

# Objective C static code analysis: Appropriate size arguments should be passed to "strncat" and "strncpy"

1 minute

Size argument of `strncat`, `strlcat` and `strncpy` should define the size of the destination to prevent buffer overflow.

Moreover, `strncat` always adds a terminating null character at the end of the appended characters so the size argument should be smaller than the size of the destination to let enough space for it.

## Noncompliant Code Example

```
void f(char* src) {
    char dest[10];
    strncpy(dest, src, sizeof(src)); // Noncompliant; size argument is
    the size of the source instead of the size of the destination

    strncat(dest, src, sizeof(src)); // Noncompliant; size of the source
    instead of the size of the destination
    strncat(dest, src, sizeof(dest)); // Noncompliant; size argument is
    too large
}
```

## Compliant Solution

```
void f(char* src) {
    char dest[10];
    strncat(dest, src, sizeof(dest) - 1); // Compliant
}
```

Available In: