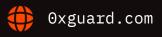


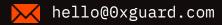
Smart contracts security assessment

Final report
Tariff: Standard

Ravelin Finance

May 2022





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Ox Guard

□ Introduction

This report has been prepared for the Ravelin Finance team upon their request.

The audited project is a fork of the Tomb Finance Project.

The purpose of this audit was to ensure that no issues were introduced with the changes to the original code and that known vulnerabilities (e.g. <u>circumventing</u> the protocol's fee system) are fixed prior to deployment.

Further details about Ravelin Finance are available at the official website: https://www.ravelin.finance/boardroom.

Name	Ravelin Finance
Audit date	2022-05-16 - 2022-05-16
Language	Solidity
Platform	Milkomeda

Contracts checked

Name	Address
RAV	https://explorer-mainnet-cardano- evm.c1.milkomeda.com/address/0x9B7c74Aa737FE278 795fAB2Ad62dEFDbBAedFBCA/contracts
RBond	https://explorer-mainnet-cardano- evm.c1.milkomeda.com/address/0xf1F1E08844E9AC3D adcBba349D6D93F1FCaC651f/contracts
RShare	https://explorer-mainnet-cardano- evm.c1.milkomeda.com/address/0xD81E377E9cd5093C E752366758207Fc61317fC70/contracts

RShareRewardPool https://explorer-mainnet-cardano-

evm.c1.milkomeda.com/address/0xa85B4e44A28B5F10

b3d5751A68e03E44B53b7e89/contracts

Treasury https://explorer-mainnet-cardano-

evm.c1.milkomeda.com/address/0x351bDAC12449974e

98C9bd2FBa572EdE21C1b7C4/contracts

Oracle https://explorer-mainnet-cardano-

evm.c1.milkomeda.com/address/0x6B089a6bc16F4312

<u>0F39dC1BdB4825046E33dF16/contracts</u>

Boardroom https://explorer-mainnet-cardano-

evm.c1.milkomeda.com/address/0x618C166262282DcB

6Cdc1bFAB3808e2fa4ADFEc2/contracts

Multiple contracts

Procedure

We perform our audit according to the following procedure:

Automated analysis

- Scanning the project's smart contracts with several publicly available automated Solidity analysis tools
- Manual verification (reject or confirm) all the issues found by the tools

Manual audit

Comparing the project to the Tomb Finance implementation

Classification of issue severity

High severity

High severity issues can cause a significant or full loss of funds, change of contract ownership, major interference with contract logic. Such issues require immediate attention.

Medium severity Medium severity issues do not pose an immediate risk, but can be

detrimental to the client's reputation if exploited. Medium severity issues may lead to a contract failure and can be fixed by modifying the contract

state or redeployment. Such issues require attention.

Low severity Low severity issues do not cause significant destruction to the contract's

functionality. Such issues are recommended to be taken into

consideration.

Issues

High severity issues

No issues were found

Medium severity issues

No issues were found

Low severity issues

1. Reentrancy attack (RShareRewardPool)

When withdrawing, some pool tokens may be subject to a reentrancy attack. The variable user.rewardDebt in withdraw() function is updated after calling pool.token.safeTransfer().

Recommendation: It is recommended to update the value of the user.rewardDebt variable before calling pool.token.safeTransfer().

2. Few events (Multiple contracts)

Many set functions from contracts are missing events when changing important values in the contact.

Recommendation: Create events for these set functions.

Conclusion

2 low severity issues were found.

The Ravelin Finance Project was compared with the Tomb Project. Ravelin Finance has changed the implementation of Token contract.

The changed contracts is not affected by the vulnerability that was discovered in the Tomb before because it doesn't contain the implementation of transfer with taxes.

Disclaimer

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