

Unchecked Call Return Value

Description

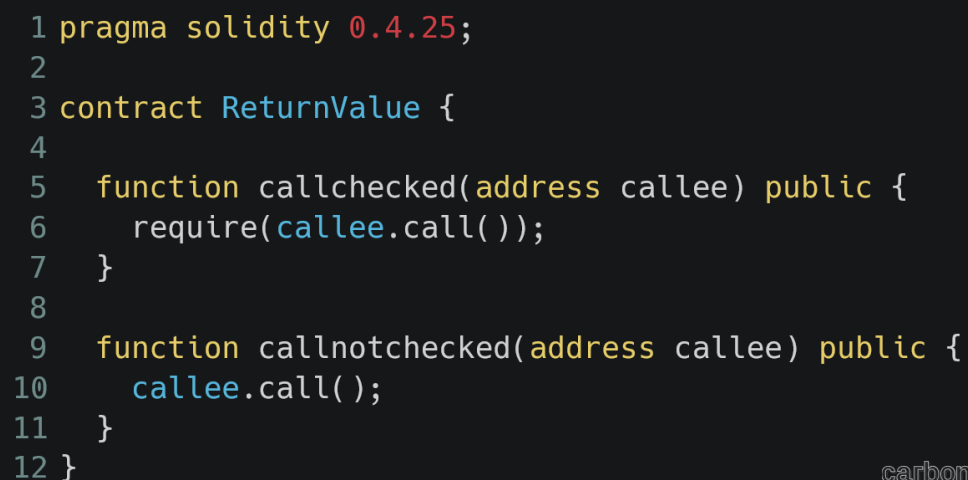
The return value of a message call is not checked. Execution will resume even if the called contract throws an exception. If the call fails accidentally or an attacker forces the call to fail, this may cause unexpected behavior in the subsequent program logic.

Remediation

If you choose to use low-level call methods, make sure to handle the possibility that the call will fail by checking the return value

Example:

Code:



```
1 pragma solidity 0.4.25;
2
3 contract ReturnValue {
4
5     function callchecked(address callee) public {
6         require(callee.call());
7     }
8
9     function callnotchecked(address callee) public {
10         callee.call();
11     }
12 }
```

Explanation:

If the return value of a low-level call is not checked, the execution may resume even if the function call throws an error. This can lead to unexpected behaviour and break the program logic. A failed call can even be caused by an attacker, who may be able to further exploit the application.

In solidity, you can either use low-level calls such as: `address.call()`, `address.callcode()`, `address.delegatecall()`, and `address.send()`; or you can use contract calls such as: `ExternalContract.doSomething()`. Low-level calls will never throw an exception, instead they will return false if they encounter an exception, whereas contract calls will automatically throw.

In the case that you use low-level calls, be sure to check the return value to handle possible failed calls.