

Draft
Security Assessment for

# 100-LogicBug-Prepo (10K-FD)

July 23, 2023



# **Executive Summary**

Overview	
Project Name	100-LogicBug-Prepo (10K-FD)
Codebase URL	https://github.com/metatrust- demo/LogicBug-Prepo
Scan Engine	Al Analyzer
Scan Time	2023/07/23 20:52:51
Commit Id	1916b17

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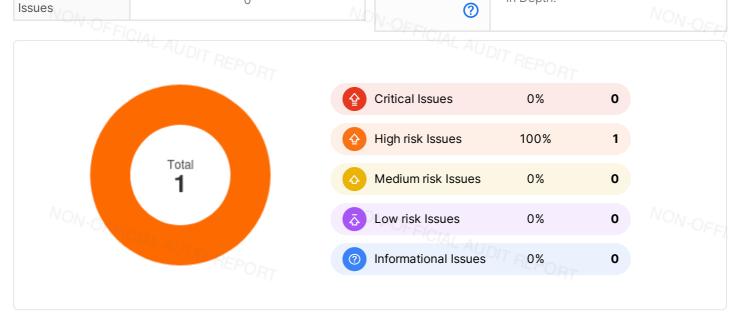
Total		
Critical Issues	PIAL AUDIT REP	0
High risk Issues		ORT 1
Medium risk Issues		0
Low risk Issues		0
Informational Issues		0

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.

The issue does not pose an

in Depth.

immediate risk but is relevant to security best practices or Defence



Informational Issue

3



# **Summary of Findings**

MetaScan security assessment was performed on **July 23, 2023 20:52:51** on project **100-LogicBug-Prepo (10K-FD)** with the repository **https://github.com/metatrust-demo/LogicBug-Prepo** 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-204: Unsafe First Deposit		High risk
	AUDIT REPORT	OFFICIAL AUDIT REPORT	94



# **Findings**



# **Critical** (0)

No Critical vulnerabilities found here

FICIAL AUDIT REPORT 4 High risk (1)



## 1. MWE-204: Unsafe First Deposit





First depositor can break minting of shares or drain the liquidity of all users.

### File(s) Affected

contracts/core/Collateral.sol #52-93

```
function deposit (uint256 _amount)
     external
     override
     nonReent.rant.
      returns (uint256)
     require(_depositsAllowed, "Deposits not allowed");
     _baseToken.safeTransferFrom(msg.sender, address(this), _amount);
      // Calculate fees and shares to mint including latent contract funds
     uint256 _amountToDeposit = _baseToken.balanceOf(address(this));
OF // Record deposit before fee is taken
      if (address(_depositHook) != address(0)) {
         _depositHook.hook(msg.sender, _amount, _amountToDeposit);
       * Add 1 to avoid rounding to zero, only process deposit if user is
      * depositing an amount large enough to pay a fee.
     uint256 _fee = (_amountToDeposit * _mintingFee) / FEE_DENOMINATOR + 1;
     require(_amountToDeposit > _fee, "Deposit amount too small");
     _baseToken.safeTransfer(_treasury, _fee);
      _amountToDeposit -= _fee;
     uint256 _valueBefore = _strategyController.totalValue();
     _baseToken.approve(address(_strategyController), _amountToDeposit);
     _strategyController.deposit(_amountToDeposit);
     uint256 _valueAfter = _strategyController.totalValue();
     _amountToDeposit = _valueAfter - _valueBefore;
    uint256 \_shares = 0;
     if (totalSupply() == 0) {
         _shares = _amountToDeposit;
      } else {
          * # of shares owed = amount deposited / cost per share, cost per
     FIC/A* share = total supply / total value.
         _shares = (_amountToDeposit * totalSupply()) / (_valueBefore);
     _mint(msg.sender, _shares);
     return _shares;
}
```

When totalSupply() == 0, send the first min liquidity LP tokens to the zero address to enable share dilution. NON-OFFICIAL AUDIT REPORT





No Medium risk vulnerabilities found here



# ∆ Low risk (0)

No Low risk vulnerabilities found here FICIAL AUDIT REPORT



# ? Informational (0)

No Informational vulnerabilities found here



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