable Object to an Untrusted Caller - (375)	0
Uncaught Exception - (248)	0



Use of Inner Class Containing Sensitive Data - (492)

0

Code conventions for the Java Programming Language(Oracle)

Reference Chapter	Issues
04.1 Line Length	0
04.2 Wrapping Lines	0
05.1.1 Block Comments	0
05.1.2 Single-Line Comments	0
05.1.3 Trailing Comments	0
05.1.4 End-Of-Line Comments	0
05.2 Documentation Comments	0
06.1 Number Per Line	0
06.2 Initialization	0
06.3 Placement	0
06.4 Class and Interface Declarations	0
07.1 Simple Statements	0
07.2 Compound Statements	0
07.3 return Statements	0
07.4 if, if-else, if else-if else Statements	0
07.5 for Statements	0
07.6 while Statements	0
07.7 do-while Statements	0
07.8 switch Statements	0
07.9 try-catch Statements	0
08.1 Blank Lines	0
08.2 Blank Spaces	0
09.1 Package	0
09.2 Classes or Interface	0
09.3 Methods	0
09.4 Variables	0
09.5 Constants	0
10.1 Providing Access to Instance and Class Variables	0
10.2 Refferring to Class Variables and Methods	0
10.3 Constants	0
10.4 Variable Assignments	0



10.5.1 Parentheses	0
10.5.2 Returning Values	0
10.5.3 Expressions before '?' in the Conditional Operator	0

● JavaScript 시큐어코딩 가이드 2022

Reference Chapter	Issues
01.01. SQL 삽입	0
01.02. 코드 삽입	0
01.03. 경로 조작 및 자원 삽입	0
01.04. 크로스사이트 스크립트(XSS)	0
01.05. 운영체제 명령어 삽입	0
01.08. 부적절한 XML 외부 개체 참조	0
01.11. 크로스사이트 요청 위조(CSRF)	0
02.04. 취약한 암호화 알고리즘 사용	7
02.07. 충분하지 않은 키 길이 사용	0
02.08. 적절하지 않은 난수 값 사용	50
02.14. 솔트 없이 일방향 해쉬 함수 사용	0
03.01. 종료되지 않는 반복문 또는 재귀 함수	0
04.01. 오류 메시지 정보 노출	0
06.02. 제거되지 않고 남은 디버그 코드	0

MISRA-C 2004

Reference Chapter	Issues
1.02 (Required): No reliance shall be placed on undefined or unspecified behaviour.	0
1.04 (Required): The compiler/linker shall be checked to ensure that 31 character significance and case sensitivity are supported for external identifiers.	0
10.03 (Required): The value of a complex expression of integer type may only be cast to a type that is narrower and of the same signedness as the underlying type of the expression.	0
10.04 (Required): The value of a complex expression of floating type may only be cast to a narrower floating type.	0
10.05 (Required): If the bitwise operators ~ and << are applied to an operand of underlying type unsigned char or unsigned short, the result shall be immediately cast to the underlying type of the operand.	0
10.06 (Required): A "U" suffix shall be applied to all constants of unsigned type.	0



11.01 (Required): Conversions shall not be performed between a pointer to a function and any type other than an integral type.	0
11.02 (Required): Conversions shall not be performed between a pointer to object and any type other than an integral type, another pointer to object type or a pointer to void.	0
11.03 (Advisory): A cast should not be performed between a pointer type and an integral type.	0
11.04 (Advisory): A cast should not be performed between a pointer to object type and a different pointer to object type.	0
11.05 (Required): A cast shall not be performed that removes any const or volatile qualification from the type addressed by a pointer.	0
12.01 (Advisory): Limited dependence should be placed on C's operator precedence rules in expressions.	0
12.02 (Required): The value of an expression shall be the same under any order of evaluation that the standard permits.	0
12.03 (Required): The sizeof operator shall not be used on expressions that contain side effects.	0
12.04 (Required): The right hand operand of a logical && or operator shall not contain side effects.	0
12.05 (Required): The operands of a logical && or shall be primary-expressions.	0
12.06 (Advisory): The operands of logical operators (&&, and !) should be effectively Boolean. Expressions that are effectively Boolean should not be used as operands to operators other than (&&, and !).	0
12.07 (Required): Bitwise operators shall not be applied to operands whose underlying type is signed.	0
12.08 (Required): The right hand operand of a shift operator shall lie between zero and one less than the width in bits of the underlying type of the left hand operand.	0
12.09 (Required): The unary minus operator shall not be applied to an expression whose underlying type is unsigned.	0
12.10 (Required): The comma operator shall not be used.	0
12.11 (Advisory): Evaluation of constant unsigned integer expressions should not lead to wrap-around.	0
12.12 (Required): The underlying bit representations of floating-point values shall not be used.	0
12.13 (Advisory): The increment (++) and decrement () operators should not be mixed with other operators in an expression.	0
13.01 (Required): Assignment operators shall not be used in expressions that yield a Boolean value.	0



13.02 (Advisory): Tests of a value against zero should be made explicit, unless the operand is effectively Boolean.	0
13.03 (Required): Floating-point expressions shall not be tested for equality or inequality.	0
13.04 (Required): The controlling expression of a for statement shall not contain any objects of floating type.	0
13.05 (Required): The three expressions of a for statement shall be concerned only with loop control.	0
13.06 (Required): Numeric variables being used within a for loop for iteration counting shall not be modified in the body of the loop.	0
13.07 (Required): Boolean operations whose results are invariant shall not be permitted.	0
14.01 (Required): There shall be no unreachable code.	0
14.02 (Required): All non-null statements shall either: a) have at least one side-effect however executed, or b) cause control flow to change.	0
14.03 (Required): Before preprocessing, a null statement shall only occur on a line by itself; it may be followed by a comment provided that the first character following the null statement is a white-space character.	0
14.04 (Required): The goto statement shall not be used.	0
14.05 (Required): The continue statement shall not be used.	0
14.06 (Required): For any iteration statement there shall be at most one break statement used for loop termination.	0
14.07 (Required): A function shall have a single point of exit at the end of the function.	0
14.08 (Required): The statement forming the body of a switch, while, do while or for statement shall be a compound statement.	0
14.09 (Required): An if (expression) construct shall be followed by a compound statement. The else keyword shall be followed by either a compound statement, or another if statement.	0
14.10 (Required): All if else if constructs shall be terminated with an else clause.	0
15.01 (Required): A switch label shall only be used when the most closely-enclosing compound statement is the body of a switch statement.	0
15.02 (Required): An unconditional break statement shall terminate every non- empty switch clause.	0
15.03 (Required): The final clause of a switch statement shall be the default clause.	0
15.04 (Required): A switch expression shall not represent a value that is effectively Boolean.	0
15.05 (Required): Every switch statement shall have at least one case clause.	0



16.01 (Required): Functions shall not be defined with a variable number of arguments.	0
16.02 (Required): Functions shall not call themselves, either directly or indirectly.	0
16.03 (Required): Identifiers shall be given for all of the parameters in a function prototype declaration.	0
16.04 (Required): The identifiers used in the declaration and definition of a function shall be identical.	0
16.05 (Required): The identifiers used in the declaration and definition of a function shall be identical.	0
16.06 (Required): The number of arguments passed to a function shall match the number of parameters.	0
16.07 (Advisory): A pointer parameter in a function prototype should be declared as pointer to const if the pointer is not used to modify the addressed object.	0
16.08 (Required): All exit paths from a function with non-void return type shall have an explicit return statement with an expression.	0
16.09 (Required): A function identifier shall only be used with either a preceding &, or with a parenthesised parameter list, which may be empty.	0
16.10 (Required): If a function returns error information, then that error information shall be tested.	0
17.01 (Required): Pointer arithmetic shall only be applied to pointers that address an array or array element.	0
17.02 (Required): Pointer subtraction shall only be applied to pointers that address elements of the same array.	0
17.03 (Required) : \rangle , \rangle =, \langle , \langle = shall not be applied to pointer types except where they point to the same array.	0
17.04 (Required): Array indexing shall be the only allowed form of pointer arithmetic.	0
17.05 (Advisory): The declaration of objects should contain no more than 2 levels of pointer indirection.	0
17.06 (Required): The address of an object with automatic storage shall not be assigned to another object that may persist after the first object has ceased to exist.	0
18.01 (Required): All structure and union types shall be complete at the end of a translation unit.	0
18.02 (Required): An object shall not be assigned to an overlapping object.	0
18.04 (Required): Unions shall not be used.	0
19.01 (Advisory): #include statements in a file should only be preceded by other preprocessor directives or comments.	0
19.02 (Advisory): Non-standard characters should not occur in header file names in	



#include directives.	0
19.03 (Required): The #include directive shall be followed by either a 〈filename〉 or "filename" sequence.	0
19.04 (Required): C macros shall only expand to a braced initialiser, a constant, a	
parenthesised expression, a type qualifier, a storage class specifier, or a do-while-zero construct.	0
19.05 (Required): Macros shall not be #define'd or #undef'd within a block.	0
19.06 (Required): #undef shall not be used.	0
19.07 (Advisory): A function should be used in preference to a function-like macro.	0
19.08 (Required): A function-like macro shall not be invoked without all of its arguments.	0
19.09 (Required): Arguments to a function-like macro shall not contain tokens that look like preprocessing directives.	0
19.10 (Required): In the definition of a function-like macro each instance of a parameter shall be enclosed in parentheses unless it is used as the operand of # or ##.	0
19.11 (Required): All macro identifiers in preprocessor directives shall be defined before use, except in #ifdef and #ifndef preprocessor directives and the defined() operator.	0
19.12 (Required): There shall be at most one occurrence of the # or ## operators in a single macro definition.	0
19.13 (Advisory): The # and ## operators should not be used.	0
19.14 (Required): The defined preprocessor operator shall only be used in one of the two standard forms.	0
19.15 (Required): Precautions shall be taken in order to prevent the contents of a header file being included twice.	0
19.16 (Required): Preprocessing directives shall be syntactically meaningful even when excluded by the preprocessor.	0
2.01 (Required): Assembly language shall be encapsulated and isolated.	0
2.02 (Required): Source code shall only use /* */ style comments.	0
2.03 (Required): The character sequence /* shall not be used within a comment.	0
20.01 (Required): Reserved identifiers, macros and functions in the standard library, shall not be defined, redefined or undefined.	0
20.02 (Required): The names of standard library macros, objects and functions shall not be reused.	0
20.04 (Required): Dynamic heap memory allocation shall not be used.	0
20.05 (Required): The error indicator errno shall not be used.	0



20.06 (Required): The macro offsetof, in library <stddef.h>, shall not be used.</stddef.h>	0
20.07 (Required): The setjmp macro and the longjmp function shall not be used.	0
20.08 (Required): The signal handling facilities of <signal.h> shall not be used.</signal.h>	0
20.09 (Required) : The input/output library $\langle stdio.h \rangle$ shall not be used in production code.	0
20.10 (Required): The library functions atof, atoi and atol from library <stdlib.h> shall not be used.</stdlib.h>	0
20.11 (Required): The library functions abort, exit, getenv and system from library <stdlib.h> shall not be used.</stdlib.h>	0
20.12 (Required): The time handling functions of library <time.h> shall not be used.</time.h>	0
21.1 (Required): Minimisation of run-time failures shall be ensured by the use of at least one of a) static analysis tools/techniques; b) dynamic analysis tools/techniques; c) explicit coding of checks to handle run-time faults.	0
3.04 (Required): All uses of the #pragma directive shall be documented and explained.	0
3.05 (Required): If it is being relied upon, the implementation defined behaviour and packing of bitfields shall be documented.	0
4.01 (Required): Only those escape sequences that are defined in the ISO C standard shall be used.	0
4.02 (Required): Trigraphs shall not be used.	0
5.01 (Required): Identifiers (internal and external) shall not rely on the significance of more than 31 characters.	0
5.02 (Required): Identifiers in an inner scope shall not use the same name as an identifier in an outer scope, and therefore hide that identifier.	0
5.03 (Required): A typedef name shall be a unique identifier.	0
5.04 (Required): A tag name shall be a unique identifier.	0
5.05 (Advisory): No object or function identifier with static storage duration should be reused.	0
5.06 (Advisory): No identifier in one name space should have the same spelling as an identifier in another name space, with the exception of structure and union member names.	0
5.07 (Advisory): No identifier name should be reused.	0
6.01 (Required): The plain char type shall be used only for the storage and use of character values.	0
6.02 (Required): Signed and unsigned char type shall be used only for the storage and use of numeric values.	0
6.03 (Advisory): Typedefs that indicate size and signedness should be used in place of the basic types.	0



6.04 (Required): Bit fields shall only be defined to be of type unsigned int or signed int.	0
6.05 (Required): Bit fields of type signed int shall be at least 2 bits long.	0
7.01 (Required): Octal constants (other than zero) and octal escape sequences shall not be used.	0
8.02 (Required): Whenever an object or function is declared or defined, its type shall be explicitly stated.	0
8.03 (Required): For each function parameter the type given in the declaration and definition shall be identical, and the return types shall also be identical.	0
8.04 (Required): If objects or functions are declared more than once their types shall be compatible.	0
8.05 (Required): There shall be no definitions of objects or functions in a header file.	0
8.06 (Required): Functions shall be declared at file scope.	0
8.07 (Required): Objects shall be defined at block scope if they are only accessed from within a single function.	0
8.08 (Required): An external object or function shall be declared in one and only one file.	0
8.09 (Required): An identifier with external linkage shall have exactly one external definition.	0
8.10 (Required): All declarations and definitions of objects or functions at file scope shall have internal linkage unless external linkage is required.	0
8.11 (Required): The static storage class specifier shall be used in definitions and declarations of objects and functions that have internal linkage.	0
8.12 (Required): When an array is declared with external linkage, its size shall be stated explicitly or defined implicitly by initialisation.	0
9.01 (Required): All automatic variables shall have been assigned a value before being used.	0
9.02 (Required): Braces shall be used to indicate and match the structure in the non-zero initialisation of arrays and structures.	0
9.03 (Required): In an enumerator list, the "=" construct shall not be used to explicitly initialise members other than the first, unless all items are explicitly initialised.	0

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Rule 8.09	0
Rule 8.10	0
Rule 8.11	0
Rule 8.12	0
Rule 8.13	0
Rule 8.14	0
Rule 9.1	0



Rule 9.2	0
Rule 9.3	0
Rule 9.4	0
Rule 9.5	0

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Reference Chapter	Issues
Directives 1.1	0
Directives 4.1	0
Directives 4.10	0
Directives 4.12	0
Directives 4.14	0
Directives 4.3	0
Directives 4.4	0
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Directives 4.9	0
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Rule 11.4	0



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Rule 16.7	0
Rule 17.1	0
Rule 17.2	0



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Rule 8-3-1 0 Rule0-1-10 0 Rule0-1-11 0 Rule0-1-12 0 Rule0-1-3 0 Rule0-1-4 0 Rule0-1-5 0 Rule0-1-6 0 Rule0-1-7 0 Rule0-1-8 0 Rule0-1-9 0 Rule0-2-1 0 Rule0-3-1 0 Rule10-1-1 0 Rule10-1-2 0 Rule10-3-1 0 Rule10-3-2 0 Rule10-3-3 0 Rule11-0-1 0 Rule12-1-1 0 Rule12-1-1 0 Rule12-1-2 0 Rule12-1-3 0	Reference Chapter	Issues
Rule0-1-10 0 Rule0-1-11 0 Rule0-1-2 0 Rule0-1-3 0 Rule0-1-4 0 Rule0-1-5 0 Rule0-1-6 0 Rule0-1-7 0 Rule0-1-8 0 Rule0-1-9 0 Rule0-2-1 0 Rule10-3-1 0 Rule10-1-2 0 Rule10-1-3 0 Rule10-3-1 0 Rule10-3-2 0 Rule10-3-3 0 Rule11-0-1 0 Rule12-1-1 0 Rule12-1-2 0 Rule12-1-3 0	Rule 0-1-1	0
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Rule9-6-1	0
Rule9-6-2	0
Rule9-6-3	0
Rule9-6-4	0

OWASP 2017

Reference Chapter	Issues
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A1-Injection	0
A2-Broken Authentication	0
A3-Sensitive Data Exposure	0
A5-Broken Access Control	0
A6-Security Misconfiguration	0

OWASP 2021

Reference Chapter	Issues
A03 Injection	0
A05 Security Misconfiguration	0
A07 Identification and Authentication Failures	0

● Python 시큐어코딩 가이드 2022

Reference Chapter	Issues
01.01. SQL 삽입	0
01.02. 코드 삽입	0
01.03. 경로 조작 및 자원 삽입	0
01.04. 크로스사이트 스크립트(XSS)	0
01.05. 운영체제 명령어 삽입	0
01.06. 위험한 형식 파일 업로드	0
01.07. 신뢰되지 않은 URL주소로 자동접속 연결	0
01.08. 부적절한 XML 외부 개체 참조	0
01.09. XML 삽입	0
01.10. LDAP 삽입	0
01.11. 크로스사이트 요청 위조(CSRF)	0
01.12. 서버사이드 요청 위조	0
01.13. HTTP 응답분할	0
01.14. 보안기능 결정에 사용되는 부적절한 입력값	0
01.15. 포맷 스트링 삽입	0
02.01. 적절한 인증 없는 중요 기능 허용	0
02.03. 중요한 자원에 대한 잘못된 권한 설정	0
02.04. 취약한 암호화 알고리즘 사용	0
02.06. 하드코드된 중요정보	0
02.07. 충분하지 않은 키 길이 사용	0



02.08. 적절하지 않은 난수 값 사용	0
02.09. 취약한 비밀번호 허용	0
02.10. 사용자 하드디스크에 저장되는 쿠키를 통한 정보 노출	0
02.11. 주석문 안에 포함된 시스템 주요정보	0
02.12. 솔트 없이 일방향 해쉬 함수 사용	0
02.13. 무결성 검사없는 코드 다운로드	0
03.01. 경쟁조건: 검사시점과 사용시점(TOCTOU)	0
03.02. 종료되지 않는 반복문 또는 재귀 함수	0
04.01. 오류 메시지 정보노출	0
04.02. 오류상황 대응 부재	0
04.03. 부적절한 예외 처리	0
05.01. Null Pointer 역참조	0
05.02. 부적절한 자원 해제	0
05.03. 신뢰할 수 없는 데이터의 역직렬화	0
06.02. 제거되지 않고 남은 디버그 코드	0
06.03. Public 메소드로부터 반환된 Private 배열	0
06.04. Private 배열에 Public 데이터 할당	0

Rust ANSSI guide v1.0

Reference Chapter	Issues
R10 RULE - Don't use unsafe blocks	0
R11 RULE - Use appropriate arithmetic operations regarding potential overflows	0
R13 RECO - Use the ? operator and do not use the try! macro	0
R14 RULE - Don't use functions that can cause panic!	0
R15 RULE - Test properly array indexing or use the get method	0
R16 RULE - Handle correctly panic! in FFI	0
R17 RULE - Do not use forget	0
R19 RULE - Do not leak memory	0
R2 RULE - Keep default values for critical variables in cargo profiles	0
R20 RULE - Do release value wrapped in ManuallyDrop	0
R21 RULE - Always call from_raw on into_rawed value	0
R22 RULE - Do not use uninitialized memory	0
R32 RULE - Use only C-compatible types in FFI	0

● 무기체계 소프트웨어 보안약점 점검 목록



Reference Chapter	Issues
CWE-119	0
CWE-134	0
CWE-170	0
CWE-190	0
CWE-209	0
CWE-22	0
CWE-259	0
CWE-285	0
CWE-306	0
CWE-307	0
CWE-312	0
CWE-319	0
CWE-321	0
CWE-327	0
CWE-330	0
CWE-367	0
CWE-369	0
CWE-390	0
CWE-400	0
CWE-404	0
CWE-415	0
CWE-416	0
CWE-457	0
CWE-467	0
CWE-469	0
CWE-476	0
CWE-489	0
CWE-494	0
CWE-495	0
CWE-496	0
CWE-497	0
CWE-521	0
CWE-562	0
CWE-587	0



CWE-59	0
CWE-615	0
CWE-628	0
CWE-676	0
CWE-732	0
CWE-755	0
CWE-759	0
CWE-78	0
CWE-89	0
CWE-99	0

● 방위사업청 코딩규칙

1-01. Switch 구문에서 첫 번째 Label 전에 코드 구문이 존재하면 안된다. 0 1-02. 함수/변수 선언 시 type을 명시해야 한다. 0 1-03. 의미 없는 구문은 사용하지 말아야 한다.(side effect) 0 1-04. 함수의 Return Type에 맞는 return을 사용해야 한다. 0 1-05. 선언 없이 함수를 사용하지 말아야 한다.(묵시적 선언이 사용됨) 0 1-06. 매크로의 정의 여부를 확인하지 않고 해당 매크로에 대하여 #if, #elseif 표현을 사용하지 말아야 한다. 0 1-07. goto 문 사용은 최대한 자제한다. 0 1-08. 하나의 함수는 하나의 Exit Point를 가져야 한다. 0 1-09. switch~case 문은 default 문이 포함되어야 한다. 0 1-10. 한 줄에 하나의 명령문을 사용한다. 0 1-11. if - else if 문은 else 문도 포함시킨다. 0 2-01. String 배열의 초기화에서 배열의 마지막 인자는 NULL로 종료되어야 한다. 0 2-02. 초기화 되지 않은 변수를 사용하지 말아야 한다. 0
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2-02. 초기화 되지 않은 변수를 사용하지 말아야 한다. 0
2-03 설정되지 않은 포인터를 할수의 Read-only(const)로 사용하면 안되다 0
3-01. external과 internal linkage 의 특성을 동시에 가질 수 없다. 0
3-02. external linkage scope 에서 선언된 함수나 Object의 이름은 유일해야 한다. 0
3-03. external linkage scope 에서 정의된 함수나 Object의 데이터 형은 선언 시 정의와 동 일해야 한다.
3-04. 바깥 scope 의 식별자를 가리는 정의를 해서는 안된다. 0
4-01. float 자료형에서 동등성 비교연산을 수행하지 말아야 한다. 0
4-02. 조건문의 결과가 항상 True거나 False면 안된다. 0



4-03. switch의 case 조건을 만족할 수 없는 Label을 사용하지 않는다.	0
4-04. switch 구문에서 Expression을 논리적 연산으로 사용하지 말아야 한다.	0
4-05. 수행되지 않는 소스코드를 작성하지 말아야 한다.	0
5-01. 선언된 데이터 형으로 표현할 수 있는 숫자의 영역을 초과하는 값을 할당하지 말아야 한다.	0
	0
5-02. 가변인수를 받는 함수의 Conversion 지시자와 Argument의 type은 동일해야 한다.	0
5-03. 가변인수를 받는 함수의 Conversion 지시자와 Argument의 개수는 동일해야 한다.	0
5-04. Object 저장값을 표현할 수 없는 데이터로의 형 변환을 하지말아야 한다.	0
5-05. 음수값을 unsigned type으로 변환을 자제해야 한다.	0
5-06. Character 문자열과 Wide character 문자열을 혼용하지 말아야 한다.	0
5-07. 포인터 Cast의 결과로 이전 포인터의 Const 특성의 상실을 유의해야 한다.	0
5-08. 포인터 Cast의 결과로 이전 포인터의 Volatile 특성의 상실을 유의해야 한다.	0
6-01. Null pointer를 참조하지 않는다.	0
6-02. 지역 변수의 주소값을 더 넓은 scope를 가진 변수에 할당하지 말아야 한다.	0
6-03. 지역 변수의 주소값을 함수의 리턴값으로 사용하지 말아야 한다.	0
6-04. 선언된 배열의 크기를 초과하는 인덱스 값을 사용하지 말아야 한다.	0
6-05. Null Pointer를 산술연산 하지 않는다.	0
7-01. 하나의 Sequence Point 내에서 하나의 Object Value를 두 번 이상 변경하지 않아야 한다.	0
7-02. 0 으로 나눗셈 연산을 하지 않는다.	0
7-03. 하나의 Sequence Point 내에서 Object의 값을 변경하고 Access 하지 않아야 한다.	0
7-04. 음수 값 또는 데이터 사이즈를 초과하는 값을 사용하여 Shift operator를 하지 않는다.	0
7-05. Underlying type이 부호 없는 정수일 경우 단행 빼기 연산(-)을 사용하여 결과를 대입하지 말아야 한다.	0
7-06. sizeof의 인자는 side effect를 가지지 말아야 한다.	0
7-07. Boolean 표현 값에 &&, , ! 연산자를 제외하고 다른 연산자를 사용하지 말아야 한다.	0
7-08. 조건문에 직접적인 대입 연산자를 사용하지 말아야 한다.	0
7-09. Signed Value에서 Bitwise연산자(〈〈, ~, I, ^ 등)로 인한 Negative Value를 유의해야한다.	0
8-01. Scanf의 Argument 는 Object Value의 저장된 주소에 값이 입력되어야 한다.	0
8-02. #include 구문에서 표준에 맞지 않는 Character set을 사용하지 않아야 한다.	0
8-03. Allocated되는 메모리 블록의 크기는 Pointer에 의해서 Address 되는 완전한 하나의 multiple size여야 한다.	0
8-04. 함수의 Argument type과 개수는 함수의 Prototype, 선언, 정의가 모두 같아야 한다.	0
8-05. 구조체/배열의 초기화 시 default 초기화 값(0)을 제외하고, 구조에 맞게 '{}'를 사용하여 선언된 Size에 맞게 초기화 해야 한다.	0



9-01. 동적 할당된 데이터를 해제할 때, 잘못된 메소드를 이용하여 해제하면 안된다.	0
9-02. 지역 변수의 주소 값을 처리하는 handle을 return하지 말아야 한다.	0
9-03. 함수 parameter의 주소 값을 처리하는 handle을 return하지 말아야 한다.	0
9-04. 소멸자내에서 처리할 수 없는 예외 상황을 발생시키지 말아야 한다.	0
9-05. 사용되지 않는 예외 처리 문을 작성하지 말아야 한다.	0
9-06. exception specification에 기술되지 않은 모든 throw에 대하여 예외처리를 해야만 한다.	0
9-07. main 함수에서 처리되지 않는 throw를 작성하지 말아야 한다.	0
9-08. 해제된 메모리 영역 사용하지 말아야 한다.	0
9-09.복사 연산자를 통해서, 복사되지 않는 멤버 변수가 존재하지 말아야 한다	0
9-10. C 코딩 방법으로 메모리를 할당 하면 안된다.	0
9-11. 순수 가상함수는 반드시 0으로 초기화 되어야 한다	0
9-12. 순수함수는 반드시 가상함수로 선언되어야 한다	0
9-13. virtual base 클래스의 포인터는 derived 클래스의 포인터로 cast 할 때에는 dynamic_cast만 사용해야 한다.	0
9-14. 생성자/소멸자 내에서 가상함수는 식별자 없이 호출하면 안된다.	0
9-15. 생성자/소멸자에 dynamic type을 사용하면 안된다.	0

● 소프트웨어 보안약점 진단가이드 2021

Reference Chapter	Issues
DNS lookup에 의존한 보안 결정	0
HTTP 응답분할	0
LDAP 삽입	0
Null Pointer 역참조	0
Private 배열에 Public 데이터 할당	0
Public 메소드부터 반환된 Private 배열	0
SQL 삽입	0
XML 삽입	0
경로 조작 및 자원 삽입	0
경쟁조건: 검사시점과 사용시점(TOCTOU)	0
메모리 버퍼 오버플로우	0
무결성 검사없는 코드 다운로드	0
반복된 인증시도 제한 기능 부재	0
보안기능 결정에 사용되는 부적절한 입력값	0
부적절한 XML 외부개체 참조	0



부적절한 예외처리	0
부적절한 인가	0
부적절한 인증서 유효성 검증	0
부적절한 자원 해제	0
부적절한 전자서명 확인	0
사용자 하드디스크에 저장되는 쿠키를 통한 정보 노출	0
서버사이드 요청 위조	0
솔트 없이 일방향 해쉬 함수 사용	0
신뢰되지 않는 URL 주소로 자동 접속 연결	0
신뢰할 수 없는 데이터의 역직렬화	0
암호화되지 않은 중요정보	0
오류 상황 대응 부재	34
오류메시지 정보 노출	0
운영체제 명령어 삽입	0
위험한 형식 파일 업로드	0
잘못된 세션에 의한 데이터 정보 노출	0
적절하지 않은 난수 값 사용	0
적절한 인증없는 중요기능 허용	0
정수형 오버플로우	0
제거되지 않고 남은 디버그 코드	0
종료되지 않는 반복문 또는 재귀 함수	0
주석문 안에 포함된 시스템 주요정보	0
중요한 자원에 대한 잘못된 권한 설정	0
초기화되지 않은 변수 사용	0
충분하지 않은 키 길이 사용	0
취약한 API 사용	8
취약한 비밀번호 허용	0
취약한 암호화 알고리즘 사용	0
코드 삽입	0
크로스사이트 스크립트	0
크로스사이트 요청 위조	0
포맷스트링 삽입	0
하드코드된 중요정보	0
해제된 자원 사용	0

● 주요정보통신기반시설 취약점 분석·평가 기준



Reference Chapter	Issues
SQL 인젝션	0
XPath 인젝션	0
경로 추적	0
디렉토리 인덱싱	0
세션 고정	0
세션 예측	0
약한 문자열 강도	0
운영체제 명령 실행	0
위치 공개	0
크로스사이트 스크립팅	0
파일 다운로드	0



Issue Details

• [Rule Name] Use of forbidden function (Trivial, jsts)

The Use of forbidden function checker finds calls to a forbidden function.

You can optionally specify functions that should not be called.

A project may have to prohibit calling certain functions for some reasons: 1) code needs to be consistent throughout the project; 2) those functions have become obsolete and now better approaches are available; or 3) those functions have fundamental defects.

Do not call forbidden functions. Unless the intended behavior itself is prohibited, you need to consider implementing the same behavior by other means.

- 소프트웨어 보안약점 진단가이드 2021
 - 취약한 API 사용

Dangerous Example

```
1. ...
2. $var = allowed($arg);
3. $var = forbidden($arg);
4. ...
```

Line 2: Suppose that forbidden() function is forbidden to call. The forbidden function is called.

Safe Example

```
1. ...
2. $var = allowed($arg);
3. //$var = forbidden($arg);
4. ...
```

Line 2: Do not call forbidden functions.

Rocket.Chat-develop/apps/meteor/app/livechat/imports/server/rest/upload.



File ts
Line 29

Source Code

```
24.
25.
             const visitorToken = this.request.headers['x-visitor-token'];
26.
             const visitor = await LivechatVisitors.getVisitorByToken(visitorToken as
string, {});
27.
28.
             if (!visitor) {
29.
                  return API.v1.forbidden();
30.
             }
31.
32.
             const room = await LivechatRooms.
findOneOpenByRoomIdAndVisitorToken(this.urlParams.rid, visitorToken as string);
33.
             if (!room) {
34.
                  return API.v1.forbidden();
```

File Rocket.Chat-develop/apps/meteor/app/livechat/imports/server/rest/users.ts

Line 38

```
33.
                  const { sort } = await this.parseJsonQuery();
34.
                  const { text } = this.queryParams;
35.
36.
                  if (this.urlParams.type === 'agent') {
                       if (!(await hasAtLeastOnePermissionAsync(this.userld,
37.
['transfer-livechat-guest', 'edit-omnichannel-contact']))) {
38.
                            return API.v1.forbidden();
39.
                       }
40.
41.
                       const { onlyAvailable, excludeId, showIdleAgents } = this.
queryParams;
                       return API.v1.success(
42.
                            await findAgents({
43.
```



File	Rocket.Chat-develop/apps/meteor/app/api/server/v1/videoConference.ts

Line 30

Source Code

```
25.
                  if (!userId || !(await canAccessRoomIdAsync(roomId, userId))) {
26.
                       return API.v1.failure('invalid-params');
27.
                  }
28.
29.
                  if (!(await hasPermissionAsync(userId, 'call-management',
roomId))) {
30.
                       return API.v1.forbidden();
31.
                  }
32.
33.
                  try {
34.
                       const providerName = videoConfProviders.getActiveProvider();
35.
```

```
File Rocket.Chat-develop/apps/meteor/app/api/server/v1/voip/events.ts

Line 29
```

```
24.
                 const room = await VoipRoom.findOneVoipRoomById(rid);
25.
                 if (!room) {
26.
                      return API.v1.notFound();
27.
                 if (!(await canAccessRoomAsync(room, this.user))) {
28.
                      return API.v1.forbidden();
29.
30.
                 }
31.
32.
                 return API.v1.success(await LivechatVoip.handleEvent(event, room,
this.user, comment));
            },
33.
34.
        },
```



File

Rocket.Chat-develop/apps/meteor/app/livechat/imports/server/rest/upload.
ts

Line

14

Source Code

```
9. import { sendFileLivechatMessage } from '../../server/methods
/sendFileLivechatMessage';
10.
11. API.v1.addRoute('livechat/upload/:rid', {
12.
        async post() {
             if (!this.request.headers['x-visitor-token']) {
13.
14.
                  return API.v1.forbidden();
             }
15.
16.
17.
             const canUpload = settings.get(boolean)
('Livechat_fileupload_enabled') && settings.get \( boolean \) ('FileUpload_Enabled');
18.
             if (!canUpload) {
19.
```

```
File
Rocket.Chat-develop/apps/meteor/app/livechat/imports/server/rest/upload.
ts

Line
34
```

```
29.
                 return API.v1.forbidden();
30.
             }
31.
32.
             const room = await LivechatRooms.
findOneOpenByRoomIdAndVisitorToken(this.urlParams.rid, visitorToken as string);
33.
             if (!room) {
34.
                 return API.v1.forbidden();
35.
            }
36.
             const maxFileSize = settings.get<number>('FileUpload_MaxFileSize') ||
37.
104857600;
```



```
38.39. const file = await getUploadFormData(
```

File Rocket.Chat-develop/apps/meteor/app/livechat/imports/server/rest/users.ts

Line 58

Source Code

```
53.
                            }),
                       );
54.
                  }
55.
                  if (this.urlParams.type === 'manager') {
56.
57.
                       if (!(await hasAtLeastOnePermissionAsync(this.userId, ['view-
livechat-manager']))) {
58.
                            return API.v1.forbidden();
59.
                       }
60.
                       return API.v1.success(
61.
62.
                            await findManagers({
63.
                                 text,
```

File Rocket.Chat-develop/apps/meteor/ee/server/api/sessions.ts

Line 89

```
84.
         'sessions/list',
85.
         { authRequired: true, validateParams: isSessionsPaginateProps },
        {
86.
87.
             async get() {
                  if (!License.hasModule('device-management')) {
88.
89.
                       return API.v1.forbidden();
90.
                  }
91.
92.
                  const { offset, count } = await getPaginationItems(this.
queryParams);
```



```
93. const { sort = { loginAt: -1 } } = await this.parseJsonQuery();
94. const search = escapeRegExp(this.queryParams?.filter || '');
```

[Rule Name] Empty catch block (Medium, jsts)

The Empty catch block checker finds exception-handling blocks that have no relevant content.

It detects empty catch blocks containing no actual executable code.

If a caught exception is not handled, it is hard to find out the causes of accompanying program errors.

Add an exception-handling code in the empty block. If you don''t want any measure for an exception, you may simply leave an error message.

- 소프트웨어 보안약점 진단가이드 2021
 - 오류 상황 대응 부재

Dangerous Example

```
    try {
    adddlert("Welcome guest!");
    }
    catch(err) {
    6. }
```

Line 5: An error is caught in a try block, but no action is taken.

Safe Example

```
    try {
    adddlert("Welcome guest!");
    }
    catch(err) {
    log(err.message);
    }
```



Line 5: Properly handle each exception after catching it.

File Rocket.Chat-develop/apps/meteor/server/services/federation/infrastructure /matrix/Bridge.ts

Line 190

Source Code

```
185.
         }
186.
          public async inviteToRoom(externalRoomld: string, externalInviterId: string,
externalInviteeld: string): Promise(void) {
               try {
188.
189.
                    await this.bridgeInstance.getIntent(externalInviterId).invite
(externalRoomld, externalInviteeld);
              } catch (e) {
190.
191.
                    // no-op
               }
192.
193.
         }
194.
195.
          public async setUserAvatar(externalUserId: string, avatarUrl: string):
Promise(void) {
```

File Rocket.Chat-develop/apps/meteor/server/services/federation/infrastructure /matrix/Bridge.ts

Line 198

```
193. }
194.
195. public async setUserAvatar(externalUserId: string, avatarUrl: string):
Promise<void> {
196. try {
197. await this.bridgeInstance.getIntent(externalUserId).matrixClient.
setAvatarUrl(avatarUrl);
198. } catch (e) {
```



```
199. // no-op
200. }
201. }
202.
203. public async verifyInviteeIds(matrixIds: string[]): Promise<Map<string, string>> {
```

File Rocket.Chat-develop/apps/meteor/server/services/federation/infrastructure /matrix/Bridge.ts

Line 252

Source Code

```
247.
         }
248.
249.
          public async setUserDisplayName(externalUserId: string, displayName:
string): Promise(void) {
250.
              try {
251.
                   await\ this.bridge Instance.get Intent (external User Id).set Display Name
(displayName);
              } catch (e) {
252.
253.
                   // no-op
254.
              }
255.
         }
256.
257.
          public async createDirectMessageRoom(
```

File Rocket.Chat-develop/apps/meteor/server/services/federation/infrastructure /matrix/Bridge.ts

Line 529

```
524. }
525.
526. public async leaveRoom(externalRoomld: string, externalUserld: string):
```



```
Promise(void) {
527.
              try {
528.
                   await this.bridgeInstance.getIntent(externalUserId).leave
(externalRoomId);
529.
              } catch (e) {
530.
                   // no-op
              }
531.
532.
         }
533.
534.
          public async kickUserFromRoom(externalRoomId: string, externalUserId:
string, externalOwnerld: string): Promise(void) {
```

 $\textbf{File} \hspace{1cm} \textbf{Rocket.Chat-develop/apps/meteor/app/federation/server/lib/dns.js}$

Line 80

Source Code

```
75.
        // Search by HTTPS first
76.
        try {
77.
             dnsLogger.debug(`search: peerDomain=${peerDomain} srv=_rocketchat.
_https.${peerDomain}`);
78.
             srvEntries = await memoizedDnsResolveSRV(`_rocketchat.
_https.${peerDomain}`);
79.
             protocol = 'https';
80.
        } catch (err) {
81.
             // Ignore errors when looking for DNS entries
        }
82.
83.
84.
        // If there is not entry, try with http
85.
        if (!srvEntries.length) {
```

File Rocket.Chat-develop/apps/meteor/app/federation/server/lib/dns.js

Line 90



```
85.
        if (!srvEntries.length) {
86.
             try {
87.
                  dnsLogger.debug(`search: peerDomain=${peerDomain}
srv=_rocketchat._http.${peerDomain}`);
88.
                  srvEntries = await memoizedDnsResolveSRV(`_rocketchat.
_http.${peerDomain}`);
89.
                  protocol = 'http';
90.
             } catch (err) {
91.
                  // Ignore errors when looking for DNS entries
92.
             }
93.
        }
94.
95.
        // If there is not entry, try with tcp
```

File Rocket.Chat-develop/apps/meteor/app/federation/server/lib/dns.js

Line 138

Source Code

```
dnsLogger.debug(`search: peerDomain=${peerDomain} txt=rocketchat-
133.
public-key.${peerDomain}`);
134.
              const publicKeyTxtRecords = await memoizedDnsResolveTXT
(`rocketchat-public-key.${peerDomain}`);
135.
136.
              // Join the TXT record, that might be split
137.
              publicKey = publicKeyTxtRecords[0].join('');
138.
         } catch (err) {
139.
              // Ignore errors when looking for DNS entries
140.
         }
141.
142.
         // If there is no entry, throw error
         if (!publicKey) {
143.
```

File

Rocket.Chat-develop/apps/meteor/ee/server/apps/marketplace/applnstall.

ts

Line

18



```
13.
        try {
14.
             const token = await getWorkspaceAccessToken();
15.
             headers.Authorization = `Bearer ${token}`;
16.
17.
             // eslint-disable-next-line no-empty
18.
        } catch {}
19.
20.
        let siteUrl = '';
21.
        try {
22.
             siteUrl = settings.get\string\('Site_Url'\);
23.
```

```
File
Rocket.Chat-develop/apps/meteor/ee/server/apps/marketplace/applnstall.
ts

Line 25
```

Source Code

```
20.
        let siteUrl = '';
21.
        try {
22.
             siteUrl = settings.get(string)('Site_Url');
23.
24.
             // eslint-disable-next-line no-empty
25.
        } catch {}
26.
27.
        const data = {
28.
             action,
29.
             appName: appInfo.name,
30.
             appSlug: appInfo.nameSlug,
```

File	Rocket.Chat-develop/apps/meteor/server/methods/createDirectMessage.ts
Line	53



```
48.
49.
                       // If the username does have an `@`, but does not exist locally,
we create it first
50.
                       if (!to && username.includes('@')) {
51.
                            try {
52.
                                 to = await addUser(username);
53.
                            } catch {
54.
                                 // no-op
55.
                            if (!to) {
56.
57.
                                 return username;
                            }
58.
```

File Rocket.Chat-develop/apps/meteor/server/methods/registerUser.ts

Line 120

Source Code

```
115.
                   await Users.setReason(userId, reason);
              }
116.
117.
118.
              try {
                   Accounts.sendVerificationEmail(userId, userData.email);
119.
120.
              } catch (error) {
                   // throw new Meteor. Error 'error-email-send-failed', 'Error trying
121.
to send email: ' + error.message, { method: 'registerUser', message: error.message }
122.
              }
123.
124.
               return userld;
125.
         },
```

File Rocket.Chat-develop/apps/meteor/tests/e2e/saml.spec.ts

Line 132



```
127.
               // the compose CLI doesn't have any way to remove images, so try to
remove it with a direct call to the docker cli, but ignore errors if it fails.
128.
               try {
129.
                    child_process.spawn('docker', ['rmi', 'saml-testsamlidp_idp'], {
130.
                         cwd: containerPath.
                    });
131.
               } catch {
132
133.
                    // ignore errors here
134.
               }
135.
               // Remove saml test users so they don't interfere with other tests
136.
137.
               await resetTestData({ cleanupOnly: true });
```

File Rocket.Chat-develop/packages/agenda/src/Job.ts

Line 95

Source Code

```
90.
                        } else {
91.
                             this.attrs.nextRunAt = new Date(lastRun.valueOf() +
numberInterval);
92.
                             debug('[%s:%s] nextRunAt set to [%s]', this.attrs.name,
this.attrs._id, this.attrs.nextRunAt.tolSOString());
93.
94.
                        // Either `xo` linter or Node.js 8 stumble on this line if it isn't
just ignored
95.
                   } catch (error) {
96.
                        //
97.
                   }
              } finally {
98.
99.
                   if (!this.attrs.nextRunAt || isNaN(this.attrs.nextRunAt.valueOf())) {
                         this.attrs.nextRunAt = null;
100.
```

File

Rocket.Chat-develop/apps/meteor/app/apple/server/AppleCustomOAuth.

ts

14



```
9.
            const { id_token: identityToken, user: userStr = '' } = query;
10.
11.
              let usrObj = {} as any;
12.
              try {
13.
                   usrObj = JSON.parse(userStr);
             } catch (e) {
14.
                  // ignore
15.
16.
             }
17.
18.
              try {
                   const serviceData = await handleIdentityToken(identityToken);
19.
```

File Rocket.Chat-develop/apps/meteor/app/federation/server/lib/dns.js

Line 110

Source Code

```
105.
                    protocol = protocol[0].join('');
106.
107.
                    if (protocol !== 'http' && protocol !== 'https') {
108.
                         protocol = null;
                    }
109.
110.
               } catch (err) {
111.
                    // if there is an error while getting the _tcp entry, it means the
config is not there
                    // but if there is an error looking for the
`_rocketchat_tcp_protocol` entry, it means we should use https
113.
114.
          }
115.
```

File Rocket.Chat-develop/apps/meteor/app/lib/server/functions/saveUser/saveNewUser.ts

Line 74



```
69.
                   protocol: 'https',
              });
70.
71.
72.
              try {
73.
                   await setUserAvatar({ ...userData, _id }, gravatarUrl, '', 'url');
74.
              } catch (e) {
75.
                   // Ignore this error for now, as it not being successful isn't bad
76.
              }
         }
77.
78.
79.
         void notifyOnUserChangeById({ clientAction: 'inserted', id: _id });
```

```
File
Rocket.Chat-develop/apps/meteor/app/slashcommands-open/client/client.
ts

42
```

```
37.
                  const subscription = Subscriptions.findOne(query);
38.
                  if (!subscription) {
39.
                       return;
40.
                  }
41.
                  roomCoordinator.openRouteLink(subscription.t, subscription,
router.getSearchParameters());
             } catch (err: unknown) {
42.
43.
                  // noop
44.
             }
45.
        },
        options: {
46.
47.
             description: 'Opens_a_channel_group_or_direct_message',
```

```
File Rocket.Chat-develop/apps/meteor/app/voip/server/startup.ts

Line 12
```



```
7.
            if (value) {
8.
                  await VoipAsterisk.init();
9.
            } else {
10.
                   await VoipAsterisk.stop();
              }
11.
        } catch (e) {
12.
              // do nothing
13.
14.
         }
15. });
16.
17. settings.changeMultiple(
```

File Rocket.Chat-develop/apps/meteor/app/voip/server/startup.ts

Line 25

```
// Here, if 4 settings are changed at once, we're getting 4 diff callbacks.
20.
The good part is that all callbacks are fired almost instantly
             // So to avoid stopping/starting voip too often, we debounce the call
and restart 1 second after the last setting has reached us.
22.
              if (settings.get('VoIP_Enabled')) {
23.
24.
                        await VoipAsterisk.refresh();
                  } catch (e) {
25.
26.
                        // do nothing
27.
                  }
28.
             }
29.
        },
30.);
```

```
File

Rocket.Chat-develop/apps/meteor/ee/server/apps/marketplace/applnstall.

ts

47
```



```
42. headers,
43. body: data,
44. });
45.
46. // eslint-disable-next-line no-empty
47. } catch {}
48. }
```

File Rocket.Chat-develop/apps/meteor/ee/server/services/ecdh-proxy/lib/server. ts

Line 181

Source Code

```
176.
         });
177.
178.
         ws.on('close', (code, reason) => {
179.
              try {
180.
                   proxy.close(code, reason);
              } catch (e) {
181.
182.
                   //
183.
               }
184.
         });
185.
         // proxy.on('close', (code, reason) => ws.close(code, reason));
186. });
```

File Rocket.Chat-develop/apps/meteor/server/lib/getNestedProp.ts

Line 4

```
    1. export const getNestedProp = (customFields: Record<string, any>, property: string): unknown => {
    2. try {
```



```
    return property.split('.').reduce((acc, el) => acc[el], customFields);
    } catch {
    // ignore errors
    }
    }
```

File Rocket.Chat-develop/apps/meteor/server/lib/rooms/roomTypes/direct.ts

Line 18

Source Code

File Rocket.Chat-develop/apps/meteor/server/services/federation/infrastructure /matrix/Bridge.ts

Line 111

```
106. ? {
107. avatarUrl: externalInformation.avatar_url,
108. }
109. : {}),
110. };
111. } catch (err) {
112. // no-op
```



```
113. }
114. }
115.
116. public async joinRoom(externalRoomld: string, externalUserId: string, viaServers?: string[]): Promise<void> {
```

File Rocket.Chat-develop/apps/meteor/server/services/federation/infrastructure /matrix/Bridge.ts

Line 718

Source Code

```
713.
              try {
714.
                  const roomState = (await this.bridgeInstance.getIntent
(externalUserId).roomState(externalRoomId)) as AbstractMatrixEvent[];
715.
716.
                  return ((roomState || []).find((event) => event?.type ===
MatrixEventType.ROOM_NAME_CHANGED) as MatrixEventRoomNameChanged)?.
content
717.
                       ?.name;
718.
              } catch (error) {
719.
                  // no-op
720.
              }
721.
         }
722.
723.
         public async getRoomTopic(externalRoomId: string, externalUserId: string):
Promise \string | undefined \> {
```

 $\begin{tabular}{ll} File & Rocket. Chat-develop/apps/meteor/server/services/federation/infrastructure \\ /matrix/Bridge.ts & \\ \end{tabular}$

Line 729

```
724. try {
725. const roomState = (await this.bridgeInstance.getIntent
```



```
(externalUserId).roomState(externalRoomId)) as AbstractMatrixEvent[];
726.
727.
                  return ((roomState || []).find((event) => event?.type ===
MatrixEventType.ROOM_TOPIC_CHANGED) as MatrixEventRoomTopicChanged)?.
content
728.
                       ?.topic;
729.
             } catch (error) {
730.
                  // no-op
             }
731.
732.
         }
733.
734.
         public async setRoomName(externalRoomId: string, externalUserId: string,
roomName: string): Promise(void) {
```

File Rocket.Chat-develop/apps/meteor/server/services/messages/hooks/BeforeSaveBadWords.ts

Line 43

Source Code

```
38.
                 return message;
            }
39.
40.
41.
             try {
                 message.msg = this.badWords.clean(message.msg);
42.
43.
            } catch (error) {
                 // ignore
44.
45.
             }
46.
47.
             return message;
48.
        }
```

 $\textbf{File} \hspace{1.5cm} \textbf{Rocket.Chat-develop/apps/meteor/server/startup/presenceTroubleshoot.ts} \\$

Line 9



```
4.
5. // maybe this setting should disable the listener to 'presence.status' event on listerners.module.ts
6. settings.watch('Troubleshoot_Disable_Presence_Broadcast', async (value) => {
7. try {
8. await Presence.toggleBroadcast(!value);
9. } catch (e) {
10. // do nothing
11. }
12. });
```

File Rocket.Chat-develop/apps/uikit-playground/src/Components/CodeEditor/index.tsx

Line 39

Source Code

```
changedByEditor: false,
34.
35.
         }),
36.
        );
37.
38.
        dispatch(updatePayloadAction({ blocks: parsedCode }));
39.
       } catch (e) {
40.
        // do nothing
41.
       }
    }
42.
43. // eslint-disable-next-line react-hooks/exhaustive-deps
44. }, [changes?.value]);
```

File Rocket.Chat-develop/apps/uikit-playground/src/hooks/useCodeMirror.ts

Line 59

```
54. to: to || view.current.state.doc.length,
55. insert: value || '',
```



```
56. },
57. selection: { anchor: cursor || 0 },
58. });
59. } catch (e) {
60. // do nothing;
61. }
62. };
63.
64. useEffect(() => {
```

File Rocket.Chat-develop/apps/uikit-playground/src/hooks /useFormatCodeMirrorValue.ts

Line 29

Source Code

```
24.
       if (!isILayoutblock(parsedCode))
25.
        throw new Error('Please enter a valid LayoutBlock');
26.
       codePrettier(changes.value, changes.cursor || 0).then((prettierCode) => {
27.
        callback(parsedCode, prettierCode);
28.
       });
    } catch (e) {
29.
30.
      // do nothing
31. }
32.
33.
    // eslint-disable-next-line react-hooks/exhaustive-deps
34. }, [changes]);
```

File Rocket.Chat-develop/ee/packages/presence/src/Presence.ts

Line 87

```
82. await Settings.updateValueByld('Presence_broadcast_disabled', false);
83.
```



```
84.
                  this.hasScalabilityLicense = await License.hasModule('scalability');
85.
                  this.hasPresenceLicense = await License.hasModule('unlimited-
presence');
                  this.hasLicense = this.hasPresenceLicense || this.
86.
hasScalabilityLicense;
87.
             } catch (e: unknown) {
88.
                  // ignore
89.
             }
        }
90.
91.
92.
        async stopped(): Promise(void) {
```

File Rocket.Chat-develop/packages/apps-engine/src/server/compiler /AppPackageParser.ts

Line 110

Source Code

```
105.
               const lang = entrySplit[entrySplit.length - 1].split('.')[0].toLowerCase();
106.
107.
               let content;
108.
               try {
109.
                 content = JSON.parse(entry.getData().toString());
110.
              } catch (e) {
                 // Failed to parse it, maybe warn them? idk yet
111.
112.
               }
113.
               languageContent[lang] = Object.assign(languageContent[lang] || {},
114.
content);
115.
            });
```

File Rocket.Chat-develop/packages/server-fetch/src/parsers.ts

Line 16



```
options.headers = {
11.
12.
                       ...options.headers,
                       'Content-Type': 'application/json', // force content type to be
13.
json
                  };
14.
             }
15.
        } catch (e) {
16.
             // Body is not JSON, do nothing
17.
18.
19.
20.
        return options as FetchOptions;
21. };
```

• [Rule Name] Assignment to innerHTML (Medium, jsts)

The Assignment to innerHTML checker finds instances of assigning a value to the innerHTML property.

Assignment to innerHTML may be exploited to inject a malicious script.

Do not assign a value to innerHTML.

Dangerous Example

```
    var element = document.getElementById("demo");
    var name = "<img src = " + document.URL.indexOf(1) + ">";
    element.innerHTML = name;
```

Line 3: A value is assigned to innerHTML of an element.

Safe Example

```
    var element = document.getElementByld("demo");
    var name = "<img src = " + document.URL.indexOf(1) + ">";
    // element.innerHTML = name;
```

Line 3: Do not assign a value to innerHTML.

It is recommended to use textContent instead of innerHTML to assign text value.

22



File	Rocket.Chat-develop/apps/meteor/app/emoji/client/emojiParser.ts

Source Code

Line

```
17.
             .reverse()
18.
             .reduce((value, [, emojiPackage]) => emojiPackage.render(value), html);
19.
        const checkEmojiOnly = document.createElement('div');
20.
21.
22.
        checkEmojiOnly.innerHTML = html;
23.
24.
        const emojis = Array.from(checkEmojiOnly.querySelectorAll('.emoji:not(:
empty), .emojione:not(:empty)'));
25.
26.
        let hasText = false;
27.
```

File Rocket.Chat-develop/apps/meteor/client/lib/utils/detectEmoji.ts Line 8

```
3. export const detectEmoji = (text: string): { name: string; className: string; image?:
string; content: string \}[] = \} {
4.
       const html = Object.values(emoji.packages)
5.
            .reverse()
6.
            .reduce((html, { render }) => render(html), text);
7.
       const div = document.createElement('div');
8.
       div.innerHTML = html;
       return Array.from(div.querySelectorAll('span')).map((span) => ({
9.
10.
              name: span.title,
11.
              className: span.className,
12.
             image: span.style.backgroundlmage || undefined,
13.
             content: span.innerText,
```



File Rocket.Chat-develop/apps/meteor/client/lib/utils/renderEmoji.ts

Line 34

Source Code

```
return { 'className': '', 'data-title': '', 'children': '', 'name': '' };
29.
              }
30.
31.
32.
              const div = document.createElement('div');
33.
              div.innerHTML = html;
34.
35.
36.
              const emojiElement = div.firstElementChild;
37.
              if (!emojiElement) {
                   return { 'className': '', 'data-title': '', 'children': '', 'name': '',
38.
'image': '' };
39.
             }
```

File Rocket.Chat-develop/apps/meteor/client/lib/utils/waitForElement.spec.ts

Line 4

Source Code

```
    import { waitForElement } from './waitForElement';
    beforeEach(() => {
    document.body.innerHTML = `\span class="ready" /> `;
    });
    it('should return the element when it is already in the dom', async () => {
    expect(await waitForElement('.ready')).toBe(document.querySelector('.ready'));
    });
```

File Rocket.Chat-develop/apps/meteor/client/views/account/accessibility/hooks /useCreateFontStyleElement.ts



Line 18

Source Code

```
13. export const useCreateFontStyleElement = (): ((fontSize: string) => void) => {
14.
         return useMemo(
15.
              () = \rangle (fontSize: string) = \rangle \{
16.
                   const styleElement = createStyleElement('rcx-font-size');
17.
                   const css = `html { font-size: ${fontSize}; }`;
                   styleElement.innerHTML = css;
18.
19.
                   document.head.appendChild(styleElement);
20.
             },
              []
21.
22.
        );
23. };
```

File Rocket.Chat-develop/apps/meteor/client/views/room/composer/hooks/useAutoGrow.ts

Line 46

Source Code

```
41.
                   const { value } = textarea;
42.
                   const { current: shadow } = shadowRef;
43.
                   if (!shadow) {
44.
                        return;
45.
46.
                   shadow.innerHTML = value
47.
                        .replace(/&/g, '&')
48.
                        .replace(/\langle/g, '\<')
49.
                        .replace(/)/g, '>')
50.
                        .replace(/\mu\n$/, '<\br/>\&n\bsp;')
51.
                        .replace(/\psi n/g, '<br/>');
```

File Rocket.Chat-develop/apps/meteor/client/views/room/contextualBar/Threads/components/ThreadTitle.tsx



Line 12

Source Code

```
7. type ThreadTitleProps = {
8. mainMessage: IThreadMainMessage;
9. };
10.
11. const ThreadTitle = ({ mainMessage }: ThreadTitleProps) => {
12. const innerHTML = useMemo(() => ({ __html: normalizeThreadTitle (mainMessage) ?? '' }), [mainMessage]);
13. return <ContextualbarTitle dangerouslySetInnerHTML={innerHTML} />;
14. };
15.
16. export default ThreadTitle;
```

File Rocket.Chat-develop/apps/meteor/packages/rocketchat-livechat/assets /rocket-livechat.js

Line 697

```
config.url = url;
692.
693.
694.
              var chatWidget = document.createElement('div');
695.
               chatWidget.dataset.state = 'closed';
696.
               chatWidget.className = 'rocketchat-widget';
697.
              chatWidget.innerHTML = '\langle div class="rocketchat-container" style="
width:100%;height:100%">'+
                    ''<iframe id="rocketchat-iframe" src="' + url + '" style="width:</pre>
698.
100%; height: 100%; border: none; background-color: transparent allow Transparency = "
true" allow="microphone; camera"></iframe> ' +
699.
                    '\langle div class="rocketchat-overlay"\\/div\';
700.
701
              chatWidget.style.position = 'fixed';
702.
               chatWidget.style.width = widgetWidth;
```



File Rocket.Chat-develop/packages/livechat/src/components/Composer/index. tsx

Line 203

Source Code

```
198.
                   return;
              }
199.
200.
201.
              if (this.props.value !== el.innerHTML) {
202.
                    this.value = this.props.value ?? '';
                   el.innerHTML = this.value;
203.
204.
205.
              replaceCaret(el);
         }
206.
207.
208.
          handleNotifyEmojiSelect(emoji: string) {
```

File Rocket.Chat-develop/packages/livechat/src/components/Composer/index.
tsx

Line 217

```
212.
213.
              const { onChange } = this.props;
214.
              const caretPosition = this.getCaretPosition(this.el);
              const oldText = this.el?.innerText ?? '';
215.
              const newText = `${oldText.slice(0, caretPosition)}${emoji}
216.
 ${oldText.slice(caretPosition)}`;
217.
              this.el.innerHTML = DOMPurify.sanitize(newText);
218.
              this.moveCursorToEndAndFocus(caretPosition + emoji.length + 1);
              onChange?.(this.el.innerText);
219.
220.
         }
221.
         moveCursorToEndAndFocus(endIndex: number) {
222.
```



• [Rule Name] Use of localStorage (Medium, jsts)

The Use of localStorage checker finds instances of using localStorage.

Unless the data must persist, sessionStorage is recommended over localStorage.

Unlike SessionStorage, a LocalStorage object keeps the data in it even after the page is closed. This may allow an external application to access or manipulate the data in the LocalStorage object.

Use SessionStorage instead.

Dangerous Example

```
1. localStorage.setItem("key", "sensitive-info");
```

Line 1: localStorage is used.

Safe Example

```
1. sessionStorage.setItem("key", "sensitive-info");
```

Line 1: Use SessionStorage instead.

File	Rocket.Chat-develop/apps/meteor/tests/e2e/e2e-encryption.spec.ts
Line	55

	50.	// Login again, check the banner to save the generated password and
	test it	
	51.	await restoreState(page, Users.admin);
	52.	
	53.	await poHomeChannel.bannerSaveEncryptionPassword.click();
	54.	
	55.	password = (await page.evaluate(() => localStorage.getItem('e2e.
randomPassword'))) 'undefined';		word'))) 'undefined';
	56.	
	57.	await expect (poHomeChannel.dialogSaveE2EEPassword).toContainText
	(password);	
	(password),	



58.59. await poHomeChannel.btnSavedMyPassword.click();60.

File Rocket.Chat-develop/apps/meteor/tests/e2e/e2e-encryption.spec.ts

Line 913

Source Code

908. await expect(poHomeChannel.content.inputMessage).not. 909 toBeVisible(); 910. 911. await poHomeChannel.btnRoomSaveE2EEPassword.click(); 912. 913. e2eePassword = (await page.evaluate(() = \rangle localStorage.getItem('e2e. randomPassword'))) || 'undefined'; 914. 915. await expect(poHomeChannel.dialogSaveE2EEPassword).toBeVisible(); 916. await expect(poHomeChannel.dialogSaveE2EEPassword).toContainText (e2eePassword); 917. 918. await poHomeChannel.btnSavedMyPassword.click();

File Rocket.Chat-develop/apps/uikit-playground/src/Context/index.tsx

Line 7

```
    import createCtx from './createCtx';
    import { initialState } from './initialState';
    import reducer from './reducer';
    export * from './action';
    const initializer = localStorage.getItem('pesrist')
    ? JSON.parse(localStorage.getItem('pesrist') || '')
```



```
9. : initialState;10.11. const [context, Provider] = createCtx(reducer, initializer);12.
```

File Rocket.Chat-develop/apps/uikit-playground/src/Context/index.tsx

Line 8

Source Code

```
    import { initialState } from './initialState';
    import reducer from './reducer';
    export * from './action';
    const initializer = localStorage.getItem('pesrist')
    ? JSON.parse(localStorage.getItem('pesrist') || '')
    initialState;
    const [context, Provider] = createCtx(reducer, initializer);
    export { context, Provider };
```

File Rocket.Chat-develop/apps/meteor/client/meteorOverrides/login/oauth.ts

Line 27

```
22. const meteorOAuthRetrieveCredentialSecret = OAuth._retrieveCredentialSecret;
23. OAuth._retrieveCredentialSecret = (credentialToken: string): string | null => {
24.    let secret = meteorOAuthRetrieveCredentialSecret.call(OAuth,
    credentialToken);
25.    if (!secret) {
26.        const localStorageKey = `${OAuth.}
    _storageTokenPrefix}${credentialToken};
27.        secret = localStorage.getItem(localStorageKey);
28.    localStorage.removeItem(localStorageKey);
```



```
29. }
30.
31. return secret;
32. };
```

File Rocket.Chat-develop/apps/meteor/client/meteorOverrides/login/oauth.ts

Line 28

Source Code

```
23. OAuth._retrieveCredentialSecret = (credentialToken: string): string | null => {
        let secret = meteorOAuthRetrieveCredentialSecret.call(OAuth,
24.
credentialToken);
25.
        if (!secret) {
26.
             const localStorageKey = `${OAuth.
_storageTokenPrefix}${credentialToken}`;
27.
             secret = localStorage.getItem(localStorageKey);
28.
             localStorage.removeItem(localStorageKey);
29.
        }
30.
31.
        return secret;
32. };
33.
```

File Rocket.Chat-develop/apps/meteor/client/serviceWorker.ts

Line 5

```
    const KEY = 'sw_last_reload';
    const RELOAD_WINDOW = 1000 * 10;
    function reload() {
    const lastReload = localStorage.getItem(KEY);
    if (lastReload) {
```



```
8. const last = Date.parse(lastReload);
9.
10. if (!isNaN(last)) {
```

File Rocket.Chat-develop/apps/meteor/client/serviceWorker.ts

Line 19

Source Code

```
14.
                       return;
15.
                  }
             }
16.
        }
17.
18.
19.
        localStorage.setItem(KEY, new Date().toISOString());
20.
        console.log('service worker: reloading to activate');
21.
        window.location.reload();
22.}
23.
24. if ('serviceWorker' in navigator) {
```

File Rocket.Chat-develop/apps/meteor/client/startup/afterLogoutCleanUp /purgeAllDrafts.ts

Line 8

```
    import { callbacks } from '../../../lib/callbacks';
    import { afterLogoutCleanUpCallback } from '../../../lib/callbacks /afterLogoutCleanUpCallback';
    Meteor.startup(() => {
    const purgeAllDrafts = (): void => {
    Object.keys(localStorage)
    . filter((key) => key.indexOf('messagebox_') === 0)
    . forEach((key) => localStorage.removeltem(key));
```



```
11. };
12.
13. afterLogoutCleanUpCallback.add(purgeAllDrafts, callbacks.priority.MEDIUM, 'chatMessages-after-logout-cleanup');
```

File Rocket.Chat-develop/apps/meteor/client/startup/afterLogoutCleanUp /purgeAllDrafts.ts

Line 10

Source Code

```
5.
6. Meteor.startup(() = \rangle {
7.
                                                  const purgeAllDrafts = (): void =  {
8.
                                                                                   Object.keys(localStorage)
9.
                                                                                                                     .filter((key) => key.indexOf('messagebox_') === 0)
 10.
                                                                                                                             .forEach((key) => localStorage.removeItem(key));
 11.
                                                          };
 12.
 13.
                                                           after Logout Clean Up Callback. add (purge All Drafts, callbacks.priority. MEDIUM, after Logout Clean Up Callback. add (purge All Drafts, callbacks.priority. MEDIUM, after Logout Clean Up Callback. add (purge All Drafts, callbacks.priority. MEDIUM, after Logout Clean Up Callback.) and after Logout Clean Up Callback. add (purge All Drafts, callbacks.priority. MEDIUM, after Logout Clean Up Callbacks.priority. Add (purge All Drafts, callbacks.priority. MEDIUM) after Logout Clean Up Callbacks.priority. Add (purge All Drafts) and after Logout Clean Up Callbacks.priority. Add (purge All Drafts) and after Logout Clean Up Callbacks.priority. Add (purge All Drafts) and after Logout Clean Up Callbacks.priority. Add (purge All Drafts) and after Logout Clean Up Callbacks.priority. Add (purge All Drafts) and after Logout Clean Up Callbacks.priority. Add (purge All Drafts) and after Logout Clean Up Callbacks.priority. Add (purge All Drafts) and after Logout Clean Up Callbacks.priority. Add (purge All Drafts) and (purge All Drafts)
 'chatMessages-after-logout-cleanup');
 14. });
```

File Rocket.Chat-develop/apps/uikit-playground/src/utils/persistStore.ts

Line 4

```
    import { initialStateType } from '../Context/initialState';
    const persistStore = (state: initialStateType) => {
    localStorage.setItem('pesrist', JSON.stringify(state));
    };
    export default persistStore;
```



File Rocket.Chat-develop/packages/livechat/src/store/Store.ts

Line 20

Source Code

```
15. store[name] = val;
16. },
17. };
18. }
19. }
20. const localStorage = getLocalStorage();
21.
22. type StoreStateType = StoreState;
23.
24. export default class Store extends Emitter {
25. private _state: StoreStateType;
```

File Rocket.Chat-develop/packages/livechat/src/store/Store.ts

Line 48

Source Code

```
this.dontPersist = dontPersist;
43.
44.
45.
              let storedState;
46.
47.
             try {
48.
                   const stored = localStorage.getItem(this.localStorageKey);
                   storedState = stored ? JSON.parse(stored) : {};
49.
             } catch (e) {
50.
51.
                   storedState = {};
52.
             } finally {
                   storedState = typeof storedState === 'object' ? storedState : {};
53.
```

File Rocket.Chat-develop/packages/livechat/src/store/Store.ts



Line 84

Source Code

```
79.
         persist() {
80.
              const persistable = { ...this. state };
81.
              for (const ignoredKey of this.dontPersist) {
82.
                   delete persistable[ignoredKey];
83.
              }
84.
              localStorage.setItem(this.localStorageKey, JSON.stringify(persistable));
85.
         }
86.
87.
         setState(partialState: Partial (StoreStateType)) {
88.
              const prevState = this. state;
              this. state = { ...prevState, ...partialState };
89.
```

[Rule Name] Use of weak cryptographic algorithm (High, jsts)

A hash function is a one-way function that receives data of different lengths and maps it to random data of a fixed length. It is commonly used to store user passwords because it always produces the same output for a given input.

Because hash can be calculated very quickly, the hash functions, such as MD5 and SHA, may give the illusion of high performance. However they are vulnerable to random brute-force attacks. If you use the hash functions on simple data, they can be saved in the rainbow table, making it insecure. In addition, RC2, RC3, RC4, RC5, RC6, MD4, and DES are also known to be vulnerable.

There are many functions used to overcome the disadvantages of MD5 and SHA. In Node. js, bcrypt is one of the functions that is commonly used with outstanding performance and easily replace them. The latest hash algorithms, such as Argon2, PBKDF2, and Scrypt, are also good alternatives. Make sure to add a salt to the hash in SHA-2 i.e. SHA-224, SHA-256, SHA-384, SHA-512.

- JavaScript 시큐어코딩 가이드 2022
 - 02.04. 취약한 암호화 알고리즘 사용

Dangerous Example



```
    var md5 = require('md5');
    console.log(md5('password'));
```

Line 2: This is dangerous because it uses DES, a weak encryption algorithm.

Safe Example

```
    var bcrypt = require('bcrypt');
    sbcrypt.hash("password", 13, function(err, hash) {
    console.log(hash);
    });
```

Line 2: This is secure because using AES, a secure encryption algorithm.

File Rocket.Chat-develop/apps/meteor/app/ui-master/server/inject.ts

Line 87

```
82.
83.
         if (!content.trim()) {
              injectIntoHead(key, '');
84.
85.
              return;
86.
        }
87.
         const currentHash = crypto.createHash('sha1').update(content).digest('hex');
88.
89.
         injectIntoHead(key, {
90.
              type: 'JS',
              tag: `<script id="${key}" type="text/javascript" src="${`${getURL(key)}}</pre>
91.
_${currentHash}.js`}"></script>`,
92.
              content,
```

```
File Rocket.Chat-develop/apps/meteor/app/ui-master/server/inject.ts

Line 105
```



```
100.
101.
         if (!content.trim()) {
102.
              injectIntoHead(key, '');
103.
              return;
104.
         }
         const currentHash = crypto.createHash('sha1').update(content).digest
105.
('hex');
106.
107.
         injectIntoHead(key, {
108.
              type: 'CSS',
109.
              tag: `key}" rel="stylesheet" type="text/css" href="${`${getURL}}
(key)}_${currentHash}.css`}">`,
110.
              content,
```

File Rocket.Chat-develop/apps/meteor/app/2fa/server/code/index.ts

Line 62

Source Code

```
57.
        const data = JSON.stringify({
58.
             userAgent: connection.httpHeaders['user-agent'],
59.
             clientAddress: connection.clientAddress,
60.
        });
61.
62.
        return crypto.createHash('md5').update(data).digest('hex');
63.}
64.
65. function getRememberDate(from: Date = new Date()): Date | undefined {
        const rememberFor = parseInt(settings.get
('Accounts_TwoFactorAuthentication_RememberFor') as string, 10);
67.
```

File Rocket.Chat-develop/apps/meteor/app/assets/server/assets.ts

Line 333



```
328.
               if (!file) {
329.
                    assetValue.cache = undefined;
330.
                    return;
              }
331.
332.
333.
               const hash = crypto.createHash('sha1').update(file.buffer).digest('hex');
334.
               const extension = settingValue.url.split('.').pop();
335.
               assetValue.cache = {
336
                    path: `assets/${assetKey}.${extension}`,
337.
338.
                    cacheable: false,
```

File Rocket.Chat-develop/apps/meteor/app/cors/server/cors.ts

Line 141

Source Code

```
136.
                  meteorRuntimeConfigHash?: string;
137.
                  meteorRuntimeConfig: string;
             };
138.
139.
140.
             if (!program?.meteorRuntimeConfigHash) {
141.
                  program.meteorRuntimeConfigHash = createHash('sha1')
142.
                       .update(JSON.stringify(encodeURIComponent(program.
meteorRuntimeConfig)))
143.
                       .digest('hex');
             }
144.
145.
146.
              if (program.meteorRuntimeConfigHash !== url.query.hash) {
```

File Rocket.Chat-develop/apps/meteor/app/theme/server/server.ts

Line 41



File Rocket.Chat-develop/packages/node-poplib/src/index.js

Line 402

Source Code

```
397.
              self.setMultiline(false);
398.
              self.write(
                   'APOP',
399.
400.
                   username +
                        ' ' +
401.
402.
                        crypto
403.
                             .createHash('md5')
404.
                             .update(self.data['apop-timestamp'] + password)
405.
                             .digest('hex'),
406.
              );
407.
         }
```

• [Rule Name] Use of Insufficient Random Value (High, jsts)

If you use a predictable random number, an attacker can predict the next number generated and exploit the system.

When using a seed in a random number generator, a value generated in an unpredictable manner is used instead of a fixed value. In the NodeJS engine, you can generate a cryptographically secure pseudo-random number byte using crypto.getRandomBytes.



- JavaScript 시큐어코딩 가이드 2022
 - 02.08. 적절하지 않은 난수 값 사용

Dangerous Example

```
    let dan_randStr = "";
    for (let i = 0; i < lmt; i++) {</li>
    dan_randStr += String(Math.floor(Math.random() * 10));
    }
```

Line 3: This is insecure because the Math.random library is used to generate a random number.

Safe Example

```
    const crypto = require("crypto");
    const array = new Uint32Array(1);
    const tmp = crypto.getRandomValues(array);
    let result = "";
    for (let i = 0; i < tmp.length; i++) {</li>
    result += String(array[i]);
    }
    const safe_randStr = String(result).substring(0, 6);
```

Line 4: This is secure because the crypto library is used to generate the random number.

File

```
6.
7. describe('AppAccessors', () => {
8. let appAccessors: AppAccessors;
9. const senderFn = (r: object) =>
```



```
10. Promise.resolve({
11. id: Math.random().toString(36).substring(2),
12. jsonrpc: '2.0',
13. result: r,
14. serialize() {
15. return JSON.stringify(this);
16. },
```

File Rocket.Chat-develop/packages/apps-engine/deno-runtime/lib/accessors /tests/ModifyCreator.test.ts

Line 12

Source Code

```
7. import { ModifyCreator } from '../modify/ModifyCreator.ts';
8.
9. describe('ModifyCreator', () => {
10. const senderFn = (r: any) = 
11.
        Promise.resolve({
           id: Math.random().toString(36).substring(2),
12.
13.
           jsonrpc: '2.0',
14.
           result: r,
15.
           serialize() {
16.
             return JSON.stringify(this);
           },
17.
```

File Rocket.Chat-develop/packages/apps-engine/deno-runtime/lib/accessors /tests/ModifyExtender.test.ts

Line 13

```
8. describe('ModifyExtender', () => {
9. let extender: ModifyExtender;
10.
11. const senderFn = (r: any) =>
```



```
12. Promise.resolve({
13. id: Math.random().toString(36).substring(2),
14. jsonrpc: '2.0',
15. result: structuredClone(r),
16. serialize() {
17. return JSON.stringify(this);
18. },
```

File Rocket.Chat-develop/packages/apps-engine/deno-runtime/lib/accessors /tests/ModifyUpdater.test.ts

Line 14

Source Code

```
9. describe('ModifyUpdater', () => {
10.
      let modifyUpdater: ModifyUpdater;
11.
12.
      const senderFn = (r: any) =>
13.
        Promise.resolve({
14.
           id: Math.random().toString(36).substring(2),
15.
           jsonrpc: '2.0',
16.
           result: structuredClone(r),
17.
           serialize() {
18.
              return JSON.stringify(this);
           },
19.
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/methods.ts

Line 2000

```
1995. .send({
1996. message: JSON.stringify({
1997. method: 'sendMessage',
1998. params: [
1999. {
```



```
2000. __id: `${Date.now() + Math.random()}`,
2001. rid,
2002. msg: 'test message with https://github.
com',
2003. },
2004. ],
2005. id: 'id',
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/methods.ts

Line 2165

Source Code

2160.	.send({
2161.	message: JSON.stringify({
2162.	method: 'sendMessage',
2163.	params: [
2164.	{
2165.	_id: `\${Date.now() + Math.random()}`,
2166.	rid,
2167.	msg: 'test message with https://github.
com',	
2168.	},
2169.],
2170.	id: 'id',

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/methods.ts

Line 2198

```
      2193.
      .send({

      2194.
      message: JSON.stringify({

      2195.
      method: 'sendMessage',

      2196.
      params: [

      2197.
      {
```



```
2198. __id: `${Date.now() + Math.random()}`,
2199. rid,
2200. msg: 'test message with ``https://github.
com``',
2201. },
2202. ],
2203. id: 'id',
```

File Rocket. Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 902

Source Code

```
897.
              });
898.
         });
899.
900.
          describe('/rooms.favorite', () => {
901.
               let testChannel: IRoom;
902.
               const testChannelName = `channel.test.${Date.now()}-${Math.
random()}`;
903.
               before(async () \Rightarrow {
904.
905.
                   testChannel = (await createRoom({ type: 'c', name:
testChannelName })).body.channel;
906.
              });
907.
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 987

```
982. });
983. });
984.
985. describe('/rooms.nameExists', () => {
```



```
986. let testChannel: IRoom;
987. const testChannelName = `channel.test.${Date.now()}-${Math. random()}`;
988.
989. before(async () => {
990. testChannel = (await createRoom({ type: 'c', name: testChannelName })).body.channel;
991. });
992.
```

File Rocket. Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 1669

Source Code

```
1664.
               });
1665.
           });
1666.
1667.
           describe('/rooms.createDiscussion', () =  {
1668.
                let testChannel: IRoom;
1669.
               const testChannelName = `channel.test.${Date.now()}-${Math.
random()}`;
1670.
                let messageSent: IMessage;
1671.
                let privateTeam: ITeam;
1672.
1673.
                before(async () = \} {
1674.
                    testChannel = (await createRoom({ type: 'c', name:
testChannelName })).body.channel;
```

File Rocket.Chat-develop/apps/meteor/server/ufs/ufs-store.ts

Line 250

```
245. }
246.
```



```
247.
          generateToken(pattern?: string) {
248.
               return (pattern || 'xyxyxyxyy').replace(/[xy]/g, (c) = \ {
                    // eslint-disable-next-line no-mixed-operators
249.
                    const r = (Math.random() * 16) | 0;
250.
251.
                    const v = c === 'x' ? r : (r \& 0x3) | 0x8;
252.
                    const s = v.toString(16);
253.
                    return Math.round(Math.random()) ? s.toUpperCase() : s;
254.
              });
         }
255.
```

File Rocket.Chat-develop/apps/meteor/server/ufs/ufs-store.ts

Line 253

Source Code

```
248.
               return (pattern || 'xyxyxyxyy').replace(/[xy]/g, (c) = \ {
249.
                    // eslint-disable-next-line no-mixed-operators
                    const r = (Math.random() * 16) | 0;
250.
251.
                    const v = c === 'x' ? r : (r \& 0x3) | 0x8;
252.
                    const s = v.toString(16);
253.
                    return Math.round(Math.random()) ? s.toUpperCase() : s;
254.
              });
255.
         }
256.
257.
          getCollection() {
258.
               // eslint-disable-next-line @typescript-eslint/no-non-null-assertion
```

Line 26

```
21.22. (isEnterprise ? describe : describe.skip)('[/engagement-dashboard/channels /list]', () => {
```



```
23.
             let testRoom: IRoom;
24.
25.
              before(async () \Rightarrow {
                  testRoom = (await createRoom({ type: 'c', name: `channel.test.
26.
engagement.${Date.now()}-${Math.random()}`})).body.channel;
27.
28.
29.
             after(async() = ) {
                  await deleteRoom({ type: 'c', roomld: testRoom._id });
30.
             });
31.
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/channels.ts

Line 696

Source Code

```
691.
                   const promises = [];
692.
                   for (let i = 0; i < maxRoomsPerGuest; i++) {
693.
                        promises.push(
694.
                            createRoom({
695.
                                 type: 'c',
696.
                                 name: `channel.test.${Date.now()}-${Math.
random()}`,
697.
                                 members: [guestUser.username],
698.
                            }),
699.
                       );
700.
701.
                   const channellds = (await Promise.all(promises)).map((r) = r.
body.channel).map((channel) => channel._id);
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/livechat/12-priorites.ts

Line 882



```
877.
                            };
                       }
878.
879.
                        if (index < 15) {
880.
881.
                            // random number between 0 and 4
882.
                            const randomPriorityIndex = Math.floor(Math.random()
* 5);
883.
                            const randomSlaIndex = Math.floor(Math.random() * 5);
884.
885.
                            return {
886.
                                 priority: priorities[randomPriorityIndex]._id,
                                 sla: slas[randomSlaIndex]._id,
887.
```

File	Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/livechat/12-priorites.ts
Line	883

```
878.
                       }
879.
880.
                        if (index < 15) {
881.
                            // random number between 0 and 4
882.
                            const randomPriorityIndex = Math.floor(Math.random()
* 5);
883.
                            const randomSlaIndex = Math.floor(Math.random() * 5);
884.
885.
                            return {
                                 priority: priorities[randomPriorityIndex]._id,
886.
                                 sla: slas[randomSlaIndex]._id,
887.
888.
                            };
```

File	Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/methods.ts
Line	2913



```
2908.
                    const promises = [];
                    for (let i = 0; i \le maxRoomsPerGuest; i++) {
2909.
2910.
                         promises.push(
2911.
                              createRoom({
2912.
                                   type: 'c',
2913.
                                   name: `channel.test.${Date.now()}-${Math.
random()}`,
2914.
                                   members: [guestUser.username],
2915.
                              }),
                         );
2916.
2917.
                    }
2918.
                    createdRooms = [...createdRooms, ...(await Promise.all
(promises)).map((res) = > res.body.channel)];
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 65

Source Code

```
60.
61.
         describe('/rooms.saveNotification:', () = > {
62.
              let testChannel: IRoom;
63.
64.
              before(async () \Rightarrow {
                   testChannel = (await createRoom({ type: 'c', name: `channel.
test.${Date.now()}-${Math.random()}`})).body.channel;
              });
66.
67.
68.
              after(() => deleteRoom({ type: 'c', roomId: testChannel._id }));
69.
70.
              it('/rooms.saveNotification:', (done) => {
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 1262



```
1257.
           describe('[/rooms.info]', () = \} {
1258.
                let testChannel: IRoom;
1259.
                let testGroup: IRoom;
1260.
                let testDM: IRoom;
                const expectedKeys = ['_id', 'name', 'fname', 't', 'msgs', 'usersCount',
1261.
'u', 'ts', 'ro', 'sysMes', 'default', '_updatedAt'];
1262.
                const testChannelName = `channel.test.${Date.now()}-${Math.
random()}`;
1263.
                const testGroupName = `group.test.${Date.now()}-${Math.random()}`;
1264.
                let user: TestUser;
1265.
                before(async () \Rightarrow {
1266.
1267.
                     user = await createUser();
```

File Rocket. Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 1263

Source Code

```
1258.
                let testChannel: IRoom;
1259.
                let testGroup: IRoom;
1260.
                let testDM: IRoom;
1261.
                const expectedKeys = ['_id', 'name', 'fname', 't', 'msgs', 'usersCount',
'u', 'ts', 'ro', 'sysMes', 'default', '_updatedAt'];
1262.
                const testChannelName = `channel.test.${Date.now()}-${Math.
random()}`;
                const testGroupName = `group.test.${Date.now()}-${Math.random()}`;
1263.
1264
                let user: TestUser;
1265.
1266.
                before(async () \Rightarrow {
1267.
                     user = await createUser();
                    testChannel = (await createRoom({ type: 'c', name:
1268.
testChannelName })).body.channel;
```

File Rocket. Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts



Line 1520

Source Code

```
1515.
               let testChannel: IRoom;
1516.
               let testGroup: IRoom;
               let testDM: IRoom;
1517.
1518.
               let user2: TestUser;
1519.
               let user2Credentials: Credentials;
1520.
               const testChannelName = `channel.leave.${Date.now()}-${Math.
random()}`;
1521.
               const testGroupName = `group.leave.${Date.now()}-${Math.random()}
1522.
               before(async () \Rightarrow {
1523.
1524.
                    user2 = await createUser();
1525.
                    user2Credentials = await login(user2.username, password);
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 1521

```
1516.
               let testGroup: IRoom;
1517.
               let testDM: IRoom;
               let user2: TestUser;
1518.
1519.
               let user2Credentials: Credentials;
1520.
               const testChannelName = `channel.leave.${Date.now()}-${Math.
random()}`;
               const testGroupName = `group.leave.${Date.now()}-${Math.random()}
1521.
1522.
1523.
               before(async () = \rangle {
1524.
                    user2 = await createUser();
1525
                    user2Credentials = await login(user2.username, password);
1526.
                    testChannel = (await createRoom({ type: 'c', name:
testChannelName })).body.channel;
```



File

Rocket.Chat-develop/apps/meteor/app/meteor-accounts-saml/server/lib
/Utils.ts

Line 98

Source Code

```
93.
94.
         public static generateUniqueID(): string {
95.
             const chars = 'abcdef0123456789';
             let uniqueID = 'id-';
96.
97.
             for (let i = 0; i < 20; i++) {
98.
                  uniqueID += chars.substr(Math.floor(Math.random() * 15), 1);
99.
             }
100.
               return uniqueID;
101.
         }
102.
103.
          public static generateInstant(): string {
```

File Rocket.Chat-develop/apps/meteor/client/stories/contexts
/ServerContextMock.tsx

Line 12

```
7. import type { ContextType, ReactElement, ReactNode } from 'react';
8. import { useContext, useMemo } from 'react';
9.
10. const logAction = action('ServerContext');
11.
12. const randomDelay = (): Promise \ UploadResult \> = \> new Promise \( (resolve) = \> setTimeout(resolve, Math.random() * 1000));
13.
14. const uploadToEndpoint = (endpoint: PathFor \ 'POST' \>, formData: any): Promise \ UploadResult \> = \>
15. Promise.resolve(logAction('uploadToEndpoint', endpoint, formData)).then
```



```
(randomDelay);
16.
17. const getStream = (
```

File Rocket Chat-develop/apps/meteor/client/stories/contexts

/ServerContextMock.tsx

Line 27

Source Code

```
22.
        \} = \{\}.
23.): (<TEvent extends unknown[]>(eventName: string, callback: (...event: TEvent) =>
void) = () = void) = \{
24.
        logAction('getStream', streamName, options);
25.
26.
        return (eventName: string, callback: () => void): (() => void) => {
27.
             const subId = Math.random().toString(16).slice(2);
28.
             logAction('getStream.subscribe', streamName, eventName, subId);
29.
30.
             randomDelay().then(() = > callback());
31.
             return (): void =  {
32.
```

File Rocket.Chat-develop/apps/meteor/client/views/admin/customSounds/AddCustomSound.tsx

Line 59

```
54. reader.onloadend = (): void => {
55. try {
56. uploadCustomSound(reader.result as string,
soundFile.type, {
57. ...soundData,
58. __id: soundld,
59. random: Math.round(Math.random() * 1000),
```



```
60. });
61. dispatchToastMessage({ type: 'success', message: t
  ('File_uploaded') });
62. } catch (error) {
  63. (typeof error === 'string' || error instanceof Error) &&
  dispatchToastMessage({ type: 'error', message: error });
64. }
```

Rocket.Chat-develop/apps/meteor/client/views/admin/customSounds

/EditSound.tsx

Line 70

Source Code

```
65.
                           dispatchToastMessage({ type: 'error', message: error });
66.
                           return;
67.
                      }
68.
69.
                      soundData._id = soundId;
70.
                      soundData.random = Math.round(Math.random() * 1000);
71.
72.
                      if (sound && sound !== previousSound) {
73.
                           dispatchToastMessage({ type: 'success', message: t
('Uploading_file') });
74.
75.
                           const reader = new FileReader();
```

File Rocket.Chat-develop/apps/meteor/tests/data/livechat/rooms.ts

Line 67

```
62. customPhone?: string,
63.): Promise〈ILivechatVisitor〉=〉
64. new Promise((resolve, reject) =〉 {
65. const token = getRandomVisitorToken();
```



```
66. const email = customEmail || `${token}@${token}.com`;
67. const phone = customPhone || `${Math.floor(Math.random() * 10000000000)}`;
68. void request.get(api(`livechat/visitor/${token}`)).end((err: Error, res: DummyResponse<ILivechatVisitor>) => {
69. if (!err && res && res.body && res.body.visitor) {
70. return resolve(res.body.visitor);
71. }
72. void request
```

File Rocket. Chat-develop/apps/meteor/tests/data/users.helper.ts

Line 24

Source Code

```
19.
              name?: string;
20.
              password?: string;
         \} = \{\},
21.
22.) =>
         new Promise\langle TestUser \langle TUser \rangle \rangle ((resolve, reject) = \rangle {
23.
24.
              const username = userData.username || `user.test.${Date.now()}.${Math.
random()}`;
25.
              const email = userData.email || `${username}@rocket.chat`;
26.
              void request
27.
                    .post(api('users.create'))
                    .set(credentials)
28.
29.
                    .send({ email, name: username, username, password, ...userData })
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/groups.ts

Line 119

```
114.

115. for (let i = 0; i < maxRoomsPerGuest; i++) {

116. promises.push(
```



```
117.
                                 createRoom({
118.
                                      type: 'p',
119.
                                      name: `channel.test.${Date.now()}-${Math.
random()}`,
120.
                                      members: [guestUser.username],
121.
                                 }),
                            );
122.
123.
                        await Promise.all(promises);
124.
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/groups.ts

Line 130

Source Code

```
125.
126.
                        await request
127.
                             .post(api('groups.create'))
128.
                             .set(credentials)
129.
                             .send({
130.
                                  name: `channel.test.${Date.now()}-${Math.
random()}`,
131.
                                  members: [guestUser.username],
132.
                             })
                             .expect('Content-Type', 'application/json')
133.
                             .expect(200)
134.
                             .expect((res) =) {
135.
```

File	Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/incoming-integrations.ts
Line	32

```
27. updatePermission('manage-own-incoming-integrations', []),
28. updatePermission('manage-own-outgoing-integrations', []),
```



```
29.
                  updatePermission('manage-outgoing-integrations', []),
             ]);
30.
31.
32.
             testChannelName = `channel.test.${Date.now()}-${Math.random()}`;
33.
34.
             channel = (await createRoom({ type: 'c', name: testChannelName })).
body.channel;
35.
        });
36.
37.
        after(async() = ) {
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/livechat/20-messages.ts

Line 91

Source Code

```
86.
87.
                  const data = await startANewLivechatRoomAndTakeIt();
88.
                  visitor = data.visitor;
89.
                  room = data.room;
90.
91.
                  const response = await createRoom({ type: 'p', name: `private-
room-${Math.random()}` } as any);
                  privateRoom = response.body.group;
92.
93.
             });
94.
95.
             after(() => Promise.all([closeOmnichannelRoom(room._id), deleteRoom
({ roomId: privateRoom._id, type: 'p' })]));
96.
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/methods.ts

Line 1973



```
1968.
                          .post(methodCall('sendMessage'))
1969.
                          .set(credentials)
                          .send({
1970.
1971.
                              message: JSON.stringify({
1972.
                                   method: 'sendMessage',
1973.
                                   params: [{ _id: `${Date.now() + Math.random()}`,
rid, msg: 'test message' }],
1974.
                                   id: 1000,
1975.
                                   msg: 'method',
1976.
                              }),
1977.
                         })
1978.
                          .expect('Content-Type', 'application/json')
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/methods.ts

Line 2070

Source Code

```
2065.
                          .post(methodCall('sendMessage'))
                          .set(credentials)
2066.
2067.
                          .send({
2068.
                              message: JSON.stringify({
2069.
                                   method: 'sendMessage',
2070.
                                   params: [{ _id: `${Date.now() + Math.random()}`,
rid, msg: 'test message', _notAllowed: '1' }],
2071.
                                   id: 1000,
2072.
                                   msg: 'method',
2073.
                              }),
2074.
                         })
2075.
                         .expect('Content-Type', 'application/json')
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/methods.ts

Line 2845



```
guestUser = await createUser({ roles: ['guest'] });
2840.
2841.
                    user = await createUser();
2842.
                    room = (
2843.
                         await createRoom({
2844.
                              type: 'c',
2845.
                              name: `channel.test.${Date.now()}-${Math.random()}`,
                         })
2846.
2847.
                    ).body.channel;
2848.
                    createdRooms.push(room);
               });
2849.
2850.
               after(() = >
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 97

Source Code

```
92.
93.
        describe('/rooms.upload', () = \} {
94.
             let testChannel: IRoom;
             let user: TestUser<\IUser>;
95.
96.
             let userCredentials: Credentials;
97.
             const testChannelName = `channel.test.upload.${Date.now()}-${Math.
random()}`;
98.
             let blockedMediaTypes: SettingValue;
99.
             let testPrivateChannel: IRoom;
100.
101.
               before(async () \Rightarrow {
102.
                    user = await createUser({ joinDefaultChannels: false });
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 105



```
100.
               before(async () \Rightarrow {
101.
102.
                    user = await createUser({ joinDefaultChannels: false });
103.
                    userCredentials = await login(user.username, password);
104.
                   testChannel = (await createRoom({ type: 'c', name:
testChannelName })).body.channel;
                   testPrivateChannel = (await createRoom({ type: 'p', name:
105.
`channel.test.private.${Date.now()}-${Math.random()}`})).body.group;
                   blockedMediaTypes = await getSettingValueByld
('FileUpload_MediaTypeBlackList');
107.
                   const newBlockedMediaTypes = (blockedMediaTypes as string)
                         .split(',')
108.
109.
                        .filter((type) => type !== 'image/svg+xml')
110.
                         .join(',');
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 411

Source Code

```
406.
          describe('/rooms.media', () = ) {
407.
408.
               let testChannel: IRoom;
409.
               let user: TestUser(IUser);
               let userCredentials: Credentials;
410.
411.
               const testChannelName = `channel.test.upload.${Date.now()}-${Math.
random()}`;
412.
               let blockedMediaTypes: SettingValue;
413.
414.
               before(async () \Rightarrow {
415.
                    user = await createUser({ joinDefaultChannels: false });
                    userCredentials = await login(user.username, password);
416.
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts



```
1369.
                              expect(res.body.room).to.not.have.property('prid');
                         });
1370.
1371.
               });
1372.
1373.
               describe('with team and parent data', () => {
1374.
                    const testChannelName = `channel.test.${Date.now()}-${Math.
random()}`;
1375.
                    const teamName = `test-team-${Date.now()}`;
1376.
                    const discussionName = `test-discussion-${Date.now()}`;
1377.
                    const testChannelOutsideTeamname = `channel.test.
outside.${Date.now()}-${Math.random()}`;
                    let testChannel: IRoom;
1378.
                    let testDiscussion: IRoom;
1379.
```

File	Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts
Line	1377

Source Code

```
1372.
1373.
                describe('with team and parent data', () = \rangle {
1374.
                    const testChannelName = `channel.test.${Date.now()}-${Math.
random()}`;
                    const teamName = `test-team-${Date.now()}`;
1375.
1376.
                    const discussionName = `test-discussion-${Date.now()}`;
1377.
                    const testChannelOutsideTeamname = `channel.test.
outside.${Date.now()}-${Math.random()}`;
1378.
                    let testChannel: IRoom;
1379.
                    let testDiscussion: IRoom;
                    let testDiscussionMainRoom: IRoom;
1380.
                    let testTeam: ITeam;
1381.
                    let testChannelOutside: IRoom;
1382.
```

File Rocket. Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts



Line 1939

Source Code

```
1934.
                });
           });
1935.
1936.
1937.
           describe('/rooms.getDiscussions', () = \} {
1938.
                let testChannel: IRoom;
1939.
                const testChannelName = `channel.test.getDiscussions${Date.now()}
-${Math.random()}`;
1940.
1941.
                before(async () = \rangle {
1942.
                     testChannel = (await createRoom({ type: 'c', name:
testChannelName })).body.channel;
1943.
                     await request
                          .post(api('rooms.createDiscussion'))
1944.
```

File Rocket.Chat-develop/apps/meteor/tests/end-to-end/api/rooms.ts

Line 2109

Source Code

```
2104.
               });
2105.
          });
2106.
          describe('[/rooms.autocomplete.adminRooms]', () => {
2107.
2108.
               let testGroup: IRoom;
2109.
               const testGroupName = `channel.test.adminRoom${Date.now()}
-${Math.random()}`;
2110.
               const name = {
2111.
                    name: testGroupName,
2112.
               };
2113.
2114.
               before(async () = \rangle {
```

File Rocket. Chat-develop/apps/meteor/tests/end-to-end/api/users.ts



Line 670

Source Code

```
665.
666.
               before(async () \Rightarrow {
667.
                    infoRoom = (
668.
                        await createRoom({
669.
                             type: 'c',
670.
                             name: `channel.test.info.${Date.now()}-${Math.
random()}`,
671.
                             members: [targetUser.username],
                        })
672.
                   ).body.channel;
673.
              });
674.
675.
```

File

Rocket.Chat-develop/apps/meteor/tests/unit/app/markdown/client.mocks.

js

Line

15

Source Code

```
10.
              '@global': true,
11.
        },
12.
         '@rocket.chat/random': {
13.
              'Random': {
                  id() {
14.
                       return Math.random().toString().replace('0.', 'A');
15.
                  },
16.
17.
             },
18.
              '@global': true,
19.
        },
20.};
```

Rocket.Chat-develop/packages/apps-engine/deno-runtime/lib/messenger.



File ts

Line 171

Source Code

```
166. export function pongResponse(): Promise(void) {
       return Promise.resolve(Queue.enqueue(COMMAND_PONG));
168.}
169.
170. export async function sendRequest(requestDescriptor):
Promise \( jsonrpc. Success Object \) {
      const request = jsonrpc.request(Math.random().toString(36).slice(2),
requestDescriptor.method, requestDescriptor.params);
172.
173.
      // TODO: add timeout to this
174. const responsePromise = new Promise((resolve, reject) => {
175.
         const handler = (event: Event) => {
176.
           if (event instanceof ErrorEvent) {
```

File Rocket.Chat-develop/packages/apps-engine/src/client/utils/index.ts

Line 17

Source Code

```
12.
13. return buffer.join('');
14. }
15.
16. function getRandomInt(max: number): number {
17. return Math.floor(Math.random() * Math.floor(max));
18. }
```

File Rocket.Chat-develop/packages/apps-engine/src/server/runtime/deno/AppsEngineDenoRuntime.ts



```
312.
       public getAppId(): string {
313.
         return this.appPackage.info.id;
314. }
315.
       public async sendRequest(message: Pick<jsonrpc.RequestObject, 'method' |</pre>
316.
'params'>, options = this.options): Promise(unknown) {
         const id = String(Math.random().toString(36)).substring(2);
317.
318.
319.
         const start = Date.now();
320
321.
         const request = jsonrpc.request(id, message.method, message.params);
322.
```

File Rocket.Chat-develop/packages/livechat/widget-demo.html

Line 51

Source Code

```
46.
                  w.RocketChat._ = [];
                  w.RocketChat.url = u;
47.
48.
                  var h = d.getElementsByTagName(s)[0],
49.
                      j = d.createElement(s);
50.
                  j.async = true;
51.
                  j.src = 'dist/rocketchat-livechat.min.js?_=' + Math.random();
                  h.parentNode.insertBefore(j, h);
52.
53.
             })(window, document, 'script', 'http://localhost:8080');
             RocketChat(function() {
54.
55.
                  this.setTheme({
56
                       color: '#04436A', // widget title background color
```

File Rocket.Chat-develop/packages/random/src/createAleaGenerator.ts

Line 23



```
18.
19. const agent = (typeof navigator !== 'undefined' && navigator.userAgent) || '';
20.
21. export function createAleaGeneratorWithGeneratedSeed() {
22. return new AleaRandomGenerator({
23. seeds: [new Date(), height, width, agent, Math.random()],
24. });
25. }
```

[Rule Name] Using Strict Mode Group (High, typescript)

In Typescript, the Strict mode enables type-checks extensively, which can make your program more accurate and less prone to errors. Disabling this feature can lead to weak methods being used or various errors being ignored, creating potential vulnerabilities in your source code.

The Strict setting enables a total of eight flags, each of which is described below:

- 1. Always Strict: Enables ECMAScript Strict Mode by adding `use strict` to all source files.
- 2. Strict Null Checks: Explicitly handles 'null' and 'undefined'.
- 3. Strict Bind Call Apply: Ensures that the built-in methods of calling, binding, and applying functions are called with the correct arguments to the underlying function.
- 4. Strict Function Types: Checks function parameters more precisely.
- 5. Strict Property Initialization: Raise an error if a class property is declared but not set in the constructor.
- 6. No Implicit Any: Raises an error for variables that are of type `any`.
- 7. No Implicit This: Raises an error on a 'this' expression that has a type of 'any'.
- 8. Use Unknown In Catch Variables: Changes the `error` type to `unknown` in the `catch` statement.

In the Typescript configuration file, `tsconfig.json` or `jsconfig.json`, declare the `strict` property inside the `compilerOptions` section to be `true`.

Dangerous Example

```
1. //tsconfig.json
2. {
```



```
    "compilerOptions": {
    "strict": false,
    ...
    },
    }
```

Line 4: Disabling the strict mode group, which can lead to vulnerabilities in the source code.

Safe Example

```
    //tsconfig.json
    {
    "compilerOptions": {
    "strict": true,
    ...
    },
    }
```

Line 4: Enabling the strict mode group makes the program more secure.

File Rocket.Chat-develop/ee/packages/license/tsconfig.json

Line 3

Source Code

```
File Rocket.Chat-develop/ee/packages/network-broker/tsconfig.json
```



```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "declaration": true,
5.          "outDir": "./dist",
6.          "rootDir": "./src",
7.     },
8.     "files": ["./src/index.ts"]
```

File Rocket.Chat-develop/ee/packages/omnichannel-services/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "outDir": "./dist",
5. "rootDir": "./src",
6. "declaration": true,
7. },
8. "include": ["./src/**/*", "../../apps/meteor/definition/externals/meteor"],
```

File Rocket.Chat-develop/ee/packages/presence/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../.tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "strictPropertyInitialization": false, // TODO: Remove this line
    5. "declaration": true,
    6. "outDir": "./dist",
```



```
7. "rootDir": "./src",
8. },
```

File Rocket.Chat-develop/ee/packages/ui-theming/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/account-utils/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/agenda/tsconfig.json



```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/api-client/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "module": "commonjs",
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/apps/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
```



```
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/cas-validate/tsconfig.json

Line 3

Source Code

```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "lib": ["dom", "dom.iterable", "esnext"],
5.          "declaration": true,
6.          "rootDir": "./src",
7.          "outDir": "./dist"
8.     },
```

File Rocket.Chat-develop/packages/core-services/tsconfig.json

Line 3

Source Code

```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "declaration": true,
5.          "rootDir": "./src",
6.          "outDir": "./dist"
7.      },
8.     "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/core-typings/tsconfig.json



```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "lib": ["dom", "dom.iterable"],
5. "declaration": true,
6. "rootDir": "./src",
7. "outDir": "./dist"
8. },
```

File Rocket.Chat-develop/packages/cron/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "declaration": true,
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"],
```

File Rocket.Chat-develop/packages/favicon/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist"
6. },
```



```
7. "include": ["./src/**/*"]
8.}
```

File Rocket. Chat-develop/packages/freeswitch/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"],
```

File Rocket. Chat-develop/packages/instance-status/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/jest-presets/tsconfig.json



```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist",
6. "declaration": true
7. },
8. "include": ["./src"]
```

File Rocket.Chat-develop/packages/jwt/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "module": "commonjs",
6. "rootDir": "./src",
7. "outDir": "./dist"
8. },
```

File Rocket.Chat-develop/packages/livechat/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "module": "CommonJS",
5. "outDir": "./dist",
```



```
6. "allowJs": true,
7. "checkJs": false,
8. "jsxImportSource": "preact",
```

File Rocket.Chat-develop/packages/log-format/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/logger/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/mock-providers/tsconfig.json



File Rocket.Chat-develop/packages/model-typings/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket. Chat-develop/packages/password-policies/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist"
6. },
```



```
7. "include": ["./src/**/*"]
8.}
```

File Rocket.Chat-develop/packages/patch-injection/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket. Chat-develop/packages/rest-typings/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/server-cloud-communication/tsconfig.json



File Rocket.Chat-develop/packages/server-fetch/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist",
6. "declaration": true,
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/tools/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
```



```
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/tracing/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/ui-avatar/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/ui-contexts/tsconfig.json



```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "module": "CommonJS",
    5. "rootDir": "./src",
    6. "outDir": "./dist",
    7. },
    8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/apps/meteor/ee/server/services/tsconfig.json

Line 1

Source Code

```
    1. {
    2. "extends": "../../../tsconfig.json",
    3. "include": ["./**/*", "../../../definition/externals/meteor/rocketchat-streamer.d. ts", "../../../../ee/apps/account-service/src/lib"],
    4. "exclude": ["./dist", "./ecosystem.config.js", "../../.definition/methods"]
    5. }
```

File Rocket.Chat-develop/apps/meteor/tsconfig.json

Line 3



File Rocket.Chat-develop/ee/apps/account-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "allowJs": true, // TODO remove asap
    "incremental": true,
    /* Strict Type-Checking Options */
    "strictPropertyInitialization": false,
```

File Rocket.Chat-develop/ee/apps/authorization-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist"
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/ddp-streamer/tsconfig.json

Line 3



```
1. {
2.
       "extends": "../../tsconfig.base.server.json",
3.
       "compilerOptions": {
4.
             "strictPropertyInitialization": false, // TODO: Remove this line
5.
             "allowJs": true, // TODO: Remove this line
             "outDir": "./dist"
6.
7.
       },
       "include": ["./src/**/*", "./definition", "../../apps/meteor/definition/externals
8.
/meteor/rocketchat-streamer.d.ts"],
```

File Rocket. Chat-develop/ee/apps/omnichannel-transcript/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "allowJs": true,
    "strictPropertyInitialization": false,
    "outDir": "./dist/ee/apps/omnichannel-transcript/src",
    },
    "files": ["./src/service.ts"],
```

File Rocket. Chat-develop/ee/apps/presence-service/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "strictPropertyInitialization": false, // TODO: Remove this line
    5. "allowJs": true, // TODO: Remove this line
```



```
    "outDir": "./dist/ee/apps/presence-service/src",
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/queue-worker/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "allowJs": true,
    5. "strictPropertyInitialization": false,
    6. "outDir": "./dist/ee/apps/queue-worker/src",
    7. },
    8. "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/stream-hub-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist"
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/packages/pdf-worker/tsconfig.json



```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "jsx": "react-jsx"
    5. },
    6. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"]
    7. }
```

File Rocket. Chat-develop/packages/apps-engine/tsconfig.json

Line 2

Source Code

```
    "compilerOptions": {
    "sourceMap": true,
    "target": "es6",
    "module": "commonjs",
    "declaration": true,
    "nolmplicitAny": true,
```

File Rocket.Chat-develop/packages/base64/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "outDir": "dist",
5. "rootDir": "src",
6. "allowJs": true,
7. "noImplicitAny": true,
8. "noUnusedLocals": true,
```



File Rocket.Chat-develop/packages/ddp-client/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/fuselage-ui-kit/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "noImplicitReturns": true,
    5. "noImplicitThis": true,
    6. },
    7. "include": ["src", ".storybook/**/*", "jest.config.ts"]
    8. }
```

File Rocket.Chat-develop/packages/gazzodown/tsconfig.json

Line 3



File Rocket.Chat-develop/packages/i18n/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "rootDirs": ["./src", "./"],
5. "outDir": "./dist",
6. "declaration": true
7. },
8. "include": ["./src/**/*", "./jest.config.ts"]
```

File Rocket.Chat-develop/packages/models/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. // TODO migrate Users to TS
5. "allowJs": true,
6. "declaration": true,
7. "rootDir": "./src",
8. "outDir": "./dist",
```



File Rocket.Chat-develop/packages/random/tsconfig.json

Line 3

Source Code

```
1. {
2.     "extends": "../../tsconfig.base.json",
3.     "compilerOptions": {
4.          "outDir": "dist",
5.          "rootDir": "src",
6.          "allowJs": true,
7.          "noImplicitAny": true,
8.          "noUnusedLocals": true,
```

File Rocket.Chat-develop/packages/release-action/tsconfig.json

Line 2

Source Code

```
    1. {
    2. "compilerOptions": {
    3. /* Visit https://aka.ms/tsconfig to read more about this file */
    4.
    5. /* Projects */
    6. // "incremental": true, /* Save .tsbuildinfo files to allow for incremental compilation of projects. */
    7. // "composite": true, /* Enable constraints that allow a TypeScript project to be used with project references. */
```

File Rocket.Chat-develop/packages/release-changelog/tsconfig.json

Line 2



```
1. {
2. "compilerOptions": {
3. /* Visit https://aka.ms/tsconfig to read more about this file */
4.
5. /* Projects */
6. // "incremental": true, /* Save .tsbuildinfo files to allow for incremental compilation of projects. */
7. // "composite": true, /* Enable constraints that allow a TypeScript project to be used with project references. */
```

File Rocket.Chat-develop/packages/sha256/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "outDir": "dist",
5. "rootDir": "src",
6. "allowJs": true,
7. "noImplicitAny": true,
8. "noUnusedLocals": true,
```

File Rocket.Chat-develop/packages/ui-client/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "rootDirs": ["./src", "./"],
5. "outDir": "./dist"
```



```
6. },
7. "include": ["./src/**/*", "./.storybook/**/*", "./jest.config.ts"],
8. }
```

File Rocket.Chat-develop/packages/ui-composer/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/ui-video-conf/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist",
    6. },
    7. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"],
    8. }
```

File Rocket.Chat-develop/packages/ui-voip/tsconfig.json



File Rocket.Chat-develop/packages/web-ui-registration/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.client.json",
    "compilerOptions": {
    "rootDirs": ["./src","./.storybook"],
    "outDir": "./dist",
    "module": "CommonJS"
    },
    "include": ["./src", "./.storybook"],
```

[Rule Name] Using Implicit Any Type (High, typescript)

Typescript provides `nolmplicitAny` as a `Compiler Options`. nolmplicitAny'' will raise an error for any variable that is implicitly inferred to be `any''. If you don''t infer types and use the `any` type, Typescript behaves like normal Javascript.

Enable it in your Typescript configuration file, `tsconfig.json` or `jsconfig.json`, by declaring the `strict` property inside the `compilerOptions` section to be `true`, or by declaring the `noImplicitAny` property to be `true`.

Dangerous Example



```
    //tsconfig.json
    {
    "compilerOptions": {
    "noImplicitAny": false,
    ...
    },
    }
```

Line 4: The noImplicitAny gets disabled. This may introduce vulnerabilities.

Safe Example

```
    //tsconfig.json
    {
    "compilerOptions": {
    "noImplicitAny": true,
    ...
    },
    }
```

Line 4: The noImplicitAny gets enabled. This makes the program more secure.

File Rocket.Chat-develop/ee/packages/license/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```



File Rocket.Chat-develop/ee/packages/network-broker/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "outDir": "./dist",
6. "rootDir": "./src",
7. },
8. "files": ["./src/index.ts"]
```

File Rocket.Chat-develop/ee/packages/omnichannel-services/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/ee/packages/presence/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
```



```
    "strictPropertyInitialization": false, // TODO: Remove this line
    "declaration": true,
    "outDir": "./dist",
    "rootDir": "./src",
    },
```

File Rocket.Chat-develop/ee/packages/ui-theming/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/account-utils/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```



File Rocket.Chat-develop/packages/agenda/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/api-client/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "module": "commonjs",
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/apps/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
```



```
    "declaration": true,
    "rootDir": "./src",
    "outDir": "./dist"
    },
    "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/cas-validate/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "lib": ["dom", "dom.iterable", "esnext"],
5. "declaration": true,
6. "rootDir": "./src",
7. "outDir": "./dist"
8. },
```

File Rocket.Chat-develop/packages/core-services/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```



File Rocket.Chat-develop/packages/core-typings/tsconfig.json

Line 3

Source Code

```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "lib": ["dom", "dom.iterable"],
5.          "declaration": true,
6.          "rootDir": "./src",
7.          "outDir": "./dist"
8.     },
```

File Rocket.Chat-develop/packages/cron/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "declaration": true,
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"],
```

File Rocket.Chat-develop/packages/favicon/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
```



```
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/freeswitch/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"],
```

File Rocket.Chat-develop/packages/instance-status/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```



File Rocket.Chat-develop/packages/jest-presets/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist",
6. "declaration": true
7. },
8. "include": ["./src"]
```

File Rocket.Chat-develop/packages/jwt/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "module": "commonjs",
6. "rootDir": "./src",
7. "outDir": "./dist"
8. },
```

File Rocket.Chat-develop/packages/livechat/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
```



```
    "module": "CommonJS",
    "outDir": "./dist",
    "allowJs": true,
    "checkJs": false,
    "jsxImportSource": "preact",
```

File Rocket.Chat-develop/packages/log-format/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/logger/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```



File Rocket.Chat-develop/packages/mock-providers/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/model-typings/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket. Chat-develop/packages/password-policies/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
```



```
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/patch-injection/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/rest-typings/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```



File Rocket.Chat-develop/packages/server-cloud-communication/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/server-fetch/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist",
6. "declaration": true,
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/tools/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
```



```
    "declaration": true,
    "rootDir": "./src",
    "outDir": "./dist"
    },
    "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/tracing/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/ui-avatar/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```



File Rocket.Chat-develop/packages/ui-contexts/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "module": "CommonJS",
    5. "rootDir": "./src",
    6. "outDir": "./dist",
    7. },
    8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/ui-voip/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"],
    8. }
```

File Rocket.Chat-develop/packages/web-ui-registration/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
```



```
    "rootDirs": ["./src","./.storybook"],
    "outDir": "./dist",
    "module": "CommonJS"
    },
    "include": ["./src", "./.storybook"],
```

File Rocket.Chat-develop/apps/meteor/ee/server/services/tsconfig.json

Line 1

Source Code

```
    1. {
    2. "extends": "../../tsconfig.json",
    3. "include": ["./**/*", "../../definition/externals/meteor/rocketchat-streamer.d. ts", "../../../ee/apps/account-service/src/lib"],
    4. "exclude": ["./dist", "./ecosystem.config.js", "../../../definition/methods"]
    5. }
```

File Rocket.Chat-develop/apps/meteor/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/ee/apps/account-service/tsconfig.json

Line 3



Source Code

```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "allowJs": true, // TODO remove asap
5.          "incremental": true,
6.
7.          /* Strict Type-Checking Options */
8.          "strictPropertyInitialization": false,
```

File Rocket.Chat-develop/ee/apps/authorization-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist"
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/ddp-streamer/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "strictPropertyInitialization": false, // TODO: Remove this line
    5. "allowJs": true, // TODO: Remove this line
    6. "outDir": "./dist"
```



```
7. },
8. "include": ["./src/**/*", "./definition", "../../.apps/meteor/definition/externals/meteor/rocketchat-streamer.d.ts"],
```

File Rocket.Chat-develop/ee/apps/omnichannel-transcript/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "allowJs": true,
    5. "strictPropertyInitialization": false,
    6. "outDir": "./dist/ee/apps/omnichannel-transcript/src",
    7. },
    8. "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/presence-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist/ee/apps/presence-service/src",
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/queue-worker/tsconfig.json

Line 3



Source Code

File Rocket.Chat-develop/ee/apps/stream-hub-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist"
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/packages/pdf-worker/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "jsx": "react-jsx"
```



```
5. },
6. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"]
7. }
```

File Rocket. Chat-develop/packages/ddp-client/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist",
6. "target": "es6",
7. "module": "commonjs",
8. "esModuleInterop": true,
```

File Rocket.Chat-develop/packages/fuselage-ui-kit/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "noImplicitReturns": true,
    5. "noImplicitThis": true,
    6. },
    7. "include": ["src", ".storybook/**/*", "jest.config.ts"]
    8. }
```

File Rocket.Chat-develop/packages/gazzodown/tsconfig.json

Line 3



Source Code

File Rocket.Chat-develop/packages/i18n/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist",
    6. "declaration": true
    7. },
    8. "include": ["./src/**/*", "./jest.config.ts"]
```

File Rocket.Chat-develop/packages/models/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. // TODO migrate Users to TS
    5. "allowJs": true,
    6. "declaration": true,
```



```
7. "rootDir": "./src",
8. "outDir": "./dist",
```

File Rocket.Chat-develop/packages/release-action/tsconfig.json

Line 2

Source Code

```
    1. {
    2. "compilerOptions": {
    3. /* Visit https://aka.ms/tsconfig to read more about this file */
    4.
    5. /* Projects */
    6. // "incremental": true, /* Save .tsbuildinfo files to allow for incremental compilation of projects. */
    7. // "composite": true, /* Enable constraints that allow a TypeScript project to be used with project references. */
```

File Rocket.Chat-develop/packages/release-changelog/tsconfig.json

Line 2

Source Code

```
1. {
2. "compilerOptions": {
3. /* Visit https://aka.ms/tsconfig to read more about this file */
4.
5. /* Projects */
6. // "incremental": true, /* Save .tsbuildinfo files to allow for incremental compilation of projects. */
7. // "composite": true, /* Enable constraints that allow a TypeScript project to be used with project references. */
```

File Rocket.Chat-develop/packages/ui-client/tsconfig.json



Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*", "./.storybook/**/*", "./jest.config.ts"],
    8. }
```

File Rocket.Chat-develop/packages/ui-composer/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/ui-video-conf/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "rootDirs": ["./src", "./"],
```



```
5. "outDir": "./dist",
6. },
7. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"],
8.}
```

[Rule Name] Clear Distinction of Null Type (Medium, typescript)

The issue of distinguishing between 'null' and 'undefined' is the source of many bugs. Typescript supports 'strictNullChecks' which makes clear distinction and prevents developers from referencing 'null' or 'undefined' values.

Enable it in your Typescript configuration file, `tsconfig.json` or `jsconfig.json`, by declaring the `strict` property inside the `compilerOptions` section to be `true`; or by declaring the `strictNullChecks` property to be `true`.

Dangerous Example

```
    //tsconfig.json
    {
    "compilerOptions": {
    "strictNullChecks": false,
    ...
    },
    },
```

Line 4: The `strictNullChecks` gets disabled. This may introduce vulnerabilities.

Safe Example

```
    //tsconfig.json
    {
    "compilerOptions": {
    "strictNullChecks": true,
    ...
    },
    },
```

Line 4: The `strictNullChecks` gets enabled. This makes the program more secure.



File Rocket.Chat-develop/ee/packages/license/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/ee/packages/network-broker/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "outDir": "./dist",
6. "rootDir": "./src",
7. },
8. "files": ["./src/index.ts"]
```

File Rocket.Chat-develop/ee/packages/omnichannel-services/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
```



```
    "outDir": "./dist",
    "rootDir": "./src",
    "declaration": true,
    },
    "include": ["./src/**/*", "../../apps/meteor/definition/externals/meteor"],
```

File Rocket.Chat-develop/ee/packages/presence/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/ee/packages/ui-theming/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```



File Rocket.Chat-develop/packages/account-utils/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/agenda/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/api-client/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
```



```
    "module": "commonjs",
    "rootDir": "./src",
    "outDir": "./dist"
    },
    "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/apps/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket. Chat-develop/packages/cas-validate/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "lib": ["dom", "dom.iterable", "esnext"],
5. "declaration": true,
6. "rootDir": "./src",
7. "outDir": "./dist"
8. },
```



File Rocket.Chat-develop/packages/core-services/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/core-typings/tsconfig.json

Line 3

Source Code

```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "lib": ["dom", "dom.iterable"],
5.          "declaration": true,
6.          "rootDir": "./src",
7.          "outDir": "./dist"
8.     },
```

File Rocket.Chat-develop/packages/cron/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
```



```
    4. "rootDir": "./src",
    5. "declaration": true,
    6. "outDir": "./dist"
    7. },
    8. "include": ["./src/**/*"],
```

File Rocket.Chat-develop/packages/favicon/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket. Chat-develop/packages/freeswitch/tsconfig.json

Line 3

```
1. {
2.    "extends": "../../tsconfig.base.server.json",
3.    "compilerOptions": {
4.         "declaration": true,
5.         "rootDir": "./src",
6.         "outDir": "./dist"
7.    },
8.    "include": ["./src/**/*"],
```



File Rocket.Chat-develop/packages/instance-status/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/jest-presets/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist",
6. "declaration": true
7. },
8. "include": ["./src"]
```

File Rocket.Chat-develop/packages/jwt/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
```



```
4. "declaration": true,
5. "module": "commonjs",
6. "rootDir": "./src",
7. "outDir": "./dist"
8. },
```

File Rocket.Chat-develop/packages/livechat/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "module": "CommonJS",
5. "outDir": "./dist",
6. "allowJs": true,
7. "checkJs": false,
8. "jsxImportSource": "preact",
```

File Rocket.Chat-develop/packages/log-format/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```



File Rocket.Chat-develop/packages/logger/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/mock-providers/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/model-typings/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
```



```
    4. "declaration": true,
    5. "rootDir": "./src",
    6. "outDir": "./dist"
    7. },
    8. "include": ["./src/**/*"]
```

File Rocket. Chat-develop/packages/password-policies/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/patch-injection/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```



File Rocket.Chat-develop/packages/rest-typings/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/server-cloud-communication/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/server-fetch/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
```



```
    "rootDir": "./src",
    "outDir": "./dist",
    "declaration": true,
    },
    "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/tools/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/tracing/tsconfig.json

Line 3

```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "declaration": true,
5.          "rootDir": "./src",
6.          "outDir": "./dist"
7.     },
8.     "include": ["./src/**/*"]
```



File Rocket.Chat-develop/packages/ui-avatar/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/ui-contexts/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "module": "CommonJS",
5. "rootDir": "./src",
6. "outDir": "./dist",
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/ui-voip/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
```



```
    "rootDirs": ["./src", "./"],
    "outDir": "./dist"
    },
    "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"],
    8.}
```

File Rocket.Chat-develop/apps/meteor/ee/server/services/tsconfig.json

Line 1

Source Code

```
    1. {
    2. "extends": "../../tsconfig.json",
    3. "include": ["./**/*", "../../definition/externals/meteor/rocketchat-streamer.d. ts", "../../../ee/apps/account-service/src/lib"],
    4. "exclude": ["./dist", "./ecosystem.config.js", "../../definition/methods"]
    5. }
```

File Rocket.Chat-develop/apps/meteor/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/ee/apps/account-service/tsconfig.json



File Rocket.Chat-develop/ee/apps/authorization-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist"
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/ddp-streamer/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "strictPropertyInitialization": false, // TODO: Remove this line
    5. "allowJs": true, // TODO: Remove this line
    6. "outDir": "./dist"
```



```
7. },
8. "include": ["./src/**/*", "./definition", "../../apps/meteor/definition/externals/meteor/rocketchat-streamer.d.ts"],
```

File Rocket.Chat-develop/ee/apps/omnichannel-transcript/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "allowJs": true,
    "strictPropertyInitialization": false,
    "outDir": "./dist/ee/apps/omnichannel-transcript/src",
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/presence-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist/ee/apps/presence-service/src",
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/queue-worker/tsconfig.json



File Rocket.Chat-develop/ee/apps/stream-hub-service/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "strictPropertyInitialization": false, // TODO: Remove this line
    5. "allowJs": true, // TODO: Remove this line
    6. "outDir": "./dist"
    7. },
    8. "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/packages/pdf-worker/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "jsx": "react-jsx"
```



```
5. },
6. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"]
7. }
```

File Rocket.Chat-develop/packages/apps-engine/tsconfig.json

Line 2

Source Code

```
    1. {
    2. "compilerOptions": {
    3. "sourceMap": true,
    4. "target": "es6",
    5. "module": "commonjs",
    6. "declaration": true,
    7. "nolmplicitAny": true,
```

File Rocket.Chat-develop/packages/ddp-client/tsconfig.json

Line 3

Source Code

```
1. {
2.     "extends": "../../tsconfig.base.client.json",
3.     "compilerOptions": {
4.          "rootDir": "./src",
5.          "outDir": "./dist",
6.          "target": "es6",
7.          "module": "commonjs",
8.          "esModuleInterop": true,
```

File Rocket.Chat-develop/packages/fuselage-ui-kit/tsconfig.json



```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "noImplicitReturns": true,
    5. "noImplicitThis": true,
    6. },
    7. "include": ["src", ".storybook/**/*", "jest.config.ts"]
    8. }
```

File Rocket.Chat-develop/packages/gazzodown/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/i18n/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "rootDirs": ["./src", "./"],
5. "outDir": "./dist",
```



```
6. "declaration": true
7. },
8. "include": ["./src/**/*", "./jest.config.ts"]
```

File Rocket.Chat-develop/packages/models/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. // TODO migrate Users to TS
5. "allowJs": true,
6. "declaration": true,
7. "rootDir": "./src",
8. "outDir": "./dist",
```

File Rocket.Chat-develop/packages/release-action/tsconfig.json

Line 2

Source Code

```
1. {
2. "compilerOptions": {
3. /* Visit https://aka.ms/tsconfig to read more about this file */
4.
5. /* Projects */
6. // "incremental": true, /* Save .tsbuildinfo files to allow for incremental compilation of projects. */
7. // "composite": true, /* Enable constraints that allow a TypeScript project to be used with project references. */
```

File Rocket.Chat-develop/packages/release-changelog/tsconfig.json



Line 2

Source Code

```
    "compilerOptions": {
    /* Visit https://aka.ms/tsconfig to read more about this file */
    /* Projects */
    /* Projects */
    // "incremental": true, /* Save .tsbuildinfo files to allow for incremental compilation of projects. */
    // "composite": true, /* Enable constraints that allow a TypeScript project to be used with project references. */
```

File Rocket.Chat-develop/packages/ui-client/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*", "./.storybook/**/*", "./jest.config.ts"],
    8. }
```

File Rocket.Chat-develop/packages/ui-composer/tsconfig.json

Line 3

```
1. {2. "extends": "../../tsconfig.base.client.json",3. "compilerOptions": {
```



```
    "rootDirs": ["./src", "./"],
    "outDir": "./dist"
    },
    "include": ["./src/**/*", "./.storybook/**/*", "./jest.config.ts"],
    }
```

File Rocket.Chat-develop/packages/ui-video-conf/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist",
    6. },
    7. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"],
    8. }
```

File Rocket.Chat-develop/packages/web-ui-registration/tsconfig.json

Line 3



[Rule Name] Enabling alwaysStrict Mode (High, typescript)

Strict mode is compatible with other code and makes your source code behave more safely by imposing restrictions on it, such as throwing previously ignored errors or prohibiting the use of dangerous methods. Typescript allows you to explicitly use `use stirct` in your source code, but recommends that you use `alwaysStrict` to have stirct mode automatically added to all your source code.

Enable Strict Mode in your Typescript configuration file, 'tsconfig.json' or 'jsconfig.json' declare the 'strict' property inside the 'compilerOptions' section to be 'true', or declare the 'alwaysStrict' property to be 'true'.

Dangerous Example

```
    //tsconfig.json
    {
    "compilerOptions": {
    "alwaysStrict": false,
    ...
    },
    }
```

Line 4: The 'alwaysStrict' gets disabled. This may introduce vulnerabilities.

Safe Example

```
    //tsconfig.json
    {
    "compilerOptions": {
    "alwaysStrict": true,
    ...
    },
    }
```

Line 4: The `alwaysStrict` gets enabled. This makes the program more secure.

File	Rocket.Chat-develop/ee/packages/license/tsconfig.json
Line	3



```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/ee/packages/network-broker/tsconfig.json

Line 3

Source Code

```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "declaration": true,
5.          "outDir": "./dist",
6.          "rootDir": "./src",
7.     },
8.     "files": ["./src/index.ts"]
```

File Rocket.Chat-develop/ee/packages/omnichannel-services/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "outDir": "./dist",
5. "rootDir": "./src",
```



```
6. "declaration": true,
7. },
8. "include": ["./src/**/*", "../../apps/meteor/definition/externals/meteor"],
```

File Rocket.Chat-develop/ee/packages/presence/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/ee/packages/ui-theming/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/account-utils/tsconfig.json



File Rocket.Chat-develop/packages/agenda/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket. Chat-develop/packages/api-client/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "module": "commonjs",
    5. "rootDir": "./src",
    6. "outDir": "./dist"
```



```
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/apps/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket. Chat-develop/packages/cas-validate/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "lib": ["dom", "dom.iterable", "esnext"],
5. "declaration": true,
6. "rootDir": "./src",
7. "outDir": "./dist"
8. },
```

File Rocket.Chat-develop/packages/core-services/tsconfig.json



```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/core-typings/tsconfig.json

Line 3

Source Code

```
1. {
2.     "extends": "../../tsconfig.base.server.json",
3.     "compilerOptions": {
4.          "lib": ["dom", "dom.iterable"],
5.          "declaration": true,
6.          "rootDir": "./src",
7.          "outDir": "./dist"
8.     },
```

File Rocket.Chat-develop/packages/cron/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "declaration": true,
```



```
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"],
```

File Rocket.Chat-develop/packages/favicon/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/freeswitch/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"],
```

File Rocket.Chat-develop/packages/instance-status/tsconfig.json



```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/jest-presets/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "rootDir": "./src",
5. "outDir": "./dist",
6. "declaration": true
7. },
8. "include": ["./src"]
```

File Rocket.Chat-develop/packages/jwt/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "declaration": true,
    5. "module": "commonjs",
    6. "rootDir": "./src",
```



```
7. "outDir": "./dist"
8. },
```

File Rocket.Chat-develop/packages/livechat/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/log-format/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/logger/tsconfig.json



```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/mock-providers/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/model-typings/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
```



```
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket. Chat-develop/packages/password-policies/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/patch-injection/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/rest-typings/tsconfig.json



File Rocket. Chat-develop/packages/server-cloud-communication/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*"]
    8. }
```

File Rocket.Chat-develop/packages/server-fetch/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "rootDir": "./src",
    5. "outDir": "./dist",
    6. "declaration": true,
```



```
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/tools/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "declaration": true,
5. "rootDir": "./src",
6. "outDir": "./dist"
7. },
8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/tracing/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "declaration": true,
    5. "rootDir": "./src",
    6. "outDir": "./dist"
    7. },
    8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/packages/ui-avatar/tsconfig.json



File Rocket.Chat-develop/packages/ui-contexts/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "module": "CommonJS",
    5. "rootDir": "./src",
    6. "outDir": "./dist",
    7. },
    8. "include": ["./src/**/*"]
```

File Rocket.Chat-develop/apps/meteor/ee/server/services/tsconfig.json

Line 1

```
1. {
2. "extends": "../.././tsconfig.json",
3. "include": ["./**/*", "../../.definition/externals/meteor/rocketchat-streamer.d.
ts", "../../../ee/apps/account-service/src/lib"],
4. "exclude": ["./dist", "./ecosystem.config.js", "../../.definition/methods"]
5. }
```



File Rocket.Chat-develop/apps/meteor/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "target": "es2018",
5. "module": "esNext",
6. "lib": ["esnext", "dom"],
7.
8. "allowJs": true,
```

File Rocket.Chat-develop/ee/apps/account-service/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "allowJs": true, // TODO remove asap
    5. "incremental": true,
    6.
    7. /* Strict Type-Checking Options */
    8. "strictPropertyInitialization": false,
```

File Rocket.Chat-develop/ee/apps/authorization-service/tsconfig.json

Line 3



```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist"
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/ddp-streamer/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist"
    },
    "include": ["./src/**/*", "./definition", "../../.apps/meteor/definition/externals/meteor/rocketchat-streamer.d.ts"],
```

File Rocket. Chat-develop/ee/apps/omnichannel-transcript/tsconfig.json

Line 3

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "allowJs": true,
    5. "strictPropertyInitialization": false,
```



```
    "outDir": "./dist/ee/apps/omnichannel-transcript/src",
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/presence-service/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.server.json",
    "compilerOptions": {
    "strictPropertyInitialization": false, // TODO: Remove this line
    "allowJs": true, // TODO: Remove this line
    "outDir": "./dist/ee/apps/presence-service/src",
    },
    "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/apps/queue-worker/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.server.json",
    3. "compilerOptions": {
    4. "allowJs": true,
    5. "strictPropertyInitialization": false,
    6. "outDir": "./dist/ee/apps/queue-worker/src",
    7. },
    8. "files": ["./src/service.ts"],
```

File Rocket. Chat-develop/ee/apps/stream-hub-service/tsconfig.json



```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "strictPropertyInitialization": false, // TODO: Remove this line
5. "allowJs": true, // TODO: Remove this line
6. "outDir": "./dist"
7. },
8. "files": ["./src/service.ts"],
```

File Rocket.Chat-develop/ee/packages/pdf-worker/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. "jsx": "react-jsx"
5. },
6. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"]
7. }
```

File Rocket.Chat-develop/packages/apps-engine/tsconfig.json

Line 2

```
    1. {
    2. "compilerOptions": {
    3. "sourceMap": true,
    4. "target": "es6",
    5. "module": "commonjs",
    6. "declaration": true,
    7. "noImplicitAny": true,
```



File Rocket. Chat-develop/packages/base64/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "outDir": "dist",
5. "rootDir": "src",
6. "allowJs": true,
7. "noImplicitAny": true,
8. "noUnusedLocals": true,
```

File Rocket. Chat-develop/packages/ddp-client/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/fuselage-ui-kit/tsconfig.json

Line 3



```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "noImplicitReturns": true,
    5. "noImplicitThis": true,
    6. },
    7. "include": ["src", ".storybook/**/*", "jest.config.ts"]
    8. }
```

File Rocket.Chat-develop/packages/gazzodown/tsconfig.json

Line 3

Source Code

```
    "extends": "../../tsconfig.base.client.json",
    "compilerOptions": {
    "rootDirs": ["./src", "./"],
    "outDir": "./dist"
    },
    "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"]
```

File Rocket.Chat-develop/packages/i18n/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "rootDirs": ["./src", "./"],
5. "outDir": "./dist",
6. "declaration": true
7. },
8. "include": ["./src/**/*", "./jest.config.ts"]
```



File Rocket.Chat-develop/packages/models/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.server.json",
3. "compilerOptions": {
4. // TODO migrate Users to TS
5. "allowJs": true,
6. "declaration": true,
7. "rootDir": "./src",
8. "outDir": "./dist",
```

File Rocket.Chat-develop/packages/random/tsconfig.json

Line 3

Source Code

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "outDir": "dist",
5. "rootDir": "src",
6. "allowJs": true,
7. "noImplicitAny": true,
8. "noUnusedLocals": true,
```

File Rocket.Chat-develop/packages/release-action/tsconfig.json

Line 2



```
1. {
2. "compilerOptions": {
3. /* Visit https://aka.ms/tsconfig to read more about this file */
4.
5. /* Projects */
6. // "incremental": true, /* Save .tsbuildinfo files to allow for incremental compilation of projects. */
7. // "composite": true, /* Enable constraints that allow a TypeScript project to be used with project references. */
```

File Rocket.Chat-develop/packages/release-changelog/tsconfig.json

Line 2

Source Code

```
1. {
2. "compilerOptions": {
3. /* Visit https://aka.ms/tsconfig to read more about this file */
4.
5. /* Projects */
6. // "incremental": true, /* Save .tsbuildinfo files to allow for incremental compilation of projects. */
7. // "composite": true, /* Enable constraints that allow a TypeScript project to be used with project references. */
```

File Rocket.Chat-develop/packages/sha256/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.json",
3. "compilerOptions": {
4. "outDir": "dist",
5. "rootDir": "src",
6. "allowJs": true,
```



```
7. "nolmplicitAny": true,
8. "noUnusedLocals": true,
```

File Rocket.Chat-develop/packages/ui-client/tsconfig.json

Line 3

Source Code

File Rocket.Chat-develop/packages/ui-composer/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*", "./.storybook/**/*", "./jest.config.ts"],
    8. }
```

File Rocket.Chat-develop/packages/ui-video-conf/tsconfig.json



```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist",
    6. },
    7. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"],
    8. }
```

File Rocket.Chat-develop/packages/ui-voip/tsconfig.json

Line 3

Source Code

```
    1. {
    2. "extends": "../../tsconfig.base.client.json",
    3. "compilerOptions": {
    4. "rootDirs": ["./src", "./"],
    5. "outDir": "./dist"
    6. },
    7. "include": ["./src/**/*", "./jest.config.ts", "./.storybook/**/*"],
    8. }
```

File Rocket.Chat-develop/packages/web-ui-registration/tsconfig.json

Line 3

```
1. {
2. "extends": "../../tsconfig.base.client.json",
3. "compilerOptions": {
4. "rootDirs": ["./src","./.storybook"],
5. "outDir": "./dist",
```



```
6. "module": "CommonJS"
7. },
8. "include": ["./src", "./.storybook"],
```

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File	Rocket. Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	tslib
Component Version	2.8.0

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-
riie	app_0.0.1.zip/package-lock.json



Component Name tslib

Component Version 2.7.0

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	tslib
Component Version	1.14.1

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File Rocket.Chat-develop/apps/meteor/package.json



Component Name	google-libphonenumber
Component Version	3.2.38

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File	Rocket. Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	type-fest
Component Version	0.21.3

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File	Rocket. Chat-develop/.github/actions/update-version-durability/package-lock.json
Component Name	semver
Component Version	7.6.2

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	picocolors
Component Version	1.1.0

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	signal-exit



Component Version 3.0.7

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File	Rocket. Chat-develop/packages/apps-engine/package.json
Component Name	semver
Component Version	7.6.3

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File	Rocket.Chat-develop/packages/apps-engine/package.json
Component Name	rimraf
Component Version	6.0.1

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data /apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	glob
Component Version	7.2.3



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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	semver
Component Version	5.7.2

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	minimatch
Component Version	3.1.2

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	inherits
Component Version	2.0.4



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File	Rocket. Chat-develop/.github/actions/update-version-durability/package-lock.json
Component Name	form-data
Component Version	4.0.0

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File	Rocket. Chat-develop/.github/actions/update-version-durability/package-lock.json
Component Name	axios
Component Version	1.7.4



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File	Rocket. Chat-develop/.github/actions/update-version-durability/package.json
Component Name	axios
Component Version	1.7.5

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File	Rocket.Chat-develop/apps/meteor/package.json
Component Name	mkdirp
Component Version	1.0.4

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File	Rocket. Chat-develop/apps/meteor/package.json
Component Name	google-libphonenumber
Component Version	3.2.38



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File	Rocket.Chat-develop/apps/meteor/package.json
Component Name	iconv-lite
Component Version	0.6.3

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File	Rocket. Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	@babel/code-frame
Component Version	7.24.7

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	ansi-regex
Component Version	5.0.1



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File	Rocket. Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	emoji-regex
Component Version	8.0.0

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	supports-color
Component Version	7.2.0

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	ms
Component Version	2.1.3



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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	ansi-styles ansi-styles
Component Version	4.3.0

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File	Rocket. Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	readable-stream
Component Version	3.6.2

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	buffer
Component Version	5.7.1



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File	Rocket. Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	type-fest
Component Version	0.21.3

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File	Rocket. Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	color-convert
Component Version	2.0.1

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	color-name
Component Version	1.1.4



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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	commander
Component Version	10.0.1

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	onetime
Component Version	5.1.2

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	has-flag
Component Version	4.0.0



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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	wrap-ansi
Component Version	6.2.0

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	lodash
Component Version	4.17.21

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	strip-ansi
Component Version	6.0.1



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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	iconv-lite
Component Version	0.4.24

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	is-fullwidth-code-point
Component Version	3.0.0

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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	string-width
Component Version	4.2.3



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File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	string_decoder
Component Version	1.3.0

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File	Rocket. Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	safe-buffer
Component Version	5.2.1

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File	Rocket.Chat-develop/apps/uikit-playground/package.json
Component Name	react-dom
Component Version	18.3.1



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File	Rocket.Chat-develop/ee/packages/pdf-worker/package.json
Component Name	buffer
Component Version	6.0.3

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File	Rocket.Chat-develop/packages/apps-engine/package.json
Component Name	debug
Component Version	4.3.7

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Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	acorn
Component Version	8.13.0



Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	color-convert
Component Version	1.9.3

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Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	@babel/code-frame
Component Version	7.23.5

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Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	commander
Component Version	2.20.3



Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	acorn
Component Version	8.11.2

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	mkdirp
Component Version	0.5.6

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Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data /apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	@babel/code-frame
Component Version	7.25.7



Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	chalk
Component Version	2.4.2

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Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	escape-string-regexp
Component Version	1.0.5

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Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	uuid
Component Version	8.3.2



Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	ansi-styles
Component Version	3.2.1

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	@types/node
Component Version	14.14.6

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	js-yaml
Component Version	3.14.1



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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	has-flag
Component Version	3.0.0

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	supports-color
Component Version	5.5.0

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data /apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	color-name
Component Version	1.1.3



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Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	resolve
Component Version	1.22.8

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File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	brace-expansion
Component Version	1.1.11

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File	Rocket. Chat-develop/packages/ddp-client/package.json
Component Name	WS
Component Version	8.18.0



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Open Source Component

File	Rocket. Chat-develop/packages/livechat/package.json
Component Name	css-vars-ponyfill
Component Version	2.4.9

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Open Source Component

File	Rocket.Chat-develop/packages/log-format/package.json	
Component Name	chalk	
Component Version	4.1.2	

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Open Source Component

File	Rocket.Chat-develop/packages/message-parser/package.json		
Component Name	prettier		
Component Version	3.3.3		

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Open Source Component

File Rocket.Chat-develop/packages/message-parser/package.json

Component Name webpack-cli

Component Version 5.1.4

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License Name MIT License

Open Source Component

File	Rocket. Chat-develop/packages/model-typings/package.json		
Component Name	eslint		
Component Version	8.45.0		

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Open Source Component

File	Rocket.Chat-develop/packages/release-action/package.json		
Component Name	@actions/exec		
Component Version	1.1.1		

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File	Rocket.Chat-develop/packages/rest-typings/package.json
Component Name	ajv
Component Version	8.17.1

License Name MIT License

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File	Rocket.Chat-develop/packages/server-fetch/package.json		
Component Name	https-proxy-agent		
Component Version	7.0.5		

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File	Rocket. Chat-develop/packages/ui-avatar/package.json	
Component Name	react	
Component Version	18.3.1	

• [Rule Name] Use of Components Licensed Under the Python-2.0 (Low, common)

The Python License 2.0 (SPDX ID: Python-2.0) has obligations for notice. You should read the full license to be aware of its use.

Dangerous Example



Safe Example

Open Source License

License Name Python License 2.0

Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	argparse
Component Version	1.0.10

• [Rule Name] Use of Vulnerable Component (Critical, common)

The One of the most important steps you can take to ensure the security of your application is to avoid using components with known security vulnerabilities.

Vulnerable components must be updated to the latest secure version or replaced with other secure components.

Dangerous Example

Safe Example

Known Vulnerability in Component

Vulnerability Name	GHSA-fvqr-27wr-82fm		
	Versions of `lodash` before 4.17.5 are vulnerable to		
	prototype pollution. The vulnerable functions are		
	'defaultsDeep', 'merge', and 'mergeWith' which allow a		





malicious user to modify the prototype of 'Object' via '__proto__' causing the addition or modification of an existing property that will exist on all objects. ##

Recommendation Update to version 4.17.5 or later.

CVSS 3

Score	AV	AC	PR	UI	S	C	1	Α
-	NETWORK	LOW	LOW	NONE	UNCHANGED	NONE	HIGH	NONE

CVSS 2

Score	AV	AC	Au	C	1	Α
_	_	_	_	_	_	_

Open Source Component

File	Rocket.Chat-develop/apps/meteor/tests/e2e/fixtures/files/test-app_0.0.1.zip/package-lock.json
Component Name	lodash
Component Version	4.17.21

Remedial Recommendation

Update the component version to between 4.17.5 to 4.17.9.

Known Vulnerability in Component

Vulnerability Name	GHSA-832h-xg76-4gv6
Vulnerability Description	Affected versions of `brace-expansion` are vulnerable to a regular expression denial of service condition. ## Proof of Concept ``` var expand = require('brace-expansion'); expand('{,

CVSS 3

Score	AV	AC	PR	UI	S	C	I	Α
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- NETWORK LOW NONE NONE UNCHANGED NONE NONE HIGH

CVSS 2

Score	AV	AC	Au	C	1	Α
_	_	_	_	_	_	_

Open Source Component

File	Rocket.Chat-develop/packages/apps-engine/tests/test-data/apps/hello-world-test_0.0.1.zip/package-lock.json
Component Name	brace-expansion
Component Version	1.1.11

Remedial Recommendation

Update the component version to between 2.0.0 to 4.0.0.



Excluded Issues

No issue has been excluded.



Detection Rules

Code Low abap Too long line Code Low abap Improper WHEN OTHERS Position Code Low abap Violation of naming rule for DATA variable Code Low abap Violation of naming rule for class Code Low abap Violation of naming rule for form Code Low abap Violation of naming rule for function Code Low abap Violation of naming rule for interface Code Low abap Violation of naming rule for method Code Low abap Violation of naming rule for REPORT Code Low abap Violation of naming rule for program Code Low c Assignment of Integer-type Null to Pointer Variable Code Low c Assignment of Integer-type Null to Pointer Variable Code Trivial c Exposal of Internal Implementation of Struct/Union Code Low cpp Non-standard escape sequence Code Low cpp Non-unique user defined t	Туре	Risk Level	Language	Name
Code Low abap Violation of naming rule for DATA variable Code Low abap Violation of naming rule for class Code Low abap Violation of naming rule for form Code Low abap Violation of naming rule for function Code Low abap Violation of naming rule for interface Code Low abap Violation of naming rule for method Code Low abap Violation of naming rule for REPORT Code Low abap Violation of naming rule for program Code Low abap Violation of naming rule for program Code Low c Assignment of Integer-type Null to Pointer Variable Code Trivial c Exposal of Internal Implementation of Struct/Union Code Low cpp Non-standard escape sequence Code Low cpp Duplicated name in different scope Code Low cpp Non-unique user defined type name Code Low cpp Duplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Use of continue statement Code Low cpp Too high pointer level Code Low cpp Too high pointer level Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	abap	Too long line
Code Low abap Violation of naming rule for class Code Low abap Violation of naming rule for form Code Low abap Violation of naming rule for function Code Low abap Violation of naming rule for interface Code Low abap Violation of naming rule for method Code Low abap Violation of naming rule for REPORT Code Low abap Violation of naming rule for program Code Low abap Violation of naming rule for program Code Low c Assignment of Integer-type Null to Pointer Variable Code Trivial c Exposal of Internal Implementation of Struct/Union Code Low cpp Non-standard escape sequence Code Low cpp Duplicated name in different scope Code Low cpp Non-unique user defined type name Code Low cpp Puplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Use of continue statement Code Low cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	abap	Improper WHEN OTHERS Position
Code Low abap Violation of naming rule for form Code Low abap Violation of naming rule for function Code Low abap Violation of naming rule for interface Code Low abap Violation of naming rule for method Code Low abap Violation of naming rule for method Code Low abap Violation of naming rule for REPORT Code Low abap Violation of naming rule for program Code Low c Assignment of Integer-type Null to Pointer Variable Code Trivial c Exposal of Internal Implementation of Struct/Union Code Low cpp Non-standard escape sequence Code Low cpp Duplicated name in different scope Code Low cpp Non-unique user defined type name Code Low cpp Duplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Use of continue statement Code Low cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Mon-boolean value as operand of logical operation	Code	Low	abap	Violation of naming rule for DATA variable
Code Low abap Violation of naming rule for function Code Low abap Violation of naming rule for interface Code Low abap Violation of naming rule for method Code Low abap Violation of naming rule for REPORT Code Low abap Violation of naming rule for REPORT Code Low composed Code	Code	Low	abap	Violation of naming rule for class
Code Low abap Violation of naming rule for interface Code Low abap Violation of naming rule for method Code Low abap Violation of naming rule for REPORT Code Low abap Violation of naming rule for program Code Low c Assignment of Integer-type Null to Pointer Variable Code Trivial c Exposal of Internal Implementation of Struct/Union Code Low cpp Non-standard escape sequence Code Low cpp Duplicated name in different scope Code Low cpp Non-unique user defined type name Code Low cpp Duplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	abap	Violation of naming rule for form
Code Low abap Violation of naming rule for method Code Low abap Violation of naming rule for REPORT Code Low abap Violation of naming rule for program Code Low c Assignment of Integer-type Null to Pointer Variable Code Trivial c Exposal of Internal Implementation of Struct/Union Code Low cpp Non-standard escape sequence Code Low cpp Duplicated name in different scope Code Low cpp Non-unique user defined type name Code Low cpp Duplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	abap	Violation of naming rule for function
Code Low abap Violation of naming rule for REPORT Code Low abap Violation of naming rule for program Code Low c Assignment of Integer-type Null to Pointer Variable Code Trivial c Exposal of Internal Implementation of Struct/Union Code Low cpp Non-standard escape sequence Code Low cpp Duplicated name in different scope Code Low cpp Non-unique user defined type name Code Low cpp Duplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	abap	Violation of naming rule for interface
Code Low abap Violation of naming rule for program Code Low c Assignment of Integer-type Null to Pointer Variable Code Trivial c Exposal of Internal Implementation of Struct/Union Code Low cpp Non-standard escape sequence Code Low cpp Duplicated name in different scope Code Low cpp Non-unique user defined type name Code Low cpp Duplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	abap	Violation of naming rule for method
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Code	Code	Low	abap	Violation of naming rule for program
Code Low cpp Duplicated name in different scope Code Low cpp Duplicated name in different scope Code Low cpp Non-unique user defined type name Code Low cpp Duplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Improper operand of logical operation Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	С	Assignment of Integer-type Null to Pointer Variable
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Code Low cpp Duplicated tag name Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Improper operand of logical operation Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	срр	Duplicated name in different scope
Code Low cpp Reused static identifier Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Improper operand of logical operation Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Mon-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	срр	Non-unique user defined type name
Code Trivial cpp Reused identifier Code Trivial cpp Missing size specification in type definition Code Low cpp Improper operand of logical operation Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	срр	Duplicated tag name
Code Trivial cpp Missing size specification in type definition Code Low cpp Improper operand of logical operation Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	срр	Reused static identifier
Code Low cpp Improper operand of logical operation Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Trivial	срр	Reused identifier
Code Low cpp Use of continue statement Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Trivial	срр	Missing size specification in type definition
Code Trivial cpp Missing default case in switch statement Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	срр	Improper operand of logical operation
Code Low cpp Too high pointer level Code Low cpp Too complex function Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	срр	Use of continue statement
Code Low cpp Too complex function Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Trivial	срр	Missing default case in switch statement
Code Low cpp Non-boolean value as operand of logical operation Code Low cpp Multiple break statements	Code	Low	срр	Too high pointer level
Code Low cpp Multiple break statements	Code	Low	срр	Too complex function
	Code	Low	срр	Non-boolean value as operand of logical operation
Code Trivial and Cose statement in posted block	Code	Low	срр	Multiple break statements
Code Trivial Cpp Case statement in nested block	Code	Trivial	срр	Case statement in nested block
Code Low cpp Missing identifier for parameter	Code	Low	срр	Missing identifier for parameter
Code Trivial cpp Mismatched name of argument	Code	Trivial	срр	Mismatched name of argument
Code Low cpp Following include statement	Code	Low	срр	Following include statement
Code Low cpp Inconsistent parameter declaration	Code	Low	срр	Inconsistent parameter declaration
Code Trivial cpp Non-const member function	Code	Trivial	срр	Non-const member function



Code	Trivial	срр	Declaration of external global variable in header file
Code	Trivial	срр	Missing definition of inline function in header file
Code	Trivial	срр	Template definition in source file
Code	Low	срр	Non-unique Identifier
Code	Trivial	срр	Use of ambiguous grammar
Code	Low	срр	Confusing character in identifier
Code	Low	срр	Multiple type name in single type definition
Code	Low	срр	User defined array type
Code	Low	срр	Use of C-style Array
Code	Trivial	срр	Violation of rule for * and & tokens
Code	Trivial	срр	Use of unsigned type
Code	Low	срр	Improper comparison with constant value
Code	Trivial	срр	Use of Ternary Operator
Code	Low	срр	Non-static overloaded new operator
Code	Low	срр	Violation of rule for white space in preprocess statement
Code	Low	срр	Violation of rule for white space in nested preprocess statements
Code	Low	срр	Use of #if directive
Code	Low	срр	Path specifier in include statement
			Use of Null Macro
Code	Low	cpp	OSC OF INGILIVIACIO
Code Code	Low Low	cbb	Violation of rule of class organization
Code	Low	срр	Violation of rule of class organization
Code Code	Low	срр	Violation of rule of class organization Illegible identifier
Code Code	Low Low	cpp cpp	Violation of rule of class organization Illegible identifier Type declaration in source file Non-member function at outside of anonymous
Code Code Code	Low Low Low	cpp cpp	Violation of rule of class organization Illegible identifier Type declaration in source file Non-member function at outside of anonymous namespace
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Code Code Code Code Code	Low Low Low Low Low	cpp cpp cpp	Violation of rule of class organization Illegible identifier Type declaration in source file Non-member function at outside of anonymous namespace Member function in structure Comparing enumeration type with integer value Variable name of lower scope including variable name
Code Code Code Code Code Code Code	Low Low Low Low Low Trivial	cpp cpp cpp cpp	Violation of rule of class organization Illegible identifier Type declaration in source file Non-member function at outside of anonymous namespace Member function in structure Comparing enumeration type with integer value Variable name of lower scope including variable name of upper scope
Code Code Code Code Code Code Code Code	Low Low Low Low Trivial Trivial	cpp cpp cpp cpp cpp	Violation of rule of class organization Illegible identifier Type declaration in source file Non-member function at outside of anonymous namespace Member function in structure Comparing enumeration type with integer value Variable name of lower scope including variable name of upper scope Violation of naming rule for variable (BSSC)
Code Code Code Code Code Code Code Code	Low Low Low Low Trivial Trivial Trivial	cpp cpp cpp cpp cpp cpp	Violation of rule of class organization Illegible identifier Type declaration in source file Non-member function at outside of anonymous namespace Member function in structure Comparing enumeration type with integer value Variable name of lower scope including variable name of upper scope Violation of naming rule for variable (BSSC) Violation of naming rule for function
Code Code Code Code Code Code Code Code	Low Low Low Low Trivial Trivial Trivial Trivial	cpp cpp cpp cpp cpp cpp cpp cpp	Violation of rule of class organization Illegible identifier Type declaration in source file Non-member function at outside of anonymous namespace Member function in structure Comparing enumeration type with integer value Variable name of lower scope including variable name of upper scope Violation of naming rule for variable (BSSC) Violation of naming rule for function Violation of naming rule for user defined type
Code Code Code Code Code Code Code Code	Low Low Low Low Trivial Trivial Trivial Trivial Trivial	cpp	Violation of rule of class organization Illegible identifier Type declaration in source file Non-member function at outside of anonymous namespace Member function in structure Comparing enumeration type with integer value Variable name of lower scope including variable name of upper scope Violation of naming rule for variable (BSSC) Violation of naming rule for user defined type Violation of naming rule for class



Code	Low	срр	Redundant casting
Code	Low	срр	Improperly Formatted Macro Name
Code	Medium	срр	Throwing unspecified exception
Code	Medium	срр	Missing call of sizeof
Code	Medium	срр	Wrong length of field array
Code	Medium	срр	Duplicated parameters
Code	Trivial	срр	Code in Comment
Code	Trivial	срр	Duplicate Definition of Virtual Function
Code	Trivial	срр	Missing overriding of pure virtual function
Code	Medium	срр	Invalid Comparison with Loop Counter
Code	Trivial	срр	Duplicate Loop Counter
Code	Low	срр	Out-of-scope case Statement
Code	Trivial	срр	Unnamed Namespace of Header File
Code	Trivial	срр	Non-main Function Uses Name of main()
Code	Low	срр	Unused Function Return
Code	Low	срр	Overloading of Function in Namespace
Code	Low	срр	Cast of cvalue Expression
Code	Low	срр	Array Decayed to Pointer
Code	Trivial	срр	Invalid Preprocessing Token
Code	Trivial	срр	Variable and Function Declaration in Global Scope
Code	Trivial	срр	Missing Call to Superclass Constructor
Code	Trivial	срр	Throwing of Unlisted Exception
Code	Trivial	срр	Template Specialization Declaration in Another File
Code	Trivial	срр	Violation of One Definition Rule
Code	Trivial	срр	Too many function calls
Code	Medium	срр	Use of goto statement
Code	Low	срр	Too many return statements
Code	Trivial	срр	Non-macro constant
Code	Trivial	срр	Constant in condition of loop statement
Code	Trivial	срр	Variable declaration at middle of function
Code	Trivial	срр	Too many consecutive if statements
Code	Trivial	срр	Unprefixed Constant in Enum
Code	Trivial	срр	Violation of Hungarian notation
Code	High	срр	Missing initialization of variable
Code	Trivial	срр	Violation of naming rule for macro
Code	Trivial	срр	Violation of naming rule for constant



Code	Medium	срр	Braced Block Starting in Same Line as Condition
Code	Low	срр	Duplicate Name
Code	Trivial	срр	Violation of naming rule for global variable
Code	Trivial	срр	Too Long Name
Code	Medium	срр	Missing explicit array size
Code	Trivial	срр	Violation of format of block comments
Code	Trivial	срр	Too long source code before comment
Code	Trivial	срр	Missing blank line before comment
Code	Trivial	срр	Violation of indentation rule for comment
Code	Low	срр	Invalid Enumerator Operation
Code	Trivial	срр	typedef Declaration of Numeric Type without Signedness
Code	Trivial	срр	Noncompliant Macro Name Length
Code	Trivial	срр	Duplicate Name with Macro
Code	Trivial	срр	switch Statement with Starting or without Ending default
Code	Medium	срр	Improper initialization of character array
Code	Trivial	срр	Missing break in case Statement(Misra2008)
Code	Low	срр	Missing Case in Switch Statement (Misra2012)
Code	Trivial	срр	Unspecified Size of Empty extern Array
Code	Trivial	срр	Missing ELSE Branch from IF-ELSE
Code	Trivial	срр	Invalid Global Variable Identifier (Misra2012)
Code	Low	срр	Inadequate operator of argument of sizeof
Code	Trivial	срр	Violation of naming rule for pointer variable
Code	Trivial	срр	Too long line
Code	Trivial	срр	Indentation of improper length
Code	Trivial	срр	Multiple Statements in Single Line
Code	Trivial	срр	Violation of rule for white space around keyword
Code	Trivial	срр	Missing white space around binary operator
Code	Trivial	срр	Violation of rule for white space in method call
Code	Trivial	срр	Violation of rule for white space in for statement
Code	Trivial	срр	White space around unary operator
Code	Trivial	срр	Violation of rule for white space in casting
Code	Trivial	срр	Violation of rule for white space around accessing operator
Code	Trivial	срр	Wrong inclusion order



Code	Trivial	cpp	Violation of rule for white space around pointer operator
Code	Trivial	срр	Violation of rule for white space around function
Code	Trivial	срр	Violation of rule for white space in parentheses
Code	Trivial	срр	Violation of rule for white space around semicolon
Code	Trivial	срр	Violation of indentation rule for block
Code	Trivial	срр	Missing curly brace in compound statement
Code	Trivial	срр	Missing curly brace in compound statement
Code	Trivial	срр	Violation of rule for white space in while statement
Code	Trivial	срр	Violation of rule for white space in if statement
Code	Trivial	срр	Violation of indentation rule for switch statement
Code	Trivial	срр	Violation of switch Statement Spacing Rule
Code	Trivial	срр	Violation of indentation rule for case and default statements
Code	Trivial	срр	Violation of rule for white space around comma
Code	Trivial	срр	Too many logical operations
Code	Trivial	срр	Violation of naming rule for type
Code	Trivial	срр	Global variable declaration between functions
Code	Trivial	срр	Undeclared local variable at top of block
Code	Trivial	срр	Violation of rule of variable declaration in loop
Code	Trivial	срр	Improper size examination
Code	Trivial	срр	Non-static global variable used within one source file
Code	Trivial	срр	Missing extern in data definition in header file
Code	Trivial	срр	Violation of Type Comment Format
Code	Trivial	срр	Multiple Declarations in Single Line
Code	Low	срр	Unnecessary variable scope
Code	Medium	срр	Violation of format of comments for class
Code	Trivial	срр	Violation of format of function comments
Code	Medium	срр	Violation of format of comments for field
Code	Medium	срр	Violation of format of comments for file
Code	Trivial	срр	Violation of naming rule for variable
Code	Medium	CS	Empty Interface
Code	Medium	CS	Mutable Type in Struct
Code	Low	CS	Use of out Parameter
Code	Trivial	CS	Noncompliant Namespace Name
Code	Trivial	CS	Violation of naming rule for parameter



Code	Trivial	CS	Noncompliant Local Variable Name
Code	Low	CS	Definition of Single Field Class
Code	Low	java	Immediate Use of Integer Literal
Code	Medium	java	Throwing of Non-allowed Exception
Code	Trivial	java	Too Long Line
Code	Trivial	java	Violation of General Rule of Line-wrapping at Braces
Code	Trivial	java	Single-variable Expression in Condition
Code	Trivial	java	Missing ELSE clause
Code	Trivial	java	Modifiers in Wrong Order
Code	Trivial	java	Compound Statement without Braces
Code	Trivial	java	Too Wide Live Range of Variable
Code	Medium	java	Unused Default in Switch
Code	Trivial	java	Misuse of Return in if-else Statement
Code	Trivial	java	Empty while Statement
Code	Trivial	java	Violation of Documentation Comment Format
Code	Trivial	java	Violation of rule for white space around If keyword
Code	Trivial	java	Violation of rule for white space around while keyword
Code	Trivial	java	Violation of rule for white space around for keyword
Code	Trivial	java	Violation of rule for white space around do-while keyword
Code	Trivial	java	Violation of rule for white space around switch keyword
Code	Trivial	java	Violation of rule for white space around try-catch keyword
Code	Trivial	java	Misuse of Whitespace for Incremental/Decremental Operator
Code	Trivial	java	Violation of rule for white space around assert keyword
Code	Medium	java	Violation of format of comments for class
Code	Medium	java	Violation of format of comments for field
Code	Medium	java	Violation of format of general comments
Code	Medium	java	Violation of format of comments for method
Code	Medium	java	Violation of format of comments for package
Code	Medium	java	Violation of format of comments for file
Code	Trivial	java	Special character used in name



Code	Trivial	java	Too Long Name
Code	Trivial	java	Hard coded number
Code	Trivial	java	Ambiguous order of priority of expressions
Code	Trivial	java	Too Complicated for Loop Control
Code	Trivial	java	Missing tab space in declaration
Code	Trivial	java	Violation of naming rule for parameter
Code	Low	java	Duplicate Name
Code	Trivial	java	Violation of format of block comments
Code	Trivial	java	Violation of format of single line comments
Code	Trivial	java	Violation of format of comments after source code
Code	Trivial	java	Missing comment at end of block
Code	Trivial	java	White space around unary operator
Code	Trivial	java	Unparenthesized Conditional Operation
Code	Trivial	java	Improper increment and decrement operators
Code	Trivial	java	Missing white space around binary operator
Code	Trivial	java	Multiple Statements in Single Line
Code	Trivial	java	Violation of indentation rule for block
Code	Trivial	java	Missing package declaration
Code	Trivial	java	Missing parentheses in return statement
Code	Trivial	java	Missing curly brace in if statement
Code	Trivial	java	Missing finally block
Code	Trivial	java	Violation of rule for white space in for statement
Code	Trivial	java	Violation of rule for white space in casting
Code	Trivial	java	Violation of indentation rule for if statement
Code	Trivial	java	Multiple Declarations in Single Line
Code	Trivial	java	Declaration at middle of block
Code	Trivial	java	Violation of format of curly braces
Code	Trivial	java	Misformatted Array Declaration
Code	Low	java	Unsynchronized public method
Code	Trivial	java	Use of Synchronized Statement
Code	Trivial	java	Missing curly brace in compound statement
Code	Trivial	java	Violation of naming rule for constant
Code	Trivial	java	Violation of naming rule for variable
Code	Trivial	java	Violation of naming rule for method
Code	Trivial	java	Violation of naming rule for class
Code	Trivial	java	Locking or unlocking in loop



Code	Trivial	java	Reading stream in loop
Code	Trivial	java	Missing blank line
Code	Trivial	java	Missing public class or interface
Code	Trivial	java	Unhandled additional exceptions
Code	Trivial	java	Violation of rule for white space in method call
Code	Trivial	java	Missing initialization of local variable
Code	Trivial	java	Immediate initialization of field
Code	Trivial	java	Violation of rule for white space in parentheses
Code	Trivial	java	Violation of rule for white space around keyword
Code	Trivial	java	Violation of rule of class organization
Code	Trivial	java	Indentation at Beginning of Source Code
Code	Trivial	java	Too long line
Code	Trivial	java	Indentation of improper length
Code	Trivial	java	Violation of indentation rule for for statement
Code	Trivial	java	Violation of Method Declaration Rule
Code	Trivial	java	Violation of rule for white space around accessing operator
Code	Trivial	java	Violation of Line-wrapping Rule
Code	Trivial	java	Violation of Line-wrapping Rule between import Statements
Code	Trivial Trivial	java java	
			Statements
Code	Trivial	java	Statements Missing blank line between method blocks
Code Code	Trivial Trivial	java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration
Code Code Code	Trivial Trivial Trivial	java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class
Code Code Code	Trivial Trivial Trivial Trivial	java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method
Code Code Code Code	Trivial Trivial Trivial Trivial Trivial	java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration
Code Code Code Code Code Code	Trivial Trivial Trivial Trivial Trivial Trivial	java java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field
Code Code Code Code Code Code	Trivial Trivial Trivial Trivial Trivial Trivial Trivial Trivial	java java java java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field Violation of Semicolon Spacing Rule
Code Code Code Code Code Code Code	Trivial Trivial Trivial Trivial Trivial Trivial Trivial Trivial Trivial	java java java java java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field Violation of Semicolon Spacing Rule Violation of Variable Declaration Rule
Code Code Code Code Code Code Code Code	Trivial	java java java java java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field Violation of Semicolon Spacing Rule Violation of Variable Declaration Rule Violation of rule of variable declaration in loop
Code Code Code Code Code Code Code Code	Trivial	java java java java java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field Violation of Semicolon Spacing Rule Violation of Variable Declaration Rule Violation of rule of variable declaration in loop Use of integer type
Code Code Code Code Code Code Code Code	Trivial	java java java java java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field Violation of Semicolon Spacing Rule Violation of Variable Declaration Rule Violation of rule of variable declaration in loop Use of integer type Use of float type
Code Code Code Code Code Code Code Code	Trivial	java java java java java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field Violation of Semicolon Spacing Rule Violation of Variable Declaration Rule Violation of rule of variable declaration in loop Use of integer type Use of float type Violation of rule for white space in while statement
Code Code Code Code Code Code Code Code	Trivial	java java java java java java java java	Statements Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field Violation of Semicolon Spacing Rule Violation of Variable Declaration Rule Violation of rule of variable declaration in loop Use of integer type Use of float type Violation of rule for white space in while statement Violation of indentation rule for do statement
Code Code Code Code Code Code Code Code	Trivial	java java java java java java java java	Missing blank line between method blocks Type-import-on-demand Declaration Violation of indentation rule for class Violation of indentation rule for method Violation of rule of field declaration Violation of indentation rule for field Violation of Semicolon Spacing Rule Violation of Variable Declaration Rule Violation of rule of variable declaration in loop Use of integer type Use of float type Violation of rule for white space in while statement Violation of rule for white space in if statement



Code	Trivial	java	Violation of indentation rule for case and default statements
Code	Trivial	java	Multiple case Branches in Single Line
Code	Trivial	java	Violation of indentation rule for try statement
Code	Trivial	java	Violation of catch Statement Spacing Rule
Code	Trivial	java	Violation of rule for white space around comma
Code	Trivial	java	Constant of Inner Class
Code	Trivial	java	Too many logical operations
Code	Trivial	java	String appended via + and += operator
Code	Trivial	java	Instance creation in loop
Code	Trivial	java	Violation of naming rule for package
Code	Trivial	java	Violation of indentation rule for package
Code	Trivial	java	Empty branch statement
Code	Trivial	java	String comparison via equals method
Code	Trivial	java	Accessing instance
Code	Trivial	java	Redundant name
Code	Trivial	java	Violation of indentation rule for comment
Code	Low	jsts	Unnecessary Block
Code	Low	jsts	Unnecessary Parentheses
Code	Trivial	jsts	Missing curly brace
Code	Trivial	jsts	Violation of naming rule for variable
Code	Medium	sql	Missing comment for column in SELECT statement
Code	Trivial	sql	Violation of naming rule for table
Code	Critical	sql	Use of Forbidden Table
Code	Critical	sql	Use of Forbidden Table Column
Code	Medium	abap	Use of BREAK-POINT statement
Code	Medium	abap	Use of SYSTEM-CALL statement
Code	Medium	abap	Use of system C functions
Code	Low	abap	CX_ROOT Exception Handling
Code	Medium	abap	Missing WHEN OTHERS clause
Code	Low	abap	Too Short WHEN Clause
Code	Low	abap	Empty catch block
Code	Low	abap	Missing ELSE clause
Code	Medium	abap	Use of DATA BEGIN OF OCCURS Statement
Code	Medium	abap	Use of NOT IN
Code	High	abap	Missing WHERE clause in DELETE statement



Code	Medium	abap	Use of EXIT and CHECK statements in loop
Code	Medium	abap	Use of * in SELECT Statement
Code	Medium	abap	Use of native SQL
Code	Low	abap	Use of FORM Statement
Code	High	abap	Missing WHERE in UPDATE Statement
Code	Low	abap	Use of REFRESH FROM TABLE Statement
Code	Low	abap	Use of SELECT Statement in Loop
Code	Medium	abap	Too deeply nested control flows
Code	Medium	abap	Too big file
Code	Medium	abap	Nested SELECT Statement
Code	Medium	abap	Too many branches in loop
Code	Medium	abap	Missing SORT field
Code	Medium	abap	Missing ORDER BY clause in SELECT statement
Code	Medium	abap	Missing WHERE clause in SELECT statement
Code	Medium	abap	Use of Internal Source Code-handling Statement
Code	Medium	abap	Use of BYPASSING BUFFER Clause
Code	Medium	abap	Use of DISTINCT Operator
Code	Low	abap	Duplicated string
Code	Medium	С	Misuse of TRY and CATCH macro
Code Code	Medium Medium	С	Misuse of TRY and CATCH macro Missing call of commit or rollback functions in transaction
			Missing call of commit or rollback functions in
Code	Medium	С	Missing call of commit or rollback functions in transaction
Code	Medium Low	C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier
Code Code	Medium Low Low	c c c	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header
Code Code Code Code	Medium Low Low Medium	C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf
Code Code Code Code Code	Medium Low Low Medium Medium	C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block
Code Code Code Code Code Code	Medium Low Low Medium Medium Medium	C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type
Code Code Code Code Code Code Code	Medium Low Low Medium Medium Medium Medium	C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type Assignment of mixed char and integer types
Code Code Code Code Code Code Code Code	Medium Low Low Medium Medium Medium Medium High	C C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type Assignment of mixed char and integer types Missing call of required function
Code Code Code Code Code Code Code Code	Medium Low Low Medium Medium Medium High Low	C C C C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type Assignment of mixed char and integer types Missing call of required function Missing function declaration
Code Code Code Code Code Code Code Code	Medium Low Low Medium Medium Medium High Low Medium	C C C C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type Assignment of mixed char and integer types Missing call of required function Missing function declaration Misuse of FILE Object
Code Code Code Code Code Code Code Code	Medium Low Low Medium Medium Medium High Low Medium Medium	C C C C C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type Assignment of mixed char and integer types Missing call of required function Missing function declaration Misuse of FILE Object Array-type Parameter Declaration with Static Keyword
Code Code Code Code Code Code Code Code	Medium Low Low Medium Medium Medium High Low Medium Medium	C C C C C C C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type Assignment of mixed char and integer types Missing call of required function Missing function declaration Misuse of FILE Object Array-type Parameter Declaration with Static Keyword Modification of Parameter in Call-by-value Function
Code Code Code Code Code Code Code Code	Medium Low Low Medium Medium Medium High Low Medium Medium Trivial	C C C C C C C C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type Assignment of mixed char and integer types Missing call of required function Missing function declaration Misuse of FILE Object Array-type Parameter Declaration with Static Keyword Modification of Parameter in Call-by-value Function Inline Function Declaration without Static
Code Code Code Code Code Code Code Code	Medium Low Medium Medium Medium High Low Medium Medium Low Trivial Low	C C C C C C C C C C C C C C C	Missing call of commit or rollback functions in transaction Use of Forbidden Restrict Qualifier Use of forbidden tgmath.h header Inadequate type of argument of scanf Inadequate size of allocated block Assignment of parameter to improper type Assignment of mixed char and integer types Missing call of required function Missing function declaration Misuse of FILE Object Array-type Parameter Declaration with Static Keyword Modification of Parameter in Call-by-value Function Inline Function Declaration without Static Macro Named after Keyword



Code	Low	С	Useless Tag Declaration
Code	Low	С	Useless Macro Declaration
Code	Low	С	Duplicate Declarations of Identifier with External Linkage
Code	Medium	С	Side effect on initializer list
Code	Medium	С	Side effect on designated initializer list
Code	Medium	С	Missing Item in Designator List
Code	Low	С	Use of Compiler-specific Code Extension
Code	Trivial	С	Invalid Return from Preprocessor Conditional Expression
Code	Trivial	С	Duplicate Initializer in Designator List
Code	Low	С	Forbidden exception handling in fenv.h header
Code	Low	С	Use of forbidden function of stdarg.h header
Code	Low	С	Too Long Function Code
Code	Low	С	Block with Too Many Levels of Nesting
Code	Low	С	Out of Range of Constant Argument in Function
Code	Low	С	Too many execution paths
Code	Low	С	Division by Undecidable Value
Code	Trivial	С	Implicit Function Declaration
Code	Medium	С	Write to Read-only File
Code	Medium	С	Use of cnd_wait without Loop
Code	Medium	С	Double-freeing of Thread
Code	Low	С	Disable added language features
Code	Low	С	Validating values passed to <ctype.h> functions</ctype.h>
Code	Low	С	Checking Pointer Argument Type Compatibility
Code	Low	С	Handling returned pointer const
Code	Low	С	Do not reuse returned pointers
Code	Low	С	Compare the returned EOF data
Code	Low	С	Check for errors after setting errno
Code	Low	С	Check for invalid errno
Code	Low	С	Useless Assignment
Code	Low	срр	Use of forbidden argument
Code	Medium	срр	Improper value on sting argument
Code	Medium	срр	Use of unspecified argument
Code	Medium	срр	Inadequate variable arguments
Code	Medium	срр	Implicit casting of float



Code	Medium	срр	Unencapsulated assembly language
Code	Low	срр	Identifier with Over 31 Characters
Code	Trivial	срр	Duplicated name in namespace
Code	Medium	срр	Assignment of improper type
Code	High	срр	Replaced character type variable
Code	High	срр	Character value as operand of operation
Code	Medium	срр	Missing explicit casting
Code	Medium	срр	Unused wrapper function
Code	Low	срр	Replaced character type variable
Code	Trivial	срр	Direct use of primitive type
Code	High	срр	Improper type of bit field
Code	Medium	срр	Too small signed integer type
Code	Low	срр	Use of Octal Number
Code	Low	срр	Suspicious octal escape sequence
Code	Low	срр	Function declaration in function
Code	Medium	срр	Unnecessary global variable
Code	Medium	срр	Duplicated external object or function
Code	Medium	срр	Violation of rule of argument usage after function call
Code	Medium	срр	Non-static object or function without external reference
Code	Medium Medium	срр	
			reference
Code	Medium	срр	reference Missing curly brace in array initialization
Code Code	Medium Medium	cpp	reference Missing curly brace in array initialization Insufficient initialization value
Code Code Code	Medium Medium Medium	срр	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list
Code Code Code	Medium Medium Medium Medium	cpp cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer
Code Code Code Code Code	Medium Medium Medium Medium	cpp cpp cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer
Code Code Code Code Code Code	Medium Medium Medium Medium Medium	cpp cpp cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer
Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer Mismatched return types of definition and declaration
Code Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer Mismatched return types of definition and declaration Use of forbidden macro
Code Code Code Code Code Code Code Code	Medium	cpp cpp cpp cpp cpp cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer Mismatched return types of definition and declaration Use of forbidden macro Implicit casting of float
Code Code Code Code Code Code Code Code	Medium	cpp cpp cpp cpp cpp cpp cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer Mismatched return types of definition and declaration Use of forbidden macro Implicit casting of float Implicit downcasting of float
Code Code Code Code Code Code Code Code	Medium High	cpp cpp cpp cpp cpp cpp cpp cpp cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer Mismatched return types of definition and declaration Use of forbidden macro Implicit casting of float Implicit downcasting of float Casting integer to larger type
Code Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium Medium High High	cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer Mismatched return types of definition and declaration Use of forbidden macro Implicit casting of float Implicit downcasting of float Casting integer to larger type Conversion between signed and unsigned data
Code Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium Medium High High Low	cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer Mismatched return types of definition and declaration Use of forbidden macro Implicit casting of float Implicit downcasting of float Casting integer to larger type Conversion between signed and unsigned data Casting float to larger type
Code Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium Medium High High Low Medium	cpp	reference Missing curly brace in array initialization Insufficient initialization value Partially initialized enumeration list Implicit casting of integer Implicit upcasting of integer Implicit downcasting of integer Mismatched return types of definition and declaration Use of forbidden macro Implicit casting of float Implicit downcasting of float Casting integer to larger type Conversion between signed and unsigned data Casting float to larger type Missing casting for result of bitwise operation



Code	Medium	срр	Casting to pointer type
Code	Medium	срр	Use of forbidden string as argument
Code	Medium	срр	Ambiguous order of priority of expressions
Code	Medium	срр	Side effect on expression
Code	Medium	срр	Side effect on function call
Code	Medium	срр	Side effect on parameter
Code	Medium	срр	Assignment in operands
Code	Low	срр	Use of volatile type variable in complex expression
Code	Medium	срр	Side effect on size examination
Code	Medium	срр	Side effect on function call in wrong order
Code	High	срр	Side effect on logical operation
Code	Medium	срр	Missing specified argument in function
Code	Medium	срр	Opening already opened file
Code	Low	срр	Improper deallocation of array
Code	Low	срр	Use of void parameter type
Code	High	срр	Accessing volatile variable in logical operation
Code	High	срр	Bitwise operation on signed value
Code	High	срр	Shifting on signed value
Code	Medium	срр	Negative operation on unsigned value
Code	Low	срр	Use of comma operator
Code	High	срр	Use of bit representation on floating point value
Code	Medium	срр	Implicit comparison expression
Code	Medium	срр	Use of float type as loop index
Code	Low	срр	Missing update of loop index
Code	Low	срр	Missing condition of loop statement
Code	Low	срр	Modification of variable except loop index in loop
Code	Low	срр	Multiple initializations in loop
Code	Medium	срр	Missing specified argument
Code	Low	срр	Update of loop index in loop
Code	Low	срр	Use of boolean expression in condition of switch statement
Code	Low	срр	Empty switch statement
Code	Low	срр	Variable arguments in function
Code	Trivial	срр	Improper declaration of read-only parameter
Code	Medium	срр	Direct use of function identifier
Code	Medium	срр	Arithmetic operation on general pointer



Code	Medium	срр	Subtraction of pointers of different objects
Code	Medium	срр	Use of literal as argument
Code	Medium	срр	Comparison between pointers of different objects
Code	Medium	срр	Array indexing on pointer type variable
Code	Medium	срр	Assignment between objects from overlapped memory region
Code	High	срр	Assignment to overlapping storage
Code	Low	срр	Use of forbidden standard library functions
Code	Low	срр	Use of forbidden time functions
Code	Trivial	срр	Use of break statement at outside of switch statement
Code	Medium	срр	Non-const function pointer
Code	Medium	срр	Use of variable as argument
Code	Low	срр	Anonymous field in structure and union
Code	Low	срр	Redefinition of pointer type
Code	Low	срр	Lowercase suffix for long
Code	Medium	срр	Improper declaration of flexible array member
Code	High	срр	Use of structure as argument of memcmp
Code	Trivial	срр	Assumed constant value
Code	Medium	срр	Improper association of operators
Code	Medium	срр	Semicolon on same line with statement
Code	Medium	срр	Accessing volatile object through non-volatile reference
Code	Medium	срр	Use of non-variable argument
Code	Low	срр	Modification to Temporary Object
Code	Low	срр	Missing error handling for input function
Code	Medium	срр	Shift and arithmetic operations in single expression
Code	Low	срр	Assumed signed integer representation
Code	Low	срр	Missing casting of floating point return value
Code	Trivial	срр	Non-const string pointer
Code	Medium	срр	Concatenation of different type strings
Code	Medium	срр	Modification of string literal
Code	Low	срр	Missing casting after memory allocation
Code	High	срр	Hard coded data
Code	Medium	срр	Static allocation or copying with variable length member array
Code	Low	срр	Insecure transmission of binary data between systems



Code	Low	срр	Wrong file open mode
Code	Low	срр	Multiple use of ungetc
Code	Low	срр	Inadequate value of argument of fsetpos
Code	Low	срр	Use of errno to check for FILE stream errors
Code	Medium	срр	Missing required qualifier on pointer parameter
Code	Medium	срр	Improper exit method
Code	Medium	срр	Uninitialized errno
Code	Low	срр	Direct use of variable of type time_t
Code	High	срр	Improper assert statement
Code	Low	срр	Too complex switch statement
Code	Medium	срр	Use of forbidden qualifier on pointer parameter
Code	Low	срр	Blocking while holding POSIX lock
Code	Low	срр	Missing curly brace in switch statement
Code	Low	срр	Missing curly brace in if-else statement
Code	Medium	срр	Use of invalid error code
Code	Low	срр	Incomplete structure and union type
Code	High	срр	Use of Union
Code	Low	срр	Non-standard character in include statement
Code	Low	срр	Violation of format of included file name
Code	Low	срр	Defined or undefined macro in block
Code	Low	срр	Use of #undef directive
Code	Medium	срр	Missing call of initialization function on error
Code			
	Medium	срр	Function-like macro
Code	Medium Medium	cpp cpp	Function-like macro Mismatched number of arguments of macro
Code Code			
	Medium	срр	Mismatched number of arguments of macro
Code	Medium Low	срр	Mismatched number of arguments of macro Preprocess statement in macro
Code Code	Medium Low Medium	срр срр	Mismatched number of arguments of macro Preprocess statement in macro Missing parentheses around macro argument
Code Code Code	Medium Low Medium Low	cbb cbb	Mismatched number of arguments of macro Preprocess statement in macro Missing parentheses around macro argument Undefined identifier
Code Code Code	Medium Low Medium Low Low	cpp cpp	Mismatched number of arguments of macro Preprocess statement in macro Missing parentheses around macro argument Undefined identifier Multiple # or ## operation
Code Code Code Code Code	Medium Low Medium Low Low Trivial	cpp cpp cpp	Mismatched number of arguments of macro Preprocess statement in macro Missing parentheses around macro argument Undefined identifier Multiple # or ## operation Use of # or ## operator
Code Code Code Code Code Code	Medium Low Medium Low Low Trivial Low	cpp cpp cpp	Mismatched number of arguments of macro Preprocess statement in macro Missing parentheses around macro argument Undefined identifier Multiple # or ## operation Use of # or ## operator Non-standard format of preprocess statement
Code Code Code Code Code Code Code	Medium Low Low Trivial Low Low	cpp cpp cpp cpp	Mismatched number of arguments of macro Preprocess statement in macro Missing parentheses around macro argument Undefined identifier Multiple # or ## operation Use of # or ## operator Non-standard format of preprocess statement Extra character after preprocess statement
Code Code Code Code Code Code Code Code	Medium Low Low Trivial Low Low Low Low	cpp cpp cpp cpp cpp	Mismatched number of arguments of macro Preprocess statement in macro Missing parentheses around macro argument Undefined identifier Multiple # or ## operation Use of # or ## operator Non-standard format of preprocess statement Extra character after preprocess statement Trailing semicolon at preprocess statement
Code Code Code Code Code Code Code Code	Medium Low Low Trivial Low Low Low Medium	cpp cpp cpp cpp cpp cpp	Mismatched number of arguments of macro Preprocess statement in macro Missing parentheses around macro argument Undefined identifier Multiple # or ## operation Use of # or ## operator Non-standard format of preprocess statement Extra character after preprocess statement Trailing semicolon at preprocess statement Improper return value on error



Code	Trivial	срр	Use of setjmp
Code	Trivial	срр	Use of longjmp
Code	Low	срр	Use of Signal Handling
Code	Trivial	срр	Use of stdio
Code	Low	срр	Use of Wide String
Code	Low	срр	Returning in function of void return type
Code	Low	срр	Arithmetic Operation on Pointer
Code	Low	срр	Use of setlocale
Code	Medium	срр	Signal Handler''s Access to Shared Object
Code	Low	срр	Returning signal handlers
Code	Low	срр	Unused runtime constraint handler
Code	Medium	срр	Use of signal in multi-threaded program
Code	Medium	срр	Overloaded logical operator
Code	Medium	срр	Missing logging on error
Code	Medium	срр	Use of C-style casting
Code	Medium	срр	Use of copy initialization
Code	Medium	срр	Missing special function in complicated class
Code	Medium	срр	Missing special function in dynamically allocated class
Code	Medium	срр	Missing explicit destructor in complex class
Code	Medium Medium		
		срр	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating
Code	Medium	срр	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class
Code	Medium Trivial	срр	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function
Code Code	Medium Trivial Trivial	cpp cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function
Code Code Code Code	Medium Trivial Trivial Trivial	cpp cpp cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function
Code Code Code Code Code	Medium Trivial Trivial Trivial Trivial	cpp cpp cpp cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function
Code Code Code Code Code Code	Medium Trivial Trivial Trivial Trivial High	cpp cpp cpp cpp cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument
Code Code Code Code Code Code Code	Medium Trivial Trivial Trivial Trivial High Medium	cpp cpp cpp cpp cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument Conversion operator for primitive type
Code Code Code Code Code Code Code Code	Medium Trivial Trivial Trivial High Medium Medium	cpp cpp cpp cpp cpp cpp cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument Conversion operator for primitive type Conversion operator for class type
Code Code Code Code Code Code Code Code	Medium Trivial Trivial Trivial High Medium Medium Trivial	cpp cpp cpp cpp cpp cpp cpp cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument Conversion operator for primitive type Conversion operator for class type Missing output operator
Code Code Code Code Code Code Code Code	Medium Trivial Trivial Trivial High Medium Medium Trivial Low	cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument Conversion operator for primitive type Conversion operator for class type Missing output operator Non-standard interface
Code Code Code Code Code Code Code Code	Medium Trivial Trivial Trivial High Medium Medium Trivial Low Medium	cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument Conversion operator for primitive type Conversion operator for class type Missing output operator Non-standard interface Missing keyword explicit
Code Code Code Code Code Code Code Code	Medium Trivial Trivial Trivial High Medium Medium Trivial Low Medium Low	cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument Conversion operator for primitive type Conversion operator for class type Missing output operator Non-standard interface Missing keyword explicit Non-public derivation
Code Code Code Code Code Code Code Code	Medium Trivial Trivial Trivial High Medium Medium Trivial Low Medium Low Medium	cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument Conversion operator for primitive type Conversion operator for class type Missing output operator Non-standard interface Missing keyword explicit Non-public derivation Non-virtual destructor for base class
Code Code Code Code Code Code Code Code	Medium Trivial Trivial Trivial High Medium Medium Trivial Low Medium Low Medium Medium	cpp	Missing explicit destructor in complex class Missing explicit destructor in dynamically allocating class Too complex inline function Non-virtual inline function Too long inline function Use of inline member function Hard coded argument Conversion operator for primitive type Conversion operator for class type Missing output operator Non-standard interface Missing keyword explicit Non-public derivation Non-virtual destructor for base class Dangerous downcasting



Code	Medium	срр	Missing overriding of overloaded function
Code	Low	срр	Too many parameters
Code	Low	срр	Multiple updates of loop index
Code	Trivial	срр	Mutable condition of loop statement
Code	Low	срр	Multiple entry and exit points
Code	Low	срр	Improper switch statement
Code	Low	срр	Improper variable declaration in for statement
Code	Trivial	срр	Missing suffix for integer constant
Code	Trivial	срр	Missing suffix for floating point constant
Code	Low	срр	Non-const global and static variable
Code	Medium	срр	Use of forbidden number as argument
Code	High	срр	Casting from floating point type to integer type
Code	Low	срр	Implicit casting of argument
Code	Low	срр	Use of global variable
Code	Trivial	срр	Use of using directive
Code	Trivial	срр	Using statement before include statement
Code	Low	срр	Static object declaration in namespace
Code	Trivial	срр	Use of extern
Code	Medium	срр	Use of static specifier in header file
Code	Trivial	срр	Use of auto
Code	Trivial	срр	Use of register keyword
Code	Low	срр	Missing const qualifier
Code	Medium	срр	Use of result of assignment operation
Code	Medium	срр	Mixed signed and unsigned data
Code	Medium	срр	Mixed arithmetic precision
Code	Low	срр	Passing by value
Code	Low	срр	Overloaded numeric and pointer types
Code	Low	срр	Use of default arguments for overloaded function
Code	Low	срр	Unused user defined type on array
Code	Low	срр	Uninitialized pointer after release
Code	Low	срр	Comment in macro
Code	Low	срр	Non-blank line at end of source code
Code	Low	срр	Uppercase in included file name
Code	Low	срр	Improper constant definition
Code	Low	срр	Use of array type
Code	Low	срр	Use of Digraph



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Code	Low	срр	Use of non-standard header file
Code	Low	cpp	Inefficient copying object in container
Code	Low	срр	Use of copy constructor
Code	Low	cpp	Dynamic array allocation
Code	Medium	cpp	Unnecessary reallocation
Code	Low	срр	Improper passing of vector to C-style function
Code	High	срр	Modification of key
Code	Low	срр	Mixed iterator types
Code	Medium	срр	Non-pure predicate function
Code	Medium	срр	Use of forbidden type
Code	Medium	срр	Use of STL algorithms
Code	Low	срр	Use of auto_ptr
Code	Low	срр	Definition of inline member function in class declaration
Code	Low	срр	Missing exception handling for memory allocation
Code	Low	срр	Too high level of dereferencing
Code	Low	срр	Pointer dereference operation in macro
Code	Low	срр	Duplicated function or variable name between files
Code	Low	срр	Missing declaration of extern variable
Code	Low	срр	Unused user defined type on pointer
Code	Medium	срр	Use of universal character in macro concatenation
Code	Low	срр	Missing relationship between constants
Code	Low	срр	Use of compound literal address in loop
Code	Low	срр	Non-unique mutually visible identifier
Code	Low	срр	Use of non-volatile variable in signal handler
Code	Medium	срр	Use of reserved identifier
Code	Medium	срр	Side effect on macro argument
Code	Medium	срр	Unused user defined type
Code	High	срр	Accessing variable via incompatible pointer
Code	High	срр	Improper casting of integer
Code	Medium	срр	Copying FILE Object
Code	Medium	срр	Redefined errno
Code	Low	срр	Parameter name in function prototype
Code	Medium	срр	Virtual function call in constructor and destructor
Code	Low	срр	Just one of overloaded new and delete
			Returning non-const value from overloaded postfix



Code	Low	срр	operator
Code	Low	срр	Recursive call during initialization of static object
Code	Low	срр	Unused user defined type on member variable
Code	Low	срр	Deleting or casting pointer of incomplete class
Code	Medium	срр	Float operation on non-float value
Code	Low	срр	Predicate function with non-static field
Code	Medium	срр	Specified bound of character array
Code	Medium	срр	Missing check of sameness on copy assignment operation
Code	Low	срр	Use of unaligned pointer
Code	Medium	срр	Throwing exception in destructor
Code	Medium	срр	Accessing field in handler of constructor
Code	Critical	срр	Wrong exception handling order
Code	Low	срр	Throwing exception during deallocation
Code	Low	срр	Use of forbidden array type
Code	Medium	срр	Non-virtual destructor
Code	Medium	срр	Throwing exception on copy assignment operation
Code	Low	срр	Missing initialization in constructor
Code	Medium	срр	Wrong initialization order in constructor
Code	Low	срр	Public constructor for abstract class
Code	Medium	срр	Overloaded non-virtual function
Code	Low	срр	Mismatched default values
Code	Low	срр	Non-protected copy constructor
Code	Medium	срр	Use of not-allowed type
Code	Low	срр	Implicit virtual function
Code	Low	срр	Return of non-const handle from const member function
Code	Trivial	срр	Non-abstract base class
Code	Low	срр	Too many base classes
Code	Low	срр	Member binary operator
Code	Low	срр	Improper overloading of subscript operator
Code	Low	срр	Too many execution paths
Code	Low	срр	Throwing non-class type object
Code	Medium	срр	Catching exception by reference
Code	Low	срр	Use of forbidden compound type
Code	Low	срр	Use of increment operator on boolean value



Code	Low	срр	Casting from integer type to enumeration type
Code	Low	срр	Implicit conversion of class template
Code	Medium	срр	Conflicting method in class template
Code	Medium	срр	Derived class object in container for base class object
Code	Low	срр	Comparing size of container with zero
Code	Low	срр	Use of STL container as public base class
Code	Low	срр	Use of forbidden pointer type
Code	High	срр	Creation of container of auto_ptr
Code	Medium	срр	Use of vector of boolean type
Code	Low	срр	Violation of naming rule for identifier
Code	Trivial	срр	Extern variable and function declaration in source file
Code	Low	срр	Use of magic number
Code	Low	срр	Use of forbidden user defined type
Code	Low	срр	Missing void keyword
Code	Low	срр	Public class member variable
Code	Low	срр	Undeclared constructor
Code	Low	срр	Undeclared destructor
Code	Low	срр	Undeclared copy constructor
Code	Low	срр	Undeclared assignment operator
Code	Medium	срр	Improperly overloaded assignment operator
Code	Low	срр	Non-member asymmetric operator
Code	High	срр	Missing check of array index
Code	Low	срр	Non-friend symmetric operator
Code	Medium	срр	Improper memory reallocation
Code	Medium	срр	Modification of constant value
Code	Medium	срр	Mismatched type in ternary operation
Code	High	срр	Insufficient allocated memory
Code	Low	срр	Use of #pragma directive
Code	Low	срр	Empty statement without comment
Code	Low	срр	Name in standard library
Code	Low	срр	Use of friend function and class
Code	Medium	срр	Improper comparison of condition
Code	Medium	срр	Missing Casting to larger type
Code	High	срр	Casting from void pointer type to non-void pointer type
Code	Low	срр	Missing reset of string on failure



Code	Medium	срр	Missing check of array length
Code	Medium	срр	Use of void return type
Code	Low	срр	Ineffective statement
Code	Medium	срр	Pointer dereference operation in type definition
Code	Low	срр	Lost of precision in integer casting
Code	Medium	срр	Missing check of debug mode
Code	Low	срр	Use of macro as instance
Code	Medium	срр	Missing class member assignment
Code	Medium	срр	Missing class member assignment
Code	Medium	срр	Misuse of rename
Code	Low	срр	Performing operation on device
Code	Low	срр	Wrong type of error
Code	Low	срр	Duplicated header file name
Code	High	срр	Improper conversion of string token
Code	Medium	срр	Missing exception handling for floating point errors
Code	Medium	срр	Use of pointer operation on field
Code	Low	срр	Improper file opening and creation
Code	Low	срр	Storing returned pointer to non-const variable
Code	Medium	срр	Variable declaration in loop
Code	Low	срр	Code deletion during compiler optimization
Code	Low	срр	Use of va_arg on indeterminated value
Code	Low	срр	Violation of constraints of extern inline function
Code	Medium	срр	Non-standard character
Code	Medium	срр	Unused Parameter
Code	Trivial	срр	Use of do-while statement
Code	Low	срр	Backward goto Statement
Code	Low	срр	Jump between Blocks
Code	Low	срр	Use of Variable-length Array in Struct
Code	Medium	срр	Use of == operator on floating point values
Code	Trivial	срр	Illegible comment
Code	Trivial	срр	Different comment lengths
Code	Trivial	срр	Violation of format of comments
Code	Trivial	срр	Comment around code
Code	Low	срр	Unused user defined type on parameter
Code	Low	срр	Returning non-constant value
Code	Medium	срр	Unused user defined type for return type



Code	Medium	срр	Use of character type
Code	Medium	срр	Including duplicated header file
Code	Medium	срр	Unused static variable
Code	Low	срр	Use of bit field type
Code	Medium	срр	Use of float type
Code	Medium	срр	Use of extern or static specifier
Code	Medium	срр	Use of forbidden qualifier
Code	Trivial	срр	Too many functions
Code	Medium	срр	Improper file input and output
Code	Low	срр	Missing definition of declared function
Code	Medium	срр	Use of bitwise operation on boolean type
Code	Low	срр	Multiple declarations of different types in single line
Code	Low	срр	Including forbidden header file
Code	Low	срр	Exposure of structure of type
Code	Medium	срр	Returning null array
Code	Medium	срр	Assignment of local address to upper scope
Code	Low	срр	Inappropriate including method of file
Code	Medium	срр	Executable statement before first case statement
Code	Low	срр	Use of absolute path for inclusion
Code Code	Low		Use of absolute path for inclusion Missing header file
		срр	
Code	Low	срр	Missing header file
Code Code	Low Trivial	срр срр	Missing header file Improper structure alignment
Code Code Code	Low Trivial Trivial	cpp cpp	Missing header file Improper structure alignment Padded structure
Code Code Code	Low Trivial Trivial Low	cpp cpp cpp	Missing header file Improper structure alignment Padded structure Too big structure
Code Code Code Code Code	Low Trivial Trivial Low Medium	cpp cpp cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement
Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium	cpp cpp cpp cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments
Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium	cpp cpp cpp cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier
Code Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium Medium	cpp cpp cpp cpp cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier Use of dynamic type in constructor and destructor
Code Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp cpp cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier Use of dynamic type in constructor and destructor Unhandled exception in destructor
Code Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium Medium Medium Low	cpp cpp cpp cpp cpp cpp cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier Use of dynamic type in constructor and destructor Unhandled exception in destructor Unused exception handling
Code Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium Medium Low Low	cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier Use of dynamic type in constructor and destructor Unhandled exception in destructor Unused exception handling Use of remainder operation
Code Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium Medium Low Low Low	cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier Use of dynamic type in constructor and destructor Unhandled exception in destructor Unused exception handling Use of remainder operation Returning parameter address
Code Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium Medium Low Low Low Medium	cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier Use of dynamic type in constructor and destructor Unhandled exception in destructor Unused exception handling Use of remainder operation Returning parameter address Static casting on virtual base class pointer
Code Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium Medium Low Low Low Medium Medium	cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier Use of dynamic type in constructor and destructor Unhandled exception in destructor Unused exception handling Use of remainder operation Returning parameter address Static casting on virtual base class pointer Unhandled exception in main
Code Code Code Code Code Code Code Code	Low Trivial Trivial Low Medium Medium Medium Medium Low Low Low Medium Medium Medium	cpp	Missing header file Improper structure alignment Padded structure Too big structure Unreachable case statement Mismatched number of variable arguments Virtual function call without qualifier Use of dynamic type in constructor and destructor Unhandled exception in destructor Unused exception handling Use of remainder operation Returning parameter address Static casting on virtual base class pointer Unhandled exception in main Dividing on signed value



Code	Low	срр	Conflicting storage class
Code	Low	срр	Uninitialized pointer as read-only parameter
Code	Medium	срр	Inconsistent global variable declaration
Code	High	срр	Mismatched character type
Code	High	срр	Mismatched reallocated type
Code	Medium	срр	Missing break statement in case statement
Code	Low	срр	Use of multidimensional array
Code	Low	срр	Declaration at middle of block
Code	Low	срр	Use of function in condition of if statement
Code	Low	срр	String comparison via == and != operators
Code	Medium	срр	Assignment of character type to integer type
Code	Medium	срр	Non-decimal integer constant
Code	High	срр	Invalidated Iterator
Code	Medium	срр	Accessing local variable address
Code	Medium	срр	Mismatched number of arguments
Code	High	срр	Reused tokenized string
Code	Medium	срр	Symbolic link race condition
Code	Low	срр	Direct assignment of physical address to function pointer
Code	High	срр	Asynchronous thread termination
Code	Critical	срр	Assigning instead of comparing
Code	Critical	срр	Assigning instead of comparing
Code	Trivial	срр	Non-virtual pure function
Code	Trivial	срр	Improper initialization of pure virtual function
Code	Medium	срр	Mismatched types of function definition and declaration
Code	Medium	срр	Inadequate value of argument of memcpy
Code	Trivial	срр	Redundant name
Code	Medium	срр	Missing return type
Code	Low	срр	Empty while Statement
Code	Low	срр	Use of Hexadecimal Escape Sequence
Code	Medium	срр	Trailing semicolon at macro definition
Code	High	срр	Use of improper macro
Code	High	срр	Replacing secure function
Code	High	срр	Unbracketed macro including multiple statements
Code	Medium	срр	Duplicated macro



Code	Medium	срр	Incorrect Byte Order
Code	Critical	срр	Locking already locked resource
Code	Critical	срр	Double unlocked resource
Code	High	срр	Trylocking already locked resource
Code	Medium	срр	Inadequate value of file descriptor
Code	High	срр	Too large stack size
Code	Trivial	срр	Ineffective function call
Code	Low	срр	Class with Template Does Not Have Copy Assignment Operator Definition
Code	Low	срр	Function Declaration without External Side-effect
Code	Trivial	срр	Non-constant Operands of Bitwise Operator
Code	Low	срр	Diamond Problem with Non-virtual Inheritance
Code	High	срр	Assignment of Local Variable Address to Wide-scoped Variable
Code	Low	срр	Exception Handler Missed in Main Function
Code	Trivial	срр	Use of cstdio Header
Code	Trivial	срр	Use of cstring Header
Code	Trivial	срр	Use of ctime Header
Code	Medium	срр	Throwing of Null Exception
Code	Low	срр	Throwing of Pointer Type Exception
Code	Trivial	срр	Empty throw Statement
Code	Low	срр	Use of Null Pointer for Integer
Code Code	Low	cpp	Use of Null Pointer for Integer enum Declaration of Bit Field
			<u> </u>
Code	Low	срр	enum Declaration of Bit Field
Code Code	Low Medium	срр	enum Declaration of Bit Field Return of Argument Passed by Reference
Code Code Code	Low Medium Low	срр срр	enum Declaration of Bit Field Return of Argument Passed by Reference Overloading of address operator
Code Code Code	Low Medium Low Trivial	cpp cpp	enum Declaration of Bit Field Return of Argument Passed by Reference Overloading of address operator Use of Virtual Inheritance Both Virtual and Non-Virtual Inheritance in Same
Code Code Code Code	Low Medium Low Trivial Low	cpp cpp cpp	enum Declaration of Bit Field Return of Argument Passed by Reference Overloading of address operator Use of Virtual Inheritance Both Virtual and Non-Virtual Inheritance in Same Hierarchy
Code Code Code Code Code	Low Medium Low Trivial Low Trivial	cpp cpp cpp	enum Declaration of Bit Field Return of Argument Passed by Reference Overloading of address operator Use of Virtual Inheritance Both Virtual and Non-Virtual Inheritance in Same Hierarchy Function Never Used
Code Code Code Code Code Code	Low Medium Low Trivial Low Trivial Trivial	cpp cpp cpp cpp	enum Declaration of Bit Field Return of Argument Passed by Reference Overloading of address operator Use of Virtual Inheritance Both Virtual and Non-Virtual Inheritance in Same Hierarchy Function Never Used Throwing of Non-allowed Exception
Code Code Code Code Code Code Code Code	Low Medium Low Trivial Low Trivial Trivial Low	cpp cpp cpp cpp cpp	enum Declaration of Bit Field Return of Argument Passed by Reference Overloading of address operator Use of Virtual Inheritance Both Virtual and Non-Virtual Inheritance in Same Hierarchy Function Never Used Throwing of Non-allowed Exception Bit Field Declaration of Non-allowed Data Type
Code Code Code Code Code Code Code Code	Low Medium Low Trivial Low Trivial Trivial Low Trivial	cpp cpp cpp cpp cpp cpp cpp	enum Declaration of Bit Field Return of Argument Passed by Reference Overloading of address operator Use of Virtual Inheritance Both Virtual and Non-Virtual Inheritance in Same Hierarchy Function Never Used Throwing of Non-allowed Exception Bit Field Declaration of Non-allowed Data Type Use of Assembly Command without asm
Code Code Code Code Code Code Code Code	Low Medium Low Trivial Low Trivial Low Trivial Low Trivial Low	cpp cpp cpp cpp cpp cpp cpp cpp	enum Declaration of Bit Field Return of Argument Passed by Reference Overloading of address operator Use of Virtual Inheritance Both Virtual and Non-Virtual Inheritance in Same Hierarchy Function Never Used Throwing of Non-allowed Exception Bit Field Declaration of Non-allowed Data Type Use of Assembly Command without asm Unused Parameter in Virtual Function



Code	Low	срр	Class with Template Does Not Have Copy Constructor Definition
Code	Trivial	срр	Uninstantiated Template
Code	Low	срр	Ambiguous Call to Explicitly Specialized Function
Code	Trivial	срр	Ambiguous Call for Template Specialization Function
Code	Low	срр	Throw Involves Another Throw
Code	Trivial	срр	Different Exception Specification
Code	Trivial	срр	Non-member Template Function Definition in Namespace
Code	Low	срр	Ambiguous Call to Template Base Method
Code	Trivial	срр	String Allocation to Invalid Type
Code	Medium	срр	Changed loop control variable in condition or increment or decrement clause
Code	Medium	срр	Non-boolean Loop Control Variable
Code	Low	срр	Use of continue in Unusually-formed for Loop
Code	Low	срр	Internal-Linkage Function without Static Storage Class
Code	Medium	срр	Missing Catch for Explicitly Thrown Exception
Code	Low	срр	Non-const Handle Returned to Class Data
Code	Trivial	срр	Token Mismatch in Redeclaration
Code	Trivial	срр	Misuse of unsigned int-type Suffix
Code	Medium	срр	Missing Termination of Case
Code	Medium	срр	Use of C Style Memory-related Function
Code	Medium	срр	Infinite loop
Code	Medium	срр	Misuse of socket
Code	Trivial	срр	Use of forbidden function
Code	Medium	срр	Comparing function pointer instead of return value
Code	Medium	срр	Adjustment of Pointer Size for Pointer Operation
Code	Trivial	срр	Function declaration in function
Code	Medium	срр	Ambiguous Call to Template Function
Code	Medium	срр	Using Casting to Remove const Qualifier
Code	Medium	срр	Violation of va_start Macro Limitation
Code	High	срр	Unfreed Memory after Use of tss_create()
Code	Medium	срр	Reference to Atomic Variable Twice in Expression
Code	Low	срр	Failure of atomic_compare_exchange_weak()
Code	Medium	срр	Conflicting Storage Classes
Code	Medium	срр	Unused return of standard libraries



Code	Low	срр	Incorrect Vararg Type
Code	Medium	срр	Comparison on Floating-point Objects
Code	Medium	срр	Use of Incorrect Integer Precision
Code	Medium	срр	Manipulation of Another Thread''s Mutex
Code	Medium	срр	Local Variable Shared between Threads
Code	Low	срр	Violation of naming rule for enumeration type
Code	Low	срр	Missing Include Guard in Class Definition Header
Code	Trivial	срр	Violation of Operator Spacing Rule
Code	Low	срр	Use of constexpr in switch
Code	Medium	срр	Range Error in Math Function
Code	Medium	срр	Destruction of Locked Mutex
Code	Medium	срр	Shared Object with Expired Storage Duration
Code	Medium	срр	Occurrence of Deadlock
Code	Medium	срр	Misuse of Condition Variable
Code	High	срр	Already Owned Pointer
Code	Medium	срр	Use of volatile Qualifier for Reference Type
Code	Low	срр	Return from noreturn Function
Code	Medium	срр	Array with Polymorphism
Code	High	срр	Increase/Decrease Iterator by more than One
Code Code	High High	срр	Increase/Decrease Iterator by more than One Call to mutex_unlock() Function without Exception Handling
			Call to mutex_unlock() Function without Exception
Code	High	срр	Call to mutex_unlock() Function without Exception Handling
Code	High Medium	срр	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size
Code Code Code	High Medium Low	cbb cbb	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean
Code Code Code	High Medium Low Trivial	cbb cbb	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable
Code Code Code Code Code	High Medium Low Trivial Medium	cpp cpp cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file
Code Code Code Code Code Code	High Medium Low Trivial Medium Medium	cpp cpp cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison
Code Code Code Code Code Code Code	High Medium Low Trivial Medium Medium High	cpp cpp cpp cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison Remainder operation on negative value
Code Code Code Code Code Code Code Code	High Medium Low Trivial Medium Medium High High	cpp cpp cpp cpp cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison Remainder operation on negative value Assignment of negative value to unsigned type
Code Code Code Code Code Code Code Code	High Medium Low Trivial Medium Medium High High Medium	cpp cpp cpp cpp cpp cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison Remainder operation on negative value Assignment of negative value to unsigned type Division by zero
Code Code Code Code Code Code Code Code	High Medium Low Trivial Medium Medium High High Medium Medium Medium	cpp cpp cpp cpp cpp cpp cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison Remainder operation on negative value Assignment of negative value to unsigned type Division by zero Missing check on division by zero
Code Code Code Code Code Code Code Code	High Medium Low Trivial Medium Medium High High Medium Medium High	cpp cpp cpp cpp cpp cpp cpp cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison Remainder operation on negative value Assignment of negative value to unsigned type Division by zero Missing check on division by zero Returning local variable address
Code Code Code Code Code Code Code Code	High Medium Low Trivial Medium Medium High High Medium Medium Medium Medium Medium	cpp cpp cpp cpp cpp cpp cpp cpp cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison Remainder operation on negative value Assignment of negative value to unsigned type Division by zero Missing check on division by zero Returning local variable address Releasing memory in stack
Code Code Code Code Code Code Code Code	High Medium Low Trivial Medium Medium High High Medium Medium Medium High Medium High	cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison Remainder operation on negative value Assignment of negative value to unsigned type Division by zero Missing check on division by zero Returning local variable address Releasing memory in stack Missing return statement
Code Code Code Code Code Code Code Code	High Medium Low Trivial Medium Medium High Medium Medium High Medium High Low	cpp	Call to mutex_unlock() Function without Exception Handling Use of Maximum Buffer Size Use of Decrement Operator on Boolean Missing initialization of local variable Missing #define in header file Unreachable code due to string comparison Remainder operation on negative value Assignment of negative value to unsigned type Division by zero Missing check on division by zero Returning local variable address Releasing memory in stack Missing return statement Overlapped memory region



Code	Medium	срр	Inadequate value of length argument
Code	Low	срр	Redundant condition
Code	Low	срр	Unreachable code
Code	Low	срр	Unused value
Code	High	срр	Dangerous casting of function pointer
Code	Medium	срр	Violation of format of general comments
Code	Trivial	срр	Use of label statement
Code	Medium	срр	Use of forbidden function in loop
Code	Medium	CS	Missing Braces in while Statement
Code	Medium	CS	Missing Braces in for Statement
Code	Low	CS	Instantiation of string
Code	Medium	CS	Missing default case in switch statement
Code	Medium	CS	Missing break statement in case statement
Code	Medium	CS	Jump Statement at End of Loop
Code	Medium	CS	Use of Equals on Variable
Code	Medium	CS	Addition of empty string
Code	High	CS	Hard coded IP
Code	Medium	CS	Assignment to multiple variables
Code	Trivial	CS	Instance creation in loop
Code Code	Trivial Medium	CS CS	Instance creation in loop Too deeply nested if statements
			·
Code	Medium	CS	Too deeply nested if statements
Code Code	Medium Medium	CS CS	Too deeply nested if statements Throwing NullPointerException
Code Code Code	Medium Medium Medium	cs cs cs	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values
Code Code Code	Medium Medium Medium Medium	cs cs cs	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator
Code Code Code Code Code	Medium Medium Medium Medium	CS CS CS CS CS	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0
Code Code Code Code Code Code	Medium Medium Medium Medium Medium	CS CS CS CS CS CS	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable
Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium	CS CS CS CS CS CS CS	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable Unused parameter
Code Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium Medium	CS CS CS CS CS CS CS CS CS	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable Unused parameter Unused private field
Code Code Code Code Code Code Code Code	Medium	CS	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable Unused parameter Unused private field Throwing new exception
Code Code Code Code Code Code Code Code	Medium	CS	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable Unused parameter Unused private field Throwing new exception Unpulsed Object
Code Code Code Code Code Code Code Code	Medium Low	CS	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable Unused parameter Unused private field Throwing new exception Unpulsed Object Assigning instead of comparing
Code Code Code Code Code Code Code Code	Medium	CS C	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable Unused parameter Unused private field Throwing new exception Unpulsed Object Assigning instead of comparing Empty while Statement
Code Code Code Code Code Code Code Code	Medium	CS C	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable Unused parameter Unused private field Throwing new exception Unpulsed Object Assigning instead of comparing Empty while Statement Use of Invalid Access Modifier on sealed Class
Code Code Code Code Code Code Code Code	Medium	CS C	Too deeply nested if statements Throwing NullPointerException Use of == operator on floating point values String appended via += operator Comparison of Collection Size against 0 Unused local variable Unused parameter Unused private field Throwing new exception Unpulsed Object Assigning instead of comparing Empty while Statement Use of Invalid Access Modifier on sealed Class Use of toString on Array



Code	High	java	Dangerous downcasting of object in collection
Code	Medium	java	Suspicious Method Name
Code	High	java	Misuse of equals and ==
Code	High	java	Incorrect Overriding
Code	High	java	Modification of static field in non-static method
Code	Medium	java	Use of notify
Code	Low	java	Use of wait in synchronized block without control
Code	Low	java	Use of notify in synchronized block
Code	Trivial	java	Violation of Specified Exception Handling Rule
Code	Low	java	Use of sleep or yield at outside of control block
Code	Medium	java	Use of == operator on floating point values
Code	Low	java	Inappropriate Removal of Object in Collection
Code	Low	java	Access to Private Member of Nesting Class
Code	Medium	java	Unreleased Lock
Code	Medium	java	Unnotified object
Code	Low	java	Unnecessary casting on iterator variable
Code	Low	java	Implicit casting in function call
Code	Low	java	Implicit casting in assignment
Code	Low	java	Implicit casting in return
		,	, 3
Code	Low	java	Nested try Statement
Code	Low	java	Nested try Statement
Code Code	Low	java java	Nested try Statement Returning private field of outer class
Code Code Code	Low Low	java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor
Code Code Code	Low Low Low Trivial	java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec
Code Code Code Code Code	Low Low Trivial Trivial	java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit
Code Code Code Code Code Code	Low Low Trivial Trivial Medium	java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type
Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial	java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API
Code Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial Trivial	java java java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API Use of synchronized method in loop
Code Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial Trivial Trivial	java java java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API Use of synchronized method in loop Access to Array with Fixed Index in Loop
Code Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial Trivial Trivial Trivial Trivial	java java java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API Use of synchronized method in loop Access to Array with Fixed Index in Loop Break statement using label
Code Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial Trivial Trivial Trivial Trivial Trivial	java java java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API Use of synchronized method in loop Access to Array with Fixed Index in Loop Break statement using label Use of volatile
Code Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial Trivial Trivial Trivial Trivial Trivial Trivial	java java java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API Use of synchronized method in loop Access to Array with Fixed Index in Loop Break statement using label Use of short Type
Code Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial Trivial Trivial Trivial Trivial Trivial Trivial Trivial	java java java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API Use of synchronized method in loop Access to Array with Fixed Index in Loop Break statement using label Use of volatile Use of Public Field
Code Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial Trivial Trivial Trivial Trivial Trivial Trivial Trivial Low	java java java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API Use of synchronized method in loop Access to Array with Fixed Index in Loop Break statement using label Use of volatile Use of Public Field Unused import statement
Code Code Code Code Code Code Code Code	Low Low Trivial Trivial Medium Trivial	java java java java java java java java	Nested try Statement Returning private field of outer class Return of String Using Constructor Use of Runtime.exec Use of Finalizer on Exit Use of raw type Use of deprecated API Use of synchronized method in loop Access to Array with Fixed Index in Loop Break statement using label Use of volatile Use of short Type Use of Public Field Unused import statement Use of public field in method



Code	Low	jsts	Invalid Operand Type
Code	Low	jsts	Use of with Statement
Code	Trivial	jsts	Inappropriate Equality Comparison Operator
Code	Low	jsts	Assignment in operands
Code	Low	jsts	Bitwise Operation
Code	Medium	jsts	Modified native object
Code	Low	jsts	Improper variable declaration in for statement
Code	Trivial	jsts	Unreachable code
Code	High	objc	Symbolic link race condition
Code	High	objc	Misuse of Apple APIs
Code	High	objc	Passing nil to @synchronized directive
Code	Critical	objc	Releasing non-instance object
Code	Medium	objc	Misuse of CFNumberCreate
Code	High	objc	Use of float type as loop index
Code	Medium	objc	Use of uninitialized value in binary operation
Code	Medium	objc	Use of uninitialized value in array
Code	Medium	objc	Assignment of Uninitialized Variable
Code	Medium	objc	Use of uninitialized value in conditional statement
Code	Medium	objc	Return of Uninitialized Variable
Code	Medium	objc	Misuse of CFErrorRef
Code	High	objc	Misuse of malloc
Code	High	objc	Invalid malloc Argument
Code	High	objc	Assignment of Stack Variable Address
Code	Medium	objc	Invalid Argument for String Function
Code	Medium	objc	Misuse of CFRetain, CFRelease and CFMakeCollectable
Code	Low	objc	Uninitialized self
Code	Low	objc	Misuse of Secure Keychain APIs
Code	Low	objc	Unused variable
Code	Low	objc	Logical error in function call and messaging
Code	Medium	objc	Inadequate value of length argument
Code	Low	objc	Use of IPv4-specific API
Code	Low	objc	Hard coded IP
Code	Medium	objc	Unlocked mutex
Code	High	objc	Buffer overflow
Code	Low	objc	Lost of precision in assignment



Code	Low	objc	pthread_mutex_lock
Code	Low	objc	Use of == operator on floating point values
Code	Trivial	objc	Use of forbidden function
Code	Medium	python	Missing Exception Handling for ConnectionError
Code	Medium	python	Missing Exception Handling for BlockingIOError
Code	Medium	python	Missing Exception Handling for FileExistError
Code	Critical	sql	Missing WHERE clause in SELECT statement
Code	Critical	sql	Nonexistent Table
Code	Critical	sql	Nonexistent Column
Code	Low	sql	Unused Table
Code	Low	sql	Unused Column
Code	High	sql	Invalid Number Type
Code	High	sql	Longer Input than Column Size
Code	Critical	sql	Invalid GROUP BY Clause
Code	High	sql	Null into Non-nullable Column
Code	Critical	sql	Invalid Date Format
Code	Critical	sql	Syntax Error
Code	Critical	sql	Invalid Table Name
Code	High	sql	Null into PRIMARY KEY Column
Code	Critical	sql	Unselected Column Appears in ORDER BY
Code	Critical	sql	Mismatched number of columns and values in INSERT query
Code	Critical	sql	Missing WHERE clause in DELETE and UPDATE statement
Code	Trivial	swift	Not Updated Left-hand Operand of Assignment
Code	Trivial	swift	Ternary Operator Returning Fixed Value
Code	Trivial	swift	Redundant Condition Check
Code	Trivial	swift	System Function Call
Code	Trivial	swift	Binary Operation with Identical Operands
Code	Trivial	swift	Extra Code after Branching Statement
Code	Trivial	swift	Branching Statement Not Included in Conditional Statement
Code	Trivial	swift	Relational Operation on Floating-point Value
Code	Trivial	swift	Forced-unwrapped Optional
Code	Trivial	swift	Operator Precedence Change
Code	Trivial	swift	Implicitly Unwrapped Optional



Code	Low	swift	No Explaining Message for Fingerprint Request
Code	Trivial	etc	Use of Specified Keyword
Code	Trivial	vbs	Use of forbidden function
Code	Medium	vbs	Missing check of empty value
Code	Low	vbs	Use of with Statement
Code	Medium	vbs	Missing return statement
Code	Medium	java	return Statement in catch Block
Code	High	jsts	Non-binary Transaction
Code	Low	swift	Implicit Access to Class
Code	High	vbnet	Unrestricted Action
Code	Medium	vbnet	Disabling of Header Check
Code	High	vbnet	Disabling of View State MAC
Code	Low	vbnet	Execution with Impersonated Credentials
Code	Medium	vbnet	Leftover debug code
Code	Low	vbnet	Storage of Non-Serializable Object as HttpSessionState Attribute
Code	High	vbnet	Parent Model without Required Attribute
Code	Medium	vbnet	Setting of Persistent Permission
Code	High	vbnet	Untrusted Model
Code	Medium	abap	Use of SELECT statement with dynamic clauses
Code	Low	С	Use of Variable-length Array
Code	Low	С	Macro Named after Reserved Word
Code	Medium	С	Forbidden recursive call
Code	Low	С	Useless Type Declaration
Code	Low	С	Passing of Signed to Character Function
Code	Medium	С	getchar Function Return of Invalid Type
Code	Medium	С	Null Dereference Resulting from Allocation Failure
Code	Medium	С	Dereference before null check
Code	Low	срр	Use of Trigraph
Code	Medium	срр	Too many initialization values
Code	High	срр	Lost of const qualification in casting
Code	High	срр	Lost of volatile qualification in casting
Code	Low	срр	Missing error detection
Code	Medium	срр	Misuse of assert statement
Code	Low	срр	Use of PTHREAD_MUTEX_NORMAL type mutex lock
Code	High	срр	Use of vfork



Code	Low	срр	Use of pthread_kill
Code	Medium	срр	Use of signal functions
Code	High	срр	Use of sizeof on array type parameter
Code	High	срр	Improper conversion between numeric types
Code	High	срр	Inadequate size of allocated memory
Code	Medium	срр	Printing file to temporary or public directory
Code	High	срр	Use of system
Code	High	срр	Exit on atexit handler
Code	High	срр	Use of unsafe function in signal handler
Code	Medium	срр	Use of deprecated API
Code	Medium	срр	Premature thread termination
Code	High	срр	Use of sizeof on pointer type
Code	Medium	срр	Throwing overly broad exceptions
Code	High	срр	Wrong order in privilege relinquishment
Code	High	срр	Insecure privilege relinquishment
Code	High	срр	Integer Underflow
Code	High	срр	Invalid downcasting of integer
Code	High	срр	Use of released resource
Code	High	срр	Mismatched buffer size
Code Code	High Medium	срр	Mismatched buffer size Too Small Path Buffer
Code	Medium	срр	Too Small Path Buffer
Code Code	Medium Low	срр	Too Small Path Buffer Critical public Variable without const
Code Code Code	Medium Low Medium	срр срр	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order
Code Code Code	Medium Low Medium High	cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime
Code Code Code Code Code	Medium Low Medium High	cpp cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow
Code Code Code Code Code Code	Medium Low Medium High High High	cpp cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function
Code Code Code Code Code Code Code	Medium Low Medium High High High Medium	cpp cpp cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function Use of unsafe multi-byte string function
Code Code Code Code Code Code Code Code	Medium Low Medium High High High Medium Medium	cpp cpp cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function Use of unsafe multi-byte string function Infinite recursive call Mismatch in Number between Format Specifiers and
Code Code Code Code Code Code Code Code	Medium Low Medium High High High Medium Medium Medium	cpp cpp cpp cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function Use of unsafe multi-byte string function Infinite recursive call Mismatch in Number between Format Specifiers and Arguments
Code Code Code Code Code Code Code Code	Medium Low Medium High High Medium Medium Medium Trivial	cpp cpp cpp cpp cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function Use of unsafe multi-byte string function Infinite recursive call Mismatch in Number between Format Specifiers and Arguments Empty branch statement
Code Code Code Code Code Code Code Code	Medium Low Medium High High Medium Medium Trivial Medium	cpp cpp cpp cpp cpp cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function Use of unsafe multi-byte string function Infinite recursive call Mismatch in Number between Format Specifiers and Arguments Empty branch statement Access to Bit-field by Multiple Threads
Code Code Code Code Code Code Code Code	Medium Low Medium High High Medium Medium Medium Trivial Medium Medium Medium	cpp cpp cpp cpp cpp cpp cpp cpp cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function Use of unsafe multi-byte string function Infinite recursive call Mismatch in Number between Format Specifiers and Arguments Empty branch statement Access to Bit-field by Multiple Threads Alteration of Standard Namespace
Code Code Code Code Code Code Code Code	Medium Low Medium High High High Medium Medium Medium Trivial Medium Medium Low	cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function Use of unsafe multi-byte string function Infinite recursive call Mismatch in Number between Format Specifiers and Arguments Empty branch statement Access to Bit-field by Multiple Threads Alteration of Standard Namespace Exception Thrown in Handler Registered with atexit()
Code Code Code Code Code Code Code Code	Medium Low Medium High High Medium Medium Medium Medium Low High	cpp	Too Small Path Buffer Critical public Variable without const Use of macros in wrong order Misuse of asctime Integer Overflow Use of Dangerous Function Use of unsafe multi-byte string function Infinite recursive call Mismatch in Number between Format Specifiers and Arguments Empty branch statement Access to Bit-field by Multiple Threads Alteration of Standard Namespace Exception Thrown in Handler Registered with atexit() Container Overflow



Code	Medium	срр	Use of C Standard Library to Target Unsuitable Class Object
Code	Low	срр	Public static member variable undeclared to const
Code	Medium	срр	Memory Leak
Code	High	срр	Resource leak
Code	High	срр	Double freed memory
Code	High	срр	Use of freed memory
Code	High	срр	Uninitialized value
Code	Medium	срр	Null dereference
Code	Medium	срр	Missing null check
Code	High	срр	Returning freed memory
Code	Medium	срр	Attempting delete on dynamically allocated memory
Code	Medium	срр	Attempting delete[] on dynamically allocated memory
Code	Medium	срр	Attempting delete on memory allocated by new[]
Code	Medium	срр	Attempting free on memory allocated by new[]
Code	Medium	срр	Attempting delete[] on memory allocated by new
Code	Medium	срр	Attempting free on memory allocated by new
Code	High	срр	Double freed resource
c 1			Mississ shall of an anifical library for ation
Code	Low	cpp	Missing call of specified library function
Code	Medium	срр	Missing call of library function with specified parameter
			Missing call of library function with specified
Code	Medium	срр	Missing call of library function with specified parameter Missing call of required library function with required
Code	Medium Medium	cpp	Missing call of library function with specified parameter Missing call of required library function with required argument
Code Code	Medium Medium Medium	срр	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function
Code Code Code Code	Medium Medium Medium Medium	cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc
Code Code Code Code Code	Medium Medium Medium Medium Medium	cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs
Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs Misuse of resource APIs
Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs Misuse of resource APIs Misuse of signal APIs
Code Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs Misuse of resource APIs Misuse of signal APIs Misuse of TP APIs
Code Code Code Code Code Code Code Code	Medium	cpp cpp cpp cpp cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs Misuse of resource APIs Misuse of signal APIs Misuse of TP APIs Use of temporary file-related function
Code Code Code Code Code Code Code Code	Medium	cpp cpp cpp cpp cpp cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs Misuse of resource APIs Misuse of signal APIs Misuse of TP APIs Use of temporary file-related function Misuse of timer APIs
Code Code Code Code Code Code Code Code	Medium	cpp cpp cpp cpp cpp cpp cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs Misuse of resource APIs Misuse of signal APIs Misuse of TP APIs Use of temporary file-related function Misuse of printf
Code Code Code Code Code Code Code Code	Medium Trivial	cpp cpp cpp cpp cpp cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs Misuse of resource APIs Misuse of signal APIs Misuse of TP APIs Use of temporary file-related function Misuse of printf Accessing array via subscript operator
Code Code Code Code Code Code Code Code	Medium Medium Medium Medium Medium Medium Medium Medium Medium Trivial Medium	cpp cpp cpp cpp cpp cpp cpp cpp	Missing call of library function with specified parameter Missing call of required library function with required argument Missing call of required function Misuse of malloc Misuse of process APIs Misuse of resource APIs Misuse of signal APIs Misuse of TP APIs Use of temporary file-related function Misuse of printf Accessing array via subscript operator Use of umask before calling fopen



Code	Medium	CS	Null dereference
Code	Medium	CS	Dereference of Null Return Value
Code	Medium	CS	Missing null check
Code	Medium	CS	Use of Application.Exit
Code	Medium	CS	Passing of String to IndexOf
Code	Medium	CS	Use of Monitor.Pulse
Code	High	CS	Resource leak
Code	Medium	CS	Null return value dereference in standard library
Code	Low	CS	Empty finally Block
Code	Trivial	CS	Use of forbidden interface
Code	Medium	CS	Missing Serializable Attribute
Code	Medium	CS	Null Check via Equals Method
Code	Medium	CS	Just one of defined GetHashCode and Equals
Code	Low	CS	Misuse of SqlClientPermission
Code	Medium	CS	Hard coded file separation character
Code	Medium	java	Allowing Javascript on Android
Code	Medium	java	Granting URI permission on Android
Code	Medium	java	Broadcasting intents on Android
Code	Medium	java	Using JavaScript in Android
Code Code	Medium High	java java	Using JavaScript in Android Class loading hijacking on Android
		-	<u> </u>
Code	High	java	Class loading hijacking on Android Class loading hijacking due to absolute paths on
Code	High Medium	java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android
Code Code	High Medium Medium	java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android
Code Code Code	High Medium Medium Low	java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing
Code Code Code Code Code	High Medium Medium Low Low	java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO
Code Code Code Code Code Code	High Medium Medium Low Low Medium	java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification
Code Code Code Code Code Code Code	High Medium Medium Low Low Medium Medium	java java java java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification Cross-site scripting by escapeXml
Code Code Code Code Code Code Code Code	High Medium Medium Low Low Medium Medium Medium	java java java java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification Cross-site scripting by escapeXml Missing Broadcaster Permission in Android
Code Code Code Code Code Code Code Code	High Medium Medium Low Low Medium Medium Medium Medium	java java java java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification Cross-site scripting by escapeXml Missing Broadcaster Permission in Android Cross-site scripting in Android
Code Code Code Code Code Code Code Code	High Medium Low Low Medium Medium Medium Medium Medium High	java java java java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification Cross-site scripting by escapeXml Missing Broadcaster Permission in Android Cross-site scripting in Android Use of public static final Array
Code Code Code Code Code Code Code Code	High Medium Low Low Medium Medium Medium Medium High High	java java java java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification Cross-site scripting by escapeXml Missing Broadcaster Permission in Android Cross-site scripting in Android Use of public static final Array Overloading of equals
Code Code Code Code Code Code Code Code	High Medium Low Low Medium Medium Medium Medium High High High	java java java java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification Cross-site scripting by escapeXml Missing Broadcaster Permission in Android Cross-site scripting in Android Use of public static final Array Overloading of equals Use of equals between Arrays
Code Code Code Code Code Code Code Code	High Medium Low Low Medium Medium Medium Medium High High High Medium	java java java java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification Cross-site scripting by escapeXml Missing Broadcaster Permission in Android Cross-site scripting in Android Use of public static final Array Overloading of equals Use of equals between Arrays Missing check of return value from string methods
Code Code Code Code Code Code Code Code	High Medium Low Low Medium Medium Medium Medium High High High High Medium High	java java java java java java java java	Class loading hijacking on Android Class loading hijacking due to absolute paths on Android Bypassing permission checking on Android Use of AWT or Swing Use of Java IO Android Security Alert Notification Cross-site scripting by escapeXml Missing Broadcaster Permission in Android Cross-site scripting in Android Use of public static final Array Overloading of equals Use of equals between Arrays Missing check of return value from string methods Direct Management of Connections



Code	Medium	java	Resource leak
Code	Medium	java	Division by zero
Code	Medium	java	Null dereference
Code	Medium	java	Null return value dereference
Code	Medium	java	Missing null check
Code	High	java	Missing call of super class method
Code	High	java	Use of Mutable Field in compareTo
Code	High	java	Use of Mutable Field in hashCode
Code	Medium	java	Null return value dereference in standard library
Code	High	java	Improper exception handling
Code	High	java	Invalid Modifier for serialPersistentFields
Code	Medium	java	Missing synchronization in overriding
Code	High	java	Double-checked locking
Code	High	java	Use of server socket in EJB
Code	Medium	java	Infinite recursive call
Code	Medium	java	Empty catch block
Code	High	java	Incorrect overriding of hashCode and equals
Code	High	java	Direct Use of Threads
Code	High	java	Use of System.exit
Code	Trivial	java	Use of forbidden function
Code	Low	java	Division without strictfp qualifier
Code	Medium	java	Missing break statement in case statement
Code	Critical	java	Globally accessible file
Code	Trivial	jsts	Use of forbidden function
Code	Medium	jsts	Synchronized transaction
Code	Medium	jsts	Empty catch block
Code	Medium	kotlin	Empty catch block
Code	Medium	kotlin	Null return value dereference
Code	Trivial	kotlin	Use of forbidden function
Code	High	objc	Use of system
Code	High	objc	Insecure privilege relinquishment
Code	Critical	objc	Null dereference
Code	Critical	objc	Double String Formatting
Code	Medium	objc	Buffer overflow by CFArrayGetValueAtIndex
Code	Critical	objc	Division by zero
Code	High	objc	Invalid Size of Variable-length Array



Code Medium objc Misuse of mktemp Code Medium objc Misuse of vfork Code Medium objc Misuse of CFArrayCreate Code Medium objc Misuse of getpw Code Medium objc Misuse of gets Code Medium objc Misuse of random Code Medium objc Misuse of strcpy Code Medium objc Misuse of Unix APIs	
Code Medium objc Misuse of getpw Code Medium objc Misuse of gets Code Medium objc Misuse of random Code Medium objc Misuse of strcpy Code Medium objc Misuse of Unix APIs	
Code Medium objc Misuse of gets Code Medium objc Misuse of random Code Medium objc Misuse of strcpy Code Medium objc Misuse of Unix APIs	
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Code Medium objc Misuse of strcpy Code Medium objc Misuse of Unix APIs	
Code Medium objc Misuse of Unix APIs	
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Addition also latinite consists all	
Code Medium objc Infinite recursive call	
Code High objc Insecure privilege control	
Code High objc Insecure privilege reset	
Code High objc Use of Anonymous LDAP Binding	
Code Critical objc Use of freed memory	
Code High objc Use of Dangerous Function	
Code Critical objc Memory Leak	
Code Medium php Infinite recursive call	
Code Medium php Empty catch block	
Code Medium php Catching overly broad exceptions	
Code Medium php Null dereference	
Code High php Resource leak	
Code High php Use of released resource	
Code Trivial php Use of forbidden function	
Code Medium python Hardcoded Path Separator	
Code Trivial python Use of forbidden function	
Code Critical rust Improper Cargo Setting	
Code Critical rust Use of unsafe	
Code High rust Wrapping Potential Overflow	
Code Trivial rust Use of try!	
Code Critical rust Use of panic Inducing Function	
Code Medium rust Access to Misformatted Array	
Code Critical rust Division by zero	
Code High rust Use of forget	
Code High rust Memory Leak	
Code Medium rust Improper Release of ManuallyDrop	
Code Critical rust Inaccurate Return of Pointer	
Code Low rust Use of Uninitialized Memory	



Code	Medium	rust	Use of Incompatible Type
Code	Medium	swift	Transmission via HTTP Protocol
Code	Trivial	swift	Use of forbidden function
Code	Medium	swift	Infinite recursive call
Code	High	etc	Enabled debuggable option in Android manifest
Code	Medium	etc	Enabled sharedUserId option in Android manifest
Code	Medium	etc	Enabled exported option in Android manifest
Code	High	etc	Account information in source code
Code	High	etc	Credit card information in source code
Code	High	etc	Email information in source code
Code	High	etc	Foreigner registry number in source code
Code	High	etc	IP information in source code
Code	High	etc	Resident registration number in source code
Code	High	etc	Passport number in source code
Code	High	etc	Phone number in source code
Code	High	etc	Driver license information in source code
Code	Trivial	vbnet	Use of forbidden function
Code	Trivial	vbnet	Empty branch statement
Code	Medium	asp	Cross-site scripting
Code	High	asp	SQL Injection
Code	High	asp	Command injection
			LDAP Injection
Code	High	asp	LDAI IIIJection
Code Code	High High	asp	Path Traversal
		•	-
Code	High	asp	Path Traversal
Code Code	High Critical	asp	Path Traversal XQuery Injection
Code Code Code	High Critical Medium	asp asp asp	Path Traversal XQuery Injection HTTP Response Splitting
Code Code Code	High Critical Medium High	asp asp asp asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection
Code Code Code Code Code	High Critical Medium High High	asp asp asp asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection Resource injection
Code Code Code Code Code Code	High Critical Medium High High Medium	asp asp asp asp asp asp asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection Resource injection Redirection to untrusted site
Code Code Code Code Code Code Code	High Critical Medium High High Medium Medium	asp asp asp asp asp asp asp asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection Resource injection Redirection to untrusted site Cleartext transmission of sensitive information
Code Code Code Code Code Code Code Code	High Critical Medium High High Medium Medium Medium	asp asp asp asp asp asp asp asp asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection Resource injection Redirection to untrusted site Cleartext transmission of sensitive information Cross site scripting via error messages
Code Code Code Code Code Code Code Code	High Critical Medium High High Medium Medium Medium High	asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection Resource injection Redirection to untrusted site Cleartext transmission of sensitive information Cross site scripting via error messages Reliance on DNS lookups in security decisions
Code Code Code Code Code Code Code Code	High Critical Medium High High Medium Medium Medium High High	asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection Resource injection Redirection to untrusted site Cleartext transmission of sensitive information Cross site scripting via error messages Reliance on DNS lookups in security decisions Weak password requirements
Code Code Code Code Code Code Code Code	High Critical Medium High High Medium Medium Medium High High Medium High High	asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection Resource injection Redirection to untrusted site Cleartext transmission of sensitive information Cross site scripting via error messages Reliance on DNS lookups in security decisions Weak password requirements Persistent cookie
Code Code Code Code Code Code Code Code	High Critical Medium High High Medium Medium High High High High High Medium Medium	asp	Path Traversal XQuery Injection HTTP Response Splitting XPath Injection Resource injection Redirection to untrusted site Cleartext transmission of sensitive information Cross site scripting via error messages Reliance on DNS lookups in security decisions Weak password requirements Persistent cookie Exposure of system information



Code	Medium	asp	Storing Unencrypted Password
Code	Medium	С	Missing check of return value
Code	High	срр	Insecure file identification
Code	Critical	срр	Incorrect permission assignment in file creation
Code	High	срр	Duplicated environment variable name
Code	Low	срр	Reliance on Environment Pointer
Code	Low	срр	Use of in-band error indicator
Code	Medium	срр	Missing check of symbolic links
Code	Low	срр	Use of non-static variable as argument of putenv
Code	Low	срр	File descriptor race condition
Code	Low	срр	Misuse of signal handler
Code	Low	срр	Use of signal in interruptible signal handler
Code	Low	срр	Library race condition
Code	Low	срр	Information leak due to structure padding
Code	High	срр	Missing limitation for string length
Code	Low	срр	Writing sensitive information to disk
Code	Medium	срр	Missing check of input length
Code	Medium	срр	Violation of privilege to use functions in Windows
Code	High	срр	Weak hash
Code Code	High Medium	срр	Weak hash Improper encryption
Code	Medium	срр	Improper encryption
Code Code	Medium High	срр	Improper encryption Improper random number generation
Code Code Code	Medium High Medium	cpp cpp	Improper encryption Improper random number generation Leftover debug code
Code Code Code	Medium High Medium Medium Medium	cbb cbb	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler
Code Code Code Code Code	Medium High Medium Medium Medium	cpp cpp cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP
Code Code Code Code Code Code	Medium High Medium Medium Medium Medium	cpp cpp cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP Heap inspection
Code Code Code Code Code Code Code	Medium High Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP Heap inspection Catching overly broad exceptions
Code Code Code Code Code Code Code Code	Medium High Medium Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP Heap inspection Catching overly broad exceptions Switch statement race condition
Code Code Code Code Code Code Code Code	Medium High Medium Medium Medium Medium Medium Medium Medium Medium	cpp cpp cpp cpp cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP Heap inspection Catching overly broad exceptions Switch statement race condition Improper pointer scaling
Code Code Code Code Code Code Code Code	Medium High Medium	cpp cpp cpp cpp cpp cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP Heap inspection Catching overly broad exceptions Switch statement race condition Improper pointer scaling Insufficient exponent for cryptographic key Buffer overflow dynamically assigned in wrong
Code Code Code Code Code Code Code Code	Medium High Medium Medium Medium Medium Medium Medium Medium Medium High	cpp cpp cpp cpp cpp cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP Heap inspection Catching overly broad exceptions Switch statement race condition Improper pointer scaling Insufficient exponent for cryptographic key Buffer overflow dynamically assigned in wrong condition
Code Code Code Code Code Code Code Code	Medium High Medium Medium Medium Medium Medium Medium Medium High High	cpp cpp cpp cpp cpp cpp cpp cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP Heap inspection Catching overly broad exceptions Switch statement race condition Improper pointer scaling Insufficient exponent for cryptographic key Buffer overflow dynamically assigned in wrong condition Dynamically Assigned Buffer Underflow Dynamically Assigned Buffer Underflow Caused by
Code Code Code Code Code Code Code Code	Medium High Medium Medium Medium Medium Medium Medium Medium High High High	cpp	Improper encryption Improper random number generation Leftover debug code Multiple signal assignments to same handler Use of RSA Algorithm without OAEP Heap inspection Catching overly broad exceptions Switch statement race condition Improper pointer scaling Insufficient exponent for cryptographic key Buffer overflow dynamically assigned in wrong condition Dynamically Assigned Buffer Underflow Dynamically Assigned Buffer Underflow Caused by Improper Condition



Code	Low	срр	Storage of External Data in Private Collection
Code	Medium	срр	Invalid umask Argument
Code	Low	срр	Storage of External Data in Private Field
Code	Low	срр	Critical Public Variable
Code	Medium	срр	Reallocation of aligned memory
Code	High	срр	Command injection of call on system function
Code	High	срр	Missing null termination character
Code	High	срр	Misuse of unbounded input
Code	High	срр	Buffer overflow by function
Code	High	срр	Buffer overflow by function in wrong condition
Code	High	срр	Field buffer overflow by function
Code	High	срр	Field buffer overflow by function in wrong condition
Code	High	срр	Buffer overflow dynamically assigned by function
Code	High	срр	Buffer overflow dynamically assigned by function in wrong condition
Code	High	срр	Field Buffer Underflow from Function
Code	High	срр	Field Buffer Underflow from Function Caused by Improper Condition
Code	Medium	срр	Missing changing working directory
Code	High	срр	Buffer Underflow from Function
Code	High	срр	Buffer Underflow from Function Caused by Improper Condition
Code	High	срр	Dynamically Assigned Buffer Underflow from Function
Code	High	срр	Dynamically Assigned Buffer Underflow from Function Caused by Improper Condition
Code	Medium	срр	Reliance on DNS lookups in security decisions
Code	Medium	срр	Use of getlogin in multi-threaded program
Code	High	срр	Hard coded password
Code	High	срр	Hard coded user name
Code	Medium	срр	Weak cryptographic algorithm
Code	Medium	срр	Insecure privilege control
Code	Medium	срр	Insecure privilege reset
Code	High	срр	Insufficient cryptographic key size
	111911		
Code	Medium	cpp	Inappropriate RSA Padding
Code Code		срр	Inappropriate RSA Padding Hard coded salt
	Medium		



Code	Medium	срр	Multiple bindings to same port
Code	Critical	срр	Incorrect permission assignment for critical resource
Code	High	срр	SQL Injection
Code	High	срр	Path Traversal
Code	High	срр	Command injection
Code	High	срр	LDAP Injection
Code	High	срр	Resource injection
Code	Critical	срр	External Control of System or Configuration Setting
Code	High	срр	Insecure direct object reference
Code	High	срр	Password in comment
Code	High	срр	Improper authorization
Code	Medium	срр	Cleartext storage of password
Code	High	срр	Hardcoded cryptographic key
Code	Medium	срр	Use of Tainted Value
Code	Medium	срр	Empty catch block
Code	High	срр	Unrestricted File Upload
Code	Medium	срр	Redirection to untrusted site
Code	Critical	срр	XQuery Injection
		-1-1-	
Code	High	срр	XPath Injection
Code	High	срр	XPath Injection
Code Code	High High	срр	XPath Injection Mismatched resource release method
Code Code Code	High High Medium	срр срр	XPath Injection Mismatched resource release method Persistent cookie
Code Code Code	High High Medium High	cpp cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity
Code Code Code Code Code	High High Medium High Medium	cpp cpp cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate
Code Code Code Code Code Code	High High Medium High Medium High	cpp cpp cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address
Code Code Code Code Code Code Code	High High Medium High Medium High High	cpp cpp cpp cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control
Code Code Code Code Code Code Code Code	High High Medium High Medium High High Low	cpp cpp cpp cpp cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control Missing authentication
Code Code Code Code Code Code Code Code	High High Medium High Medium High Low High	cpp cpp cpp cpp cpp cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control Missing authentication Missing password recovery control Transmission of Key Security Information and Vehicle
Code Code Code Code Code Code Code Code	High High Medium High Medium High Low High High	cpp cpp cpp cpp cpp cpp cpp cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control Missing authentication Missing password recovery control Transmission of Key Security Information and Vehicle Information in Plain Text
Code Code Code Code Code Code Code Code	High High Medium High Medium High Low High High High	cpp cpp cpp cpp cpp cpp cpp cpp cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control Missing authentication Missing password recovery control Transmission of Key Security Information and Vehicle Information in Plain Text Use of Low-security Encryption Algorithm
Code Code Code Code Code Code Code Code	High High Medium High Medium High Low High High High High	cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control Missing authentication Missing password recovery control Transmission of Key Security Information and Vehicle Information in Plain Text Use of Low-security Encryption Algorithm Missing Message ID when Generating MAC
Code Code Code Code Code Code Code Code	High High Medium High Medium High High Low High High High Low Low	cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control Missing authentication Missing password recovery control Transmission of Key Security Information and Vehicle Information in Plain Text Use of Low-security Encryption Algorithm Missing Message ID when Generating MAC Grammatically Ambiguous Declaration
Code Code Code Code Code Code Code Code	High High Medium High Medium High High Low High High Low Low Low	cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control Missing authentication Missing password recovery control Transmission of Key Security Information and Vehicle Information in Plain Text Use of Low-security Encryption Algorithm Missing Message ID when Generating MAC Grammatically Ambiguous Declaration Missing Exception Safety
Code Code Code Code Code Code Code Code	High High Medium High Medium High High Low High High Low Low Low Medium	cpp	XPath Injection Mismatched resource release method Persistent cookie Improper Reference of XML Entity Weak Server Certificate Code Injection of Return Address Missing login control Missing authentication Missing password recovery control Transmission of Key Security Information and Vehicle Information in Plain Text Use of Low-security Encryption Algorithm Missing Message ID when Generating MAC Grammatically Ambiguous Declaration Missing Exception Safety Missing Exception Handling



Code	Medium	срр	Unhandled Exception from Statically Scoped Object Declaration
Code	Critical	срр	Pointer-to-member Operator for Non-existent Member Access
Code	Medium	срр	Casting of Out-of-range Enum Value
Code	High	срр	Buffer overflow
Code	High	срр	Buffer overflow in wrong condition
Code	High	срр	Field buffer overflow in wrong condition
Code	High	срр	Field buffer overflow
Code	High	срр	Buffer overflow in range-bound copy
Code	Medium	срр	Cross-site scripting
Code	High	срр	Weak password requirements
Code	High	срр	Use of Hash without Salt
Code	High	срр	Missing limit of login attempts
Code	Medium	срр	TOCTOU race condition
Code	Medium	срр	Missing check of return value
Code	High	срр	Download of code without integrity check
Code	High	срр	Reliance on untrusted inputs in security decisions
Code	High	срр	Field Buffer Underflow Caused by Improper Condition
Code	High	срр	Field Buffer Underflow
Code	High	срр	Buffer Underflow
Code	Trivial	срр	Improper sequential memory allocation
Code	Trivial	срр	Using multithreading without synchronization in the Singleton pattern
Code	High	срр	Buffer Underflow Caused by Improper Condition
Code	High	срр	Format string injection
Code	High	срр	Exposure of system information
Code	High	CS	Hardcoded user name and password
Code	Medium	CS	Non-ASCII character used in file name and path
Code	High	CS	Integer Overflow
Code	High	CS	Missing XML validation
Code	High	CS	Use of Hash without Salt
Code	High	CS	Public data assigned to private array
Code	High	CS	Private collection returned by public method
Code	Medium	CS	Name-based Type Check
Code	High	CS	Improper authorization



Code	High	CS	Missing login control
Code	High	CS	Missing authentication for critical function
Code	High	CS	Password in comment
Code	High	CS	XSLT Injection
Code	High	CS	Data Leak between Sessions
Code	High	CS	Hardcoded cryptographic key
Code	High	CS	Download of code without integrity check
Code	Medium	CS	TOCTOU race condition
Code	High	CS	Incorrect permission assignment for critical resource
Code	Medium	CS	Weak Security Checks on Serialization Implementation
Code	High	CS	Blank Password
Code	High	CS	Hardcoded HMAC Private Key
Code	Medium	CS	Hardcoded Initialization Vector
Code	High	CS	Empty HMAC Private Key
Code	High	CS	Key Derivation Function with Blank Password
Code	High	CS	Key Derivation Function with Hardcoded Password
Code	Critical	CS	Use of Unsafe DLL
Code	Medium	CS	Missing header file
Code	High	CS	Disabling of EnableViewStateMac
Code Code	High Medium	cs cs	Disabling of EnableViewStateMac Use of Predictable Salt
Code	Medium	CS	Use of Predictable Salt
Code Code	Medium High	CS CS	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count
Code Code Code	Medium High Medium	cs cs cs	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding
Code Code Code	Medium High Medium High	cs cs cs	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding
Code Code Code Code Code	Medium High Medium High High	CS CS CS CS CS	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie
Code Code Code Code Code Code	Medium High Medium High High High	CS CS CS CS CS CS	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain
Code Code Code Code Code Code Code	Medium High Medium High High High High	CS CS CS CS CS CS CS	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain Use of Cookie with Overly Broad Path
Code Code Code Code Code Code Code Code	Medium High Medium High High High High High	CS CS CS CS CS CS CS CS CS	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain Use of Cookie with Overly Broad Path Use of Cryptographic Algorithm in ECB Mode
Code Code Code Code Code Code Code Code	Medium High Medium High High High High High High	CS	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain Use of Cookie with Overly Broad Path Use of Cryptographic Algorithm in ECB Mode Short Signature Key
Code Code Code Code Code Code Code Code	Medium High Medium High High High High High High High	CS	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain Use of Cookie with Overly Broad Path Use of Cryptographic Algorithm in ECB Mode Short Signature Key Sensitive Information Exposal in UI Loading
Code Code Code Code Code Code Code Code	Medium High Medium High High High High High High High High	CS	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain Use of Cookie with Overly Broad Path Use of Cryptographic Algorithm in ECB Mode Short Signature Key Sensitive Information Exposal in UI Loading Hardcoded Private Key in Symmetric Key Algorithm
Code Code Code Code Code Code Code Code	Medium High Medium High High High High High High High High	CS C	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain Use of Cookie with Overly Broad Path Use of Cryptographic Algorithm in ECB Mode Short Signature Key Sensitive Information Exposal in UI Loading Hardcoded Private Key in Symmetric Key Algorithm Hardcoded Password
Code Code Code Code Code Code Code Code	Medium High Medium High High High High High High High High	CS C	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain Use of Cookie with Overly Broad Path Use of Cryptographic Algorithm in ECB Mode Short Signature Key Sensitive Information Exposal in UI Loading Hardcoded Private Key in Symmetric Key Algorithm Hardcoded Password Comparison with Hardcoded Password
Code Code Code Code Code Code Code Code	Medium High Medium High High High High High High High High	CS C	Use of Predictable Salt Key Derivation Function with Insecure Iteration Count Inappropriate RSA Padding Use of Anonymous LDAP Binding Non-HttpOnly cookie Use of cookie with overly broad domain Use of Cookie with Overly Broad Path Use of Cryptographic Algorithm in ECB Mode Short Signature Key Sensitive Information Exposal in UI Loading Hardcoded Private Key in Symmetric Key Algorithm Hardcoded Password Comparison with Hardcoded Password Exception Information Exposure



CodeMediumcsWeak Server CertificateCodeHighcsDeserialization of Untrusted DataCodeHighcsCross-site Request ForgeryCodeMediumcsEmpty catch blockCodeMediumcsEmpty catch blockCodeCriticalcsUse of HtmlInputHiddenCodeMediumcsExposure of system informationCodeMediumcsCatching overly broad exceptionsCodeLowcsInsecure loggingCodeHighcsWeak hashCodeHighcsWeak cryptographic algorithmCodeHighcsInsufficient cryptographic key sizeCodeHighcsImproper random number generationCodeHighdartHardcoded API keysCodeHighdartHardcoded CredentialCodeHighdartHardcoded email addressesCodeHighdartWeak HashCodeHighdartWeak HashCodeHighdartVulnerable Random NumberCodeHighdartInsufficient RSA Encryption Key LengthCodeHighdartAPI keys in commentsCodeHighdartCredentials in commentsCodeHighdartEmail addresses in commentsCodeHighdartIP addresses in commentsCodeHighgoCross-site Script (HTML)CodeHighgoC	Code	High	CS	Inappropriate Signature
Code High cs Cross-site Request Forgery Code Medium cs Catching NullPointerException Code Medium cs Empty catch block Code Critical cs Use of HtmlInputHidden Code Medium cs Exposure of system information Code Medium cs Catching overly broad exceptions Code Low cs Insecure logging Code High cs Weak hash Code High cs Insufficient cryptographic algorithm Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Credential Code High dart Coded IP addresses Code High dart Credential Code High dart Credential Code High dart Death Respondential Code High dart Credential Code High dart Death Respondential Code High dart Death Respondential Code High dart Credential Respondential Code High dart Death Respondential Code High dart Credential Respondential Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (URL)	Code	Medium	CS	Weak Server Certificate
Code Medium cs Catching NullPointerException Code Medium cs Empty catch block Code Critical cs Use of HtmlInputHidden Code Medium cs Exposure of system information Code Medium cs Catching overly broad exceptions Code Hold cs Insecure logging Code High cs Weak hash Code High cs Weak cryptographic algorithm Code High cs Insufficient cryptographic key size Code High cs Improper random number generation Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded Pladdresses Code High dart Weak Hash Code High dart Weak Hash Code High dart Vulnerable Random Number Code High	Code	High	CS	Deserialization of Untrusted Data
Code Medium cs Empty catch block Code Critical cs Use of HtmlInputHidden Code Medium cs Exposure of system information Code Medium cs Catching overly broad exceptions Code Low cs Insecure logging Code High cs Weak hash Code High cs Weak cryptographic algorithm Code High cs Insufficient cryptographic key size Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Weak cryptographic algorithm Code High dart Credential Shart SA Encryption Key Length Code High dart Credentials in comments Code High dart Pladdresses in comments Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart Faddresses in comments Code High dart Faddresses in comments Code High dart Faddresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (tetc.) Code High go Cross-site Script (URL)	Code	High	CS	Cross-site Request Forgery
Code Medium cs Exposure of system information Code Medium cs Catching overly broad exceptions Code Low cs Insecure logging Code High cs Weak cryptographic algorithm Code High cs Insufficient cryptographic key size Code High cs Improper random number generation Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Weak Hash Code High dart Weak Cryptographic algorithm Code High dart Weak Cryptographic Rey size Code High dart Hardcoded Predential Code High dart Hardcoded IP addresses Code High dart Weak Rash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart Email addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (URL)	Code	Medium	CS	Catching NullPointerException
Code Medium cs Exposure of system information Code Medium cs Catching overly broad exceptions Code Low cs Insecure logging Code High cs Weak hash Code High cs Insufficient cryptographic algorithm Code High cs Improper random number generation Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Insufficient RSA Encryption Key Length Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart Paddresses in comments Code High dart Paddresses in comments Code High go Cross-site Script (JS) Code High go Cross-site Script (tetc.) Code High go Cross-site Script (URL)	Code	Medium	CS	Empty catch block
Code Medium cs Catching overly broad exceptions Code Low cs Insecure logging Code High cs Weak hash Code High cs Insufficient cryptographic lagorithm Code High cs Improper random number generation Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Toulerable Random Number Code High dart Credentials Code High dart Credentials Code High dart Toulerable Random Number Code High dart Credentials in comments Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart Email addresses in comments Code High go Cross-site Script (JS) Code High go Cross-site Script (template) Code High go Cross-site Script (tetc.) Code High go Cross-site Script (URL)	Code	Critical	CS	Use of HtmlInputHidden
Code Low cs Insecure logging Code High cs Weak hash Code High cs Weak cryptographic algorithm Code High cs Insufficient cryptographic key size Code High cs Improper random number generation Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded email addresses Code High dart Weak Hash Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart Faddresses in comments Code High dart Faddresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (tetc.) Code High go Cross-site Script (URL)	Code	Medium	CS	Exposure of system information
Code High cs Weak hash Code High cs Weak cryptographic algorithm Code High cs Insufficient cryptographic key size Code High cs Improper random number generation Code High dart Hardcoded API keys Code High dart Hard-coded email addresses Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart Credentials in comments Code High dart Email addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (URL)	Code	Medium	CS	Catching overly broad exceptions
Code High cs Insufficient cryptographic algorithm Code High cs Insufficient cryptographic key size Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Weak cryptographic algorithm Code High dart Todded IP addresses Code High dart Weak Cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart Erail addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (URL)	Code	Low	CS	Insecure logging
Code High cs Insufficient cryptographic key size Code High cs Improper random number generation Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart Erail addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	CS	Weak hash
Code High cs Improper random number generation Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hard-coded email addresses Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart Email addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	CS	Weak cryptographic algorithm
Code High dart Hardcoded API keys Code High dart Hardcoded Credential Code High dart Hard-coded email addresses Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart API keys in comments Code High dart Credentials in comments Code High dart Email addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	CS	Insufficient cryptographic key size
Code High dart Hardcoded Credential Code High dart Hard-coded email addresses Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart API keys in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	CS	Improper random number generation
Code High dart Hard-coded email addresses Code High dart Hardcoded IP addresses Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart API keys in comments Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	Hardcoded API keys
Code High dart Weak Hash Code High dart Weak Hash Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart API keys in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	Hardcoded Credential
Code High dart Weak Hash Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	Hard-coded email addresses
Code High dart Vulnerable Random Number Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart API keys in comments Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	Hardcoded IP addresses
Code High dart Weak cryptographic algorithm Code High dart Insufficient RSA Encryption Key Length Code High dart API keys in comments Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	Weak Hash
Code High dart Insufficient RSA Encryption Key Length Code High dart API keys in comments Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	Vulnerable Random Number
Code High dart API keys in comments Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	Weak cryptographic algorithm
Code High dart Credentials in comments Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (JS) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	Insufficient RSA Encryption Key Length
Code High dart Email addresses in comments Code High dart IP addresses in comments Code High go Cross-site Script (HTML) Code High go Cross-site Script (JS) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	API keys in comments
CodeHighdartIP addresses in commentsCodeHighgoCross-site Script (HTML)CodeHighgoCross-site Script (JS)CodeHighgoCross-site Script (template)CodeHighgoCross-site Script (etc.)CodeHighgoCross-site Script (URL)	Code	High	dart	Credentials in comments
CodeHighgoCross-site Script (HTML)CodeHighgoCross-site Script (JS)CodeHighgoCross-site Script (template)CodeHighgoCross-site Script (etc.)CodeHighgoCross-site Script (URL)	Code	High	dart	Email addresses in comments
Code High go Cross-site Script (JS) Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	dart	IP addresses in comments
Code High go Cross-site Script (template) Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	go	Cross-site Script (HTML)
Code High go Cross-site Script (etc.) Code High go Cross-site Script (URL)	Code	High	go	Cross-site Script (JS)
Code High go Cross-site Script (URL)	Code	High	go	Cross-site Script (template)
	Code	High	go	Cross-site Script (etc.)
	Code	High	go	Cross-site Script (URL)
Code High go SQL Injection	Code	High	go	SQL Injection
Code High go Weak hash	Code	High	go	Weak hash
Code High go Vulnerable Random Number	Code	High	go	Vulnerable Random Number
Code Medium go Error Message Information Exposed	Code	Medium	go	Error Message Information Exposed
Code Medium go Improper Cookie Flag Setting	Code	Medium	go	Improper Cookie Flag Setting



Code	Low	go	Vulnerable Package
Code	High	go	Hard coded password
Code	High	go	Improper Network Settings
Code	High	go	Improper SSH Key Settings
Code	High	go	Server-side Request Forgery
Code	High	go	Integer Conversion Overflow
Code	Medium	go	Slowloris Attack
Code	High	go	Improper File Privilege Setting
Code	High	go	Path Traversal
Code	Medium	go	Improper TLS Settings
Code	High	go	Insufficient RSA Encryption Key Length
Code	High	html	Exposure of password
Code	High	html	Inclusion of Script from External Site
Code	Medium	html	Password Field with Autocomplete Enabled
Code	Medium	java	Unlimited appending to collection
Code	Medium	java	Deletion of item of collection in loop
Code	Critical	java	Non-static serializable inner class
Code	High	java	Improper implementation of Externalizable interface
Code	Critical	java	Untrusted input in AccessController.doPrivileged
Code	Medium	java	Cycle in class initialization
Code	Medium	java	Cycle in class initialization
Code	Medium	java	Non-final loop index
Code	Medium	java	Expression in assert statement
Code	Medium	java	Lost of precision in casting
Code	Medium	java	Use of raw type collection
Code	High	java	Unsafe mutable class
Code	High	java	Inheritance of sensitive class
Code	High	java	Log injection
Code	Medium	java	Insecure File Extraction through ZipInputStream
Code	Medium	java	Non-ASCII character used in file name and path
Code	Medium	java	Untrusted Regex
Code	Critical	java	Non-character used in input validation
Code	Medium	java	Missing NaN Check for Real Number
Code	High	java	Comparing with string representation of floating point values
Code	Medium	java	Dangerous downcasting



Code	Medium	java	Direct use of mutable inputs and internal components
Code	Medium	java	Blocked external process on IO buffer
Code	Medium	java	Inadequate integer value of argument of write
Code	Medium	java	Use of Untrusted File Link
Code	Medium	java	Incorrect Serialization Order
Code	Medium	java	Memory and resource leakages during serialization
Code	Critical	java	Use of default automatic signature verification
Code	Medium	java	Improper use of return value from readInt
Code	Critical	java	Throwing exception in constructor
Code	Medium	java	Improper comparison between key objects
Code	Medium	java	Improper URL comparison
Code	Medium	java	Improper Restoration on Failure
Code	Medium	java	Use of same thread pool
Code	Medium	java	Not reinitialized ThreadLocal field
Code	High	java	Partially initialized object
Code	Critical	java	Improper use of return value from reading
Code	Critical	java	Incomplete Static Initializer Block
Code	High	java	Use of system environment variables
Code	Critical	java	Use of ReflectPermission
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Code	High	java	Comparing class name
Code	High High	java	Use of parameter in assert statement
Code	High	java	Use of parameter in assert statement
Code Code	High High	java java	Use of parameter in assert statement Critical public method without final modifier
Code Code Code	High High High	java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method
Code Code Code	High High High Critical	java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method
Code Code Code Code Code	High High Critical Medium	java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method
Code Code Code Code Code Code	High High Critical Medium Medium	java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block
Code Code Code Code Code Code Code	High High Critical Medium Medium High	java java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block Non-volatile shared field between threads
Code Code Code Code Code Code Code Code	High High Critical Medium Medium High Medium	java java java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block Non-volatile shared field between threads Non-thread-safe method chaining
Code Code Code Code Code Code Code Code	High High Critical Medium Medium High Medium Medium	java java java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block Non-volatile shared field between threads Non-thread-safe method chaining Use of non-atomic data type
Code Code Code Code Code Code Code Code	High High Critical Medium Medium High Medium High Medium High	java java java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block Non-volatile shared field between threads Non-thread-safe method chaining Use of non-atomic data type Use of reusable object as lock instance
Code Code Code Code Code Code Code Code	High High High Critical Medium Medium High Medium High Hedium High High	java java java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block Non-volatile shared field between threads Non-thread-safe method chaining Use of non-atomic data type Use of reusable object as lock instance Use of class object in synchronization
Code Code Code Code Code Code Code Code	High High High Critical Medium Medium High Medium High High High High	java java java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block Non-volatile shared field between threads Non-thread-safe method chaining Use of non-atomic data type Use of reusable object as lock instance Use of class object in synchronization Use of high-level concurrent object as lock instance
Code Code Code Code Code Code Code Code	High High Critical Medium Medium High Medium High High High High High	java java java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block Non-volatile shared field between threads Non-thread-safe method chaining Use of non-atomic data type Use of reusable object as lock instance Use of class object in synchronization Use of high-level concurrent object as lock instance Initialization from another collection
Code Code Code Code Code Code Code Code	High High Critical Medium Medium High Medium High High High High High Medium	java java java java java java java java	Use of parameter in assert statement Critical public method without final modifier Increased accessibility of method Overridable method call in clone method Overriding public static method Unhandled exception in finally block Non-volatile shared field between threads Non-thread-safe method chaining Use of non-atomic data type Use of reusable object as lock instance Use of class object in synchronization Use of high-level concurrent object as lock instance Initialization from another collection Non-synchronized static field



Code	Medium	java	Infinitely waiting thread
Code	Medium	java	Abrupt thread termination
Code	Medium	java	Unused thread pool
Code	Medium	java	Uninterruptible thread in synchronized block
Code	Medium	java	Improper creation of thread pool
Code	Medium	java	Thread execution in constructor
Code	Medium	java	Publishing before initialization
Code	Medium	java	Creation of thread in static initialization block
Code	High	java	Misuse of delete for File instance
Code	High	java	Misuse of deleteOnExit
Code	Critical	java	Exposure of buffer
Code	Medium	java	Missing Size Argument for read() Method
Code	Medium	java	Use of big endian only methods
Code	High	java	Exposure of field of serialized class
Code	High	java	Improper implementation of Serializable interface
Code	Medium	java	Overridable method call in readObject method
Code	Critical	java	Missing privilege check
Code	Critical	java	Use of reflection
Code	Critical	java	Missing call of super class method in getPermissions method
Code	Critical Critical	java java	
			method
Code	Critical	java	method Importing untrusted class
Code Code	Critical Medium	java java	method Importing untrusted class Missing infinity check of float input
Code Code Code	Critical Medium Medium	java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request
Code Code Code	Critical Medium Medium Critical	java java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary
Code Code Code Code Code	Critical Medium Medium Critical High	java java java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value
Code Code Code Code Code Code	Critical Medium Medium Critical High	java java java java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives
Code Code Code Code Code Code	Critical Medium Medium Critical High High Medium	java java java java java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives Missing Visibility of Shared immutable Object
Code Code Code Code Code Code Code Code	Critical Medium Medium Critical High High Medium High	java java java java java java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives Missing Visibility of Shared immutable Object Use of Socket Class
Code Code Code Code Code Code Code Code	Critical Medium Medium Critical High High Medium High High	java java java java java java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives Missing Visibility of Shared immutable Object Use of Socket Class Dynamic code manipulation
Code Code Code Code Code Code Code Code	Critical Medium Medium Critical High High Medium High High High	java java java java java java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives Missing Visibility of Shared immutable Object Use of Socket Class Dynamic code manipulation SpEL Expression Unchecked
Code Code Code Code Code Code Code Code	Critical Medium Medium Critical High High High High High High High	java java java java java java java java	method Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives Missing Visibility of Shared immutable Object Use of Socket Class Dynamic code manipulation SpEL Expression Unchecked OGNL Expression Unchecked
Code Code Code Code Code Code Code Code	Critical Medium Medium Critical High High Medium High High High High	java java java java java java java java	Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives Missing Visibility of Shared immutable Object Use of Socket Class Dynamic code manipulation SpEL Expression Unchecked OGNL Expression Unchecked Weak XML Transformer
Code Code Code Code Code Code Code Code	Critical Medium Medium Critical High High Medium High High High High High High	java java java java java java java java	Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives Missing Visibility of Shared immutable Object Use of Socket Class Dynamic code manipulation SpEL Expression Unchecked OGNL Expression Unchecked Weak XML Transformer Weak Server Certificate
Code Code Code Code Code Code Code Code	Critical Medium Medium Critical High High High High High High High High	java java java java java java java java	Importing untrusted class Missing infinity check of float input Cross site scripting via attributes in request Violation of Trust Boundary Generating predictable random value Comparison of Boxed Primitives Missing Visibility of Shared immutable Object Use of Socket Class Dynamic code manipulation SpEL Expression Unchecked OGNL Expression Unchecked Weak XML Transformer Weak Server Certificate Server-side Request Forgery



Code	Medium	java	Insecure Hostname Unchecked in Android
Code	Medium	java	Unnormalized String before Validation
Code	Medium	java	XML Insertion
Code	Medium	java	Simultaneous Bitwise and Arithmetic Operations
Code	Low	java	Use of Shift Operator
Code	High	java	Unvalidated Method Argument
Code	Medium	java	Incomplete validate Method Definition
Code	Low	java	Inheriting Validation Class
Code	Medium	java	Use of sync Primitives
Code	Low	java	Multiple Buffer Wrappers on Single Byte or Character Stream
Code	Low	java	Reuse of Public Identifier in Java Standard Library
Code	High	java	Information Exposure via Java Runtime Error Message
Code	Medium	java	Sensitive information in log
Code	Medium	java	Servlet Action after Committed Response
Code	Medium	java	Logging sensitive information in Android
Code	Critical	java	Missing Canonicalization before File Exchange through Content Provider
Code	Medium	java	Missing Normalization before Validation
Code	Medium	java	Failure to Check Permission on Geolocation API
Code	Medium	java	XML External Entity Attack
Code	Medium	java	Use of mutable Field within equals
Code	Medium	java	Non-serializable Object Stored in Session
Code	High	java	Unwrapped Native Method
Code	Critical	java	Security Check for Untrusted Sources
Code	High	java	Deserialization of Untrusted Data
Code	Trivial	java	Sensitive Information Included in Comments
Code	High	java	Direct Use of Unsafe JNI
Code	High	java	Hardcoded user name and password
Code	High	java	Insufficient session expiration
Code	High	java	Insecure direct object reference
Code	High	java	Dynamic Class Loading
Code	High	java	Weak cryptographic algorithm
Code	High	java	SQL Injection
Code	Low	java	Private collection returned by public method
Code	Medium	java	Setting up missing J2EE error pages



Code	Trivial	java	Validating disabled Struts
Code	Trivial	java	Validation and form field mismatches
Code	High	java	Validating Unsafe Reflection Input
Code	Medium	java	Asynchronous access to shared data
Code	Trivial	java	Using Direct Class Loader in EJB Environment
Code	Trivial	java	finalize() declared as public
Code	Trivial	java	Storing objects that cannot be serialized
Code	Trivial	java	Using public fields in ActionSupport
Code	Trivial	java	Incorrect autoboxing and unboxing within loops
Code	Trivial	java	Invalid integer bit shift operations
Code	Medium	java	Using non-thread-safe singletons
Code	High	java	Weak password requirements
Code	High	java	Data Leak between Sessions
Code	Medium	java	Leftover debug code
Code	High	java	Nested Class Containing Sensitive Data
Code	High	java	Critical public variable without final modifier
Code	High	java	SQL Injection via JDO API
Code	High	java	SQL Injection via J2EE Persistence API
Code	High	java	SQL Injection via Hibernate
Code	High	java	Command injection
Code	High	java	LDAP Injection
_		_	D
Code	High	java	Resource injection
Code Code	High High	java java	Path Traversal
	-		•
Code	High	java	Path Traversal
Code Code	High Medium	java java	Path Traversal HTTP Response Splitting
Code Code Code	High Medium Critical	java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting
Code Code Code	High Medium Critical Medium	java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site
Code Code Code Code Code	High Medium Critical Medium Critical	java java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site XQuery Injection
Code Code Code Code Code Code	High Medium Critical Medium Critical High	java java java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site XQuery Injection XPath Injection
Code Code Code Code Code Code Code	High Medium Critical Medium Critical High Medium	java java java java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site XQuery Injection XPath Injection Persistent cookie
Code Code Code Code Code Code Code Code	High Medium Critical Medium Critical High Medium Medium	java java java java java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site XQuery Injection XPath Injection Persistent cookie Cross-site scripting
Code Code Code Code Code Code Code Code	High Medium Critical Medium Critical High Medium Medium Medium	java java java java java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site XQuery Injection XPath Injection Persistent cookie Cross-site scripting DOM based cross site scripting
Code Code Code Code Code Code Code Code	High Medium Critical Medium Critical High Medium Medium Medium Medium	java java java java java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site XQuery Injection XPath Injection Persistent cookie Cross-site scripting DOM based cross site scripting Direct dynamic code evaluation
Code Code Code Code Code Code Code Code	High Medium Critical Medium Critical High Medium Medium Medium Medium High	java java java java java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site XQuery Injection XPath Injection Persistent cookie Cross-site scripting DOM based cross site scripting Direct dynamic code evaluation Reliance on DNS lookups in security decisions
Code Code Code Code Code Code Code Code	High Medium Critical Medium Critical High Medium Medium Medium Medium High High	java java java java java java java java	Path Traversal HTTP Response Splitting External Control of System or Configuration Setting Redirection to untrusted site XQuery Injection XPath Injection Persistent cookie Cross-site scripting DOM based cross site scripting Direct dynamic code evaluation Reliance on DNS lookups in security decisions Cross site request forgery



Code	High	java	Hardcoded cryptographic key
Code	Medium	java	Inappropriate RSA Padding
Code	High	java	Hard coded salt
Code	High	java	Improper random number generation
Code	High	java	Exposure of password in address bar
Code	High	java	Multiple bindings to same port
Code	High	java	Insecure Cookie
Code	High	java	Incorrect permission assignment for critical resource
Code	High	java	Integer Overflow
Code	High	java	Missing authentication for critical function
Code	High	java	Improper authorization
Code	Medium	java	Storing Unencrypted Password
Code	High	java	Password in comment
Code	High	java	Use of Hash without Salt
Code	High	java	Download of code without integrity check
Code	Medium	java	TOCTOU race condition
Code	High	java	Public data assigned to private array
Code	High	java	Reliance on untrusted inputs in security decisions
Code	Medium	java	Exposure of system information
Code	High	java	Format string injection
Code	Medium	java	Cross site scripting via error messages
Code	Medium	java	Cleartext transmission of sensitive information
Code	High	java	Password in servlet comment
Code	High	java	Unrestricted File Upload
Code	High	java	Missing password recovery control
Code	High	java	Missing login control
Code	Low	java	Exposure of administration page
Code	High	java	Information Leak through Privileged Block
Code	Low	java	Exposure of Dangerous Method
Code	Low	java	Missing input validation
Code	Low	java	Replacing email address
Code	Low	java	Missing authentication
Code	Low	java	Insecure password recovery
Code	Medium	java	Information Leak through Android
Code	Critical	java	Untrusted Data in Privileged Block
Code	Medium	java	SSI Injection



Code	Medium	java	Infinite loop
Code	Medium	jsts	Cross-site scripting (ExpressJS)
Code	High	jsts	Command injection
Code	Medium	jsts	DOM based cross site scripting
Code	Low	jsts	Improper property value
Code	Medium	jsts	Remote code execution
Code	Medium	jsts	Information leak from local storage to session storage
Code	Medium	jsts	Information leak from session storage to local storage
Code	Medium	jsts	Cross document messaging
Code	High	jsts	SQL Injection
Code	High	jsts	Use of external data for file creation
Code	High	jsts	Predictable database name
Code	High	jsts	Hard coded password
Code	High	jsts	Empty password
Code	High	jsts	Broken access control on databases
Code	High	jsts	Command injection
Code	Medium	jsts	Direct dynamic code evaluation
Code	Medium	jsts	Assignment to innerHTML
Code	Medium	jsts	Redirection to untrusted site
Code	Critical	jsts	XHR Injection
Code	Medium	jsts	Use of localStorage
Code	Medium	jsts	Log injection
Code	Medium	jsts	Cross-site scripting
Code	High	jsts	Insecure MiUpdater
Code	Medium	jsts	Leftover debug code
Code	High	jsts	Transaction by GET
Code	Critical	jsts	Transaction Injection
Code	Medium	jsts	Transaction using cleartext
Code	High	jsts	Dataset of sensitive information
Code	Medium	jsts	Cleartext storage of sensitive information
Code	High	jsts	Registry Leak
Code	Medium	jsts	Redirection to untrusted site through dialog
Code	High	jsts	TOBESOFT Platform OS Command Injection
Code	Low	jsts	Too long string for quicktabstextfont attribute
Code	Medium	jsts	Broken access control on Azure
Code	Medium	jsts	HTTP Response Splitting



Code	Medium	jsts	Sensitive Information Exposal
Code	High	jsts	JSON injection
Code	Medium	jsts	Use of Forbidden Logger
Code	Medium	jsts	TOBESOFT Platform Log Manipulation
Code	High	jsts	TOBESOFT Platform Path Manipulation
Code	Medium	jsts	Exposure of system information
Code	High	jsts	Dynamic code manipulation
Code	High	jsts	Server-side Request Forgery
Code	High	jsts	Inappropriate Signature
Code	Medium	jsts	Weak Server Certificate
Code	High	jsts	Deserialization of Untrusted Data
Code	High	jsts	Cross-site Request Forgery
Code	Medium	jsts	Use of uncaughtException
Code	High	jsts	Regular expression Denial of Service
Code	High	jsts	Strict Mode
Code	High	jsts	SQL Injection (mysql)
Code	High	jsts	SQL Injection (PostgreSQL)
Code	High	jsts	SQL Injection (noSQL)
Code	Low	jsts	Improper Cookie Flag Setting
Code	Medium	jsts	HTTP Security Header Settings
Code	Medium	jsts	Improper HTTP Header
Code	High	jsts	Use of weak cryptographic algorithm
Code	Medium	jsts	Cross Site Script (dangerouslySetInnerHTML)
Code	High	jsts	Use of Vulnerable Function (findDomNode)
Code	Medium	jsts	URL Manipulation
Code	Medium	jsts	Script Injection
Code	I II a la		
	High	jsts	SQL Injection (ORM)
Code	Medium	jsts	SQL Injection (ORM) Cross-site Script (VanillaJS)
Code Code		•	
	Medium	jsts	Cross-site Script (VanillaJS)
Code	Medium High	jsts jsts	Cross-site Script (VanillaJS) Improper XML External Entity Reference
Code Code	Medium High Medium	jsts jsts jsts	Cross-site Script (VanillaJS) Improper XML External Entity Reference One-way Hash Function Used Without Salt
Code Code Code	Medium High Medium High	jsts jsts jsts jsts	Cross-site Script (VanillaJS) Improper XML External Entity Reference One-way Hash Function Used Without Salt Using Encryption Keys of Insufficient Size
Code Code Code	Medium High Medium High High	jsts jsts jsts jsts jsts	Cross-site Script (VanillaJS) Improper XML External Entity Reference One-way Hash Function Used Without Salt Using Encryption Keys of Insufficient Size Path Traversal
Code Code Code Code Code	Medium High Medium High High High	jsts jsts jsts jsts jsts jsts jsts	Cross-site Script (VanillaJS) Improper XML External Entity Reference One-way Hash Function Used Without Salt Using Encryption Keys of Insufficient Size Path Traversal Use of Insufficient Random Value



Code	High	jsts	Resource injection
Code	High	jsts	Code Injection
Code	High	kotlin	SQL Injection
Code	High	kotlin	Weak cryptographic algorithm
Code	High	kotlin	Path Traversal
Code	High	kotlin	Command injection
Code	High	kotlin	Unrestricted File Upload
Code	Medium	kotlin	Redirection to untrusted site
Code	High	kotlin	XPath Injection
Code	High	kotlin	LDAP Injection
Code	High	kotlin	Format string injection
Code	High	kotlin	Missing Authentication for Critical Function
Code	High	kotlin	Improper authorization
Code	High	kotlin	Incorrect permission assignment for critical resource
Code	Medium	kotlin	Sensitive Information Storage in Plaintext
Code	Medium	kotlin	Cleartext transmission of sensitive information
Code	High	kotlin	Hardcoded Password
Code	High	kotlin	Insufficient cryptographic key size
Code	High	kotlin	Improper random number generation
Code	High	kotlin	Hardcoded Encryption Key
Code	High	kotlin	Weak password requirements
Code	Medium	kotlin	Persistent cookie
Code	High	kotlin	Password in comment
Code	High	kotlin	Use of Hash without Salt
Code	High	kotlin	Missing login control
Code	Medium	kotlin	TOCTOU race condition
Code	Medium	kotlin	Infinite loop
Code	Medium	kotlin	Catching overly broad exceptions
Code	High	kotlin	Data Leak between Sessions
Code	Medium	kotlin	Leftover debug code
Code	Medium	kotlin	Exposure of system information
Code	High	kotlin	Private collection returned by public method
Code	High	kotlin	Public data assigned to private array
Code	High	kotlin	Reliance on DNS lookups in security decisions
Code	High	kotlin	Dynamic code manipulation
Code	High	kotlin	Weak XML Transformer



Code	High	kotlin	Server-side Request Forgery
Code	High	kotlin	Inappropriate Signature
Code	Medium	kotlin	Weak Server Certificate
Code	High	kotlin	Deserialization of Untrusted Data
Code	Medium	kotlin	Insecure Hostname Unchecked in Android
Code	High	lua	Hardcoded Credential
Code	High	lua	Hard-coded email addresses
Code	High	lua	Hardcoded IP addresses
Code	High	lua	Hardcoded API keys
Code	High	lua	Weak Hash
Code	High	lua	Weak random numbers
Code	High	lua	Insufficient RSA encryption key length
Code	High	lua	Credentials in comments
Code	High	lua	Email addresses in comments
Code	High	lua	IP addresses in comments
Code	High	lua	API keys in comments
Code	Medium	lua	Debug Code Not Removed
Code	High	lua	Weak cryptographic algorithm
Code	Medium	objc	Redirection to untrusted site
Code	Low	objc	Misuse of signal handler
Code	Medium	objc	Missing check of return value
Code	Medium	objc	TOCTOU race condition
Code	Low	objc	Password in comment
Code	High	objc	Buffer overflow in string copy
Code	Medium	objc	Cross-site scripting
Code	Medium	objc	Generation of Dangerous Temp File
Code	High	objc	Command injection
Code	Medium	objc	Empty catch block
Code	Medium	objc	Catching overly broad exceptions
Code	Medium	objc	Reliance on DNS lookups in security decisions
Code	High	objc	Sensitive Information Storage in Plaintext
Code	Critical	objc	XQuery Injection
Code	High	objc	XPath Injection
Code	High	objc	LDAP Injection
Code	High	objc	Reliance on untrusted cookies in security decisions
Code	Medium	objc	Cleartext transmission of sensitive information



Code	High	objc	Download of code without integrity check
Code	High	objc	Use of Cookie with Overly Broad Path
Code	High	objc	Use of cookie with overly broad domain
Code	High	objc	Storage of Sensitive Data in Persistent Cookie
Code	High	objc	Empty Salt
Code	Medium	objc	Use of Null Salt
Code	High	objc	Improper random number generation
Code	Low	objc	Exposure of system information
Code	Medium	objc	Leftover debug code
Code	High	objc	Missing login control
Code	High	objc	Weak password requirements
Code	High	objc	Missing authentication
Code	Medium	objc	HTTP Response Splitting
Code	High	objc	Integer Overflow
Code	High	objc	Improper Reference of XML Entity
Code	Medium	objc	Weak Server Certificate
Code	High	objc	Deserialization of Untrusted Data
Code	Medium	objc	Printing file to temporary or public directory
Code	Medium	objc	Weak SSL Certificate
Code	Medium	objc	Transfer by GET
Code	Medium	objc	Transmission via HTTP Protocol
Code	High	objc	Empty password
Code	High	objc	Hard coded password
Code	Medium	objc	Use of SMS API
Code	High	objc	Hardcoded cryptographic key
Code	High	objc	Weak hash
Code	High	objc	Insufficient cryptographic key size
Code	High	objc	Weak cryptographic algorithm
Code	High	objc	Format string injection
Code	Critical	objc	Log injection
Code	High	objc	Path Traversal
Code	High	objc	Resource injection
Code	High	objc	SQL Injection
Code	High	objc	Insecure Reflection
Code	Medium	php	Header manipulation
Code	High	php	Command injection



Code	High	php	Remote code execution
Code	Medium	php	Cookie set to base path
Code	High	php	Weak hash
Code	High	php	Unrestricted File Upload
Code	Medium	php	Redirection to untrusted site
Code	Critical	php	XQuery Injection
Code	High	php	XPath Injection
Code	High	php	LDAP Injection
Code	High	php	Cross site request forgery
Code	High	php	Reliance on untrusted inputs in security decisions
Code	High	php	Format string injection
Code	High	php	Missing authentication for critical function
Code	High	php	Improper authorization
Code	High	php	Weak cryptographic algorithm
Code	Medium	php	Cleartext storage of sensitive information
Code	Medium	php	Cleartext transmission of sensitive information
Code	High	php	Hard coded password
Code	High	php	Insufficient cryptographic key size
Code	High	php	Improper random number generation
Code	High	php	Hardcoded cryptographic key
Code	High	php	Weak password requirements
Code	High	php	Missing login control
Code	Medium	php	Error information leak
Code	Medium	php	Leftover debug code
Code	High	php	Reliance on DNS lookups in security decisions
Code	High	php	Password in comment
Code	Medium	php	HTTP Response Splitting
Code	Medium	php	Cookie of sensitive information
Code	High	php	Use of Hash without Salt
Code	High	php	Weak XML Transformer
Code	High	php	Server-side Request Forgery
Code	Medium	php	Weak Server Certificate
Code	High	php	Deserialization of Untrusted Data
Code	High	php	Overly Permissive CORS Policy
Code	High	php	Transfer by GET
Code	High	php	Enabled allowed_url_fopen option



Code	High	php	Enabled allowed_url_include option
Code	Medium	php	Disabled session.cookie_secure option
Code	High	php	Disabled cgi.force_redirect option
Code	Medium	php	Disabled safe_mode option
Code	High	php	Enabled file_uploads option
Code	High	php	Enabled magic_quotes_gpc option
Code	High	php	Enabled magic_quotes_runtime option
Code	High	php	Enabled magic_quotes_sybase option
Code	Medium	php	Enabled register_globals option
Code	Medium	php	Enabled display_errors option
Code	Medium	php	Exposure of system information
Code	High	php	Missing open_basedir Setting
Code	Medium	php	Missing safe_mode_exec_dir Setting
Code	Medium	php	Cookie setting with base domain
Code	Medium	php	Cookie setting with base path
Code	Medium	php	Persistent cookie
Code	Medium	php	Disabled session.cookie_httponly option
Code	High	php	Enabled session.use_trans_sid option
Code	High	php	Excessive session timeout on CakePHP
Code	Medium	php	Information leak on CakePHP
Code	Medium	php	Cleartext transmission of cookies
Code	Medium	php	Transmission via HTTP Protocol
Code	Medium	php	Cross-site scripting
Code	High	php	Resource permission manipulation
Code	High	php	SQL Injection
Code	High	php	Path Traversal
Code	Critical	php	External variable modification
Code	Medium	php	Log injection
Code	High	properties	Password Hardcoded in Configuration File
Code	High	properties	Blank Password
Code	High	python	SQL Injection
Code	High	python	Code Injection
Code	High	python	Path Traversal and Resource Injection
Code	Medium	python	Cross-site Script (HTML)
Code	High	python	Command injection
	riigii	p) (11011	Communication in Jection.
Code	High	python	Malicious File Type Upload



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Code	Medium	python	URL Automatic Redirection to Untrusted Site
Code	High	python	Improper XML External Entity Reference
Code	High	python	XML Injection
Code	High	python	LDAP Injection
Code	High	python	Cross-site Request Forgery
Code	High	python	Server-side Request Forgery
Code	Medium	python	Generation of Dangerous Temp File
Code	High	python	Invalid umask Argument
Code	Medium	python	Direct dynamic code evaluation
Code	Medium	python	Log Manipulation
Code	High	python	SMTP Command Injection
Code	Medium	python	Memcached Injection
Code	High	python	Path Traversal
Code	Critical	python	External Control of System or Configuration Setting
Code	High	python	Manipulation of django File Response
Code	Medium	python	HTTP Response Splitting
Code	High	python	Reliance on Untrusted Inputs in a Security Decision
Code	High	python	Format string injection
Code	Low	python	Information Exposure by django Debugging
Code	High	python	Use of sleep() in django
Code	High	python	Incorrect Authorization for Critical Resources
Code	High	python	Improper authorization
Code	Medium	python	Sensitive Information Storage in Plaintext
Code	Medium	python	Sensitive Information Transfer in Plaintext
Code	High	python	Hardcoded Encryption Key
Code	High	python	Missing login control
Code	Medium	python	Exposure of system information
Code	Medium	python	Exception Information Exposure
Code	Critical	python	XQuery Injection
Code	High	python	Reliance on DNS lookups in security decisions
Code	High	python	Use of weak cryptographic algorithm
Code	Medium	python	Weak Server Certificate
Code	High	python	Hard coded sensitive information
Code	High	python	Using Encryption Keys of Insufficient Size
Code	High	python	Use of Insufficient Random Value
		-	Information Exposed from Cookies Saved in User''s



Code	Medium	python	Hard Disk
Code	High	python	Sensitive System Information Included in the Comment
Code	Medium	python	One-way Hash Function Used Without Salt
Code	High	python	Download of code without integrity check
Code	Medium	python	Race Condition: Time Of Check and Time Of Use (TOCTOU)
Code	Medium	python	Infinite Loop or Recursive Function
Code	Medium	python	Error Message Information Exposed
Code	Medium	python	Cannot Properly React to Errors
Code	Medium	python	Improper exception handling
Code	Medium	python	Null pointer dereference
Code	Medium	python	Improper Resource Release
Code	High	python	Deserialization of Untrusted Data
Code	Medium	python	Debug Code Not Removed
Code	High	python	Private Array Released from Public Method
Code	High	python	Public Data Saved to Private Array
Code	High	python	Allowing Critical Functions without Proper Authentication
Code	High	python	Allowing Insecure Passwords
Code	Medium	python	Cross-Site Scripting (XSS)
Code	High	sql	SQL injection in iBatis
Code	High	sql	SQL injection in myBatis
Code	High	swift	Hardcoded Password
Code	High	swift	Blank Password
Code	Medium	swift	Weak hash algorithm
Code	Medium	swift	Use of Cryptographic Algorithm in ECB Mode
Code	High	swift	Hardcoded IP
Code	Medium	swift	Transfer by GET
Code	High	swift	Use of cookie with overly broad domain
Code	High	swift	Use of Cookie with Overly Broad Path
Code	High	swift	Storage of Sensitive Data in Persistent Cookie
Code	High	swift	Empty HMAC Key
Code	High	swift	Empty Salt
Code	High	swift	Hardcoded Salt
Code	Medium	swift	Insecure Cookie
Code	Medium	swift	Reliance on weak frameworks in security decisions



Code	Low	swift	Exposure of system information
Code	High	swift	Weak SSL Protocol
Code	Low	swift	Use of SMS Features
Code	Trivial	swift	Absence of Auto-dialing Attack Prevention
Code	Low	swift	HTTP header manipulation
Code	Medium	swift	Key Derivation Function with Insecure Iteration Count
Code	Medium	swift	Use of Null Salt
Code	High	swift	SQL Injection
Code	High	swift	Resource injection
Code	Medium	swift	Cross-site scripting
Code	High	swift	Command injection
Code	High	swift	Sensitive Information Storage in Plaintext
Code	High	swift	Hardcoded Encryption Key
Code	High	swift	XPath Injection
Code	High	swift	LDAP Injection
Code	Medium	swift	Redirection to untrusted site
Code	High	swift	Insufficient cryptographic key size
Code	Medium	swift	Cleartext transmission of sensitive information
Code	High	swift	Download of code without integrity check
Code	Medium	swift	Empty catch block
Code	Medium	swift	Catching overly broad exceptions
Code	High	swift	Missing login control
Code	High	swift	Weak password requirements
Code	Medium	swift	Leftover debug code
Code	Medium	swift	TOCTOU race condition
Code	Medium	swift	HTTP Response Splitting
Code	High	swift	Password in comment
Code	High	swift	Format string injection
Code	High	swift	Reliance on untrusted cookies in security decisions
Code	High	swift	Missing authentication
Code	High	swift	Improper authorization
Code	Medium	swift	Reliance on DNS lookups in security decisions
Code	High	swift	Improper random number generation
Code	High	swift	Improper Reference of XML Entity
Code	Medium	swift	Weak Server Certificate
Code	High	swift	Deserialization of Untrusted Data



Code	High	typescript	Using Strict Mode Group
Code	High	typescript	Using Implicit Any Type
Code	Medium	typescript	Clear Distinction of Null Type
Code	High	typescript	Enabling alwaysStrict Mode
Code	Medium	etc	Enabled remote monitoring
Code	Medium	etc	Disabled bytecode verification
Code	Low	etc	User Account Information Hardcoded in JavaScript
Code	Medium	etc	Password Exposal in Comment
Code	Medium	etc	Hardcoded Password
Code	High	vbnet	Command injection
Code	Medium	vbnet	Empty catch block
Code	High	vbnet	Hardcoded user name and password
Code	Medium	vbnet	HTTP Response Splitting
Code	High	vbnet	LDAP Injection
Code	Medium	vbnet	Exposure of system information
Code	Medium	vbnet	Redirection to untrusted site
Code	Low	vbnet	Catching overly broad exceptions
Code	High	vbnet	Path Traversal
Code	High	vbnet	Reliance on DNS lookups in security decisions
Code	High	vbnet	SQL Injection
Code	High	vbnet	Unrestricted File Upload
Code	High	vbnet	Weak cryptographic algorithm
Code	High	vbnet	Insufficient cryptographic key size
Code	High	vbnet	XPath Injection
Code	Critical	vbnet	XQuery Injection
Code	High	vbnet	Weak password requirements
Code	Medium	vbnet	Cross-site scripting
Code	High	vbnet	Use of Non-parameterized Query
Code	High	vbnet	Inappropriate Signature
Code	Medium	vbnet	Weak Server Certificate
Code	High	vbs	Overly Permissive CORS Policy
Code	High	vbs	Command injection
Code	High	vbs	Direct dynamic code evaluation
Code	High	vbs	Improper random number generation
Code	High	vbs	Exposure of system information
Code	Medium	vbs	Log injection



Code	Medium	vbs	Redirection to untrusted site
Code	High	vbs	Path Traversal
Code	Critical	vbs	Setting manipulation
Code	High	vbs	SQL Injection
Code	Medium	vbs	Insecure Reflection
Code	High	vbs	Weak cryptographic algorithm
Code	High	vbs	Weak hash
Code	High	vbs	Insufficient cryptographic key size
Code	Medium	vbs	Cross-site scripting
Code	Medium	vbs	Header manipulation
Code	High	vbs	Resource injection
Code	Medium	xml	Inappropriate Logging Level Setting
Code	Medium	xml	Duplicate Servlet Mapping
Code	Medium	xml	Duplicate Security Role
Code	Medium	xml	Excessive Servlet Mapping
Code	High	xml	Excessive Session Duration
Code	Medium	xml	Direct Access to JSP
Code	Medium	xml	Insufficient Session ID Length
Code	Medium	xml	Invalid Servlet Setting
Code	Medium	xml	Use of Non-existent Filter
Code	High	xml	Hardcoded Password
Code	High	xml	Debugging Information Exposal
Code	High	xml	Use of Default Error Page
Code	High	xml	Trace log exposure
Code	High	xml	Non-HttpOnly cookie
Code	Medium	xml	Struts: duplicate validation forms
Code	Medium	xml	Unused input validation of struts input
Open Source	Trivial	common	Use of Components Licensed Under the OBSD
Open Source	Low	common	Use of Components Licensed Under the AAL
Open Source	High	common	Use of Components Licensed Under the Abstyles
Open Source	High	common	Use of Components Licensed Under the AdaCore-doc
Open Source	High	common	Use of Components Licensed Under the Adobe-2006
Open Source	High	common	Use of Components Licensed Under the Adobe-Glyph
Open Source	High	common	Use of Components Licensed Under the ADSL
Open Source	Low	common	Use of Components Licensed Under the AFL-1.1
Open Source	Low	common	Use of Components Licensed Under the AFL-1.2



Open Source	Low	common	Use of Components Licensed Under the AFL-2.0
Open Source	Low	common	Use of Components Licensed Under the AFL-2.1
Open Source	Medium	common	Use of Components Licensed Under the AFL-3.0
Open Source	High	common	Use of Components Licensed Under the Afmparse
Open Source	Critical	common	Use of Components Licensed Under the AGPL-1.0-only
Open Source	High	common	Use of Components Licensed Under the AGPL-1.0-or- later
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Open Source	Medium	common	Use of Components Licensed Under the AGPL-3.0-or-later
Open Source	Critical	common	Use of Components Licensed Under the Aladdin
Open Source	High	common	Use of Components Licensed Under the AMDPLPA
Open Source	Low	common	Use of Components Licensed Under the AML
Open Source	Low	common	Use of Components Licensed Under the AMPAS
Open Source	Low	common	Use of Components Licensed Under the ANTLR-PD
Open Source	High	common	Use of Components Licensed Under the ANTLR-PD-fallback
Open Source	High	common	Use of Components Licensed Under the Apache-1.0
Open Source	Low	common	Use of Components Licensed Under the Apache-1.1
Open Source	Low	common	Use of Components Licensed Under the Apache-2.0
Open Source	Low	common	Use of Components Licensed Under the APAFML
Open Source	Critical	common	Use of Components Licensed Under the APL-1.0
Open Source	High	common	Use of Components Licensed Under the App-s2p
Open Source	Critical	common	Use of Components Licensed Under the APSL-1.0
Open Source	Critical	common	Use of Components Licensed Under the APSL-1.1
Open Source	Critical	common	Use of Components Licensed Under the APSL-1.2
Open Source	Critical	common	Use of Components Licensed Under the APSL-2.0
Open Source	High	common	Use of Components Licensed Under the Arphic-1999
Open Source	Critical	common	Use of Components Licensed Under the Artistic-1.0
Open Source	High	common	Use of Components Licensed Under the Artistic-1.0-cl8
Open Source	Critical	common	Use of Components Licensed Under the Artistic-1.0- Perl
Open Source	Critical	common	Use of Components Licensed Under the Artistic-2.0



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Open Source	High	common	Use of Components Licensed Under the Bahyph
Open Source	High	common	Use of Components Licensed Under the Barr
Open Source	Low	common	Use of Components Licensed Under the Beerware
Open Source	High	common	Use of Components Licensed Under the Bitstream- Charter
Open Source	High	common	Use of Components Licensed Under the Bitstream- Vera
Open Source	High	common	Use of Components Licensed Under the BitTorrent-1.0
Open Source	High	common	Use of Components Licensed Under the BitTorrent-1.1
Open Source	Trivial	common	Use of Components Licensed Under the blessing
Open Source	Low	common	Use of Components Licensed Under the BlueOak- 1.0.0
Open Source	High	common	Use of Components Licensed Under the Borceux
Open Source	High	common	Use of Components Licensed Under the Brian-Gladman-3-Clause
Open Source	Low	common	Use of Components Licensed Under the BSD-1-Clause
Open Source	Low	common	Use of Components Licensed Under the BSD-2-Clause
Open Source	Low	common	Use of Components Licensed Under the BSD-2-Clause-FreeBSD
Open Source	High	common	Use of Components Licensed Under the BSD-2-Clause-NetBSD
Open Source	Low	common	Use of Components Licensed Under the BSD-2-Clause- Patent
Open Source	Low	common	Use of Components Licensed Under the BSD-2-Clause- Views
Open Source	Low	common	Use of Components Licensed Under the BSD-3-Clause
Open Source	Low	common	Use of Components Licensed Under the BSD-3-Clause- Attribution
Open Source	Medium	common	Use of Components Licensed Under the BSD-3-Clause- Clear
Open Source	Low	common	Use of Components Licensed Under the BSD-3-Clause- LBNL
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Open Source	High High High High High High High	common common common common common common common	components Using HPND-INRIA-IMAG licensed components Using HPND-Kevlin-Henney Licensed Components Using the HPND-MIT-disclaimer license component Using HPND-Netrek licensed components Using HPND-Pbmplus licensed components Use the HPND-sell-MIT-disclaimer-xserver license component Using the HPND-sell-regexpr licensing component
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Open Source	High	common	Using the Mackerras-3-Clause License Component
Open Source	High	common	Using the Mackerras-3-Clause-acknowledgment License Component
Open Source	High	common	Using magaz licensed components
Open Source	High	common	Using mailprio licensed components
Open Source	High	common	Using the McPhee-slideshow licensed component
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Open Source	High	common	Using the Xdebug-1.03 Licensed Component
Open Source	High	common	Using Xfig Licensed Components
Open Source	High	common	xkeyboard-config - Using the Zinoviev licensed component
Open Source	High	common	Using Zeeff Licensed Components
Open Source	Critical	common	Use of Vulnerable Component