Audit Whale

Smart contract code review and security analysis report

This document may contain confidential information about IT systems and the intellectual property of the Customer as well as information about potential vulnerabilities and methods of their exploitation.

The report containing confidential information can be used internally by the Customer, or it can be disclosed publicly after all vulnerabilities are fixed – upon a decision of the Customer.

Document

Name	Smart Contract Code Review and Security Analysis Report for Cleverminu.
Approved by	Jameson | COO AuditWhale
Type	---
Platform	All Chains
Methods	Architecture Review, Functional Testing, Computer- Aided Verification, Manual Review
Repository	---
Commit	---
Technical Documentation	NO
JS tests	NO
Website	cleverminu.com
Timeline	23 OCT 2022– 27 OCT 2022
Change log	27 Apr 2022 – INITIAL AUDIT

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Introduction

AuditWhale(Consultant) was contracted by Cleverminu (Customer) to conduct a Smart Contract Code Review and Security Analysis. This report presents the findings of the security assessment of the Customer's smart contract and its code review conducted between 23 OCT 2022 – 27OCT 2022.

Scope

The scope of the project is smart contracts in the repository:
Here are some of the commonly known vulnerabilities that are considered:

Category	Check Item
Code review	▪ Reentrancy ▪ Ownership Takeover ▪ Timestamp Dependence ▪ Gas Limit and Loops ▪ DoS with (Unexpected) Throw ▪ DoS with Block GasLimit ▪ Transaction-Ordering Dependence ▪ Style guide violation ▪ Costly Loop ▪ Unchecked external call ▪ Unchecked math ▪ Unsafe type inference ▪ Implicit visibility level ▪ Deployment Consistency ▪ Repository Consistency ▪ Data Consistency

Functional review	- Business Logics Review - Functionality Checks - Access Control & Authorization - Escrow manipulation - Token Supply manipulation - Assets integrity - User Balances manipulation - Data Consistency manipulation - Kill-Switch Mechanism - Operation Trails & Event Generation

Executive Summary

According to the assessment, the Customer's smart contracts are well-secured.

Our team performed an analysis of code functionality, manual audit, and automated checks with Jameson. All issues found during automated analysis were manually reviewed, and important vulnerabilities are presented in the Audit overview section. All found issues can be found in the Audit overview section.

As a result of the audit, security engineers found 1 high, 1medium and 0 low severity issue.

Project	Contract Address	Project Address	Network
Cleverminu	https://polygonscan.com/address/0x155AB9Cd3655Aa6174E1e743a6DA1E208762b03d	0x155AB9Cd3655Aa6174E1e743a6DA1E208762b03d	MATIC

Audit overview & Severity Definitions:

CRITICAL ISSUES (critical,high severity):	0
HIGH ISSUES (high, medium severity):	1
ERRORS, WARNINGS (medium, low severity):	1
OPTIMIZATION (low severity):	0
RECOMMENDATIONS (very low severity):	0

Conclusion

1 high, 1 medium, 0 low severity issues were found during the audit.

1 high, 1 low issue was resolved in the update.

We recommend adding documentation as well as unit and functional tests for all contracts.

This audit includes recommendations on improving the code and preventing potential attacks.

Disclaimers

This audit is only to the Smart-Contract code at the specified address.

Audit Whale is a 3rd party auditing company that works on audits based on client requests. And as a professional auditing firm, we check on the contract for any vulnerabilities, backdoors, and/or scam scripts.

Therefore:

We are not financial advisors nor do we partner with the contract owners Operations

and website administration is fully on the client's side

We do not have influence over client operations, which can lead to website changes, withdrawal function closes, etc. One always has the option to do this through the contract.

Any concerns about the project themselves need to be raised directly to the project owners and not through Audit Whale.

Investors are not in any way obliged, coerced or influenced to invest in projects audited by Audit Whale.

We highly recommend that investors do their own research and gain crypto experience before investing