

C static code analysis: "switch case" clauses should not have too many lines of code

1-2 minutes

The switch statement should be used only to clearly define some new branches in the control flow. As soon as a case clause contains too many statements this highly decreases the readability of the overall control flow statement. In such case, the content of case clause should be extracted in a dedicated function.

Noncompliant Code Example

With the default threshold of 5:

```
switch (myVariable) {  
    case 0: // 6 lines till next case  
        methodCall1("");
```

```
    methodCall2("");
    methodCall3("");
    methodCall4("");
    methodCall5("");
    break;
case 1:
    // ...
}
```

Compliant Solution

```
switch (myVariable) {
    case 0: // Compliant: 2 lines
        doSomething();
        break;
    case 1: // Compliant: 5 lines till next case. Curly
braces after a case are not counted if they
contain the entire case body
        {
            methodCall1("");
            methodCall2("");
            methodCall3("");
            methodCall4("");
            break;
        }
}
```

case 2:

// ...

}

// ...

void doSomething(){

 methodCall1("");

 methodCall2("");

 methodCall3("");

 methodCall4("");

 methodCall5("");

}