Secrets
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C++ static code analysis

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

| All rules `578` | 🔒 Vulnerability `13` | 🐛 Bug `111` | Security Hotspot `18` | Code Smell `436` | Quick Fix `68` |

[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

Assigning to an optional should directly target the optional

🐛 Bug

Result of the standard remove algorithms should not be ignored

🐛 Bug

"std::scoped_lock" should be created with constructor arguments

🐛 Bug

Objects should not be sliced

🐛 Bug

Immediately dangling references should not be created

🐛 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

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Track uses of "TODO" tags   [**Analyze your code**]

⊘ Code Smell   ⓘ Info ?   🏷 cwe

TODO tags are commonly used to mark places where some more code is required, but which the developer wants to implement later.

Sometimes the developer will not have the time or will simply forget to get back to that tag.

This rule is meant to track those tags and to ensure that they do not go unnoticed.

Noncompliant Code Example

```
void foo() {
  // TODO
}
```

See

- MITRE, CWE-546 - Suspicious Comment

Available In:

sonarlint ⊖ | sonarcloud ⬡ | sonarqube ⟲ Developer Edition

Bug

"std::move" and "std::forward" should not be confused

Bug

A call to "wait()" on a "std::condition_variable" should have a condition

Bug

A pointer to a virtual base class shall only be cast to a pointer to a derived class by means of dynamic_cast

Bug

Functions with "noreturn" attribute should not return

Bug

RAII objects should not be temporary

Bug

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

Bug

"memcpy", "memmove", and "memset" should only be called with pointers to trivially copyable types

Bug

"std::auto_ptr" should not be used

Bug

Destructors should be "noexcept"

Bug