Secrets
ABAP
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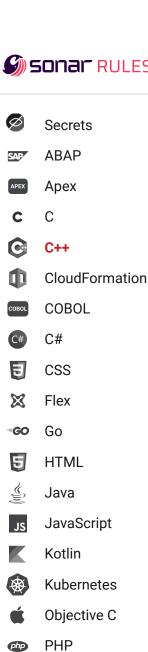Kubernetes
Objective C
PHP
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PL/SQL
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Scala
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C++ static code analysis

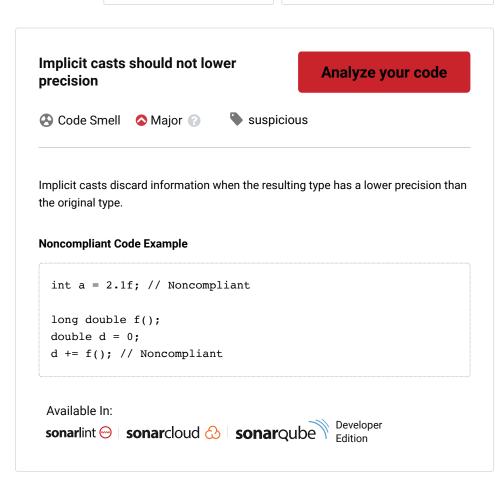Unique rules to find Bugs, Vulnerabilities, Security Hotspots, and Code Smells in your C++ code

| 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

---

Implicit casts should not lower precision

Analyze your code

🔄 Code Smell   🔺 Major ❓   🏷 suspicious

Implicit casts discard information when the resulting type has a lower precision than the original type.

Noncompliant Code Example

```
int a = 2.1f; // Noncompliant

long double f();
double d = 0;
d += f(); // Noncompliant
```

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