



METATRUST

Draft
Security Assessment for
**22-LogicBug-
Floatcapital (10K-UT)**

July 23, 2023






Executive Summary

Overview			
Project Name	22-LogicBug-Floatcapital (10K-UT)		
Codebase URL	https://github.com/metatrust-demo/LogicBug-Floatcapital		
Scan Engine	AI Analyzer		
Scan Time	2023/07/23 22:13:40		
Commit Id	bd419ab		

Total			
Critical Issues	0		
High risk Issues	2		
Medium risk Issues	0		
Low risk Issues	0		
Informational Issues	0		

Critical Issues		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.
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.
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.
Informational Issue		The issue does not pose an immediate risk but is relevant to security best practices or Defence in Depth.



	Critical Issues	0%	0
	High risk Issues	100%	2
	Medium risk Issues	0%	0
	Low risk Issues	0%	0
	Informational Issues	0%	0

Summary of Findings

MetaScan security assessment was performed on **July 23, 2023 22:13:40** on project **22-LogicBug-Floatcapital (10K-UT)** with the repository **<https://github.com/metatrust-demo/LogicBug-Floatcapital>** on branch **default branch**. The assessment was carried out by scanning the project's codebase using the scan engine **AI Analyzer**. There are in total **2** vulnerabilities / security risks discovered during the scanning session, among which **0** critical vulnerabilities, **2** high risk vulnerabilities, **0** medium risk vulnerabilities, **0** low risk vulnerabilities, **0** informational issues.

ID	Description	Severity
MSA-001	MWE-207: Unauthorized Transfer	High risk
MSA-002	MWE-207: Unauthorized Transfer	High risk


Findings

Critical (0)

No Critical vulnerabilities found here

High risk (2)

1. MWE-207: Unauthorized Transfer

 High risk Security Analyzer

The contract allows transferring tokens from an address different from the message sender without checking the approval of the address owner.

File(s) Affected



contracts/contracts/SyntheticToken.sol #91-102

```
91     function transferFrom(  
92         address sender,  
93         address recipient,  
94         uint256 amount  
95     ) public override returns (bool) {  
96         if (recipient == longShort && msg.sender == longShort) {  
97             super._transfer(sender, recipient, amount);  
98             return true;  
99         } else {  
100             return super.transferFrom(sender, recipient, amount);  
101         }  
102     }
```

Recommendation

Check the business logic about the transfer and add the approval check if necessary.

2. MWE-207: Unauthorized Transfer

 High risk Security Analyzer

The contract allows transferring tokens from an address different from the message sender without checking the approval of the address owner.

File(s) Affected

contracts/contracts/YieldManagerAave.sol #131-143

```
131 function transferPaymentTokensToUser(address user, uint256 amount) external override longShortOnly {
132     try paymentToken.transfer(user, amount) returns (bool transferSuccess) {
133         if (transferSuccess) {
134             // If the transfer is successful return early, otherwise try pay the user out with the amountR
135             return;
136         }
137     } catch {}
138
139     amountReservedInCaseOfInsufficientAaveLiquidity -= amount;
140
141     // If this reverts (ie aave unable to make payout), then the whole transaction will revert. User w
142     lendingPool.withdraw(address(paymentToken), amount, user);
143 }
```

Recommendation

Check the business logic about the transfer and add the approval check if necessary.

Medium risk (0)

No Medium risk vulnerabilities found here

Low risk (0)

No Low risk vulnerabilities found here

Informational (0)

No Informational vulnerabilities found here

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