Security Assessment MAROSCACOIN

Verified On May 24th, 2024

















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INTRODUCTION

Auditing Firm	VITAL BLOCK SECURITY
Client Firm	MAROSCACOIN
Methodology	Automated Analysis, Manual Code Review.
Language	Solidity
Contract	0xf9f842f855E76B23fC2E48c87348995ca65Cfa92
Source Code Light	Verified
License	MIT
Centralization	Active ownership
Compiler Version	v0.8.16+commit.07a7930e
Blockchain	BINANCE SMART CHAIN
Website	https://www.marosca.cc/
Telegram Group	https://t.me/marosca_coin
Twitter	https://x.com/maroscacoin
Doc	https://marosca.gitbook.io/marosca
Prelim Report Date	MAY 24 th 2024
Final Report Date	MAY 24th 2024

I Verify the authenticity of this report on our GitHub Repo: https://www.github.com/vital-block





Document Properties

Client	MAROSCACOIN
Title	Smart Contract Audit Report
Target	MAROSCACOIN
Audit Version	1.0
Author	Akhmetshin Marat
Auditors	Akhmetshin Marat, James BK, Benny Matin
Reviewed by	Dima Meru
Approved by	Prince Mitchell
Classification	Public

Version Info

Version	Date	Author(s)	Description
1.0	MAY 24 TH , 2024	James BK	Final Released
1.0-AP	MAY 24 TH , 2024	Benny Matin	Release Candidate

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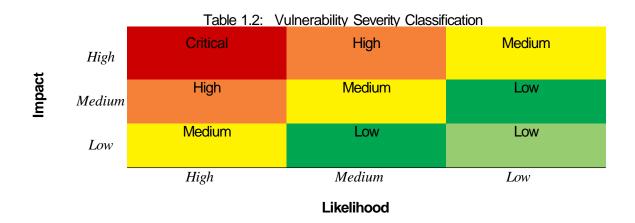


In the following, we show the specific pull request and the commit hash value used in this audit.

- https://bscscan.com/token/0xf9f842f855e76b23fc2e48c87348995ca65cfa92_(MOD8410)
- https://bscscan.com/token/0xf9f842f855e76b23fc2e48c87348995ca65cfa92#code (HODH511)

About Vital Block Security

Vital Block Security provides professional, thorough, fast, and easy-to-understand smart contract security audit. We do indepth and penetrative static, manual, automated, and intelligent analysis of the smart contract. Some of our automated scans include tools like ConsenSys MythX, Mythril, Slither, Surya. We can audit custom smart contracts, DApps, Rust, NFTs, etc (including the service of smart contract auditing). We are reachable at Telegram (https://t.me/vital_block), Twitter (https://twitter.com/vb_Audit), or Email (info@vitalblock.org).



Methodology (1)

To standardize the evaluation, we define the following terminology based on the OWASP Risk Rating Methodology [4]:

- <u>Likelihood</u> represents how likely a particular vulnerability is to be uncovered and exploited in the wild:
- · Impact measures the technical loss and business damage of a successful attack;
- Severity demonstrates the overall criticality of the risk.





SCOPE OF WORK

Vital Block was consulted by MAROSCACOIN to conduct the smart contract audit of its Sol source code. The audit scope of work is strictly limited to mentioned .SOL file only:

\cap	MΔ	ROS	\square	$C \cap T$	M	Sol

i External contracts and/or interfaces dependencies are not checked due to being out of scope.

Verify audited contract code Repo.

Public Contract Link

https://bscscan.com/token/0xf9f842f855e76b23fc2e48c87348995ca65cfa92#code





AUDIT METHODOLOGY

Smart contract audits are conducted using a set of standards and procedures. Mutual collaboration is essential to performing an effective smart contract audit. Here's a brief overview of Vital Block Security auditing process and methodology:

CONNECT

 The onboarding team gathers source codes, and specifications to make sure we understand the size, and scope of the smart contract audit.

AUDIT

- Automated analysis is performed to identify common contract vulnerabilities. We may use the
 following third-party frameworks and dependencies to perform the automated analysis:
 - Remix IDE Developer Tool
 - Open Zeppelin Code Analyzer
 - SWC Vulnerabilities Registry
 - DEX Dependencies, e.g., Pancakeswap, Uniswap
- Simulations are performed to identify centralized exploits causing contract and/or trade locks.
- A manual line-by-line analysis is performed to identify contract issues and centralized privileges.
 We may inspect below mentioned common contract vulnerabilities, and centralized exploits:

	 Token Supply Manipulation
	 Access Control and Authorization
	o Assets Manipulation
Controlling of Francisco	 Ownership Control
Centralized Exploits	o Liquidity Access
	 Stop and Pause Trading
	 Ownable Library Verification





Common Contract Vulnerabilities

- Integer Overflow
- Lack of Arbitrary limits
- Incorrect Inheritance Order
- Typographical Errors
- Requirement Violation
- Gas Optimization
- Coding Style Violations
- Re-entrancy
- Third-Party Dependencies
- Potential Sandwich Attacks
- Irrelevant Codes
- Divide before multiply
- Conformance to Solidity Naming Guides
- Compiler Specific Warnings
- Language Specific Warnings

REPORT

- The auditing team provides a preliminary report specifying all the checks which have been performed and the findings thereof.
- o The client's development team reviews the report and makes amendments to the codes.
- The auditing team provides the final comprehensive report with open and unresolved issues.

PUBLISH

- o The client may use the audit report internally or disclose it publicly.
- It is important to note that there is no pass or fail in the audit, it is recommended to view the audit as an unbiased assessment of the safety of solidity codes.





Table 1.0 The Full Audit Checklist

Category	Checklist Items		
	Constructor Mismatch		
	Ownership Takeover		
	Redundant Fallback Function		
	Overflows & Underflows		
	Reentrancy		
	Money-Giving Bug		
	Blackhole		
	Unauthorized Self-Destruct		
	Revert DoS		
Basic Coding Bugs	Unchecked External Call		
	Gasless Send		
	Send Instead Of Transfer		
	Costly Loop		
	(Unsafe) Use Of Untrusted Libraries		
	(Unsafe) Use Of Predictable Variables		
	Transaction Ordering Dependence		
	Deprecated Uses		
Semantic Consistency Checks	Semantic Consistency Checks		
	Business Logics Review		
	Functionality Checks		
	Authentication Management		
	Access Control & Authorization		
	Oracle Security		
Advenced DoFi Serviting	Digital Asset Escrow		
Advanced DeFi Scrutiny	Kill-Switch Mechanism		
	Operation Trails & Event Generation		
	ERC20 Idiosyncrasies Handling		
	Frontend-Contract Integration		
	Deployment Consistency		
	Holistic Risk Management		
	Avoiding Use of Variadic Byte Array		
	Using Fixed Compiler Version		
Additional Recommendations	Making Visibility Level Explicit		
	Making Type Inference Explicit		
	Adhering To Function Declaration Strictly		
	Following Other Best Practices		



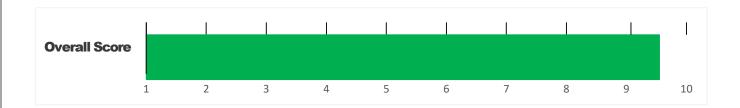


EXECUTIVE SUMMARY

Vital Block Security has performed the automated and manual analysis of the MAROSCACOIN Sol code. The code was reviewed for common contract vulnerabilities and centralized exploits. Here's a quick audit summary:

Status	Critical !	Major " 🛑	Medium # 🥚	Minor \$	Unknown %
Open	0	0	0	2	1
Acknowledged	0	0	0	2	0
Resolved	0	0	0	0	0
Noteworthy OnlyOwner Privileges Set Taxes and Ratios, Airdrop, Set Protection Settings, Set Reward Properties, Set Reflector Settings, Set Swap Settings, Set Pair and Router					

MAROSCACOIN Smart contract has achieved the following score: 95.0



- Please note that smart contracts deployed on blockchains aren't resistant to exploits, vulnerabilities and/or hacks. Blockchain and cryptography assets utilize new and emerging technologies. These technologies present a high level of ongoing risks. For a detailed understanding of risk severity, source code vulnerability, and audit limitations, kindly review the audit report thoroughly.
- Please note that centralization privileges regardless of their inherited risk status constitute an elevated impact on smart contract safety and security.





CENTRALIZED PRIVILEGES

Centralization risk is the most common cause of cryptography asset loss. When a smart contract has a privileged role, the risk related to centralization is elevated.

There are some well-intended reasons have privileged roles, such as:

- o Privileged roles can be granted the power to pause()the contract in case of an external attack.
- Privileged roles can use functions like, include(), and exclude() to add or remove wallets from fees,
 swap checks, and transaction limits. This is useful to run a presale and to list on an exchange.

Authorizing privileged roles to externally-owned-account (EOA) is dangerous. Lately, centralization-related losses are increasing in frequency and magnitude.

- The client can lower centralization-related risks by implementing below mentioned practices:
- Privileged role's private key must be carefully secured to avoid any potential hack.
- Privileged role should be shared by multi-signature (multi-sig) wallets.
- Authorized privilege can be locked in a contract, user voting, or community DAO can be introduced to unlock the privilege.
- Renouncing the contract ownership, and privileged roles.
- o Remove functions with elevated centralization risk.
- I Understand the project's initial asset distribution. Assets in the liquidity pair should be locked.

 Assets outside the liquidity pair should be locked with a release schedule.





RISK CATEGORIES

Smart contracts are generally designed to hold, approve, and transfer tokens. This makes them very tempting attack targets. A successful external attack may allow the external attacker to directly exploit. A successful centralization-related exploit may allow the privileged role to directly exploit. All risks which are identified in the audit report are categorized here for the reader to review:

Risk Type	Definition
Critical !	These risks could be exploited easily and can lead to asset loss, data loss, asset, or data manipulation. They should be fixed right away.
Major "	These risks are hard to exploit but very important to fix, they carry an elevated risk of smart contract manipulation, which can lead to high-risk severity.
Medium #	These risks should be fixed, as they carry an inherent risk of future exploits, and hacks which may or may not impact the smart contract execution. Low-risk reentrancy-related vulnerabilities should be fixed to deterexploits.
Minor \$	These risks do not pose a considerable risk to the contract or those who interact with it. They are code-style violations and deviations from standard practices. They should be highlighted and fixed nonetheless.
Unknown %	These risks pose uncertain severity to the contract or those who interact with it. They should be fixed immediately to mitigate the riskuncertainty.

All statuses which are identified in the audit report are categorized here for the reader to review:

Status Type	Definition
Open	Risks are open.
Acknowledged	Risks are acknowledged, but not fixed.
Resolved	Risks are acknowledged and fixed.





Key Findings

Overall, these contracts are well-designed and engineered, though the implementation can be improved by resolving the identified issues (shown in Table 2.1), 1 medium-severity vulnerabilities, 2 low-severity vulnerabilities, and 1 informational recommen- dations.

Table 2.1: Key MAROSCACOIN Audit Findings

ID	Severity	Title	Category	Status
MAR-001	Informational	In updateForOwner, Relevant Function Snippet	Coding Practice	Fixed
MAR-002	Low	In updateFormapping, the following equation is used inside an unchecked block	Business Logic	Fixed

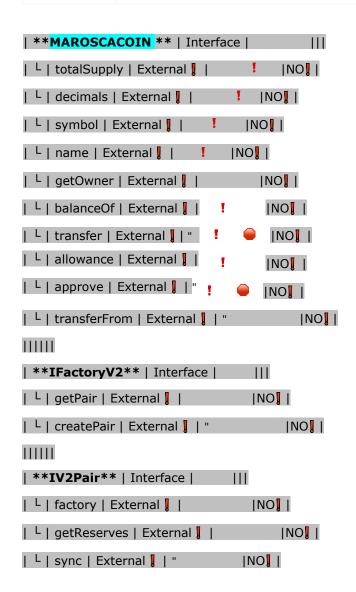
Beside the identified issues, we emphasize that for any user-facing applications and services, it is always important to develop necessary risk-control mechanisms and make contingency plans, which may need to be exercised before the mainnet deployment. The risk-control mechanisms should kick in at the very moment when the contracts are being deployed on mainnet. Please refer to page 10 for details.





AUTOMATED ANALYSIS

Symbol	Definition
•	Function modifies state
#	Function is payable
Ş	Function is internal
8	Function is private
1	Function is important







```
\Pi\Pi\Pi\Pi
| **IRouter01** | Interface | | | | | | | | | | | | | | |
| L | factory | External | |
| L | BNB | External | | | | | | | | | | | | | |
| L | addLiquidityBNB | External | | # |NO| |
| L | addLiquidity | External | | " | NO | |
| L | swapExacBNBForTokens | External | | # |NO| |
| L | getAmountsOut | External | |
                                  INOI
| L | getAmountsIn | External | |
                                     INO!
ШШ
| **IRouter02** | Interface | IRouter01 |||
L | swapExactTokensForBNBSupportingFeeOnTransferTokens | External | | "
                                                                             INO!
L | swapExactBNBForTokensSupportingFeeOnTransferTokens | External | | # |NO| |
| L | swapExactTokensForTokensSupportingFeeOnTransferTokens | External | | "
                                                                            ■ INOI I
| L | swapExactTokensForTokens | External | | " | NO | |
| **Protections** | Interface | | | |
| L | checkUser | External | | "
                                ■ INOI I
| L | setLaunch | External | | "
                                ■ INO! I
| L | setLpPair | External | | "
                                ■ INOI I
| L | Marosca
                     | External | | " | NO | |
| L | removeSniper
                   | External | | " | NO | |
\Pi\Pi\Pi\Pi
| **Cashier** | Interface | | | |
| L | setRewardsProperties | External | | "
                                               INOLI
| L | tally
            | External | | " | NO | |
| L | load
           | L | cashout | External | | " | NO | | | | | | | | | |
| L | giveMeWelfarePlease | External | | " | NO | |
| L | getTotalDistributed | External | | | | | | | | | | | | |
| L | getUserInfo | External | | NO| |
| L | getUserRealizedRewards | External | |
                                               INO
```





```
| L | getPendingRewards | External | | NO | | |
| L | initialize | External | | " | NO | |
| L | getCurrentReward | External | | NO | |
\Pi\Pi\Pi\Pi
| **SOL** | Implementation | SafeMath ||| | |
| L | <Constructor> | Public | | # |NO| |
| L | transferOwner | External | | " | onlyOwner |
| L | renounceOwnership | External | | " | NO!
| L | setOperator | Public | | "
                                 INO!
| L | renounceOriginalDeployer | External | | "
                                                INO!
| L | <Receive Ether> | External | | # |NO| |
| L | totalSupply | External | | NO! |
| L | decimals | External | | NO | |
| L | symbol | External | | NO| |
| L | name | External | | NO | |
                               INO!
| L | getOwner | External | |
                              INOI
| L | balanceOf | Public | |
                                INO
| L | allowance | External | |
                               INO
| L | approve | External | | "
| L | approve | Internal $ | " | | | | | | | | | |
| L | transfer | External | | " | NO | |
| L | transferFrom | External | | " | NO | |
| L | setNewRouter | External | | " | onlyOwner |
| L | setLpPair | External | | " | onlyOwner |
| L | setInitializers | External | | " | onlyOwner |
| L | isExcludedFromFees | External | | NO | |
| L | isExcludedFromDividends | External | | | | | | | | | | |
| L | isExcludedFromProtection | External | | NO | |
                        | Public | | " | onlyOwner |
| L | setDividendExcluded
| L | setExcludedFromFees
                        | Public | | "
                                        | onlyOwner |
```





OPTIMIZATIONS | MAROSCACOIN

ID	Title	Category	Status
BTV	Logarithm Refinement Optimization	Gas Optimization	Acknowledged
ВОР	Checks Can Be Performed Earlier	Gas Optimization	Acknowledged •
BDP	Unnecessary Use Of SafeMath	Gas Optimization	Acknowledged •
BWY	Struct Optimization	Gas Optimization	Acknowledged •
BGT	Unused State Variable	Gas Optimization	Acknowledged •





General Detectors

Transfer Limit

The max/min amount of token transferred can be limited (max could be set to 0).

Misuse of Boolean Constant

The usage of specific true/false values in this contract may lead to errors.

Division Before Multiplication

The order of operations used may result in a loss of precision.







- No compiler version inconsistencies found
- No unchecked call responses found
- No vulnerable self-destruct functions found
- No assertion vulnerabilities found
- No old solidity code found
- No external delegated calls found
- ✓ No external call dependency found
- No vulnerable authentication calls found
- No invalid character typos found
- No RTL characters found
- No dead code found
- No risky data allocation found
- No uninitialized state variables found
- No uninitialized storage variables found
- No vulnerable initialization functions found
- No risky data handling found
- No number accuracy bug found
- No out-of-range number vulnerability found
- No map data deletion vulnerabilities found

- No tautologies or contradictions found
- No faulty true/false values found
- No innacurate divisions found
- No redundant constructor calls found
- ✓ No vulnerable transfers found
- No vulnerable return values found
- No uninitialized local variables found
- No default function responses found
- No missing arithmetic events found
- No missing access control events found
- No redundant true/false comparisons found
- No state variables vulnerable through function calls found
- No buggy low-level calls found
- No expensive loops found
- No bad numeric notation practices found
- ✓ No missing constant declarations found
- No missing external function declarations found
- No vulnerable payable functions found
- No vulnerable message values found





Vulnerability Run check

Risk Analysis

O Contract source code verified

This token contract is open source. You can check the contract code for details. Unsourced token contracts are likely to have malicious functions to defraud their users of their assets.

No mint function

Mint function is transparent or non-existent. Hidden mint functions may increase the amount of tokens in circulation and effect the price of the token.

Owner cant change balance

The contract owner does not have the authority to modify the balance of tokens at other addresses.

Honeypot Risk

This does not appear to be a honeypot

We are not aware of any code that prevents the sale of tokens.

No Anti Whale

There is no limit to the number of token transactions. The number of scam token transactions may be limited (honeypot risk).

No whitelist function

Whitelist function found

No Proxy

There is no proxy in the contract. The proxy contract means contract owner can modify the function of the token and possibly effect the price.

No function to retrieve ownership

If this function exists, it is possible for the project owner to regain ownership even after relinquishing it.



The token contract has no trading cooldown function. If there is a trading cooldown function, the user will not be able to sell the token within a certain time or block after buying.

No blacklist function

No blacklist function is included.





MAR-01 Key Findings

Category	Severity •	Location	Status
Status Mathematical Operations	Low	Maroscacoin.sol 257-268	Informational

Description

In **updateForMinter**, the following equation is used inside an unchecked block

Minter can Not issue more MAROSCACOINT Token indefinitely.

Note that as of the date of publishing, the above review reflects the current understanding of known security patterns as they relate to the MAROSCA contract.

The contract may contain additional issuance functions, which could maybe generate a large number of tokens, resulting in significant fluctuations in token prices. It is recommended to confirm with the project team whether it complies with the token issuance instructions

Recommendation

Incorporate the following verification within process approve account to confirm that the token account's associated mint aligns with the mint for which the confidential transfer approval is sought.





MAR-02 Key Findings

Category	Severity •	Target	Status
Business Logic	Medium	Contract/Maroscacoin.sol – 150/158	Low

Description

In updateForOwner, Relevant Function Snippet

```
contract Ownable is Context {
    address public _owner;

    event OwnershipTransferred(address indexed previousOwner, address indexed
    newOwner);

function owner() public view returns (address) {
    return _owner;
}
```

Description

For Ownership efficiency, the MAROSCACOIN Team is engineered with the reserve cache mechanism, which necessi-tates the common steps to be followed when operating with the reserve Ownership data in different scenarios, including the tax generation, update, and eventual persistence.

Recommendation

Revise the above functions to following a consistent approach to use the reserve cache mechanism.





Vulnerability Scan

REENTRANCY

✓ No reentrancy risk found

Severity Major

Confidence Parameter Certain

Vulnerability Description

NOT Mintable: Minting in Solidity refers to the process of creating new tokens in a blockchain contract, typically achieved through function calls within the smart contract's code. (This is Essentially normal for most contracts)

Scanning Line:

```
function _transfer(address sender, address recipient, uint256
amount) private returns (bool) {

    require(sender != address(0), "ERC20: transfer from the zero
address");

    require(recipient != address(0), "ERC20: transfer to the zero
address");

    require(amount > 0, "Transfer amount must be greater than
zero");

    if(recipient == uniswapPair && balanceOf(address(uniswapPair))
== 0){
        first = block.number;
    }
}
```





VERIFIED CONTRACT:

https://bscscan.com/token/0xf9f842f855e76b23fc2e48c87348995ca65cfa92

Audited Files

Maroscacoin.sol

Contract Creator Address

0x71F69CF570553Bff08028A73E5a56243cbf1d610

Deployed Contracts:

0xf9f842f855E76B23fC2E48c87348995ca65Cfa92

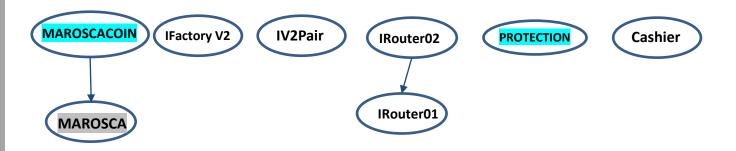
Creator TXH Contracts:

https://bscscan.com/tx/0xcdefa75b496f5c72d2aad500c6710 e5a24f96c203d1ce43bde8562133172f44f





INHERITANCE GRAPH





Vulnerability 0 : No important security issue detected.

Threat level: Low

```
| Section | Sect
```





ISSUES CHECKING STATUS

Issue Description Checking Status

1.	Compiler errors.	PASSED
2.	Race Conditions and reentrancy. Cross-Function Race Conditions.	PASSED
3.	Possible Delay In Data Delivery.	PASSED
4.	Oracle calls.	PASSED
5.	Front Running.	PASSED
6.	Sol Dependency.	PASSED
7.	Integer Overflow And Underflow.	PASSED
8.	DoS with Revert.	PASSED
9.	Dos With Block Gas Limit.	PASSED
10.	Methods execution permissions.	PASSED
11.	Economy Model of the contract.	PASSED
12.	The Impact Of Exchange Rate On the solidity Logic.	PASSED
13.	Private use data leaks.	PASSED
14.	Malicious Event log.	PASSED
15.	Scoping and Declarations.	PASSED
16.	Uninitialized storage pointers.	PASSED
17.	Arithmetic accuracy.	PASSED
18.	Design Logic.	PASSED
19.	Cross-Function race Conditions	PASSED
20.	Save Upon solidity contract Implementation and Usage.	PASSED
21.	Fallback Function Security	PASSED





MANUAL REVIEW

Marosca: is a MEME project named after the dog of world-famous soccer player Cristiano Ronaldo. Marosca is dedicated to combining blockchain technology with soccer sports culture to create a unique and engaging digital ecosystem that provides soccer fans and blockchain enthusiasts around the globe with a place to meet.

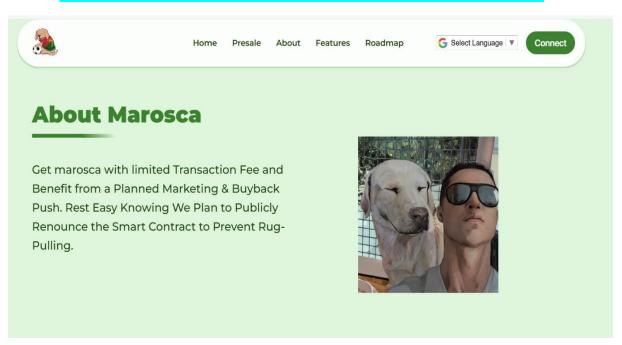
TOKEN NAME: MAROSCACOIN

Ticker: MAROSCA **DECIMALS:** 18

Total Supply: 10,000,000,000



The MAROSCACOIN Platform is Launched On The BSC Network







Identifier	Definition	Severity
CEN-02	Initial asset distribution	Minor 🌑

All of the initially minted assets are sent to the contract deployer when deploying the contract. This is Normal for most deployer and/or contract owner.

```
function waiveOwnership() public virtual onlyOwner {
    emit OwnershipTransferred(_owner, address(0));
    _owner = address(0);
}
```

RECOMMENDATION

Project stakeholders should be consulted during the initial asset distribution process.





RECOMMENDATION

Deployer and/or contract owner private keys are secured carefully.

Please refer to PAGE-7 CENTRALIZED PRIVILEGES for a detailed understanding.

ALLEVIATION

The MAROSCACOIN project team understands the centralization risk. Some functions are provided privileged access to ensure a good runtime behavior in the project





References

- MITRE. CWE-1041: Use of Redundant Code. https://cwe.mitre.org/data/definitions/1041.
 https://cwe.mitre.org/data/definitions/1041.
- 2 MITRE. CWE-1099: Inconsistent Naming Conventions for Identifiers. https://cwe.mitre.org/data/definitions/1099.html.
- 3 MITRE. CWE-561: Dead Code. https://cwe.mitre.org/data/definitions/561.html.
- 4 MITRE. CWE-563: Assignment to Variable without Use. https://cwe.mitre.org/data/definitions/563.html.
- 5 MITRE. CWE-663: Use of a Non-reentrant Function in a Concurrent Context. https://cwe.mitre.org/data/definitions/663.html.
- 6 MITRE. CWE-837: Improper Enforcement of a Single, Unique Action. https://cwe.mitre.org/data/definitions/837.html.
- 7 MITRE. CWE-841: Improper Enforcement of Behavioral Workflow. https://cwe.mitre.org/data/definitions/841.html.
- 8 MITRE. CWE CATEGORY: Bad Coding Practices. https://cwe.mitre.org/data/definitions/ 1006.html.
- 9 MITRE. CWE CATEGORY: Business Logic Errors. https://cwe.mitre.org/data/definitions/840.html.
- MITRE. CWE CATEGORY: Concurrency. https://cwe.mitre.org/data/definitions/557.html.
- MITRE. CWE VIEW: Development Concepts. https://cwe.mitre.org/data/definitions/699.
 html.
- 12 OWASP. Risk Rating Methodology. https://www.owasp.org/index.php/OWASP Risk Rating Methodology.





Identifier	Definition	Severity
COD-10	Third Party Dependencies	Minor 🌑

Smart contract is interacting with third party protocols e.g., Pancakeswap router, cashier contract, protections contract. The scope of the audit treats third party entities as black boxes and assumes their functional correctness. However, in the real world, third parties can be compromised, and exploited. Moreover, upgrades in third parties can create severe impacts, e.g., increased transactional fees, deprecation of previous routers, etc.

RECOMMENDATION

Inspect and validate third party dependencies regularly, and mitigate severe impacts whenever necessary.





DISCLAIMERS

Vital Block Security provides the easy-to-understand audit of Solidity, Move and Raw source codes (commonly known as smart contracts).

The smart contract for this particular audit was analyzed for common contract vulnerabilities, and centralization exploits. This audit report makes no statements or warranties on the security of the code. This audit report does not provide any warranty or guarantee regarding the absolute bug-free nature of the smart contract analyzed, nor do they provide any indication of the client's business, business model or legal compliance. This audit report does not extend to the compiler layer, any other areas beyond the programming language, or other programming aspects that could present security risks. Cryptographic tokens are emergent technologies, they carry high levels of technical risks and uncertainty. You agree that your access and/or use, including but not limited to any services, reports, and materials, will be at your sole risk on an as-is, where-is, and as-available basis. This audit report could include false positives, false negatives, and other unpredictable results.

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ABOUT VITAL BLOCK

Vital Block provides intelligent blockchain Security Solutions. We provide solidity and Raw Code Review, testing, and auditing services. We have Partnered with 15+ Crypto Launchpads, audited 50+ smart contracts, and analyzed 200,000+ code lines. We have worked on major public blockchains e.g., Ethereum, Binance, Cronos, Doge, Polygon, Avalanche, Metis, Fantom, Bitcoin Cash, Aptos, Oasis, etc.

Vital Block is Dedicated to Making Defi & Web3 A Safer Place. We are Powered by Security engineers, developers, Ul experts, and blockchain enthusiasts. Our team currently consists of 5 core members, and 4+ casual contributors.

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