

- Secrets
- ABAP
- Apex
- C**
- C++
- CloudFormation
- COBOL
- C#
- CSS
- Flex
- Go
- HTML
- Java
- JavaScript
- Kotlin
- Kubernetes
- Objective C
- PHP
- PL/I
- PL/SQL
- Python
- RPG
- Ruby
- Scala
- Swift
- Terraform
- Text
- TypeScript
- T-SQL
- VB.NET
- VB6
- XML



## C static code analysis

Unique rules to find Bugs, Vulnerabilities, Security Hotspots, and Code Smells in your C code

All rules **311**

Vulnerability **13**

Bug **74**

Security Hotspot **18**

Code Smell **206**

Quick Fix **14**

Tags

Search by name...



"memset" should not be used to delete sensitive data

Vulnerability

POSIX functions should not be called with arguments that trigger buffer overflows

Vulnerability

XML parsers should not be vulnerable to XXE attacks

Vulnerability

Function-like macros should not be invoked without all of their arguments

Bug

The address of an automatic object should not be assigned to another object that may persist after the first object has ceased to exist

Bug

"pthread\_mutex\_t" should be unlocked in the reverse order they were locked

Bug

"pthread\_mutex\_t" should be properly initialized and destroyed

Bug

"pthread\_mutex\_t" should not be consecutively locked or unlocked twice

Bug

Functions with "noreturn" attribute should not return

Bug

"memcpy" should only be called with pointers to trivially copyable types with no padding

Bug

### Evaluation of the operand to the sizeof operator shall not contain side effects

Analyze your code

Bug Major misra-c++2008

This rule is a strict implementation of a MISRA (Motor Industry Software Reliability Association) rule. MISRA defines best practices for developing safety-critical software. You can learn more about this rule in the MISRA documents referenced below.

If you are not concerned with MISRA compliance or with safety-critical software, you might consider using rule {rule.cpp:S3135} instead ; it targets the same kind of issue for general-purpose software.

#### See

- MISRA C 2004, 12.3 - The sizeof operator shall not be used on expressions that contain side effects.
- MISRA C++ 2008, 5-3-4 - Evaluation of the operand to the sizeof operator shall not contain side effects.
- MISRA C 2012, 13.6 - The operand of the sizeof operator shall not contain any expression which has potential side effects

Available in:

sonarlint | sonarcloud | sonarqube Developer Edition

© 2008-2022 SonarSource S.A., Switzerland. All content is copyright protected. SONAR, SONARSOURCE, SONARLINT, SONARQUBE and SONARCLOUD are trademarks of SonarSource S.A. All other trademarks and copyrights are the property of their respective owners. All rights are expressly reserved.  
[Privacy Policy](#)

Stack allocated memory and non-owned memory should not be freed

 Bug

Closed resources should not be accessed

 Bug

Dynamically allocated memory should be released

 Bug

Freed memory should not be used