

Draft Security Assessment for

192-2022-12-tigris (1Positive-WOI)

July 23, 2023

The issue can cause large economic losses, large-scale data disorder, loss of control of authority

management, failure of key functions, or indirectly affect the correct operation of other smart contracts interacting with it.



Executive Summary

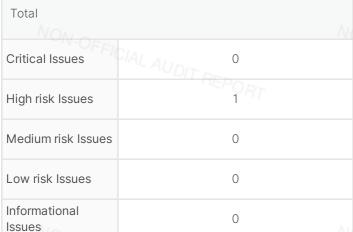
Overview-OFFICIAL AUDIT	
Project Name	192-2022-12-tigris (1Positive-WOI)
Codebase URL	https://github.com/code-423n4/2022- 12-tigris
Scan Engine	Al Analyzer
Scan Time	2023/07/23 21:55:32
Commit Id	588c84b

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/0,	High Risk Issues	The issue puts a large number of users' sensitive information at risk or is reasonably likely to lead to catastrophic impacts on clients' reputations or serious financial implications for clients and users.
	Medium Risk Issues △	The issue puts a subset of users' sensitive information at risk, would be detrimental to the client's reputation if exploited, or is reasonably likely to lead to moderate financial impact.
<i>(</i> 0)	Low Risk Issues	The risk is relatively small and could not be exploited on a recurring basis, or is a risk that the client has indicated is low-impact in view of the client's business circumstances.
40,	Informational Issue	The issue does not pose an immediate risk but is relevant to security best practices or Defence in Depth.

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Critical Issues







Summary of Findings

MetaScan security assessment was performed on July 23, 2023 21:55:32 on project 192-2022-12-tigris (1Positive-WOI) with the repository https://github.com/code-423n4/2022-12-tigris on branch default branch. The assessment was carried out by scanning the project's codebase using the scan engine Al Analyzer. There are in total 1 vulnerabilities / security risks discovered during the scanning session, among which 0 critical vulnerabilities, 1 high risk vulnerabilities, 0 medium risk vulnerabilities, 0 low risk vulnerabilities, 0 informational issues.

ID	Description	Severity
MSA-001	MWE-209: Wrong Order for Interest or ExchangeRate	
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Findings



Critical (0)

No Critical vulnerabilities found here

FICIAL AUDIT REPORT 4 High risk (1)



1. MWE-209: Wrong Order for Interest or ExchangeRate



4 High risk



Security Analyzer

Update of interest or exchange rate should be executed before calculating new balance, share, stake, loan or fee.

File(s) Affected

ON-OFFICIAL AUDIT REPORT



contracts/Trading.sol #255-305

```
function addToPosition(
           uint id,
           uint _addMargin,
           PriceData calldata _priceData,
                                               NON-OFFICIAL AUDIT REPORT
            bytes calldata _signature,
           address _stableVault,
           address _marginAsset,
            ERC20PermitData calldata _permitData,
            address trader
            external
        {
            _validateProxy(_trader);
            _checkOwner(_id, _trader);
            _checkDelay(_id, true);
            IPosition.Trade memory _trade = position.trades(_id);
            tradingExtension.validateTrade(_trade.asset, _trade.tigAsset, _trade.margin + _addMargin, _trad
            _checkVault(_stableVault, _marginAsset);
           if (_trade.orderType != 0) revert("4"); //IsLimit
            uint _fee = _handleOpenFees(_trade.asset, _addMargin*_trade.leverage/1e18, _trader, _trade.tig/
            handleDeposit(
               _trade.tigAsset,
               _marginAsset,
                _addMargin - _fee,
               _stableVault,
               _permitData,
               trader
            );
            position.setAccInterest(_id);
                                                                                                NON-OFFI
            unchecked {
           (uint256 _price,) = tradingExtension.getVerifiedPrice(_trade.asset, _priceData, _signature,
               uint _positionSize = (_addMargin - _fee) * _trade.leverage / 1e18;
                if (_trade.direction) {
                    tradingExtension.modifyLongOi(_trade.asset, _trade.tigAsset, true, _positionSize);
               } else {
                   tradingExtension.modifyShortOi(_trade.asset, _trade.tigAsset, true, _positionSize);
               _updateFunding(_trade.asset, _trade.tigAsset);
                _addMargin -= _fee;
               uint _newMargin = _trade.margin + _addMargin;
               uint _newPrice = _trade.price*_trade.margin/_newMargin + _price*_addMargin/_newMargin;
                                               NON-OFFICIAL AUDIT REPORT
                                                                                                 VON-OFFI
296 POFFICIA position.addToPosition(
                   _trade.id,
                   _newMargin,
                    newPrice
                emit AddToPosition(_trade.id, _newMargin, _newPrice, _trade.trader);
```

Recommendation

Check the business logic and move the statements about updating exchange rate or interest forward.



A Medium risk (0)

No Medium risk vulnerabilities found here



▲ Low risk (0)

No Low risk vulnerabilities found here L AUDIT REPORT



? Informational (0)

No Informational vulnerabilities found here



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