

REPORT 609D7E5BD9356B001981C473

Created	Thu May 13 2021 19:30:35 GMT+0000 (Coordinated Universal Time)
Number of analyses	1
User	609d7b6f8bfa12ed16f28fb0

REPORT SUMMARY

Analyses ID	Main source file	Detected vulnerabilities
47066185-8542-4482-80b0-188bf5fec66	/contracts/cougarreferral.sol	3

Started	Thu May 13 2021 19:30:41 GMT+0000 (Coordinated Universal Time)
Finished	Thu May 13 2021 19:32:52 GMT+0000 (Coordinated Universal Time)
Mode	Quick
Client Tool	Mythx-Vscode-Extension
Main Source File	/Contracts/Cougarreferral.Sol

DETECTED VULNERABILITIES

HIGH	MEDIUM	LOW
0	3	0

ISSUES

MEDIUM Function could be marked as external.

SWC-000

The function definition of "recordReferral" is marked "public". However, it is never directly called by another function in the same contract or in any of its descendants. Consider to mark it as "external" instead.

Source file

/contracts/cougarreferral.sol

Locations

```
25 | }
26 |
27 | function recordReferral(address _user, address _referrer) public override onlyOperator {
28 |     if (_user != address(0))
29 |         _referrer != address(0)
30 |         _user != _referrer
31 |         _referrers[_user] == address(0)
32 |     {
33 |         _referrers[_user] = _referrer;
34 |         _referralsCount[_referrer] += 1;
35 |         emit ReferralRecorded(_user, _referrer);
36 |     }
37 |
38 |
39 | function recordReferralCommission(address _referrer, uint256 _commission) public override onlyOperator {
40 |     if (_referrer != address(0) && _commission > 0) {
41 |         totalReferralCommissions[_referrer] += _commission;
```

MEDIUM Function could be marked as external.

SWC-000

The function definition of "recordReferralCommission" is marked "public". However, it is never directly called by another function in the same contract or in any of its descendants. Consider to mark it as "external" instead.

Source file

/contracts/cougarreferral.sol

Locations

```
37 }
38
39 function recordReferralCommission(address _referrer, uint256 _commission) public override onlyOperator {
40     if (_referrer != address(0) && _commission > 0 {
41         totalReferralCommissions[_referrer] += _commission;
42         emit ReferralCommissionRecorded(_referrer, _commission);
43     }
44 }
45
46 // Get the referrer address that referred the user
47 function getReferrer(address _user) public override view returns (address) {
48     return referrers[_user];
49 }
```

MEDIUM Function could be marked as external.

SWC-000

The function definition of "getReferrer" is marked "public". However, it is never directly called by another function in the same contract or in any of its descendants. Consider to mark it as "external" instead.

Source file

/contracts/cougarreferral.sol

Locations

```
46 // Get the referrer address that referred the user
47 function getReferrer(address _user) public override view returns (address) {
48     return referrers[_user];
49 }
50
51 // Update the status of the operator
52 function updateOperator(address _operator, bool _status) external onlyOwner {
53     operators[_operator] = _status;
54     emit OperatorUpdated(_operator, _status);
55 }
```