



# NOVOS

## KYC & AUDIT.

Novos is an agency specializing in blockchain technology solutions, Audits, KYC / Doxx.



# CERTIFICATE OF COMPLIANCE

Smart Contract Audit by NOVOS



MIKUToken

Audit Passed

July 18, 2022

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# Audit Summary

This report has been prepared for MIKU Token on the Binance Chain network. Novos provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Ensuring contract logic meets the specifications and intentions of the client without exposing the user's funds to risk.
- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Thorough line-by-line manual review of the entire codebase by industry experts.



## Project Overview

Parameter	Result
Address	0x73419De8E3E26A17e0E6b0436e29dd04A25B061D
Name	MIKU
Token Tracker	MIKU
Decimals	9
Supply	1,000,000,000,000
Platform	Binance Chain
Compiler	v0.8.7+commit.e28d00a7
Optimization	No with 200 runs
LicenseType	Unlicense license
Language	Solidity
Codebase	<a href="https://bscscan.com/address/0x73419de8e3e26a17e0e6b0436e29dd04a25b061d#code">https://bscscan.com/address/0x73419de8e3e26a17e0e6b0436e29dd04a25b061d#code</a>
Url	<a href="https://mikubsc.com/">https://mikubsc.com/</a>

## Main Contract Assessed

Name	Contract	Live
MIKU	0x73419De8E3E26A17e0E6b0436e29dd04A25B061D	Yes



# Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
❖ Unencrypted Private Data On-Chain	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Code With No Effects	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Message call with hardcoded gas amount	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Hash Collisions With Multiple Variable Length Arguments	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Unexpected Ether balance	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Presence of unused variables	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Right-To-Left-Override control character (U+202E)	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Typographical Error	✓ Complete	✓ Complete	✓ Low / No Risk
❖ DoS With Block Gas Limit	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Arbitrary Jump with Function Type Variable	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Insufficient Gas Griefing	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Incorrect Inheritance Order	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Write to Arbitrary Storage Location	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Requirement Violation	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Missing Protection against Signature Replay Attacks	✓ Complete	✓ Complete	✓ Low / No Risk
❖ Weak Sources of Randomness from Chain Attributes	✓ Complete	✓ Complete	✓ Low / No Risk





# Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
❖ Authorization through tx.origin	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Delegatecall to Untrusted Callee	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Use of Deprecated Solidity Functions	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Assert Violation	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Reentrancy	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Unprotected SELFDESTRUCT Instruction	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Unprotected Ether Withdrawal	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Unchecked Call Return Value	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Outdated Compiler Version	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Integer Overflow and Underflow	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>
❖ Function Default Visibility	✓ Complete	✓ Complete	✓ <b>Low / No Risk</b>





# Contract Ownership

The contract ownership of MIKU is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

01

The current owner is the address  
0x918999fa7a1Ef9fd860c35ADae08F34D8862FfC5  
which can be viewed from: [HERE](#)

02

The owner wallet has the power to call the functions displayed on the privileged functions chart below, if the owner wallet is compromised this privileges could be exploited.

03

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.



# Important Notes To The Users:



01

The owner cannot stop trading.

02

The owner cannot blacklist wallets.

03

On sells there is an increase of tax based on the fees, this new tax cannot be higher than 20%.

04

Owner can enable trading but cannot pause or disable it.

05

Bool public noFeeToTransfer = true;

06

Max transaction amount (percent of total supply) – «function  
set\_Max\_Transaction\_Percent (uint256  
maxTxPercent\_x100) external onlyOwner() {  
\_maxTxAmount =  
\_tTotal\*maxTxPercent\_x100/10000;»

07

Owner - Setting the initial fees uint256 private  
\_TotalFee = 16; uint256 public \_buyFee = 8;  
uint256 public \_sellFee = 8;

08

Owner can change the maxWalletBalance with no constrains.

09

Owner can change and configure the dividendTracker with no constrains.

10

Maximum wallet holding (percent of total supply) – «function  
set\_Max\_Wallet\_Percent(uint256  
maxWallPercent\_x100) external onlyOwner() {  
\_maxWalletToken =  
\_tTotal\*maxWallPercent\_x100/10000;

11

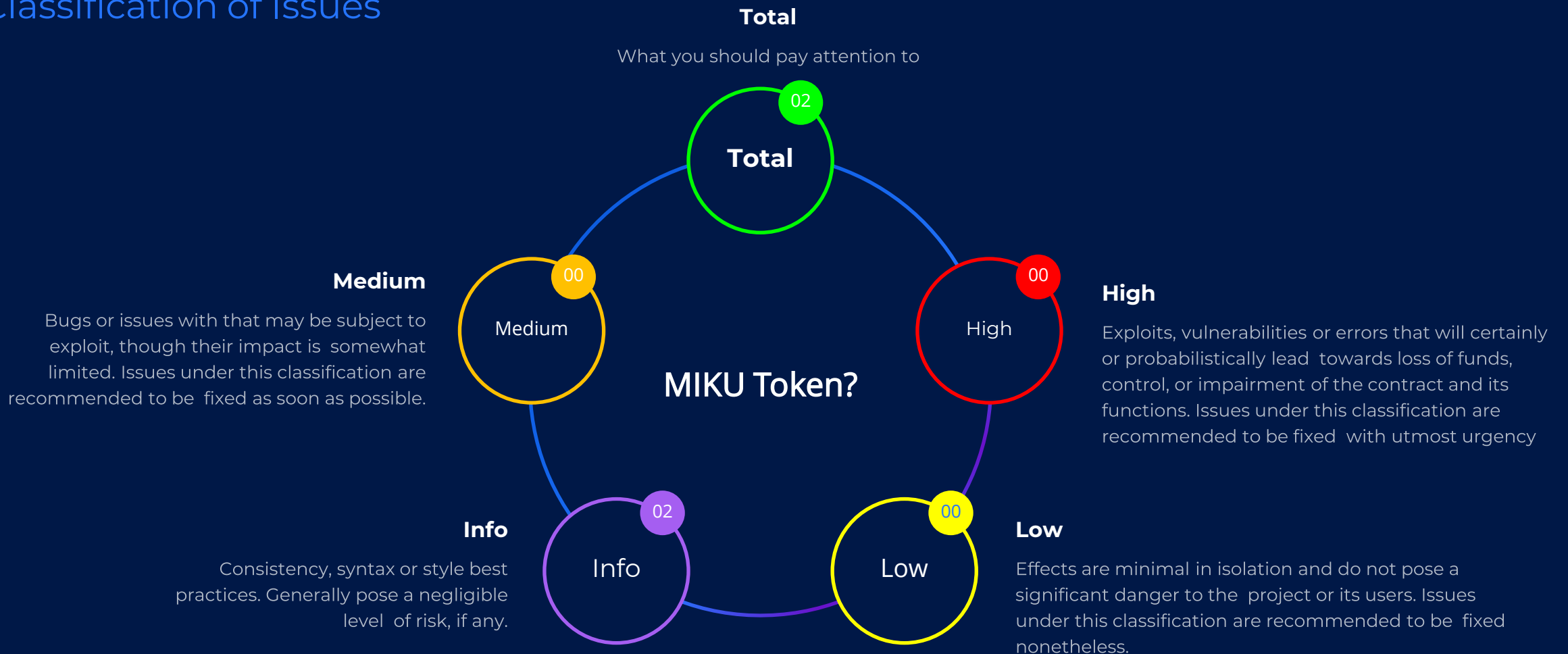
Owner can add/remove wallets from fee exemption and dividends.

12

Owner can change the minimum token balance needed to get dividends. No high-riskExploits /Vulnerabilities Were Found in token Source Code.

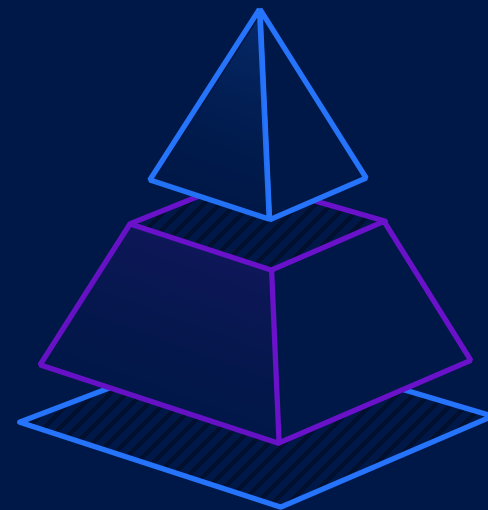
# Technical Findings Summary

## Classification of Issues



# Findings

Public function that could be declared external



ID	Severity	Contract	Function
01	Informational	MIKU	Functions: size, getKeyAtIndex, getIndexOfKey

## Description

Gas Optimization. Public function that could be declared external

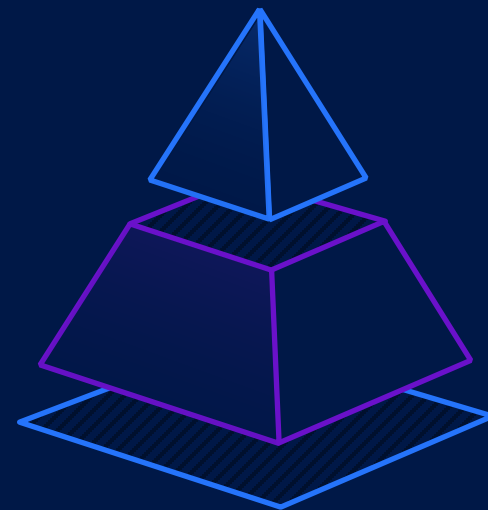
## Recommendation

Public functions that are never called by the contract should be declared external to save gas.



# Findings

Missing events arithmetic



ID	Severity	Contract	Function
02	Informational	MIKU	Missing events for setWalletBalance, setMaxBuyTransaction, setMaxSellTransaction, setSwapTokensAtAmount, setSellTransactionMultiplier

## Description

Functions that change critical arithmetic parameters should emit an event.

## Recommendation

Emit corresponding events for critical parameter changes.

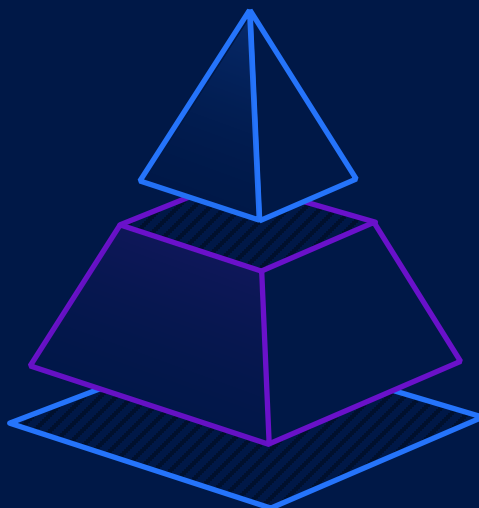


## Privileged Functions (onlyOwner & Others)

Function Name	Parameters	Visibility
✓ renounceOwnership	▪ none	▪ external
✓ transferOwnership	▪ address newOwner	▪ public
✓ prepareForPartherOrExchang eListing	▪ address_partnerOrExchangeAddress	▪ external
✓ setWalletBalance	▪ uint256 _maxWalletBalance	▪ external
✓ setMaxBuyTransaction	▪ uint256 _maxTxn	▪ external
✓ setMaxSellTransaction	▪ uint256 _maxTxn	▪ external
✓ updateBusdDividendToken	▪ address _newContract	▪ external
✓ updateMarketingWallet	▪ address _newWallet	▪ external
✓ setSwapTokensAtAmount	▪ uint256 _swapAmount	▪ external
✓ setSellTransactionMultiplier	▪ uint256 _multiplier	▪ external
✓ setTradingIsEnabled	▪ none	▪ external
✓ setBusdDividendEnabled	▪ bool _enabled	▪ external
✓ setMarketingEnabled	▪ bool _enabled	▪ external
✓ setSwapAndLiquifyEnabled	▪ bool _enabled	▪ external
✓ updatebusdDividendTracker	▪ address newAddress	▪ external
✓ updateUniswapV2Router	▪ address newAddress	▪ external

## Privileged Functions (onlyOwner & Others)

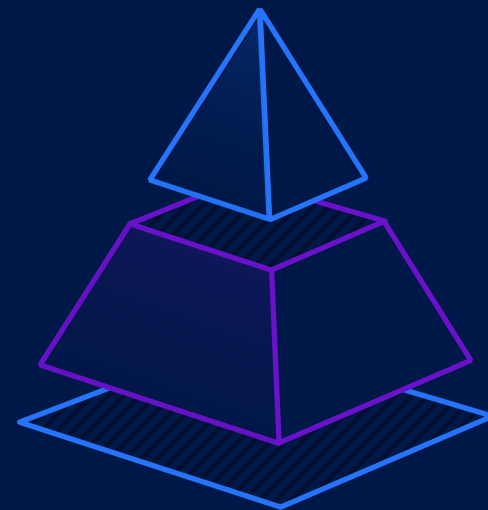
Function Name	Parameters	Visibility
✓ <code>excludeFromFees</code>	▪ <code>address account, bool excluded</code>	▪ <b>public</b>
✓ <code>excludeFromDividend</code>	▪ <code>address account</code>	▪ <b>public</b>
✓ <code>setAutomatedMarketMakerPair</code>	▪ <code>address pair, bool value</code>	▪ <b>external</b>
✓ <code>updateGasForProcessing</code>	▪ <code>uint256 newValue</code>	▪ <b>external</b>
✓ <code>updateMinimumBalanceForDividends</code>	▪ <code>uint256 newMinimumBalance</code>	▪ <b>external</b>
✓ <code>updateClaimWait</code>	▪ <code>uint256 claimWait</code>	▪ <b>external</b>
✓ <code>processDividendTracker</code>	▪ <code>uint256 gas</code>	▪ <b>external</b>





# Statistics

## Liquidity Info



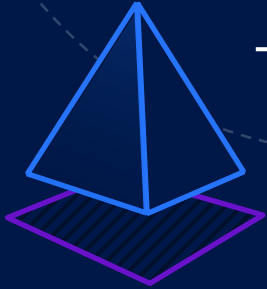
Parameter	Result
Pair Address	0xd8cc055028b87385b943ad598f2b1ec44fe44759
MIKU Reserves	81,574,562,854.739397533 MIKU
BNB Reserves	67.547 BNB
Liquidity Value	\$17,653.90 USD



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## Statistics

### Token (HINU) Holders Info



The top 100 holders collectively own 70.16%  
(701,625,399,261.33 Tokens) of MIKU

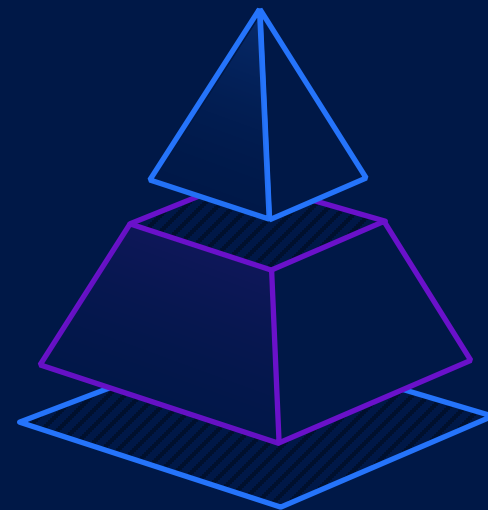
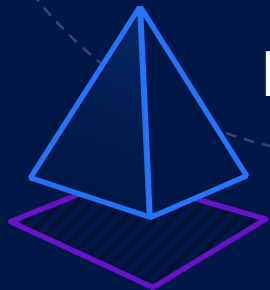
Token Total Supply: 1,000,000,000,000.00  
Token | Total Token Holders: 888





# Statistics

## LP (MIKU/BNB) Holders Info



Parameter	Result
MIKU/BNB % Burnt	0.00%
MIKU/BNB Amount Burnt	0 MIKU/BNB
Top 10 Percentage Owned	27.55%
Top 10 Amount Owned	275,518,520,392.42 MIKU

- ❖ All the data displayed above was taken on-chain at block 19573695
- ❖ The tokens on industry-standard burn wallets are not included on the top 10 wallets calculations



## Disclaimer

Novos has conducted an independent audit to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the codes that were provided for the scope of this audit. This audit report does not constitute agreement, acceptance or advocacy for the Project that was audited, and users relying on this audit report should not consider this as having any merit for financial advice in any shape, form or nature. The contracts audited do not account for any economic developments that may be pursued by the Project in question, and that the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are completely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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