

## Function Default Visibility

### Description

Functions that do not have a function visibility type specified are public by default. This could lead to a vulnerability if a developer forgot to set the visibility and a malicious user is able to make unauthorized or unintended state changes.

### Remediation

Functions can be specified as being external, public, internal, or private. It is recommended to make a conscious decision on which visibility type is appropriate for a function. This can dramatically reduce the attack surface of a contract system.

### Example:

*Code:*

```
1 pragma solidity ^0.4.24;
2
3 contract HashForEther {
4
5     function withdrawWinnings() {
6         // Winner if the last 8 hex characters of the address are 0.
7         require(uint32(msg.sender) == 0);
8         _sendWinnings();
9     }
10
11     function _sendWinnings() {
12         msg.sender.transfer(this.balance);
13     }
14 }
```

*Explanation:*

Since there is no declaration within the function, "withdrawWinnings" and "\_sendWinnings" are declared to be Public.

By taking advantage of this configuration flaw, an attacker may modify the contract call.

