

CWE WEAKNESS IDS MAPPED TO CODESONAR® 8.0 C/C++ WARNING CLASSES

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INTRODUCTION

The Common Weakness Enumeration (CWE™) is a list of software weakness types. Creating the list is a community initiative aimed at creating specific and succinct definitions for each common weakness type.

Every CodeSonar 8.0 warning report includes the numbers of any CWE weakness IDs that are closely mapped to the warning's class. (The close mapping for a warning class is the set of categories—including CWE weakness IDs—that most closely match the class, if any).

You can configure CodeSonar to enable and disable warning classes mapped to specific CWE weakness IDs, or use build presets to enable all warning classes that are closely mapped to any CWE weakness IDs. In addition, you can use the CodeSonar search function to find warnings related to specific CWE weakness IDs.

CodeSonar 8.0 is using CWE v4.12, released June 29, 2023.

For more information on Common Weakness Enumeration:

<https://cwe.mitre.org/data/index.html>

The remainder of this document comprises two tables:

- A table showing the close mapping between CodeSonar C and C++ warning classes and CWE weakness IDs.
- A table showing the broad mapping between CodeSonar C and C++ warning classes and CWE weakness IDs. The broad CWE mapping for a CodeSonar warning class combines CWE weakness IDs from four sources:
 1. The close CWE mapping for the class.
 2. Other CWE weakness IDs that are related to the class in a meaningful way, but not eligible for the close mapping.
 3. For all CWE weakness IDs from sources 1 and 2, all *ancestors* in the CWE hierarchy.
 4. For all CWE weakness IDs from sources 1 and 2, all *descendants* in the CWE hierarchy.

A separate document, [CWE Weakness IDs Mapped to CodeSonar® Java Warning Classes](#), lists the CodeSonar Java warning classes that are closely and broadly mapped to CWE weakness IDs.

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CWE CLOSE MAPPING: C/C++ (CODESONAR V8.0)

The following table lists the CodeSonar C/C++ warning classes that are closely mapped to CWE weakness IDs.

Category ID	Category Name	CodeSonar Class Name
CWE:14	Compiler Removal of Code to Clear Buffers	Use of memset
CWE:15	External Control of System or Configuration Setting	Tainted Configuration Setting
CWE:20	Improper Input Validation	Coercion Alters Value Cast Alters Value Tainted Buffer Access
CWE:22	Improper Limitation of a Pathname to a Restricted Directory ('Path Traversal')	Tainted Filename
CWE:73	External Control of File Name or Path	Tainted Filename
CWE:78	Improper Neutralization of Special Elements used in an OS Command ('OSCommand Injection')	Command Injection Untrusted Process Creation
CWE:88	Improper Neutralization of Argument Delimiters in a Command ('ArgumentInjection')	Command Injection
CWE:89	Improper Neutralization of Special Elements used in an SQL Command ('SQLInjection')	SQL Injection
CWE:90	Improper Neutralization of Special Elements used in an LDAP Query ('LDAPInjection')	LDAP Injection
CWE:99	Improper Control of Resource Identifiers ('Resource Injection')	Tainted Network Address Tainted Filename Untrusted Network Host Untrusted Network Port
CWE:114	Process Control	Command Injection Library Injection Untrusted Library Load
CWE:119	Improper Restriction of Operations within the Bounds of a Memory Buffer	Tainted Buffer Access Type Overrun Type Underrun High Risk Loop



CWE:120	Buffer Copy without Checking Size of Input ('Classic Buffer Overflow')	Use of getopt Use of getpass Use of gets Use of getwd Use of OemToAnsi Use of OemToChar Use of recvmsg Use of strcat Use of StrCatChainW Use of strchr Use of strcmp Use of strcoll Use of strcpy Use of strcpyn Use of strlen Use of strpbrk Use of strrchr Use of strspn Use of strstr Use of strtok Use of strstrn Use of syslog Buffer Overrun
CWE:128	Wrap-around Error	Addition Overflow of Allocation Size Integer Overflow of Allocation Size Multiplication Overflow of Allocation Size Subtraction Underflow of Allocation Size Addition Overflow of Size Multiplication Overflow of Size Subtraction Underflow of Size
CWE:131	Incorrect Calculation of Buffer Size	Addition Overflow of Allocation Size Integer Overflow of Allocation Size Multiplication Overflow of Allocation Size Subtraction Underflow of Allocation Size Truncation of Allocation Size Tainted Allocation Size
CWE:134	Use of Externally-Controlled Format String	Use of FormatMessage Format String Injection Format String
CWE:170	Improper Null Termination	No Space For Null Terminator Unterminated C String
CWE:190	Integer Overflow or Wraparound	Addition Overflow of Allocation Size Integer Overflow of Allocation Size Multiplication Overflow of Allocation Size Subtraction Underflow of Allocation Size Addition Overflow of Size Multiplication Overflow of Size Subtraction Underflow of Size
CWE:191	Integer Underflow (Wrap or Wraparound)	Subtraction Underflow of Allocation Size Subtraction Underflow of Size



CWE:192	Integer Coercion Error	Truncation of Allocation Size Coercion Alters Value Cast Alters Value Truncation of Size
CWE:197	Numeric Truncation Error	Truncation of Allocation Size Truncation of Size
CWE:200	Exposure of Sensitive Information to an Unauthorized Actor	Tainted Write
CWE:242	Use of Inherently Dangerous Function	Use of gets Use of getwd Use of chroot Use of crypt Use of drem Use of gamma Use of longjmp Use of setjmp Use of mktemp Use of tmpfile Use of tmpnam Use of vfork
CWE:243	Creation of chroot Jail Without Changing Working Directory	Use of chroot
CWE:243	Creation of chroot Jail Without Changing Working Directory	chroot without chdir
CWE:252	Unchecked Return Value	Ignored Return Value
CWE:256	Plaintext Storage of a Password	Plaintext Storage of Password
CWE:259	Use of Hard-coded Password	Hardcoded Authentication
CWE:269	Improper Privilege Management	Use of AddAccessAllowedAce Use of AddAccessDeniedAce
CWE:281	Improper Preservation of Permissions	Use of AddAccessAllowedAce Use of AddAccessDeniedAce
CWE:284	Improper Access Control	Null Security Descriptor
CWE:311	Missing Encryption of Sensitive Data	Plaintext Storage of Password Plaintext Transmission of Password
CWE:313	Cleartext Storage in a File or on Disk	Plaintext Storage of Password
CWE:316	Cleartext Storage of Sensitive Information in Memory	Plaintext Storage of Password
CWE:318	Cleartext Storage of Sensitive Information in Executable	Hardcoded Authentication Hardcoded Crypto Key Hardcoded Crypto Salt Plaintext Storage of Password
CWE:319	Cleartext Transmission of Sensitive Information	Plaintext Transmission of Password
CWE:321	Use of Hard-coded Cryptographic Key	Hardcoded Crypto Key
CWE:325	Missing Cryptographic Step	Encryption without Padding
CWE:326	Inadequate Encryption Strength	Use of crypt Weak Cryptography
CWE:327	Use of a Broken or Risky Cryptographic Algorithm	Use of crypt Use of rand Use of rand48 Function Use of random Weak Cryptography Use of Weak Cryptographic Algorithm



CWE:328	Reversible One-Way Hash	Use of crypt Weak Cryptography
CWE:330	Use of Insufficiently Random Values	Use of crypt Weak Cryptography
CWE:331	Insufficient Entropy	Encryption without Padding
CWE:332	Insufficient Entropy in PRNG	Use of rand Use of rand48 Function Use of random
CWE:334	Small Space of Random Values	Use of rand Use of rand48 Function Use of random
CWE:336	Same Seed in Pseudo-Random Number Generator (PRNG)	Hardcoded Seed in PRNG
CWE:337	Predictable Seed in Pseudo-Random Number Generator (PRNG)	Predictable Seed in PRNG
CWE:338	Use of Cryptographically Weak Pseudo-Random Number Generator (PRNG)	Use of crypt Use of rand Use of rand48 Function Use of random Weak Cryptography
CWE:362	Concurrent Execution using Shared Resource with Improper Synchronization('Race Condition')	Data Race
CWE:364	Signal Handler Race Condition	Data Race
CWE:366	Race Condition within a Thread	Data Race
CWE:367	Time-of-check Time-of-use (TOCTOU) Race Condition	File System Race Condition
CWE:369	Divide By Zero	Division By Zero Float Division By Zero
CWE:377	Insecure Temporary File	Use of GetTempFileName Use of mkstemp Use of mktemp Use of tmpfile Use of tmpfile_s Use of tmpnam Use of tmpnam_s
CWE:390	Detection of Error Condition Without Action	Empty if Statement
CWE:391	Unchecked Error Condition	Ignored Return Value
CWE:394	Unexpected Status Code or Return Value	Ignored Return Value
CWE:396	Declaration of Catch for Generic Exception	Use of catch
CWE:397	Declaration of Throws for Generic Exception	Use of throw
CWE:398	7PK - Code Quality	Unused Value
CWE:400	Uncontrolled Resource Consumption	Excessive Stack Depth Potential Unbounded Loop
CWE:401	Missing Release of Memory after Effective Lifetime	Leak
CWE:410	Insufficient Resource Pool	Excessive Stack Depth
CWE:413	Improper Resource Locking	Data Race Missing Lock Acquisition Conflicting Lock Order Nested Locks Try-lock that will never succeed Unknown Lock
CWE:415	Double Free	Double Free



CWE:416	Use After Free	Use After Free
CWE:427	Uncontrolled Search Path Element	Tainted Environment Variable
CWE:457	Use of Uninitialized Variable	Uninitialized Variable
CWE:459	Incomplete Cleanup	Leak
CWE:465	Pointer Issues	High Risk Loop
CWE:474	Use of Function with Inconsistent Implementations	Use of gamma
CWE:475	Undefined Behavior for Input to API	Overlapping Memory Regions
CWE:476	NULL Pointer Dereference	Null Pointer Dereference Unchecked Parameter Dereference
CWE:477	Use of Obsolete Function	Use of cuserid Use of drem Use of gamma Use of LoadModule Use of MoveFile Use of WinExec
CWE:478	Missing Default Case in Switch Statement	Missing default Assignment in Conditional Assignment Result in Expression
CWE:482	Comparing instead of Assigning	Redundant Condition
CWE:484	Omitted Break Statement in Switch	Missing break
CWE:489	Active Debug Code	Leftover Debug Code
CWE:506	Embedded Malicious Code	Hardcoded DNS Name Untrusted Network Host
CWE:511	Logic/Time Bomb	Potential Timebomb
CWE:540	Inclusion of Sensitive Information in Source Code	Hardcoded Authentication Hardcoded Crypto Key
CWE:546	Suspicious Comment	Comment Suggests Code Unfinished
CWE:547	Use of Hard-coded, Security-relevant Constants	Hardcoded Authentication Hardcoded Crypto Key
CWE:558	Use of getlogin() in Multithreaded Application	Use of getlogin
CWE:561	Dead Code	Unexercised Call Unexercised Computation Unexercised Conditional Unexercised Control Flow Unexercised Data Flow Unreachable Call Unreachable Catch Unreachable Computation Unreachable Conditional Unreachable Control Flow Unreachable Data Flow Unused Label Unused Macro Unused Parameter Unused Tag Unused Type Function Call Has No Effect Over-initialized Element
CWE:562	Return of Stack Variable Address	Return Pointer to Local
CWE:563	Assignment to Variable without Use	Unused Value



CWE:567	Unsynchronized Access to Shared Data in a Multithreaded Context	Data Race
CWE:570	Expression is Always False	Redundant Condition
CWE:571	Expression is Always True	Redundant Condition
CWE:573	Improper Following of Specification by Caller	Use After Free Division By Zero Null Pointer Dereference
CWE:587	Assignment of a Fixed Address to a Pointer	Coercion: Integer Constant to Pointer
CWE:589	Call to Non-ubiquitous API	Use of drem
CWE:590	Free of Memory not on the Heap	Free Null Pointer Type Mismatch
CWE:605	Multiple Binds to the Same Port	Use of SO_REUSEADDR
CWE:610	Externally Controlled Reference to a Resource in Another Sphere	Tainted Network Address Tainted Filename Untrusted Network Host Untrusted Network Port
CWE:615	Inclusion of Sensitive Information in Source Code Comments	Commented-out Code
CWE:628	Function Call with Incorrectly Specified Arguments	Floating Point Domain Error Arctangent Domain Error Raises FE_INVALID Logarithm on Negative Value Undefined Power of Zero sqrt on Negative Value Argument Too High Argument Too Low Floating Point Range Error cosh on High Number cosh on Low Number Gamma on Zero Logarithm on Zero Format String Type Error
CWE:641	Improper Restriction of Names for Files and Other Resources	Tainted Network Address Tainted Filename
CWE:657	Violation of Secure Design Principles	Library Function Override
CWE:662	Improper Synchronization	Lock/Unlock Mismatch Blocking in Critical Section
CWE:664	Improper Control of a Resource Through its Lifetime	Misaligned Object
CWE:665	Improper Initialization	Uninitialized Variable Inconsistent Enumerator Initialization Initialization Cycle Missing Braces in Initialization Over-initialized Element Partially Uninitialized Aggregate Partially Uninitialized Array Unordered Initialization Unspecified Array Size with Designator Initialization Virtual Call in Constructor Thread is not Joinable Inappropriate C Atomic Initialization
CWE:666	Operation on Resource in Wrong Phase of Lifetime	Socket In Wrong State Use After Close



CWE:667	Improper Locking	Missing Lock Release
CWE:672	Operation on a Resource after Expiration or Release	Use After Free Double Close Use After Close
CWE:674	Uncontrolled Recursion	Recursion
CWE:675	Multiple Operations on Resource in Single-Operation Context	Double Initialization



CWE:676	Use of Potentially Dangerous Function	Use of abort Use of AddAccessAllowe-dAce Use of AddAccessDeniedAce Use of AfxParseURL Use of atof Use of atoi Use of atol Use of atoll Use of getopt Use of getpass Use of OemToAnsi Use of OemToChar Use of realpath Use of recvmsg Use of strcat Use of StrCatChainW Use of strchr Use of strcmp Use of strcoll Use of strcpy Use of strcspn Use of strlen Use of strpbrk Use of strrchr Use of strspn Use of strstr Use of strtok Use of strtrns Use of syslog Use of bsearch Use of catopen Use of chroot Use of CreateFile Use of CreateProcess Use of CreateThread Use of crypt Use of cuserid Use of exit Use of <fenv.h> Exception Handling Function Use of FormatMessage Use of getenv Use of getlogin Use of LoadModule Use of longjmp Use of memset Use of MoveFile Use of _exec Use of _spawn Use of AfxLoadLibrary Use of CoLoadLibrary Use of execlp Use of execvp	Use of LoadLibrary Use of popen Use of SHCreateProcessAsUs-erW Use of ShellExecute Use of system Use of qsort Use of rand Use of rand48 Function Use of random Use of setjmp Use of setuid Use of signal Use of <stdio.h> Input/Output Use of _t_open Use of GetTempFileName Use of mkstemp Use of mktemp Use of tmpfile Use of tmpnam Use of <time.h> Time/DateFunction Use of ttyname Use of vfork Use of <wchar.h> Input/OutputWeak Cryptography Use of WinExec Use of <stdio.h> Input/OutputMacro Use of <wchar.h> Input/OutputMacro Use of <signal.h> Use of <tgmath.h> chroot without chdir Use of Condition Variable Signal Use of pthread_kill Use of putenv Use of realloc Use of tmpfile_s Use of tmpnam_s
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CWE:680	Integer Overflow to Buffer Overflow	Addition Overflow of Allocation Size Integer Overflow of Allocation Size Multiplication Overflow of Allocation Size Subtraction Underflow of Allocation Size Truncation of Allocation Size Addition Overflow of Size Multiplication Overflow of Size Subtraction Underflow of Size Truncation of Size
CWE:681	Incorrect Conversion between Numeric Types	Negative Character Value
CWE:686	Function Call With Incorrect Argument Type	GlobalHandle on GMEM_FIXED Memory GlobalLock on GMEM_FIXED Memory GlobalUnlock on GMEM_FIXED Memory LocalHandle on LMEM_FIXED Memory LocalLock on LMEM_FIXED Memory LocalUnlock on LMEM_FIXED Memory Type Mismatch Array Parameter Mismatch Implicit Function Declaration Negative Character Value
CWE:687	Function Call With Incorrectly Specified Argument Value	Array Parameter Mismatch Floating Point Domain Error Arctangent Domain Error Raises FE_INVALID Logarithm on Negative Value Undefined Power of Zero sqrt on Negative Value Argument Too High Argument Too Low Floating Point Range Error cosh on High Number cosh on Low Number Gamma on Zero Logarithm on Zero Format String Type Error Unreasonable Size Argument Function Call Has No Effect MAX_PATH Exceeded Negative file descriptor



CWE:688	Function Call With Incorrect Variable or Reference as Argument	Array Parameter Mismatch Floating Point Domain Error Arctangent Domain Error Raises FE_INVALID Logarithm on Negative Value Undefined Power of Zero sqrt on Negative Value Argument Too High Argument Too Low Floating Point Range Error cosh on High Number cosh on Low Number Gamma on Zero Logarithm on Zero Format String Type Error Unreasonable Size Argument Function Call Has No Effect
CWE:690	Unchecked Return Value to NULL Pointer Dereference	Null Pointer Dereference Null Test After Dereference
CWE:691	Insufficient Control Flow Management	Use of longjmp Use of setjmp
CWE:696	Incorrect Behavior Order	Use After Free Conflicting Lock Order Socket In Wrong State Use After Close Null Test After Dereference Thread is not Joinable
CWE:703	Improper Check or Handling of Exceptional Conditions	Unreachable Catch
CWE:704	Incorrect Type Conversion or Cast	Coercion Alters Value Dangerous Function Cast Cast: Non-integer Arithmetic Type/Object Pointer Cast: Arithmetic Type/Void Pointer Cast Removes const Qualifier Cast Removes volatile Qualifier Conversion to Function Pointer Float Pointer Conversion Conversion from Function Pointer Conversion: Pointer to Incomplete Conversion: Pointer/Integer Cast: Object Pointers Conversion: Void Pointer to Object Pointer Risky Integer Promotion Cast Alters Value Varargs Function Cast Expression Value Widened by Assignment Inappropriate Cast Type Inappropriate Cast Type: Expression Expression Value Widened by Other Operand



CWE:710	Improper Adherence to Coding Standards	Dynamic Allocation After Initialization Use of longjmp Use of setjmp Use of <stdlib.h> Allocator/Deallocator Use of <stdlib.h> Allocator/Deallocator Macro Not All Warnings Are Enabled Warnings Not Treated As Errors Task Delay Function Lock/Unlock Mismatch Float Pointer Conversion Not Enough Assertions Recursion Too Many Parameters Function Too Long Non-distinct Identifiers: External Names Non-distinct Identifiers: Macro/Macro Non-distinct Identifiers: Macro/Other Non-distinct Identifiers: Nested Scope Non-distinct Identifiers: Same Scope Non-unique Identifiers: External Name Non-unique Identifiers: Internal Name Library Function Override Macro Name is C Keyword Non-unique Identifiers: Tag Non-unique Identifiers: TypedefMacro Uses -> Operator Macro Uses [] Operator Code Before #include Conditional Compilation Macro Defined in Function Body Macro Uses # Operator Macro Does Not End With } or) Macro Does Not Start With { or (No Matching #endif No Matching #if Macro Uses ## Operator ## Follows # Operator Recursive Macro Macro Uses Unary * Operator Unbalanced Parenthesis Use of #undef Macro Undefined in Function Body Variadic Macro Nested Function Declaration Multiple Declarations of a Global Global Variable Declared with Different Types Multiple Declarations On Line Function Pointer Function Pointer Conversion Goto Statement Inconsistent Enumerator Initialization Multiple Statements On Line Pointer Type Inside Typedef Condition Contains Side Effects Too Many Dereferences Too Much Indirection in Declaration Basic Numerical Type Used Variable Could Be const Confusing Literal Suffix Missing Parentheses
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CWE:758	Reliance on Undefined, Unspecified, or Implementation-Defined Behavior	Use of abort Use of atof Use of atoi Use of atol Use of atoll Use of bsearch Use of exit Use of getenv Use of <stdio.h> Input/Output Use of <time.h> Time/Date Function Use of <wchar.h> Input/Output Use of <stdio.h> Input/Output Macro Use of <wchar.h> Input/Output Macro Shift Amount Exceeds Bit Width Negative Shift Amount Missing Return Value Uninitialized Variable Use of <signal.h> Use of <tgmath.h> Missing Return Statement Use of putenv Indeterminate Order of Evaluation
CWE:760	Use of a One-Way Hash with a Predictable Salt	Hardcoded Crypto Salt
CWE:761	Free of Pointer not at Start of Buffer	Misaligned Object Type Mismatch
CWE:762	Mismatched Memory Management Routines	Type Mismatch Pool Mismatch
CWE:763	Release of Invalid Pointer or Reference	Double Free Misaligned Object
CWE:764	Multiple Locks of a Critical Resource	Double Lock Locked Twice
CWE:765	Multiple Unlocks of a Critical Resource	Double Unlock
CWE:771	Missing Reference to Active Allocated Resource	Leak
CWE:772	Missing Release of Resource after Effective Lifetime	Leak
CWE:773	Missing Reference to Active File Descriptor or Handle	Leak
CWE:775	Missing Release of File Descriptor or Handle after Effective Lifetime	Leak
CWE:780	Use of RSA Algorithm without OAEP	Encryption without Padding
CWE:783	Operator Precedence Logic Error	Confusing Operator Overload
CWE:785	Use of Path Manipulation Function without Maximum-sized Buffer	Use of realpath
CWE:786	Access of Memory Location Before Start of Buffer	Buffer Underrun
CWE:788	Access of Memory Location After End of Buffer	Buffer Overrun
CWE:789	Memory Allocation with Excessive Size Value	Tainted Allocation Size
CWE:798	Use of Hard-coded Credentials	Hardcoded Authentication Hardcoded Crypto Key Hardcoded Crypto Salt
CWE:822	Untrusted Pointer Dereference	Unchecked Parameter Dereference
CWE:823	Use of Out-of-range Pointer Offset	Pointer Arithmetic



		Misaligned Object Pointer Arithmetic Pointer Before Beginning of Object Pointer Past End of Object
CWE:832	Unlock of a Resource that is not Locked	Double Unlock Missing Lock Acquisition
CWE:833	Deadlock	Deadlock
CWE:835	Loop with Unreachable Exit Condition ('Infinite Loop')	Potential Unbounded Loop
CWE:843	Access of Resource Using Incompatible Type ('Type Confusion')	GlobalHandle on GMEM_FIXED Memory GlobalLock on GMEM_FIXED Memory GlobalUnlock on GMEM_FIXED Memory LocalHandle on LMEM_FIXED Memory LocalLock on LMEM_FIXED Memory LocalUnlock on LMEM_FIXED Memory Type Mismatch
CWE:863	Incorrect Authorization	Use of cuserid Use of getlogin
CWE:908	Use of Uninitialized Resource	Uninitialized Variable Inappropriate C Atomic Initialization
CWE:910	Use of Expired File Descriptor	Use After Close
CWE:1007	Insufficient Visual Distinction of Homoglyphs Presented to User	Typographically Ambiguous Identifiers
CWE:1025	Comparison Using Wrong Factors	Read Past Null Terminator
CWE:1037	Processor Optimization Removal or Modification of Security-critical Code	Use of memset
CWE:1041	Use of Redundant Code	Copy-Paste Error
CWE:1056	Invokable Control Element with Variadic Parameters	Ellipsis
CWE:1064	Invokable Control Element with Signature Containing an Excessive Number of Parameters	Too Many Parameters
CWE:1077	Floating Point Comparison with Incorrect Operator	Floating Point Equality
CWE:1079	Parent Class without Virtual Destructor Method	delete with Non-Virtual Destructor
CWE:1080	Source Code File with Excessive Number of Lines of Code	Function Too Long
CWE:1087	Class with Virtual Method without a Virtual Destructor	delete with Non-Virtual Destructor
CWE:1091	Use of Object without Invoking Destructor Method	Leak
CWE:1121	Excessive McCabe Cyclomatic Complexity	High Cyclomatic Complexity (Procedure)
CWE:1126	Declaration of Variable with Unnecessarily Wide Scope	Scope Could Be File Static Scope Could Be Local Static
CWE:1127	Compilation with Insufficient Warnings or Errors	Not All Warnings Are Enabled Warnings Not Treated As Errors



CWE:1157	SEI CERT C Coding Standard - Guidelines 03. Expressions (EXP)	Use of <stdarg.h> Feature Cast Removes const Qualifier Risky Integer Promotion Array Parameter Mismatch Ignored Return Value Null Pointer Dereference Uninitialized Variable Assignment in Conditional Empty Branch Statement Empty for Statement Empty if Statement Empty switch Statement Empty while Statement Missing Parentheses Pointer Arithmetic Condition Contains Side Effects Side Effects in sizeof Unchecked Parameter Dereference Assignment Result in Expression Inappropriate Operand Type Restrict Qualifier Used
CWE:1164	Irrelevant Code	Unused Value
CWE:1295	Debug Messages Revealing Unnecessary Information	Leftover Debug Code
CWE:1335	Incorrect Bitwise Shift of Integer	Negative Shift Amount Shift Amount Exceeds Bit Width
CWE:1341	Multiple Releases of Same Resource or Handle	Double Close
CWE:1389	Incorrect Parsing of Numbers with Different Radices	Octal Constant



CWE IDS BROADLY MAPPED TO ONE OR MORE CODESONAR C/C++ WARNING CLASSES(CODESONAR V8.0)

The following table lists the CWE IDs that are broadly mapped to one or more CodeSonar C/C++ warning classes.

	CWE:2	CWE:14	CWE:15	CWE:19
CWE:20	CWE:22	CWE:23	CWE:24	CWE:25
CWE:26	CWE:27	CWE:28	CWE:29	CWE:30
CWE:31	CWE:32	CWE:33	CWE:34	CWE:35
CWE:36	CWE:37	CWE:38	CWE:39	CWE:40
CWE:73	CWE:74	CWE:77	CWE:78	CWE:79
CWE:81	CWE:88	CWE:89	CWE:90	CWE:91
CWE:93	CWE:94	CWE:95	CWE:99	CWE:113
CWE:114	CWE:116	CWE:117	CWE:118	CWE:119
CWE:120	CWE:121	CWE:122	CWE:123	CWE:124
CWE:125	CWE:126	CWE:127	CWE:128	CWE:129
CWE:130	CWE:131	CWE:133	CWE:134	CWE:135
CWE:136	CWE:137	CWE:138	CWE:147	CWE:170
CWE:188	CWE:189	CWE:190	CWE:191	CWE:192
CWE:193	CWE:194	CWE:195	CWE:196	CWE:197
CWE:199	CWE:200	CWE:201	CWE:203	CWE:209
CWE:212	CWE:221	CWE:226	CWE:227	CWE:228
CWE:229	CWE:230	CWE:231	CWE:232	CWE:237
CWE:238	CWE:239	CWE:240	CWE:241	CWE:242
CWE:243	CWE:244	CWE:248	CWE:251	CWE:252
CWE:253	CWE:254	CWE:255	CWE:256	CWE:259
CWE:265	CWE:266	CWE:269	CWE:274	CWE:275
CWE:280	CWE:281	CWE:284	CWE:285	CWE:287
CWE:290	CWE:310	CWE:311	CWE:312	CWE:313
CWE:316	CWE:318	CWE:319	CWE:320	CWE:321
CWE:323	CWE:325	CWE:326	CWE:327	CWE:328
CWE:330	CWE:331	CWE:332	CWE:334	CWE:335
CWE:336	CWE:337	CWE:338	CWE:339	CWE:340
CWE:341	CWE:342	CWE:343	CWE:344	CWE:350
CWE:355	CWE:359	CWE:361	CWE:362	CWE:363
CWE:364	CWE:366	CWE:367	CWE:368	CWE:369
CWE:371	CWE:377	CWE:378	CWE:379	CWE:386
CWE:387	CWE:388	CWE:389	CWE:390	CWE:391
CWE:392	CWE:394	CWE:395	CWE:396	CWE:397
CWE:398	CWE:399	CWE:400	CWE:401	CWE:404
CWE:405	CWE:410	CWE:411	CWE:412	CWE:413
CWE:414	CWE:415	CWE:416	CWE:417	CWE:426
CWE:427	CWE:435	CWE:436	CWE:438	CWE:440
CWE:451	CWE:452	CWE:453	CWE:454	CWE:456
CWE:457	CWE:459	CWE:465	CWE:466	CWE:467
CWE:468	CWE:469	CWE:470	CWE:471	CWE:474
CWE:475	CWE:476	CWE:477	CWE:478	CWE:479
CWE:480	CWE:481	CWE:482	CWE:483	CWE:484
CWE:485	CWE:486	CWE:489	CWE:491	CWE:497
CWE:501	CWE:506	CWE:507	CWE:508	CWE:510
CWE:511	CWE:514	CWE:515	CWE:522	CWE:523
CWE:529	CWE:530	CWE:532	CWE:538	CWE:540
CWE:543	CWE:546	CWE:547	CWE:550	CWE:552
CWE:557	CWE:558	CWE:561	CWE:562	CWE:563



CWE:567	CWE:569	CWE:570	CWE:571	CWE:572
CWE:573	CWE:581	CWE:582	CWE:585	CWE:587
CWE:588	CWE:589	CWE:590	CWE:595	CWE:597
CWE:601	CWE:605	CWE:606	CWE:607	CWE:609
CWE:610	CWE:611	CWE:613	CWE:614	CWE:615
CWE:624	CWE:626	CWE:628	CWE:629	CWE:635
CWE:641	CWE:642	CWE:643	CWE:651	CWE:657
CWE:662	CWE:663	CWE:664	CWE:665	CWE:666
CWE:667	CWE:668	CWE:669	CWE:670	CWE:671
CWE:672	CWE:673	CWE:674	CWE:675	CWE:676
CWE:680	CWE:681	CWE:682	CWE:683	CWE:684
CWE:685	CWE:686	CWE:687	CWE:688	CWE:690
CWE:691	CWE:693	CWE:695	CWE:696	CWE:697
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