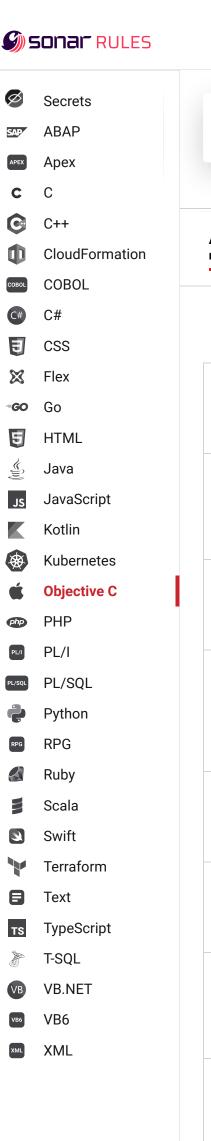
O Quick 13 Fix





should not return

with no padding

"memcmp" should only be called with pointers to trivially copyable types

Stack allocated memory and nonowned memory should not be freed

Closed resources should not be

Dynamically allocated memory should

📆 Bug

📆 Bug

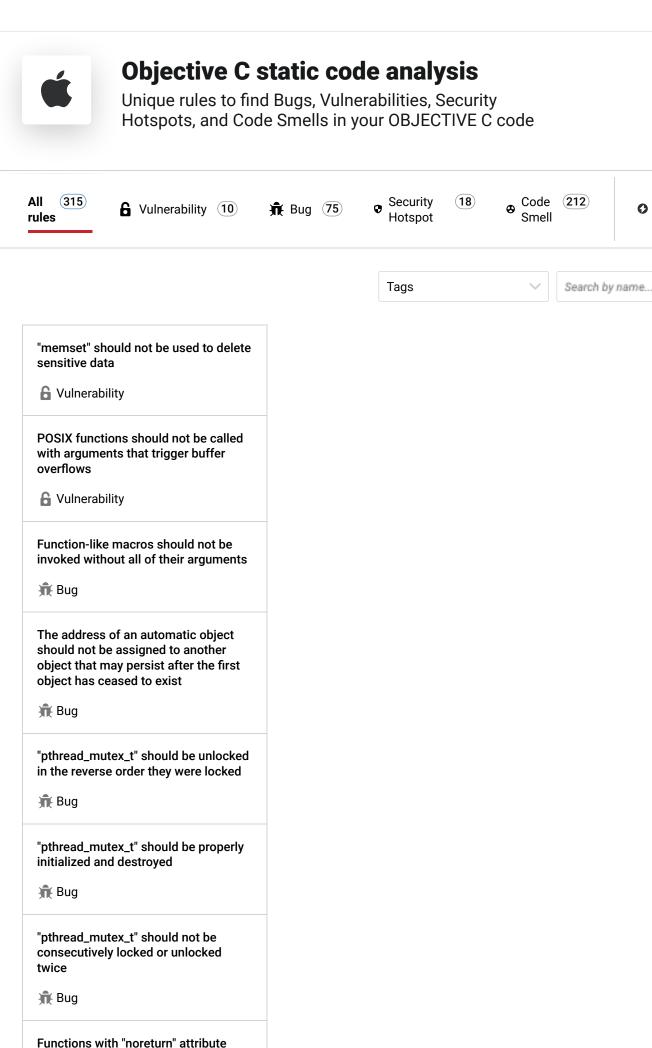
📆 Bug

accessed

📆 Bug

be released

📆 Bug



Freed memory should not be used

📆 Bug

Memory locations should not be released more than once

📆 Bug

Memory access should be explicitly bounded to prevent buffer overflows

📆 Bug

Printf-style format strings should not lead to unexpected behavior at runtime

📆 Bug

Recursion should not be infinite

📆 Bug

Resources should be closed

📆 Bug

Hard-coded credentials are securitysensitive

Security Hotspot

"goto" should jump to labels declared later in the same function

Code Smell

Only standard forms of the "defined" directive should be used

Code Smell

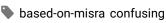
Switch labels should not be nested inside non-switch blocks

Code Smell

### Loops should not have more than one "break" or "goto" statement

# Analyze your code





Restricting the number of exits from a loop is done in the interests of good structured programming. One break or goto statement is acceptable in a loop since this allows, for example, for dual-outcome loops or optimal coding.

### **Noncompliant Code Example**

With the default threshold of 1:

```
for (int i = 0; i < 10; i++) {
  if (...) {
    break;
               // Compliant
  else if (...) {
    break;
               // Non-compliant - second jump from loop
  else {
  }
}
while (...) {
  if (...) {
    break;
                // Compliant
  if (...) {
    break;
                // Non-compliant - second jump from loop
  }
}
```

#### **Compliant Solution**

```
for (int i = 0; i < 10; i++) {
  if (...) {
               // Compliant
   break;
 }
while (...) {
 if (...) {
             // Compliant
   break;
}
```

## See

- MISRA C:2004, 14.6 For any iteration statement there shall be at most one break statement used for loop termination.
- MISRA C++:2008, 6-6-4 For any iteration statement there shall be no more than one break or goto statement used for loop termination.
- MISRA C:2012, 15.4 There should be no more than one break or goto statement used to terminate any iteration statement

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